EXECUTIVE REPORT

Teaching Academy Consortium of West Region CVM

2015

Building a Culture of Excellence in Teaching & Learning

Teaching Academy
Consortium of West Region CVM

The Teaching Academy is made possible by the collaboration of the five West Region Colleges of Veterinary Medicine; Colorado State University, Oregon State University, University of California - Davis, Washington State University, and Western University of Health Sciences. The Teaching Academy of the Consortium of the West Region Colleges of Veterinary Medicine is proud to acknowledge its corporate sponsor, Zoetis.

Building a Culture of Excellence in Teaching & Learning

Letter From the Chair

Dr. Kristy Dowers, DVM, DACVIM

The 2015 Biennial Conference theme – Building a Culture of Excellence in Teaching and Learning – accurately reflects the major accomplishments of the Regional Teaching Academy (RTA) over the last 12 months, all of which were highlighted in Pullman, WA. The diversity of talent and the passion to move veterinary education forward has never been more evident. More and more faculty are being asked to raise the bar in terms of educational best practices, which means that the RTA is poised to shape how veterinarian medicine is taught. Our members are leading the way by addressing all aspects of teaching, from innovative instructional methods to mentorship to scholarship. Recognizing that teaching does matter and that education must be evidence-based has been the goal of the initiatives the RTA has supported. Because these goals are shared among the members from the various Colleges, the RTA will have broader influence at the local level.

The collaboration among RTA members was never more apparent than in the two major initiatives that have taken shape over this last year. This Annual Report will emphasize not only these accomplishments, but will demonstrate how these initiatives will continue to grow in the coming year and beyond. As you will see, tangible products are the result of these efforts. The Faculty Development Workshop Series (VETS) is ready to go live in September with cutting edge modules that bring evidence-based, best practices in veterinary education to the various Colleges. The other initiative – External Peer Review – resulted in comprehensive documents for tenure-track faculty members that serve to standardize and highlight educational scholarship and innovation in much the same way that a research-heavy tenure packet does. Input to these documents came not only from the local Colleges, but from education experts from several regional medical schools.

Making Teaching Matter

The newest initiative, chosen at the Bi-annual conference though an iterative process of idea sharing, and populated by members with a passion for mentorship, has already resulted in a draft template for local peer review. The challenge for this initiative is the disparate ways in which teaching is evaluated and fostered at each College. However, the process and the document , produced within a 6-month period, allows for adaptation to each College's culture. The flexibility will be necessary to gain acceptance, and eventual standardization, among the schools.

Excellence in teaching will only be impactful when scholarship matches passion. The bi-annual conference served as a showcase for the research that is currently underway, both at the local level, but more importantly, across Colleges. The idea-sharing that occurred in these research sessions elicited valuable feedback to the researchers and inspired others to pursue their own research ideas, often in collaboration with faculty from member Colleges. The Annual Report includes the various scholarly efforts highlighted at the Biennial Conference.

As we look forward to 2016, we have confidence the RTA will continue to grow its membership, and by doing so, foster a cultural shift at the Colleges with respect to quality education of our veterinary students. Just as important is the mentorship of faculty who need to support of others as they push the envelope in their teaching efforts. The programs that we are developing, and will continue to grow, will only serve to make these efforts successful.

We look forward a productive 2016/2017.

Kristy Dowers, DVM, MS, DACVIM

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at the College of Veterinary Medicine and
Biomedical Sciences Colorado State University
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Highlights

- Overview
- History and Goals
- Initiatives:
  - External Review of Teaching
  - Faculty Development
  - Local Peer Review
- 2015 Biennial Summer Conference Summary - Pullman, WA
- Membership Committee

Teaching Academy
Consortium of West Region CVM

Building a Regional Cooperative to address Teaching & Learning Challenges shared by Colleges of Veterinary Medicine

History -

In 2011, Deans of the veterinary schools and colleges at Colorado State University, Oregon State University, University of California, Davis, Washington State University and Western University came together to discuss ways in which their colleges might effectively collaborate forming the Consortium of the West Region Colleges of Veterinary Medicine. The following Spring, 2012, the first initiative of the Consortium was identified as faculty development and training of future veterinarians and named The Teaching Academy. A series of meetings to develop the organizational structure as well as the Mission, Vision and Goals for this new regional teaching academy were supported by the Dean's Consortium and our industry partner, Zoetis.

"The Teaching Academy will support the development and implementation of best practices and scholarship in veterinary medical education."

Press Release April, 2012 *https://online.zoetis.com/US/EN/News*

The Teaching Academy Mission Statement is: To ensure that the members of the consortium **collaborate** to develop, implement, and sustain the **best practices in veterinary medical and biomedical education** in our colleges, and to **establish veterinary medical educator/biomedical educator as a valued career track.** Through these efforts we hope **to meet the needs of society and the profession.** The Vision is *Making Teaching Matter* and the Goals are 1) Generate innovative concepts for the advancement of veterinary education, 2) Develop, review and disseminate best practices in veterinary education, 3) Contribute to and promote the development of instructional/ teaching scholarship and 4) Provide, promote and develop educational/instructional leadership.

During year one the organizational structure was laid out with Officers consisting of a Chair, Chair-Elect and Treasurer who were all sitting members of the

Oct 2011

5 Deans + Zoetis + 2 faculty from each CVM systematically worked through shared priorities - **Teaching!**

Feb 2012

Academy of Veterinary Medical Education established with stakeholders from October 2011.

June 2012

Founding Meeting: Mission & vision statements, leadership, membership, structure, by-laws, and future plans laid out.

June 2012 - Jan. 2013

Steering Committee (SC) video conference: By-laws approved.

Feb 2013

SC Meeting: Founding members approved and first biennial meeting planned.

July 2013

First Biennial Conference, hosted at Oregon State University, Corvallis, OR.

Our Mission:

In order to meet the needs of society and the profession, members of the consortium will collaborate to develop, implement, critically evaluate, and disseminate the best practices in veterinary medical education and to establish "medical/biomedical educator" as a valued career track.

Steering Committee. The Steering Committee is made up of (2) elected members from each school or college and serve 2-year terms. Membership and Biannual Meeting Planning Committees were formed and the need for future Working Groups was established. Each Working Group includes a sitting member of the Steering Committee to serve as a liaison.

During the second year the Teaching Academy worked on developing the membership and planning and executing a summer conference. Each institution was asked to nominate 8-10 fellows in recognition of commitment to and excellence in teaching-related activities. New members were nominated to a three year term by current Teaching Academy Fellow or the Dean of a member institution. The first Biannual Meeting of the Teaching Academy was held at Oregon State University July 24-26, 2013 with the theme "Making the Teaching Academy Matter." There were a total of 63 attendees representing 44 Fellows and 19 guests. There were three areas of focus for this meeting, Faculty Development, Scholarly Work and Ideas, and Identify Projects/Develop Working Groups. At the close of the 2013 conference the Teaching Academy had identified two important initiatives, the External Review of Teaching and a Faculty Development Course. Each of these became working groups populated by fellows from all 5 institutions.

Activities -

Faculty Development: By"educating the educators" and bringing faculty from member colleges together, the academy will disseminate evidence-based best practices, develop the next generation of veterinary medical and biomedical educators, build cross-institutional collaborations, and encourage scholarship in teaching.

Scholarship: The academy will provide mechanisms (and a venue) to disseminate and make public scholarly works on teaching and learning, local experiments in teaching, best practices, educational materials, etc.

Recognition of excellence: The academy will develop mechanisms to recognize creativity, innovation, and outstanding performance in instruction, educational research, educational leadership, development of enduring educational materials, or other areas relevant to teaching and learning.

July 2013/14

Teaching Initiatives Committees & Steering Committee meet through video conference throughout the year.

July 2014

Faculty Development & External Review of Teaching meet at Veterinary Educator Conference in Ames, IA to flesh out initiatives.

Jan 2015

Face-to-face working meeting with all committees hosted by University of California-Davis

July 2015

Second Biennial Conference, hosted at Washington State University, Pullman, WA

Jan 2016

Face to Face Meeting with all committees hosted by Western University, Pomona, CA

Video Conference Meetings:

Teaching Initiatives, Membership, Steering, and Biennial Committees continue to meet about once a month through video conference

Teaching Academy

Initiatives

External Review of Teaching

Faculty Development

Peer Observation - Local & Clinical

2013 - Corvallis, OR

2015 - Pullman, WA

Chair: Phil Mixter, PhD (WSU)

Members:

Peggy Barr, DVM, PhD (WesternU)

Jennifer Buur, DVM, DACVCP (WesternU)

Patrick Chappell, PhD, (OSU)

Tod Clapp, PhD (CSU)

William Davis, PhD (WSU)

Cynthia Faux, DVM, PhD (WSU)

Jana Gordon, DVM (OSU)

Dean Hendrickson, DVM, MS, DACVS (CSU)

Steve Hines, DVM, PhD, DACVP (WSU)

Linda Kidd, (WU)

Diane McClure, DVM, PhD, DACLAM (WesternU)

John Nilson, PhD (WSU)

Erica Suchman, PhD (CSU)

Joie Watson, DVM, PhD, DACVIM (UC-Davis)

External Review of Teaching

Background:

When laboratory research faculty approach promotion, there are many metrics used to evaluate the amount and quality of their scholarly contributions. Many of these metrics have embedded information useful in the assessment, such as the impact factor of a journal publication or the competition required to garner extramural funding. For faculty with a significant teaching appointment, evaluating the instructional portion of their contribution has traditionally been measured by student evaluations and/or casual observation by peers. The RTA sought to develop a process by which a rigorous, meaningful external review could provide summary information about an instructor to administrators. This working group, formed after the RTA Biannual Conference in 2013 has worked continually to consider processes with similar goals that already exist, create a sustainable process for the consortia and work to implement external evaluation of teaching to aid the evaluation of instructors.

July 2015 Biannual Conference. Prior to the July 2015 Biannual Conference or the Regional Teaching Academy (RTA), the External Evaluation Initiative focused on generating and polishing a set of prompts for assembling submissions for external evaluation. Several instructors from Colorado State University (CSU) worked to compile and submit materials in response to these prompts as a pilot test, determining if the prompts yielded the materials the working group wanted for evaluation. During the July 2015 Biannual Conference, the External Evaluation Working Group reviewed one volunteer pilot submission in response to a series of prompts for compiling a packet prior to evaluation. This pilot testing was most informative and highlighted areas of both strength and challenge in the first cycle. One item that came up in reviewing the pilot submission was that certain institutions among the RTA have standardized curriculum vitae formats for their faculty that do not align with the first version of these prompts.

Fall 2015. Upon reflection following the Biannual Conference, the prompts were reconfigured and revised during the months of October and November. This process continues with the short-term goal of finalizing these second generation revisions during the January 2016 face-to-face meetings. In addition to refining these prompts, example documents have been assembled to help demonstrate the desired responses to the various prompts.

Goals. Short-term future goals include finalizing examples and templates for submitted packets. After completing this task soon, the External Evaluation working group will begin crafting tools for evaluation such as rubrics that will allow evaluators to maintain consistency in the future evaluation process. In the longer-term, this working group will train institutional liaisons to aid those assembling packets and train evaluators to continue to spread the burden to many. The process of evaluating in mid-2016 will also likely yield additional insights to evolve the program and deal with areas of concern as review cycles continue.

Faculty Development

Chair: Laurie Fonken , PhD, LPC – (CSU)

Chair-elect - Martin Smith, MS, EdD (UC Davis)

Members:

Karyn Bird, DVM, PhD (OSU)

Beth Boynton, DVM (WesternU)

Bonnie Campbell, DVM, PhD, DACVS (WSU)

Julie Cary, DVM, MS, DACVS (WSU)

Betsey Charles , DVM, MA (WesternU)

Munashe Chigerwe, BVSc, MPH, PhD (UC Davis)

Kristy Dowers, DVM, DACVIM (CSU)

Paul Gordon-Ross , DVM, MS (WesternU)

Samantha Gizerian, PhD (WSU)

Jan Ilkiw, BVSc, PhD, DEVAA (UC-Davis)

Linda Kidd, DVM, PhD, DACVIM (WesternU)

Suzie Kovacs, MS (WesternU)

Steve Lampa, PhD (WSU)

Ohad Levi , DVM (WesternU)

Peggy Schmidt, DVM, MS, DACVPM (WesternU)

Jane Shaw, DVM, PhD (CSU)

Suzana Tkalcic, DVM, PhD (WesternU)

Background:

The Consortium of West Region Colleges of Veterinary Medicine was originally founded in 2011. Recognizing that improving educational practices was a primary shared concern, the Consortium deans and their representatives chose establishment and support of a Regional Teaching Academy (RTA) as the first initiative of the new consortium. Understanding that training is a key component to improvement, an initiative of the RTA, the Faculty Development Initiative was formed and has been working on creation of a professional development program to be delivered to faculty from the five Consortium colleges.

Goals:

The Faculty Development Initiative (FDI) has met several times face to face and through videoconferencing over the past 2 years. The most recent meeting this January, the group developed working goals for the year consisted of three distinct projects; needs assessment, program development, and program delivery.

Accomplishments:

The FDI completed the needs assessment with 160 surveys being completed by participants from the five member institutions. The top 10 areas of interest, along with the percentage of respondents indicating *very useful* and *useful* are provided in the table below.

Topic	"Very Useful" & "Useful" %	(N)
Incorporating innovative teaching techniques	84%	158
Giving effective feedback	76%	158
Using feedback to inform your teaching	76%	157
Fostering/instilling intrinsic motivation	75%	157
Filtering content (not trying to teach too much)	75%	158
Setting expectations	73%	157
Aligning course objectives, activities, and assessment	71%	158
Course design	71%	158
Exam question writing	70%	157
Dealing with difficult students	70%	158

Faculty Development *(Continued)*

In addition to the assessment, the Faculty Development Initiative continued to work on the development of the Veterinary Educator Teaching and Scholarship (VETS) program which is focused on enhancing the effectiveness of teaching by providing new and seasoned faculty a solid grounding in the basic principles and current understanding of teaching and learning, providing participants an introduction to a range of teaching and assessment methods, and assisting them in development of a personalized approach to the student-teacher interaction.

The FDI piloted four modules in three topic areas of the VETS program at the RTA Summer Conference, in Pullman, WA, on July 22-24, 2015. Topics included *Understanding Yourself as a Teacher*, *Understanding Your Students*, and *Instructional Design.* The prelaunch provided valuable insight and has enhanced program design and delivery. Participant's feedback on evaluation of three hour and fifteen minute session is represented below:

Statement	"Very Useful" & "Useful" %	(N)
I will use the information I learned in my teaching. .254	66%	12
The information provided was presented in a manner that was easy to understand.	75%	12
I would like to attend the full program.	91%	12
I would recommend the program to my colleagues. We	75%	12

Future Goals/Plan:

The full pilot of the VETS Program is tentatively scheduled for September 9 and 10, 2016 at Oregon State University. The FDI is currently focused on finalizing the agenda for the 2 day training, seeking funding assistance and formalizing details related to the training. Please watch closely for the official announcement of the program. Be the first to attend and benefit from the program.

Chair: Brian Murphy, DVM, PhD, DACVP (UC-Davis)

Co-chair-Elect: Diana Hassel, DVM, PhD, DACVS, DACVECC (CSU)

Co-chair-Elect: Elena Gorman, DVM, MS (OSU)

Members:

Dharani Ajijthdoss, BVSc, MVSc, PhD, DACVP, DACVMB (WSU)

Joe Bertone, DVM, MS, DACVIM (WesternU)

Beth Boynton, DVM (WesternU)

Maria Fahie, DVM, MS, DACVS (WesternU)

Gary Haldorson, DVM, PhD (WSU)

Suzanne Kurtz, PhD (WSU)

Christinae Lohr, DVM (OSU)

Linda Martin, DVM, MS, DACVECC (WSU)

Juliana Meadows, DVM (UC-Davis)

Craig Ruaux, BVSc(Hons), PhD MANZCVSc, DACVIM (OSU)

William Vernau, BSc, BVMS, DVS, PhD (UC-Davis)

Local Peer Review

At the 2015 summer RTA conference in Pullman, Washington, the third Initiative was tasked with generating a useful and workable system of local peer review/observation. To address this initiative , the Local Peer Review initiative (LPI) was formed, and immediately began working on the task. The group initially decided on developing two outputs (or "products")-:

- A simplified rubric or instrument designed to facilitate the actual peer review process itself
- A set of guiding principles, or best practices, to facilitate implementation of local peer review.

Throughout this process, we have attempted to navigate the narrow passage situated between a useful system of peer observation vs. yet another unfunded mandate on faculty time and creativity.

During the fall of 2015, the LPI held monthly Zoom meetings. Utilizing available materials as a point of departure, we created a three-page instrument of peer review. This three-page instrument is comprised of three subcomponents focused on a pre-meeting, the actual observation of teaching itself, followed by a post-observation meeting. The instrument's format is designed to be both summative and formative, to both assist the maturation of the instructor and to provide a focused synopsis of his or her teaching acumen.

At the winter meeting in Pasadena California, the LPI completed the primary instrument and then focused on the second task, developing a set of best practices to guide implementation of local peer review. As the group has members from each of the five participating veterinary colleges, we were aware that adoption of local peer review would be jurisdiction-specific. What works for one institution will not necessarily work as well at another. Therefore, we view our recommendations for implementation as just that. Our group's recommendations are listed below.

1. Who will be observed?
    a. **junior (eg pretenure) teaching faculty**
2. Who will perform the observations?
    a. **Two people**- ideally both a content expert and non-content expert
    b. Observers selected by observee (*some* choice)/self-selected/selected by administrators
    c. Needs to be a mechanism to *recognize faculty for their peer review effort*
3. How frequently will peer observations be performed?
    a. At least **two times before tenure** (*eg* @ 2 and 5 years)
    b. An "observation" = one or more teaching events
4. Will there be any training mechanisms for peer observations?
    a. Institution dependent
    b. It is the contention of the WG that there is **sufficient instructional assistance implicit in the instrument itself** (OSU, CSU and Davis)

Local Peer Review *(Continued)*

5. Types of teaching to be evaluated
    a. **LEC, LAB, DIS**
    b. This instrument is less appropriate for PBL and CLINICAL teaching

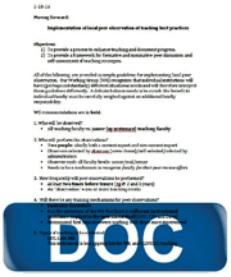
It is the collective opinion of our group that this system is now ready for implementation at the five member institutions. We are proud of our efforts and fully anticipate that the system will independently evolve, driven by the unique needs of each veterinary college.

Future Goals/Plan:

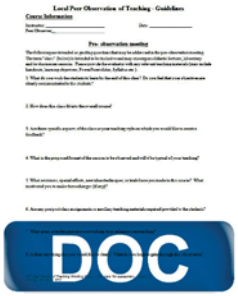
- Continue to support the development of existing and new peer observation of teaching programs within the five institutions.
- Select a representative from each institution to implement at least one peer observation within their college using the documents suggested (modified to fit their needs). After the completion, the representative will provide feedback to the group, that would facilitate continued work on improving the peer observations forms.
- Further develop local peer observation documents that can be applied to clinical and small group teaching situations.

Addendum:

1. Summary Draft_Local Peer Observation of Teaching 1-10-16



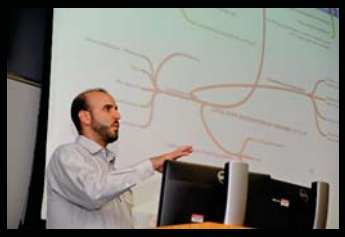
2. Peer observation_moving forward 1-10-16



2015 - Biennial Summer Conference

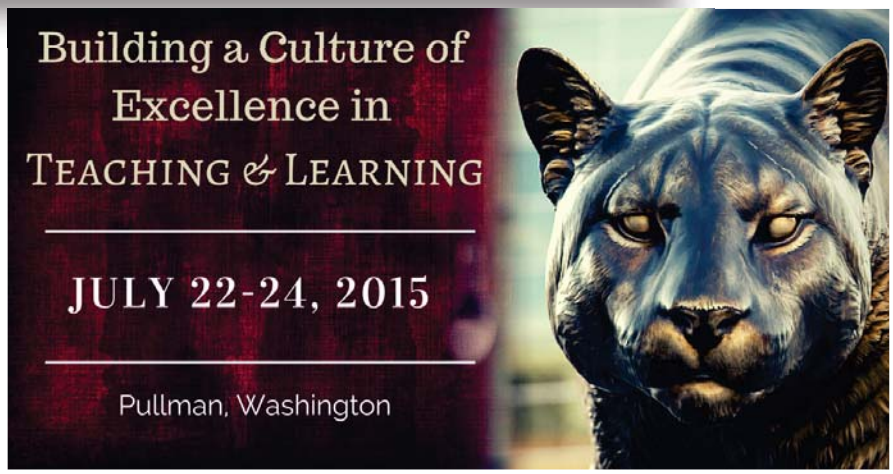
Executive Report

Keynote Workshop Speaker - Dr. Lynne Robins



Collaborative Brainstorming: Reaching Consensus on a New Working Group Project

Scholarship Presentations & Idea Exchange



On behalf of the Teaching Academy of the Consortium of West Region Colleges of Veterinary Medicine, our 5 sponsoring deans, and our corporate partner Zoetis, we proudly presented the 2015 summer conference "Building a Culture of Excellence in Teaching and Learning." This interactive two-day conference was designed to bring together the people who share a passion for teaching and learning in our Colleges, and to facilitate collaboration among schools.

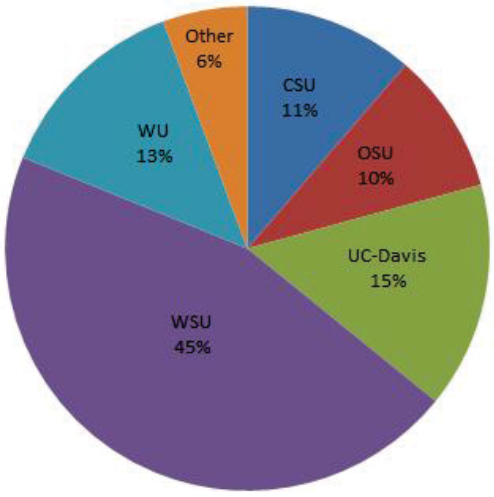
Our larger goals are to "Make Teaching Matter" and to establish veterinary education as a viable and valued career track. Our Deans asked us to work together to solve shared problems and help bring about change – notably by giving faculty and college leaders the skills, tools, and measures that are needed to challenge existing teaching paradigms within our profession.

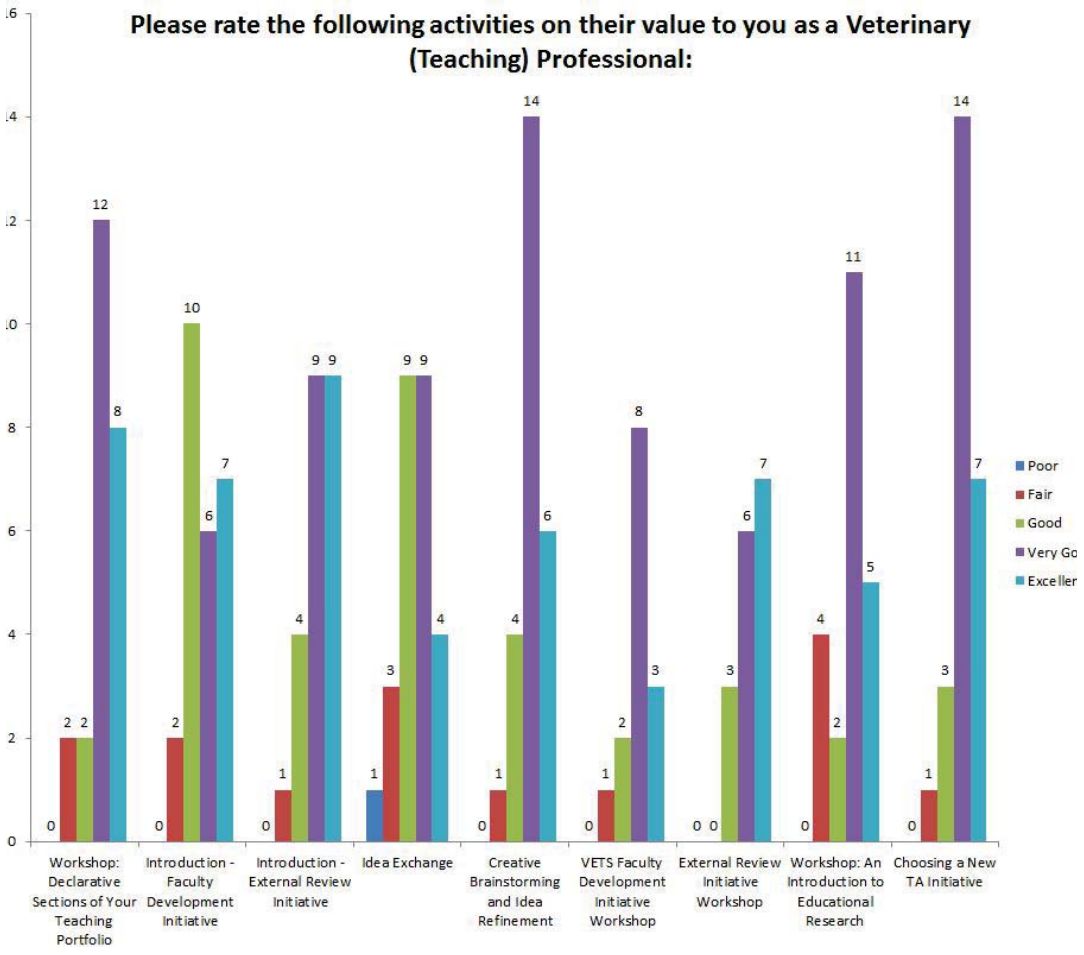
The conference consisted of 4 primary pieces:

1. **Faculty development** – We featured two workshops led by Dr. Lynne Robins, Director of the University of Washington, School of Medicine, Teaching Scholars Program. The first workshop helped us articulate our Teaching Philosophy and Self-Assessment for a teaching portfolio. The second provided an approach to diverse instructional research.
2. **Networking** – Several activities were designed to build cross-campus collaborations between individual faculty members. Collaboration is an important outcome of the Academy.
3. **Scholarship** – The biennial meeting provided a formal venue whereby Fellows presented their work/ideas to peers outside their own institution.
4. **Project Development** - A critical goal of the conference was to provide feedback to our two working groups on two major projects of the Regional Teaching Academy. The group's projects represent regional collaboration to leverage real change in each of our five Colleges. The conference also provided a venue for brainstorming and selecting our next major initiative.

"It is great to network with a dedicated group of educators"

Conference Attendance *(n=53)*





"The most valuable thing was the new relationships established; getting to know and interact with colleagues and learning more about their interests and expertise. "

72.6%

of the total Fellowship attended the Biennial Summer Conference in 2015, with additional guest present

Keynote Workshop Speaker:

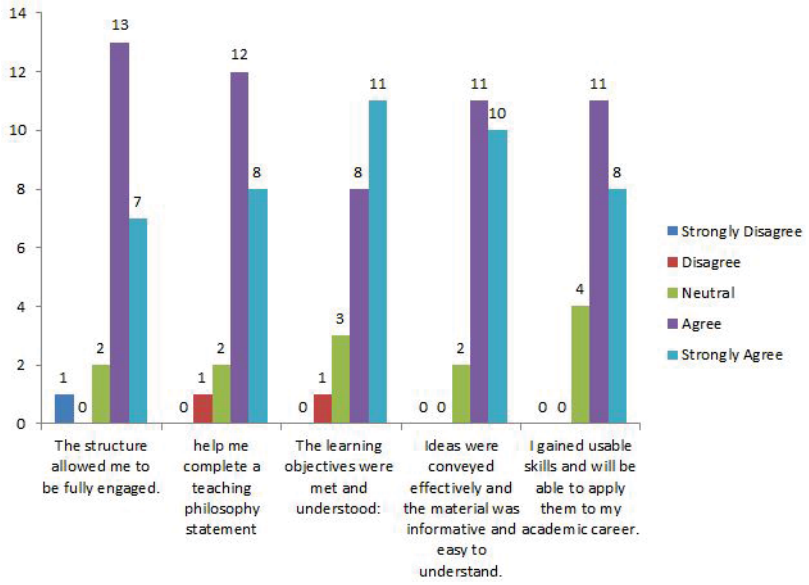
Dr. Lynne Robins, PhD

Professor, Department of Biomedical Informatics and Medical Education at the University of Washington School of Medicine and Director of the Teaching Scholars Program.

Dr. Lynne Robins is passionate about faculty development. Dr. Robins is a full professor in the Department of Biomedical Informatics and Medical Education at the University of Washington School of Medicine's (UWSOM's) and directs the UWSOM Teaching Scholars Program. This program fosters professional development of educational leaders and community building among the UWSOM faculty. In addition, Dr. Robins takes active roles in the current curriculum renewal program across UWSOM, working with faculty to develop innovative curricula for learners and implement change in a diverse array of medical instructional settings.

Keynote workshop: "Declarative Sections of your teaching Portfolio: Making the Most of your Look in the Mirror"

Participants worked specifically on their self-declarative statements including their Teaching Philosophy and Self-Assessment writing. During the workshop session, participants learned about best practices, options and gained useful peer feedback on their personal drafts. Participants took away valuable information that will lead to improved components of their portfolios, ideas for future improvement and strategies to constantly reflect their personal instructional styles in these writings. 82.6% of the participants agreed or strongly agreed that they gained usable skills that they plan to use.



Learning Objectives:

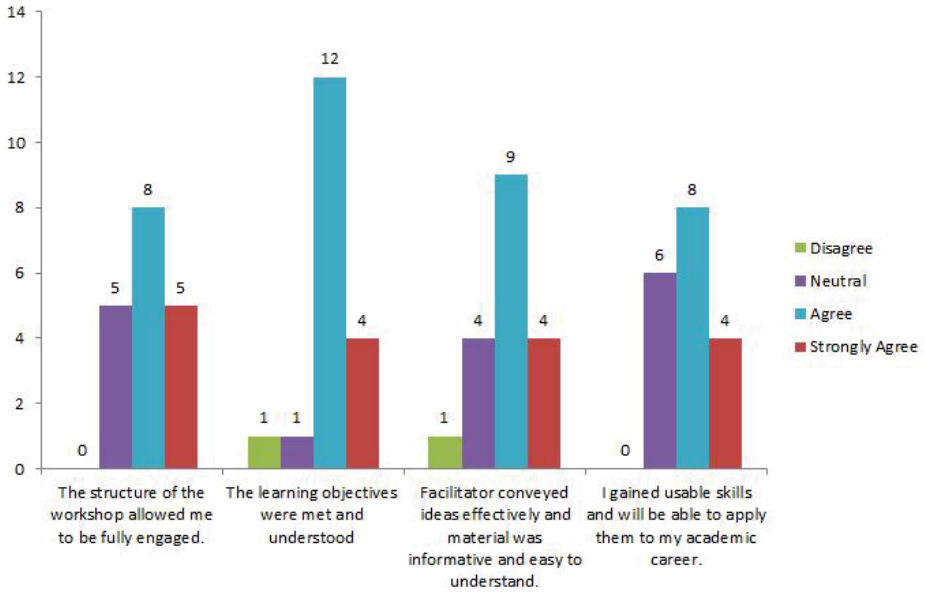
- Define and recognize opportunities for modifying my personal statements;
- Identify how to modify my personal documents to reflect best practices

Introduction to Educational Research Workshop:

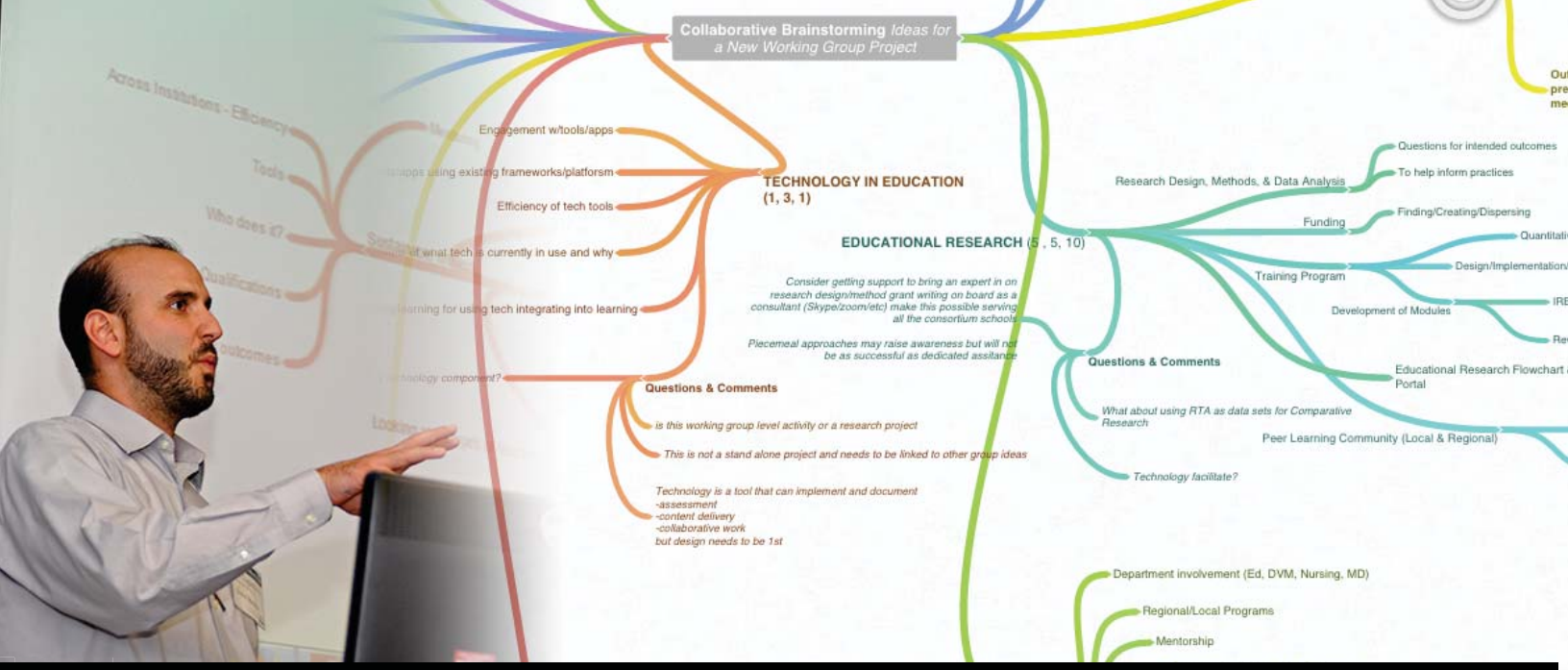
Participants gained basic information about diverse instructional research and explored the feasible scholarship opportunities within their own instructional activities. This session allowed participants to brainstorm possible projects to collect evidence about their own instruction, providing evidence for improvement. Participants learned about various data collection strategies, assessment options and modes for disseminating their scholarship.

Learning Objectives:

- Write a researchable question
- Use Glassick's criteria to assess scholarship
- Develop a plan for turning your current work into scholarship projects



"Becoming more familiar with the notion of educational scholarship and principles (Glassicks criteria etc) to help guide determining a fruitful educational study. These concepts can be fuzzy to more classically trained basic science investigators so learning the compass adjustments required was very useful."



Reaching Consensus on a New Working Group Project

Facilitator: Dr. John Lupinacci, Assistant Professor, College of Education at Washington State University

Two sequenced working sessions designed to identify affinities within the organization and emerge with one NEW working group project that would engage collaboration among fellows of the regional Teaching Academy for the coming year. Our goal was to leave Pullman with another working group focused on another target, assemble group leaders, and have a first meeting to put appropriate mandates in place.

Session 1 – Creative Brainstorming and Idea Refinement

The first session engaged participants in creatively brainstorming of possible affinities within the group that can be refined into a new working group project. Facilitator led, this brainstorming session was intended to cooperatively generate ideas, visually organize these ideas into common themes, and in small groups prepare these ideas for consideration in Session 2 as the new working group project.

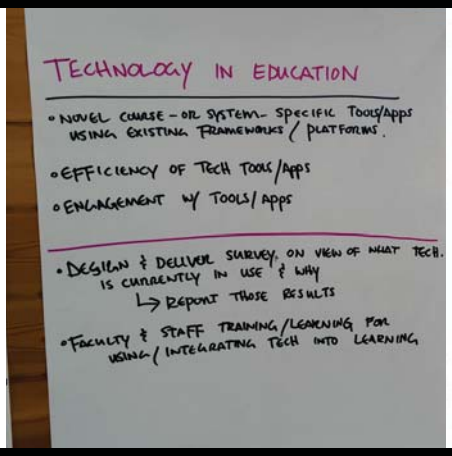
Objective:

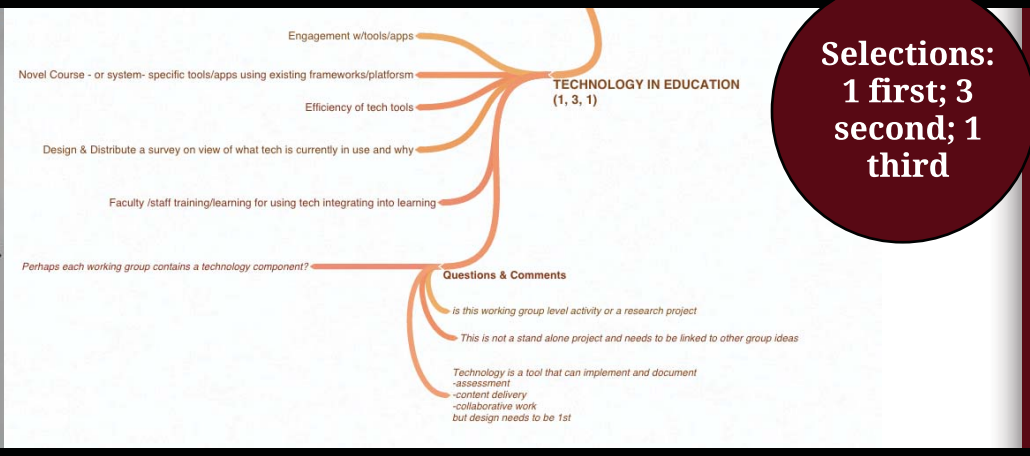
- **To** have generated concrete Ideas for a new TA working group project
- **By** creatively and productively participating in this brainstorming and forming session
- **So that** we can reflect on this session and the ideas generated toward determining the focus for a new TA working group project.

The end of the session produced **6 Ideas for New Working groups:**

Each group brainstormed and graphically organized potential work group focus and activity. Following the day's activities the participants engaged in comments and questions in an open format at the social dinner. Each participant that attended was encouraged to vote for their first, second, and third choice to help rank interests for the decision-making session that would follow.

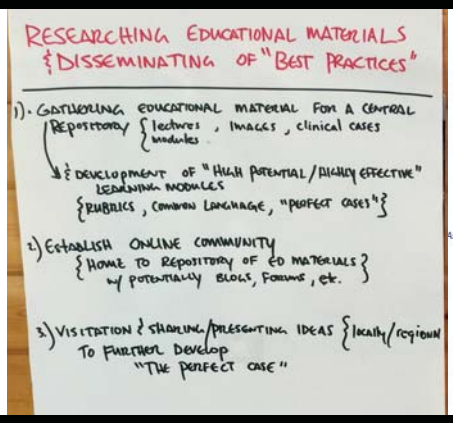
1. Technology in Education

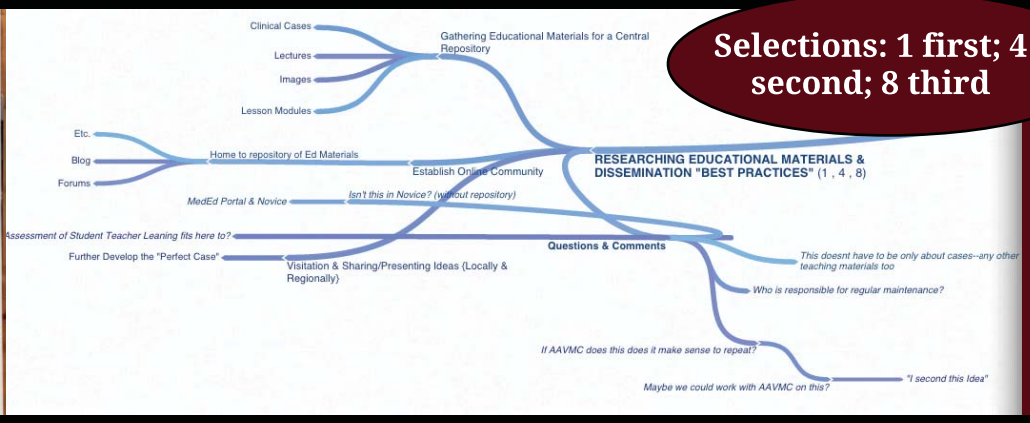




Selections: 1 first; 3 second; 1 third

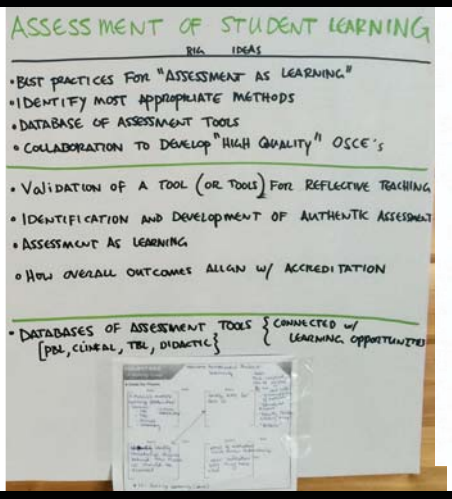
2. Research Educational Materials & Dissemination "Best Practices"

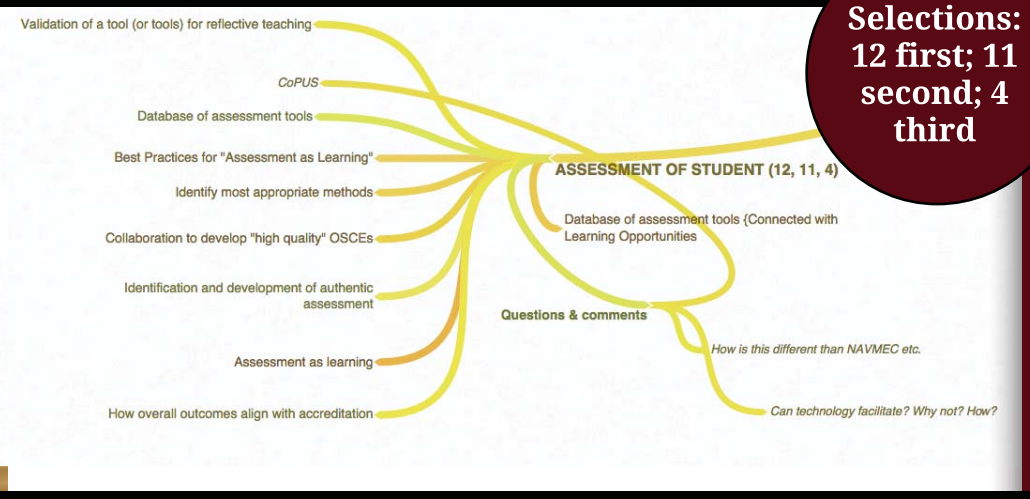




Selections: 1 first; 4 second; 8 third

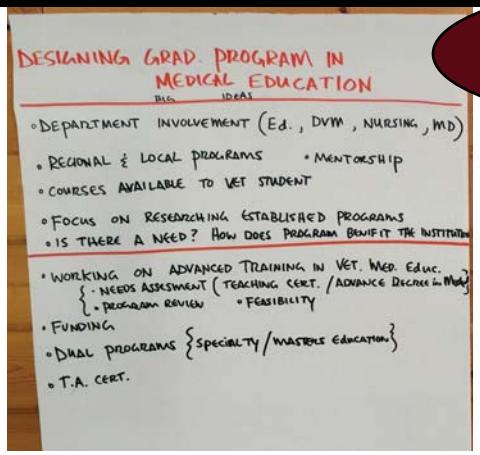
3. Assessment of Student Learning

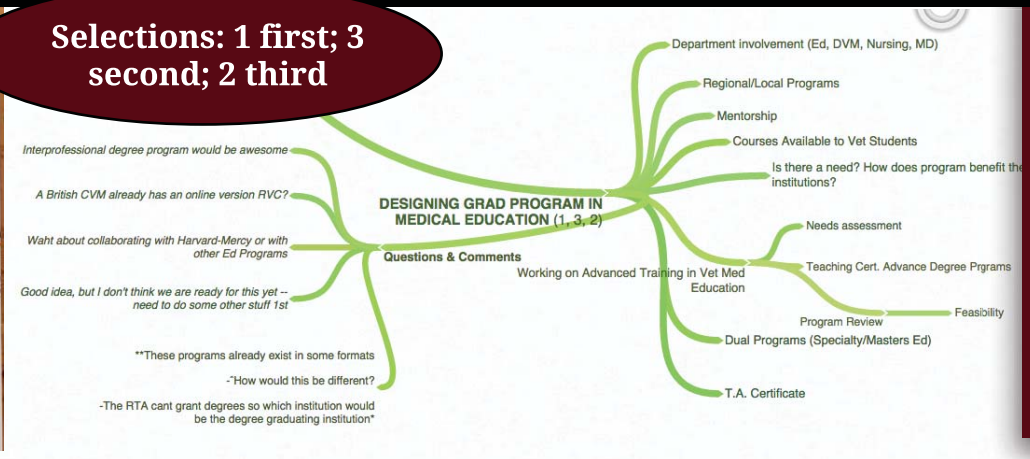




Selections: 12 first; 11 second; 4 third

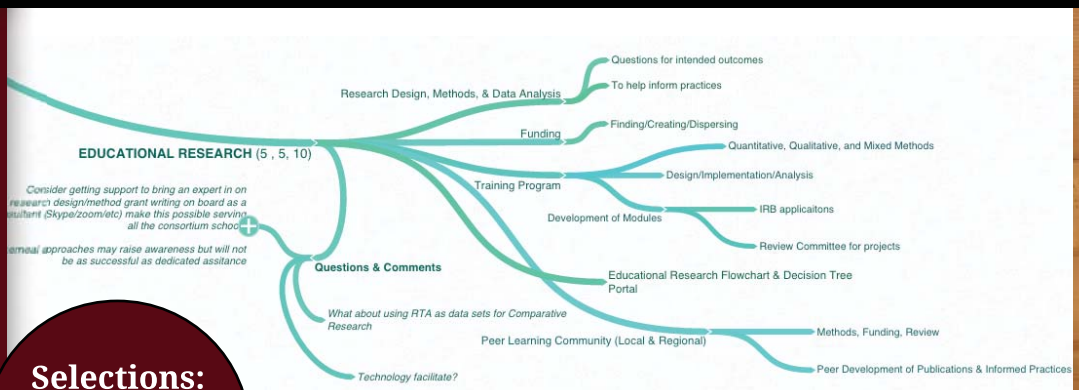
4. Research Graduate Program in Medical Education



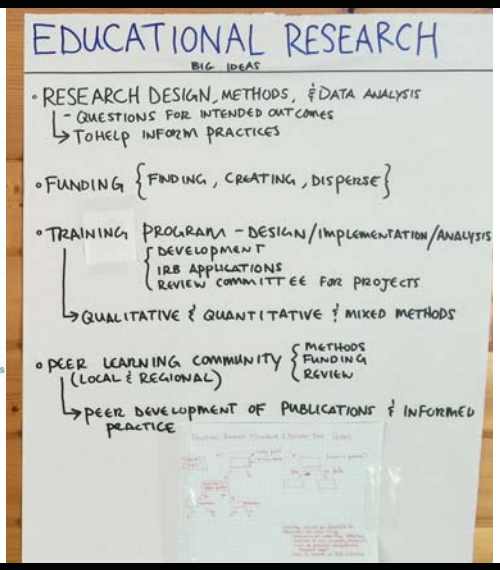


Selections: 1 first; 3 second; 2 third

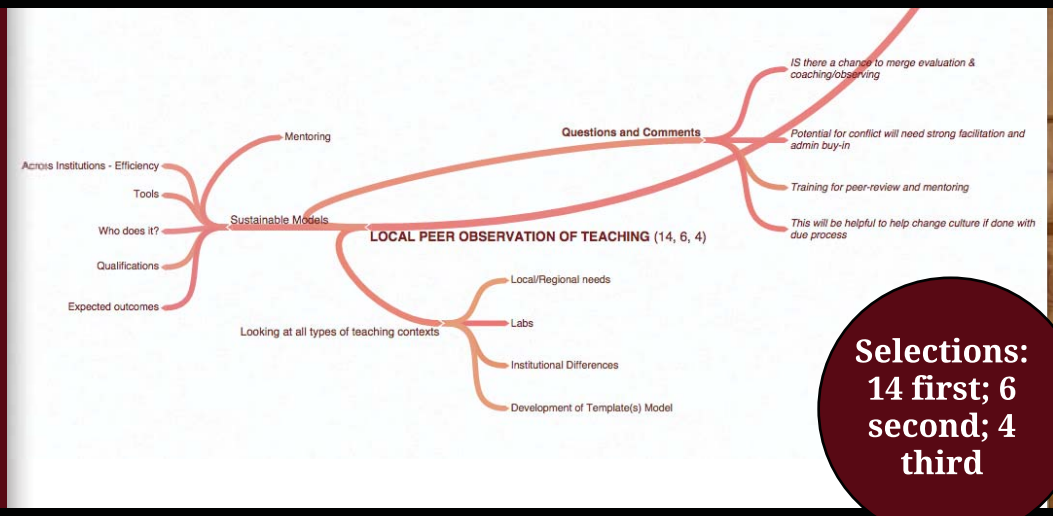
5. Educational Research



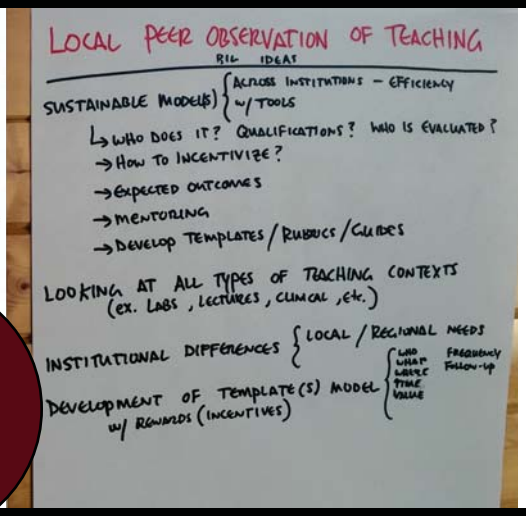
Selections: 5 first; 5 second; 10 third



6. Local Peer Observation of Teaching



Selections: 14 first; 6 second; 4 third



Session 2 -

Choosing a New TA Project: Step 2 - Consensus Based Decision-Making

In Session 2 begin a with the main ideas generated and refined in Session 1 (Creative Brainstorming and Idea Refinement) and by working together through a facilitator led consensus protocol, we emerged with one new working group project for the coming year.

Objective:

- **To** refine, present, and vote on Ideas for a new TA working group project
- **By** participating in the consensus based decision-making
- **So that** we may collaboratively determine the focus for one new TA working group project.

The Process:

Groups reflected on, refined, and presented the ideas that were displayed for the entire group to vote the evening prior. Ideas were further refined and clarified. Participants had the chance to ask clarifying questions about the project ideas

Facilitated consensus voting. Using sticky notes and considering the provided consensus criteria the participants ranked (1, 2, 3) which ideas they would primarily like for the new TA project. So 1 – First Choice, 2- Second Choice, and 3-Third Choice

Having narrowed down which idea(s) have the most 1s and 2s a final round of voting to make sure all participants agreed that the criteria listed below hold for the ideas.

- I can live with the decision
- I will support my colleagues in implementing this decision.
- I will do absolutely nothing to impede the implementation of the decision

Asked clarifying questions and make any revisions to remaining ideas with a motion to do another, final round, of ranking using 1, 2, and 3. A motion was made to agree on the idea with that most agree is there top choice and a final check to make sure the consensus criteria is cleared by everyone.

Facilitator Notes:

This session began with all the ideas posted around the meeting room with the option to reconsider any ideas despite the ranking. Ideas were merged into two groups. The first was a combining of groups between "Assessment of Student Learning" and the "Local Peer Observation of Teaching"

The latter of the ideas prevailed as the new working group focus, after a very productive session exploring what each group would do and considering potential leadership for each new idea.

In summary, the "Assessment of Student Learning" group combined with "Researching Educational Materials & Dissemination 'Best Practices'", and "Technology In Education" for a very productive and generative session. The group discussed the need for common scenarios that had high curriculum potential. After an insightful conversation from experienced participants who had attended a national association meeting the group learned that there was a larger organization designing a web site to house assessments and to determine what where the important skills and knowledge to assess. The group determined it would be a strong new working group idea to collaborate on a detailed case-study of teaching to share and learn how and what the group deemed both best practices and important skills and content to assess; furthermore the group would not just share assessments but the how to use the assessments and the details from teaching and instruction to assessment of learning.

This group had strong leadership and a large following.

Local Peer Observation of Teaching

The prevailing "**Local Peer Observation of Teaching**" group formed around a need within an existing Working group to branch out and get some work accomplished in efforts to fill in and accomplish some existing goals/projects that had emerged as the existing group was stretched thin.

In discussion, through consensus-based decision-making protocol, the group determined that the organization needed to complete the work proposed by the "Local Peer Observation of Teaching" working group. It was agreed that while the other task certainly had value that it was important to not spread thin and to bring some much needed resources to the existing tasks at hand in the organization. So, while a "new" working group focus was not determined a new working group was formed to complete important complementary work to an existing working group.

Scholarship Presentation

Ohad Levi and **Dean Hendrickson**
Western University of Health Sciences & Colorado State University

- In Progress

Comparison of Short-term versus Long-term Video Game Training Programs to Enhance Basic Laparoscopic Skills of Veterinary Medicine Students

- *Ohad Levi1; Dean Hendrickson2; Mark Battles1; Peggy Schmidt1; Dominique Griffon1; Maria Fahie1; Donna Shettko2 (1 CVM - Western University of Health Sciences & 2 CVM - Colorado State University)*

Purpose: Determine the correlation between length of training time with video games and improvement in laparoscopic basic skills of veterinary medicine students. To evaluate the implementation of video game training models into the basic laparoscopy skills training program to veterinary medical students

Material & Methods: Students completing their first and second years of the veterinary curriculum at CVM-WU (n=31)and CVM-CSU (n=21)with no previous experience with laparoscopic surgery or any other minimally invasive surgery, nor any previous experience with the video game used in this study (Marble Mania for the Nintendo Wii) were invited to participate in this study. Participants completed a questionnaire before and after the study self-assessing their prior video game experience and confidence level to perform laparoscopic basic tasks. Students meeting the inclusion requirements were block randomized into two groups by year in school, then by gender. Students' basic laparoscopic skills were assessed by a veterinary surgeon as they performed two tasks from the previously validated scoring system the McGill Inanimate System for Training and Evaluation of Laparoscopic Skills (MISTELS). One group (Group L) played the video game Marble Mania on the Nintendo Wii at their own homes for 3 hours per week for the next 6 weeks (18 hours in total). The second group (Group S) only played Marble Mania for 3 hours on the 6th week (3 hours in total). After the 6 weeks of training with Marble Mania, participants then performed the same two basic laparoscopic tasks and were assessed using the same scoring system by the same evaluator.

Results: Both groups S and L showed statistically significant (p value <0.05) improvement on both laparoscopic tasks, the peg transfer and the Pattern cutting, following their video game training with Marble Mania. Although group L scored higher than group S in both laparoscopy tasks on both assessments (pre-video game training and post-training peg transfer and pattern cutting tasks), the differences between the groups were not statistically significant.

Conclusions and Clinical Relevance: Results of the present study indicate that playing video games was an effective method for veterinary students to acquire laparoscopic basic skills on box trainers. Both the short training group (S) and the long training group (L) improved in their basic laparoscopic skill scores. Unexpectedly though, the degree of improvement of both groups was not significantly different. Perhaps three hours of video gaming with Marble Mania is enough to improve basic laparoscopic skills and sixteen hours of training is unnecessary. The results of our study demonstrate that video game training is helpful to acquire proficient basic laparoscopic skills and implementing video game training as part of the veterinary curriculum to train students in laparoscopic surgery skills is feasible.

Munashe Chigerwe *University of California-Davis - Completed*

Assessment of burnout in veterinary medical students using the Maslach Burnout Inventory-Educational Survey: a survey during two semesters.

Munashe Chigerwe, Karen A. Boudreaux** and Jan E. Ilkiw****Medicine and Epidemiology, University of California-Davis, School of Veterinary Medicine, Davis, CA USA; **Dean's Office, University of California-Davis, School of Veterinary Medicine, Davis, CA USA; ***Surgical and Radiological Sciences and Dean's Office, University of California-Davis, School of Veterinary Medicine, Davis, CA USA*

Purpose: Burnout among veterinary students can result from known stressors in the absence of a support system. The objective of this study was to evaluate use of the Maslach Burnout Inventory-Educator Survey (MBI-ES) to assess burnout in veterinary students.

Methods: The MBI-ES was administered to first (Class of 2016) and second year (Class of 2015) veterinary medical students during the 2012-2013 academic year in the fall and spring semesters. Factor analysis and test reliability for the survey were determined. Mean scores for the subscales determining burnout namely emotional exhaustion (EE), depersonalization (DP) and lack of personal accomplishment (PA) were calculated for both classes in the 2 semesters. Multiple regression analysis was performed to evaluate other factors that predict the MBI-ES scores.
Results: A non-probability sampling method was implemented consisting of a voluntary sample of 170 and 123 students in the fall and spring semesters, respectively. Scores for EE, DP and PA were not different between the 2 classes within the same semester. Mean ± SD scores for EE, DP and PA for the fall semester were 22.9 ± 9.6, 5.0 ± 4.8 and 32.3 ± 6.7, respectively. Mean ± SD scores for EE, DP and PA the spring semester were 27.8 ± 10.7, 6.5 ± 6.1and 31.7 ± 6.8, respectively. The EE score was higher in spring compared to fall while DP and PA scores were not different between the 2 semesters. Living arrangements specifically as to whether or not a student lived with another veterinary medical students was the only variable significantly associated with the MBI-ES scores. Students in this study had moderate levels of burnout based on the MBI-ES scores.

Conclusions: The MBI-ES was an acceptable instrument for assessing burnout in veterinary medical students. The EE scores were higher in the spring semester as compared to the fall semester. Thus students in the first and second years of veterinary school under the current curriculum experience the greatest levels of emotional exhaustion during the spring semester. This has administrative implications for the school, when considering the allocation and use of resources for student support systems during each semester.

Craig Ruaux Oregon State University - Completed project

Revisiting Communication Readiness: Influence of OSCE Timing and Student Gender on Self-Efficacy and Burnout Stress

Craig Ruaux, Veterinary Clinical Sciences, Oregon State University; Terri Clark, Biomedical Sciences, Oregon State University; Sue Tornquist, Biomedical Sciences, Oregon State University

Purpose: Development of client communication skills is critically important in the training of students preparing to enter professional veterinary practice. The large number of species that veterinarians may be called upon to treat and the differing expectations of pet animal owners versus production animal clients are complicating factors for client communication training in veterinary students. Development of client communication skills for pre-clinical veterinary students typically involves the use of role-play, small group discussion, and interactions with standardized clients. The aim of the study reported here was to assess the effects of standardized client interaction timing and student gender on burnout stress and client communication self-efficacy in pre-clinical veterinary medicine students.

Methods: A 30-question survey instrument assessing communication self efficacy, personal, and work-related burnout stress was deployed to two groups of preclinical veterinary students (n=53 in group one, n=57 in group two) at the beginning and end of a 10-week course teaching communication skills. Interactions with standardized clients were carried out before the second survey in the first group of students, while the second group completed the second survey after the interaction with standardized clients. Multivariate ANOVA was used to assess the effect of interaction timing and gender on client communication self-efficacy and burnout stress.

Results: Strong interactions between the effects of interaction timing and gender were detected, with male students showing a significant decline in client communication self-efficacy when the client interaction occurred before the administration of the final survey instrument. Female students showed a marked improvement in client communication self-efficacy when the interaction occurred before administration of the survey. Burnout stress was high in many students. Male students completing the survey instrument after client interaction showed significant increases in burnout stress when compared to female students, regardless of timing, and male students completing the survey instrument before client interaction.

Conclusions: The timing of standardized client interactions relative to assessment of communication readiness must be carefully considered. Male pre-clinical veterinary students may show declining communication efficacy and increasing burnout stress following standardized client interactions.

Phil Mixter *Washington State University - Collaboration with Colorado State University*

Motivation and Attitude

Phil Mixter (WSU School of Molecular Biosciences) and Jennifer LeBeau (WSU College of Education)

Between now and 2018, Washington is projected to be the second highest state in the nation in the percent of all jobs created that will require a degree in a Science, Technology, Engineering, and Math (STEM) discipline. Further, 70% of all jobs in Washington will require a STEM Bachelor's Degree by 2018. Yet, many graduating college students enter the workforce either underprepared or without STEM interest, despite exiting a STEM program. Therefore, retention of STEM graduates in STEM-related occupations is a great concern.

The Microbiology B.S. degree at Washington State University (WSU), managed by the School of Molecular Biosciences (SMB), has produced high quality graduates pursuing post-baccalaureate training. According to 2012 focus groups, 75% of graduating microbiology majors at WSU plan to gain additional education at the graduate or professional level, while the other 25% plan to train in a Medical Technology program. To date, however, there has been little assessment of the motivation, attitudes, and retention of SMB microbiology students toward their interest in or decisions to pursue STEM careers.

We present work-in-progress piloting an instrument that measures the perceptions and attitudes of students in the SMB Microbiology degree program. The instrument is a modification of the engineering-based Motivation, Attitudes, and Retention Survey (MARS) developed by Switzer and Benson (2007). A small cohort of microbiology students have used the new instrument, providing preliminary data with limited statistical power for validation. Plans for including a parallel cohort at Colorado State University (CSU) to gain statistically relevant numbers are presented.

"I'm constantly in awe of my colleagues who value quality teaching and who have gone the extra mile in the area of education research and scholarship."

Investigating Lesson Study as a Professional Development Model for Science Educators

Martin H. Smith, University of California - Davis

Effective science programs require effective teaching. Lesson study, a constructivist-based professional development model, is a potential strategy to help advance educators' knowledge and skills and improve student learning. Lesson study engages educators in developing an inquiry stance on their practice through active reflection, is situated in authentic contexts, and occurs incrementally over time. Specifically, educators involved in lesson study work in teams to formulate goals, improve specific lessons within discrete contexts, and explore deeper issues surrounding teaching and learning (Rock & Wilson, 2005; Lewis, 2002; Lewis, Perry, & Hurd, 2004; Lewis, Perry, Hurd et al., 2006; Lewis, Perry, & Murata, 2006). By adopting an inquiry stance on their practice that involves the systematic collection, analysis, and reporting of data, educators design, test, and revise one or more lessons (Lewis, 2002; Rock & Wilson, 2005; Stigler & Hiebert, 1999; Wiburg & Brown, 2007). "Inherent in the process…is the belief that discussing others' points of view enhances the learning process and the final product" (Loucks-Horsley et al., 2003, p. 186).

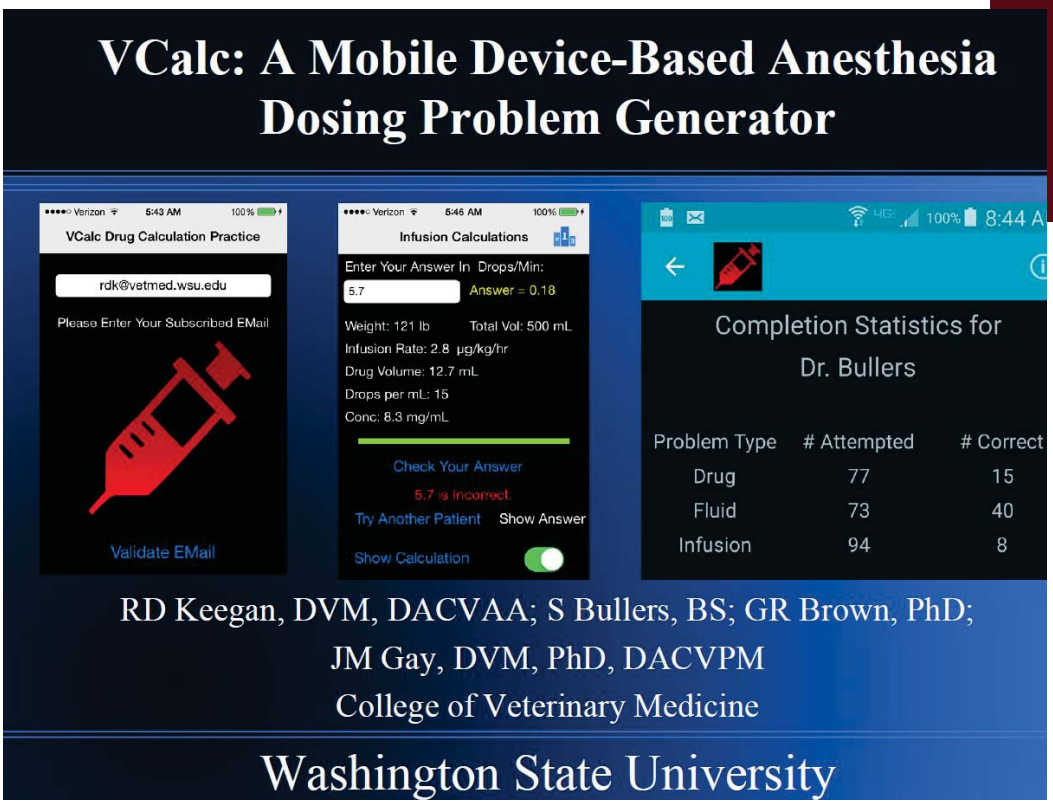
A sequential explanatory mixed methods design was used to investigate the influence of lesson study on 4-H volunteers' understanding and use of inquiry methods and veterinary science content knowledge. Survey data were analyzed using a repeated measures general linear model (GLM) which showed a significant effect of time with respect to both constructs. Thus, lesson study improved subjects' teaching practice and subject matter knowledge. Focus group interview data were collected to expand upon quantitative outcomes. Themes from qualitative data were identified and categorized using the long-table approach. Qualitative outcomes elaborated on participants' understanding and use of inquiry processes, including questioning strategies, learner-centered explorations, and knowledge application. Results from this study could benefit educators and researchers in other contexts.

Robert Keegan *Washington State University - Completed project*

Use of a mobile device anesthetic dosing problem generator (VCalc®) as a class exercise.

RD Keegan, WSU; S Bullers, WSU; GR Brown; JM Gay, WSU

Background: The ability to accurately and quickly perform anesthetic drug and infusion rate calculations is an essential skill that must be mastered by veterinary students, yet many students view these calculations as being difficult, tedious and unengaging. In response to student requests for practice problems we have created a mobile device-based anesthetic problem generator with the goal of improving student engagement while providing practice problems on demand. VCalc combines a dose, fluid rate, and infusion problem generator with a cloud-based database to record student attempts as well as the number of problems of each type that were answered correctly. Methods: One hundred twenty eight veterinary students enrolled in an anesthesia course were studied to evaluate the acceptance and learning efficacy of the application. Students were assigned to install the application onto their personal phone, tablet or PC and complete three problems of each type (9 total). Subsequent to attempting the 9 problems on the app, students completed an examination which included 4 calculation questions (1 Drug, 1 Fluid, 2 Infusion calculations). After completing the examination, students submitted a survey of attitudes and opinions concerning the applicability and usefulness of the app. Results: All students installed or accessed the app and attempted at least one of the problems. The 128 students enrolled in the class attempted 2337 total problems, averaging 7.4, 7.4 and 6.5 Drug, Fluid and Infusion problems per student respectively. Students correctly answered a total of 1400 problems, averaging 5.0, 4.5, and 3.3 Drug, Fluid and Infusion problems per student answered correctly. The 4 exam calculation questions were all answered correctly by greater than 92% of the students. The survey indicated that a majority of students found that the app was useful or very useful for practicing anesthetic drug calculations and would like to see more apps developed and used within the curriculum. Finally, 77% of students reported that they had used the app to study for the exam. Conclusions: The VCalc practice app was perceived as a useful and engaging instructional tool and was used by a majority of students to study for the exam. Students wished to see more apps developed and used within the veterinary curriculum. The VCalc application is available for Android, iOS and Windows platforms.



5 Collaborative Institutions

MEMBERSHIP COMMITTEE

Chair: Craig Ruaux, BVSc, PhD, DABVT (OSU)

Members:

Ana Alcaraz, DVM, PhD (WU)

Julie Dechant, DVM (UC-Davis)

Jana Gordon, DVM (OSU)

Spring Halland, DVM, CVA, DACVIM (WU)

Diana Hassel, DVM, PhD, DACVS, DACVECC (CSU)

Lynne Nelson, DVM, MS, DACVIM (WSU)

Dan Smeak, DVM, DACVS (CSU)

Leslie Sprunger, DVM, PhD (WSU)

It is very heartening to see the continued growth of the Consortium of Western Colleges of Veterinary Medicine Regional Teaching Academy. With the last round of admissions of Fellows to the Academy our membership now stands at 61, with representation from each of the participating schools spanning from basic sciences and educational specialist faculty to faculty engaged in teaching on the clinic floor.

Over the last year the Membership Committee has met several times, both in face-to-face meetings and via online teleconferences. The main charges of the committee for this year have been to develop and assess methods for measuring Fellow involvement in the RTA, and to establish a timeframe for future applications from new or returning faculty in the member colleges. The outcomes and suggestions of these meetings are summarized below.

Survey of Fellow Activity

With the initial constitution of the RTA, there was a decision to engage in regular assessment of activity directly related to RTA business on the part of Fellows. This assessment was to occur for the foundational Fellows after a period of three years. As we have now reached the end of that period, a process for assessment of activity has been trialed internally and is moving towards implementation. As this is the first iteration of this process, we do not have a clear understanding of what constitutes an “acceptable” level of activity, thus the initial survey is fairly broad ranging in the hope that we can gain some understanding of the average Fellow’s level of activity and engagement. With this information we hope to identify individuals who have shown a low level of engagement, and reach out to them to identify issues that may be impeding participation. This information will be of value to the RTA Steering Committee for future planning, and to identify strategies to increase Fellow engagement, if necessary. This process will also give individuals a mechanism for relinquishing their Fellow status in the RTA if they desire.

The initial plan for data gathering involves the first 36 foundational Fellows of the RTA. As this process is refined, it will continue to be used for each group of Fellows as they reach the end of their initial three-year appointment. The initial group of Fellows has been contacted via email, with the expectation that data should be available by early October of 2016.

Teaching Academy
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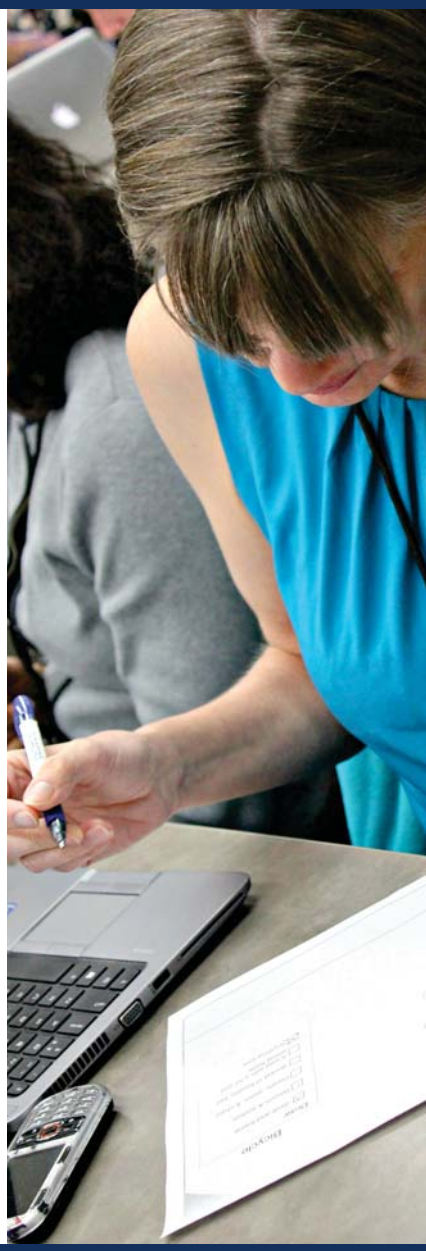
Application Cycles for New Members

The Membership committee has proposed to the Steering Committee that new applications for admission as a Fellow to the RTA be opened biennially, timed to coincide with the biennial summer meetings of the academy. The underlying aim with this timing is to identify new interested individuals and admit them to membership close to the main meetings, thus increasing early interest and engagement, while also providing sufficient time for applications to be submitted and considered and for applicants to make travel plans.

The timeframe suggested for future application cycles is that the cycle open with an initial call for identification of new potential applicants in October of the year preceding the biennial meeting. Typically, we expect that members of the Membership committee from within each school will identify new applicants. Applications will open in November, and are due by early January of the following year. Applications will then be assessed through the month of January, with successful applicants notified in late January or early February. The intent is that this process will provide ample time for new Fellows to make arrangements around their other commitments, to allow them to travel to the meeting that year.

In addition to the process outlined above, the committee established a process for “out of sequence” applications to join the RTA. This process is reserved for individuals with a very high level of experience and engagement in the development of teaching programs. Individuals who meet these criteria may petition the Membership committee for earlier admission to the academy. Their applications will be considered on an ad hoc basis, and a recommendation regarding admission made to the Steering Committee.



Deferral of Membership

During the year an additional topic that was raised concerned the possibility of establishing a mechanism for the deferral of active membership by Fellows. We recognize that all faculty members in colleges of Veterinary Medicine have heavy commitments on their time, and in some cases it may be difficult to remain engaged in RTA business. Following discussion within the Membership committee and with the Steering Committee, it was decided that it would be preferable to have Fellows who wish to reduce or cease their involvement in RTA activities relinquish their Fellow status, allowing a new potential Fellow to be identified from within their home institution. This decision reflects that fact that the RTA is in an early, actively growing state, and there is an expectation that Fellows should maintain an active role in the growth of the academy in some fashion. Fellows who relinquish their status would be eligible to reapply for membership during the routine calls for new members as outlined above, and the decision to relinquish Fellow status would not be a factor in consideration of any future application.

61 TOTAL FELLOWS

FELLOWSHIP LIST

First	Last	Institution
Anna	Alcaraz	Western University
Peggy	Barr	Western University
Linda	Barter	University of California, Davis
Joe	Bertone	Western University
Karyn	Bird	Oregon State University
Jennifer	Buur	Western University
Bonnie	Campbell	Washington State University
Julie	Cary	Washington State University
Patrick	Chappell	Oregon State University
Betsy	Charles	Western University
Munashe	Chigerwe	University of California, Davis
Tod	Clapp	Colorado State University
Alan	Conley	University of California, Davis
William (Bill)	Davis	Washington State University
Julie	Dechant	University of California, Davis
Kristy	Dowers	Colorado State University
Cynthia	Faux	Washington State University
Laurie	Fonken	Colorado State University
Samantha	Gizerian	Washington State University
Jana	Gordon	Oregon State University
Paul	Gordon-Ross	Western University
Elena	Gorman	Oregon State University
Gary	Haldorson	Washington State University
Spring	Halland	Western University
Diana	Hassel	Colorado State University
Dean	Hendrickson	Colorado State University
Steve	Hines	Washington State University
Jan	Ilkiw	University of California, Davis
Doug	Jasmer	Washington State University
Linda	Kidd	Western University
Suzie	Kovacs	Western University
Suzanne	Kurtz	Washington State University
Steve	Lampa	Washington State University
Pamela	Lee	Washington State University
Ohad	Levi	Western University
Linda	Martin	Washington State University
Diane	McClure	Western University
Matthew	Mellema	University of California, Davis
Stuart	Meyers	University of California, Davis
Phil	Mixter	Washington State University
Brian	Murphy	University of California, Davis
Lynne	Nelson	Washington State University
Birgit	Puschner	University of California, Davis
Craig	Ruaux	Oregon State University
Peggy	Schmidt	Western University
Jane	Shaw	Colorado State University
Daniel	Smeak	Colorado State University
Martin	Smith	University of California, Davis
Leslie	Sprunger	Washington State University
Ericka	Suchman	Colorado State University
John	Tegzes	Western University
Suzana	Tkalcic	Western University
Susan	Tornquist	Oregon State University
William	Vernau	University of California, Davis
Joie	Watson	University of California, Davis

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Compiled and edited by Dr. Rachel Halsey, Executive Coordinator for the Regional Teaching Academy.