Celebrating student innovation in teaching materials

“Why not a student contest for developing short videos on OIE competencies?” That was the suggestion of Rutch Khattiya, the twinning project lead for Chiang Mai University. Why not? After all, the animated infographics created during the twinning project had stimulated lots of attention from faculty and students alike.

The student contest developed quickly with 5th and 6th year veterinary students at Chiang Mai creating short videos to help explain Day 1 competencies. A celebration luncheon was held for the screening of the videos and presentation of awards. Ten videos were created, by students with CMU faculty oversight on content accuracy. The winning video focused on antimicrobial resistance. Other videos highlighted foot and mouth disease, glanders, food safety, animal welfare, cat scratch fever, superbugs, avian influenza and mycobacteriosis in fish. The students are now adding English subtitles so that other veterinary students may benefit. To mark the event, each of the participants received a shirt emblazoned with the OIE logo alongside those of CMU and UMN. The contest (and shirt) proved so successful that the graduate students in the new Masters of Veterinary Public Health program also contributed videos.

Assuring high quality National Veterinary Services through the alignment of veterinary educational curriculum with OIE guidelines on core curriculum and OIE recommendations on competencies of graduating veterinarians is the overarching objective of this OIE sponsored Twinning Project.
Celebrating student innovation in teaching materials continued

Watch all ten videos, including the winning video about antimicrobial resistance.

• AMR
• Animal welfare
• Avian influenza
• Cat scratch disease
• Food hygiene
• Glanders
• Superbugs
• Mycobacteriosis in fish
• Foot and mouth disease, video 1
• Foot and mouth disease, video 2

Chiang Mai helps Minnesota strengthen aquaculture teaching

While we often talk about curriculum gaps found during twinning, the project also identified some unique strengths at both veterinary faculties. Teaching veterinary students about aquaculture and aquatic animals is one of the real strengths of the CMU veterinary curriculum. Veterinary students start learning about aquatic animals in the second year of their curriculum, for a total of 21 different topics covered in 200 hours of lectures, laboratories, clinical practice and field trips over the course of the curriculum. Every student gains hands on experience with the diagnosis and treatment of aquatic animal diseases, especially in pet and farmed fish plus an opportunity to see fish farming in the countryside.

In contrast, the typical UMN veterinary student receives only a few hours of lectures on fish diseases, mostly geared toward pet fish.

The opportunity to learn from each other is one of the major benefits of the faculty exchanges. Over the course of the grant period, a total of 15 UMN faculty spent time at CMU. In the last of these faculty exchanges, CMU hosted Alex Primus, a member of the UMN aquaculture group.

Alex spent a busy week at CMU, observing students in the fish laboratory sessions and accompanying members of the aquatic animal team on site visits to fish farms. He picked up some good ideas on how to strengthen aquaculture teaching at UMN and was able to snap pictures to take back to UMN to incorporate in his lectures. Plans are already underway to include more aquaculture-related training in the veterinary public health rotation in the final year of the UMN veterinary curriculum.
New Masters emphasizes OIE advanced competencies

August 2016 saw the kick-off of a new Master of Veterinary Public Health program at CMU that emphasizes the OIE advanced competencies. The first cohort of eleven graduate students come from 7 countries: Bangladesh, Cambodia, Indonesia, Myanmar, Nepal, Thailand and Vietnam. Some worked for government before starting the programs, others for private sector companies and one from an intergovernmental organization.

Orientation included a 4 day workshop on One Health Leadership using zoonotic tuberculosis in elephants and their trainers (mahouts) as a case study. The new graduate students were joined by CMU and UMN faculty mentors and three medical technologists from Myanmar, who were completing a One Health exchange at CMU. The workshop included lectures, small group projects and practice sessions on communication and facilitation skills. The week culminated with a field trip to an elephant camp and presentations by the participants on major One Health challenges in their home countries.

The first few courses in the new program were co-taught by CMU and UMN teaching staff, providing one more opportunity to demonstrate new teaching styles and learn from one another. During the workshop, the students also completed an analysis on the delivery of veterinary public health services in each of their countries. The two year MVPH program leverages CMU collaborations with external partners including the Frei University of Berlin, Germany and intergovernmental organizations like the OIE.

While aligning the veterinary curriculum with the OIE Day 1 competencies was the primary objective of the twinning program, the opportunity to build graduate programs on the advanced competencies provided complementary value. Both contribute to the development of quality national veterinary services in SE Asia.

Lessons learned and recommendations

Curriculum mapping takes time, resources and diplomacy. While mapping the curricula against the OIE Day 1 competencies was foundational for the project, it was labor intensive and pointing out ‘gaps’ can be a sensitive topic.

- **Recommendations:** Engage faculty early and often in the mapping process and allow plenty of time to complete the process

Curriculum change requires long term commitment. Experience is the best teacher and developing new teaching materials does not guarantee they will be used.

- **Recommendations:** Ensure strong commitment of senior leadership and key curriculum committee members; fund twinning projects for at least 3 years; utilize ‘learn, do, teach’ approaches to help faculty get comfortable with new teaching skills; focus on early adopters; and create a portfolio of teaching materials from which faculty can choose
Lessons learned and recommendations continued

Maximizing twinning project success involves strong leadership and the ability to leverage complementary funding. And key personnel will change during the project

- Identify mutually beneficial (win-win) value propositions for both twinning partners; leverage complementary funding and plan for leadership changes

Reducing administrative burden is important given that OIE and the universities operate under different rules and have different accounting systems

- Allow recipients time to prepare for project launch after the funding decision and before the funding begins; work proactively with the Universities and OIE to develop a budget format and expenditure report that meets OIE’s needs while minimizing the administrative burden for the universities.

Veterinary Education Twinning’s aims and objectives CMU and UMN:

Our principal objectives are to:

- Strengthen effective veterinary services by aligning veterinary education with the OIE guidelines on veterinary education core curriculum within the framework of the OIE PVS pathway
- Improve the veterinary workforce by ensuring that new veterinary graduates demonstrate compliance with OIE Recommendations on the Competencies of Graduating Veterinarians (‘Day 1 Graduates’) to assure the high quality of national Veterinary Services (Day 1 competencies)
- Deliver continuing professional development for veterinarians working in both public and private components of National Veterinary Services in order to advance knowledge and skills as outlined in the advanced competencies developed by OIE
- Promote the One Health approach for interdisciplinary collaboration in addressing health issues at the human, animal, and environmental interface

Exchanges by the Numbers

- 18 CMU Faculty participated in 28 Exchanges during the 3 year project
- 15 UMN Faculty participated in 39 exchanges
- Fourteen CMU Students spent thirty-six weeks in United States
- and 19 UMN Students spent 46 weeks in Thailand