Dairy Fellows Program

Michael Van Amburgh, Professor
College of Agriculture and Life Sciences

What makes this an internationalized curriculum? Please describe the experience abroad and how you internationalized the curriculum at home.

The curriculum associated with the Dairy Fellows program has evolved to be international through the decision to develop an international trip for the Cornell University Dairy Science Club in 1996. The club members had always traveled throughout the U.S. to study dairy production and they expressed an interest in seeing something other than the U.S. Thus, the international study trip was established through a trip the England that happened to coincide with the announcement of “Mad Cow Disease” as a public health issue. The learning that was experienced by the students was visual and significant and the decision to embrace such a trip every other year was established. Since that time almost 900 students have participated in these study trips. In 2006, 94 students traveled to Italy for 11 days as one group and that was overwhelming for farms and other industry related visits. Thereafter, the activity was divided into two trips, one for the first and second year students and the second for the juniors and seniors. In 2010, the club trip evolved to be what now are two courses; AnSc 2550 Dairy Study Trip to Italy and AnSc 3560 International Dairy Study Trip. This exposure to the dairy industry and associated cultures provides the students with a perspective of the global dairy and food industry and engaging in another culture, even for a short period changes how the students see themselves within the context of the global industry and community. What the students experience abroad is driven by the relationships I have developed with industry professionals in various countries. The most important outcome is for the student to see something that causes them to rethink what they believe or that would change their practice at home. True learning evokes a change in behavior and that is the objective for these trips.

For example in Germany, the students are exposed to the movement away from the a socialist style approach to dairy production and to a more capitalistic approach through touring old Soviet style dairy facilities in Eastern Germany and then contrasting them with new, modern, cow friendly and environmentally friendly production centers. In addition, the German people’s desire to move away from nuclear energy and embrace green energy associated with agriculture has been central to the student’s experience with biogas digesters, solar panels and wind energy as part of the new income stream for farms. Further, discussions and tours involving economic decision making in the EU market, food processing (Müller in Leppersdorf, Germany), and related businesses adds to the exposure of how dairy is processed and distributed to the consumer. Finally, some cultural and historical exposure is reserved for certain parts of the trip, so the students have time to learn as much as possible about history and culture before their return.
Prior to departure, we meet as a group to discuss what the students are going to see, why they are going to see it and what the expectations are for their learning and behavior. We review the learning outcomes and the expectations for grading.

**How has the international experience been integrated into the curriculum?**

As indicated, this was a student club trip that was formalized into two courses. Thus any student that is active in our program with a sincere interest in learning about the global dairy industry can participate. Within the Dairy Program about 95% of our students have had at least one international experience prior to graduation and many have had two. We have learned that early exposure, e.g. traveling as a freshman on a trip, encourages them to want to study abroad because they see it as less daunting.

**What are the intended student learning outcomes of the internationalized curriculum related to knowledge generation, changed attitudes, and developed skills, and how do you assess them?**

Here are the learning objectives for a trip to Germany:

1. Students will be able to describe the economics and conditions surrounding milk production and consumer expectations and compare this to the U.S.
2. Students will recognize and explain resource limitations for dairy production systems and provide context for that relative to future food production within the structure observed.
3. Students will analyze dairy food production systems and contrast that with the U.S. system.
4. Describe the impact of government support for agriculture development and compare that with current U.S. policy.
5. Gain an appreciation for the diversity of production systems and be able to describe the role agriculture plays in meeting the energy needs of the country and how that integrates with “green energy” policies.

They are assessed for these learning outcomes through submission of a paper that is to address these plus additional questions tailored to the experiences of the trip. Based on subsequent discussions in class and in other situations, it is apparent that what the students learned is used as a reference for other decision making in their professional lives. For example, I am aware that certain practices on NY State farms were developed based on observations made during these trips.