LEAP for Instructors: Using AAC&U Resources for Effective Course Design
Case Study 2: Roseann Berg

Dr. Roseann Berg has been working as a non-tenure-track faculty (NTTF) member since fall 2011. She has taught Anatomy and Physiology; Human Biology; and Anatomy, Physiology, and Genetics. Berg began her career by teaching simultaneously at an educational trust fund that offers continuing education for healthcare workers and at an urban Bay Area community college. For two years, she also taught concurrently at a graduate-level Chiropractic college and at a for-profit institution. Since 2011, she has taught at two to four institutions each year.

Berg has made it a priority to attend and learn from the professional development seminars at each of her institutions. This can be difficult as such seminars frequently conflict with other classes or department meetings. Occasionally, there are small financial incentives for attending these development opportunities, but typically the main incentive is Berg’s own motivation to improve. Berg reports that both she and her fellow NTTF faculty colleagues find it difficult to get involved on campus outside of teaching (e.g., committee work or new course or curricula development). Berg notes that on some campuses NTTF faculty are allowed to attend such meetings, but they are not supported in terms of compensation or scheduling, while on other campuses NTTF are not invited into those conversations at all.

Berg’s most valuable faculty development experiences have come through the Bay Area’s Community College Biology Faculty Enhancement through Scientific Teaching (CCB FEST). This new, National Science Foundation (NSF) supported collaboration between a consortium of San Francisco Bay Area community college faculty who teach any type of biology at any Bay Area community college. CCB FEST convenes faculty teaching similar courses to learn from one another’s successes and trials. The CCB FEST focuses on fostering student engagement, building critical thinking, and creating active learning experiences that boost confidence and success for students from underrepresented populations in STEM. Participating faculty learn active and experiential pedagogies through classroom simulations. Some of the approaches that Berg has found useful include the use of concept maps, think-pair-share activities, and pre-reading. The CCB FEST sessions “walk the talk” by offering both classroom demonstrations and guided discussions to help all faculty understand the pedagogical components that make the activity effective. The sessions allows faculty to brainstorm about how to use these strategies in different configurations to enhance student learning.
During a recent one-day workshop, Berg “got the bug” for Reading Apprenticeship. As a result, she took advantage of a grant-sponsored program through one of her institutions that allowed 10 faculty to complete the six-week online course in Reading Apprenticeship through California Community Colleges Success Network. Berg says, “I now have several valuable tools that I can implement in my classrooms to help students feel more comfortable in their classes and get the most content out of the textbooks in the least amount of time.”

Berg has moved beyond development opportunities available through her many institutions by engaging in several of Coursera’s Massive Open Online Courses (MOOCs) on teaching and assessment in health education programs, building authentic assessment in online settings, and the psychosocial dimensions of learning and the classroom environment. These courses taught Berg the value of engaging her students by asking “how and why” questions throughout lab experiences. An interactive approach encourages students to think about what they are learning, rather than simply following lab instructions without engaging. Berg has always taken an interactive approach when teaching graduate students, but she realized that her undergraduate students need the same ability to “think from a multitude of angles in order to be competitive in today’s job market.”

Instilling coursework with a sense of peer accountability and collaboration is another strategy that Berg has adopted as a result of professional development opportunities. Students’ lab participation and achievement has improved as a result of Berg’s inclusion of more individualized, hands-on learning opportunities in 15-30 minute group or paired activities. She found that without these structured activities followed by assessments, students who tend to breeze through lab activities would rush through the material and leave early. While this might be okay for top-performers, it left other students to wrestle with the material without peer support and the frustration of having to stay longer than other students. Because they got frustrated, some students would leave the sessions without mastering the learning outcome. All students in her classes are now expected to succeed together; no one leaves the lab sessions until everyone in their group “gets it,” which encourages collaborative learning. Berg further enhanced students’ lab time by including group or paired discussions after each short, hands-on lesson.

One challenge that Berg faces in her multi-campus NTTF role is continually improving her teaching even though she does not consistently teach the same classes. This lack of consistency makes it challenging to reflect and put changes into practice. Berg aims to tackle this challenge in her recent appointment to the American Physiology Society’s Physiology Education Community of Practice (PECOP) Fellowship. As a PECOP Fellow, she will help create and curate web-based high-impact practice resources for faculty in her field. For more
information, visit lifescitrc.org. Berg suggests that a forum for faculty to share high-impact assignments related to specific learning outcomes or content matter would be invaluable. In such an online forum, faculty could review and adapt assignments that others have created on specific topics (e.g. cell division). This forum would not need to be institution specific, but it would need to be promoted by institutions in order to raise awareness and to gather contributors. Berg’s advice to other adjuncts is to take every opportunity (e.g. teaching and learning conferences, academic senates, etc.) to get to know faculty and staff, whether NTT or not, from multiple colleges in order to build a network rich in knowledge and opportunities to grow as an educator.