



# LEARNING ACTIVELY MENTORING PROGRAM (LAMP) UPDATE

Over the last year, LAMP has continued to illuminate paths for educators across levels. All three of our programs: 1) the Fellows program that trains college educators, 2) the learning assistant program that prepares future educators and the 3) the science roadshow that supports K-12 educators are fully operational and ramping up.

### THE LAMP FELLOWS PROGRAM

LAMP Fellows receive intensive, year-long training in active learning. They develop instructional strategies that are implemented in their classrooms, assess the impacts on student learning and develop a teaching philosophy statement. The Fellows program has had a large impact on instructors, courses and students at the University of Wyoming and at five of the Wyoming Community Colleges.



Figure 1: The reach of the LAMP over the course of 5 regular semesters and 3 summer semesters (summer 2016 – fall 2018). The first LAMP cohort of educators began training in the summer of 2016. Student numbers include a pilot active learning course taught in spring 2016. However, class and student numbers do not yet include community college data. Thirteen of the 72 fellows teach at five of our seven Wyoming community colleges: 2 faculty from Eastern Wyoming College (EWC), 6 faculty from Laramie County Community College (LCCC), 4 faculty from Northwest College (NWC), and 1 faculty member from Sheridan College. One graduate student trained in the 2016 cohort now teaches at Western Wyoming Community College. A majority of the classes (85 of 141) are lower division (gateway) courses.

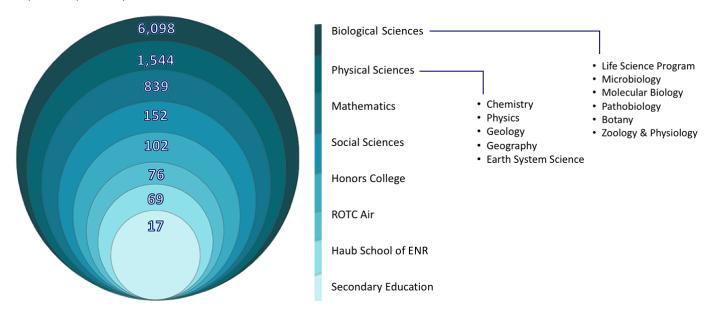


Figure 2: The reach of the LAMP by Program or Department. Circle size indicates the number of students reached. Individual departments and programs within the biological and physical sciences are listed in order of the number of students reached. LAMP-trained educators in the Life Sciences Program have reached 4,661 students and those in the Chemistry department have reached 1,093 students. Instructors serving the Life Sciences Program hail from the Zoology/Physiology, Botany and Molecular Biology departments. The Microbiology Program is serviced by educators in the Veterinary Sciences, Chemistry and Molecular Biology Departments.

#### THE LAMP SCHOLAR LEARNING ASSISTANT PROGRAM

The Learning Assistant (LA) Program trains undergraduate students and students seeking a post-graduate teaching credential. LAs are paired with a LAMP-trained instructor; they gain practical teaching experience as facilitators of activities. LAs also enroll in a pedagogy course.

- In 3 semesters we have trained 18 undergraduates and 5 College of Education post-baccalaureate students.
- Our LAMP GA for the Learning Assistant Program has researched the LA experience (accepted for publication). Key findings: LAs relate: 1) Increased confidence, 2) Uncertainty about where they fit into the teaching hierarchy, 3) That they have learned how to learn, 4) Moments of frustration, 5) Appreciation of teaching

## THE LAMP/WRSP ROADSHOW

LAMP faculty and graduate students collaborate with the undergraduate research programs such as the Wyoming Research Scholars Program (WRSP) to take 'science on the road'. We travel to schools across Wyoming to integrate hands-on projects into K-12 science classes. These active learning days allow undergraduate researchers at UW to showcase their research and engage the K-12 students in hands-on activities. LAMP collaborates with the Wyoming Department of Education and sponsors educators from across the state to attend the Roadmap to STE(A)M Conference.

- Since its inception in 2017, the Roadshow has directly impacted ~1400 K-12 students
- The Roadshow has traveled to Laramie Jr. High and High School, Sheridan Junior High, Gillette High School, Wamsutter's Desert School, Rock Springs High School, Casper's Oregon Trail Elementary School and Douglas High School.
- 21 undergraduate and graduate students have traveled with the Roadshow
- In the summers of 2017 and 2018, LAMP awarded scholarships to 26 educators from Rock Springs, Lander, Casper, Thermopolis,
  Cody, Torrington, Upton, Riverton, Moorcroft, Gillette, Laramie and Cheyenne to attend the Roadmap to STEAM Conference in Gillette

### LAMP FUTURE DIRECTIONS

Currently we have collected student evaluations for LAMP-trained educators in the College of Arts and Sciences. These will be assessed both quantitatively and qualitatively. The Qualitative Aspect will involve an analysis of student responses in the comment section of the evaluations to see how they are responding to the new learning environment, particularly if there has been a shift in attitude since the instructor was trained by LAMP. We will also be analyzing changes in drop, withdrawal, failure and incomplete marks for instructor's courses pre- and post-LAMP training.