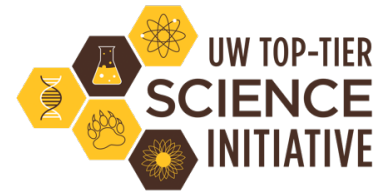




Learning Actively
Mentoring Program



LEARNING ACTIVELY MENTORING PROGRAM (LAMP) STRATEGIC PLAN

GOAL 1: NEWLY HIRED STEM TEACHING FACULTY (AT UW AND ALL 7 COMMUNITY COLLEGES) AND INCOMING TEACHING GRADUATE STUDENTS WILL BE TRAINED IN ACTIVE, INCLUSIVE, EVIDENCE-BASED PEDAGOGIES BY THE LAMP YEARLONG FELLOWS PROGRAM.

SPECIFIC AIMS:

1. A partnership will be established with Academic Affairs, specifically their “New Faculty & Lecturer Orientation”; this will enable all incoming STEM faculty to be notified of the LAMP yearlong program and encouraged to apply.
2. Newly hired STEM teaching faculty will be personally invited to apply in follow-up emails.
3. A partnership will be established with the ECTL, specifically their “Graduate Assistant Teaching and Learning Symposium & New Graduate Student Orientation”.
4. New graduate teaching assistants will be personally invited to apply in follow-up emails.
5. An existing partnership with the Community College Commission will be nurtured in order to establish a free, virtual webinar that will be viewed by all new community college STEM teaching faculty.
6. New community college STEM teaching faculty will be personally invited to apply in follow-up emails.

METRICS OF SUCCESS:

- During the 2022-2026 time period, the percent of new STEM faculty trained by the LAMP yearlong program will increase and hit a steady state at 90% of all new STEM faculty being consistently trained.
- During the 2022-2026 time period, the percent of all new teaching graduate assistants will increase and hit a steady state at 80% of all new STEM faculty being consistently trained.

GOAL 2: LAMP TRAINING WILL BE MADE ACCESSIBLE TO INTERESTED INDIVIDUALS AND TEAMS NATIONWIDE.

SPECIFIC AIMS:

1. Through existing partnerships with prior LAMP fellows and through partnerships within the Scholarship of Teaching and Learning Community, potential external participants will be notified of the LAMP yearlong training opportunity.
2. Funds from paying external participants will be utilized to increase the long-term sustainability of LAMP.

METRICS OF SUCCESS:

- LAMP will pilot this with one external member in 2021-2022 and ramp this up to 10 external participants by 2026.
- LAMP will defray 20% of its expenses by 2026.

GOAL 3: ALL LAMP-TRAINED FELLOWS WILL DEVELOP AN INFORMED WRITTEN OR MULTIMODAL TEACHING PHILOSOPHY.

SPECIFIC AIMS:

1. Teaching philosophy submission will be added to the required elements of the yearlong training.
2. During the Summer Institute and ensuing workshops, fellows will (continue to be) trained in teaching philosophy development.

METRICS OF SUCCESS:

- During the 2022-2026 time period, 80% of all LAMP fellows will complete and submit their teaching philosophy.

GOAL 4: LAMP-TRAINED FELLOWS WILL DESIGN AND IMPLEMENT EVIDENCE-BASED CURRICULUM THAT ALIGNS WITH THEIR TEACHING PHILOSOPHY AND INCORPORATES ONE OR MORE ACTIVE, INCLUSIVE LEARNING MODALITY. THEY WILL ASSESS HOW THIS CURRICULUM ALLOWS ACHIEVEMENT OF CLEAR, MEASURABLE LEARNING OUTCOMES.

SPECIFIC AIMS:

1. After the Summer Institute, fellows submit Instructional Strategies that detail their planned curriculum. These are systematically rubric assessed for outcomes, assessment, activities/assignments and the alignment therein.
2. During the semester in which fellows implement their Instructional Strategy, the LAMP GA or the LAMP director will observe the class to witness implementation of the curriculum and provide substantive feedback. A variation of a known classroom observation tool (e.g. COPUS) will be developed.
3. At the end of the yearlong training, fellows present posters that detail: Philosophy guiding the instruction, learning outcomes, activities/assignments, and assessment. These will be systematically assessed using a rubric.

METRICS OF SUCCESS:

- During the 2022-2026 time period, 90% of all LAMP fellows will achieve Goal 3.

GOAL 5: LAMP FELLOWS WILL SHARE THEIR PROCESS OF INSTRUCTIONAL DESIGN, ACTIVE, INCLUSIVE LEARNING EXPERIENCE AND STUDENT LEARNING ASSESSMENT (FACILITATED BY THE LAMP) WITH OTHER PRACTITIONERS BOTH WITHIN AND OUTSIDE OF THE SCIENCE INITIATIVE.

SPECIFIC AIMS:

1. LAMP fellows will be invited to facilitate LAMP *Coffee & Curriculum*.
2. LAMP fellows will be invited to apply to the yearlong Educator Learning Community (ELC) *Leaving the Light On* where they will have the opportunity to engage in SoTL (scholarship of teaching and learning) and present formally at a National/International teaching and learning conference.
3. LAMP fellows will be notified of other opportunities to engage in SoTL and present at the Ellbogen Center for Teaching and Learning and within the College of Education.
4. LAMP fellows will be invited to apply to be facilitators at the Summer Pedagogical Training for K-12 educators.

METRICS OF SUCCESS:

- During the 2022-2026 time period, 80% of all LAMP fellows will return to present at *LAMP Coffee & Curriculum*.
- During the 2022-2026 time period, 20% of all LAMP fellows will be admitted to and complete the Educator Learning Community.
- During the 2022-2026 time period, 20% of all LAMP fellows will facilitate sessions for other groups on campus (e.g. ECTL).
- During the 2022-2026 time period, LAMP-trained educators will present at least 50 SoTL projects.
- During the 2022-2026 time period, LAMP-trained educators will publish at least 20 SoTL projects.

GOAL 6: IN COLLABORATION WITH THE HHMI INCLUSIVE EXCELLENCE TEAM, LAMP WILL EXPAND THE EDUCATOR LEARNING COMMUNITY (ELC) (*LEAVING THE LIGHT ON*) TO THE COMMUNITY COLLEGES.

SPECIFIC AIMS:

1. Two pilot ELCs will be launched at Northwest College and Laramie County Community College during the 2021-2022 academic year.
2. ELCs will be sustained at all 7 Community Colleges by 2026.

METRICS OF SUCCESS:

- Social network analysis (SNA) and corresponding qualitative analysis will show that the network of ELC educators becomes more diverse (less siloed and homophilous), surveyed educators and students will express increased feelings of support, inclusion and confidence (see network analysis below).
- Students in courses taught by LAMP-trained faculty (1 year in LAMP and 1 year in the ELC) will be more likely to complete their degree and will take less time to degree completion than the average student in shared demographics.

GOAL 7: CONDUCT EDUCATIONAL RESEARCH (THAT IS BROADER THAN SOTL), WITH AN EMPHASIS ON WHAT IS WORKING IN ACTIVE LEARNING CLASSROOMS, TO INVESTIGATE RELATIONSHIPS BETWEEN TEACHING PRACTICES AND STUDENT SUCCESS, LITERACY, ENGAGEMENT, AND FEELINGS OF INCLUSION.

SPECIFIC AIMS:

1. The Active Learning Survey will be adopted by LAMP-trained educators during and for three years after being a fellow.
2. The job description for the LAMP Graduate Assistant will be expanded to include quantitative and qualitative data compilation on AL Survey data.
3. LAMP fellows will be given the option to join an educational research learning community devoted entirely to the AL Survey. Fellows in this community will be supported throughout the research and publication process. The LAMP Graduate Assistant will assist with the facilitation of this learning community.

METRICS OF SUCCESS:

- During the 2022-2026 time period, 50% of LAMP faculty will launch the active learning survey for at least 1 year, 20% will continue to gather data for at least the three years after being a fellow.
- During the 2022-2026 time period, LAMP-trained educators will publish at least 10 manuscripts in peer reviewed educational journals.

- During the 2022-2026 time period, the LAMP Director and LAMP GA will publish at least 3 manuscripts in peer reviewed educational journals.
- During the 2022-2026 time period, 20% of all LAMP fellows will be a part of the educational research learning community.

GOAL 8: UNDERGRADUATE, GRADUATE AND POST-BACCALAUREATE STUDENTS WILL BE TRAINED AS LAMP LEARNING ASSISTANTS (LA'S) THROUGH A TEACHING PRACTICUM AND A PEDAGOGY COURSE (BEST PRACTICES IN ACTIVE LEARNING)

SPECIFIC OUTCOMES:

1. Nurture existing relationships with the College of Education Post-baccalaureate program to ensure that all entering Post-baccs are aware of the LA program. Stably place an announcement in the materials students receive upon entrance.
2. Establish a relationship between the LA program and the ECTL's Students as Partners Program.
3. Stably advertise the LAMP LA program in every STEM, interdisciplinary and transdisciplinary unit.
4. Revise the job description for the LAMP graduate student to include fellowship timeframe (maximum of 5 years). Develop a systematic approach for evaluating the GA annually to ensure that all described job responsibilities are satisfactorily completed.
5. Embed training about the LA program into the yearlong LAMP Fellows program so that every LAMP-trained faculty member and teaching GA is aware of the benefits an LA can afford.
6. Continue to assess the LA/Professor partnership, the student-LA relationship and curriculum produced through the LA/Professor partnership.
7. Facilitate presentations by LAs and LA/Professor teams at *Coffee & Curriculum* and other venues.

METRICS OF SUCCESS:

- During the 2022-2026 time period, 100 Undergraduate students (at least 15 of which are pre-service teachers), 40 graduate students, and 20 post-baccalaureate students will be trained as LAs.
- A majority of College of Education Post-baccs will be aware that the LAMP LA program exists.
- A majority of College of Education *Curriculum and Instruction* Graduate students will be aware that the LAMP LA program exists.
- At least 50% of the LAMP-trained fellows will utilize an LA.
- A majority of students in every STEM, interdisciplinary and transdisciplinary unit will be aware of the LA program.

GOAL 9: IMPROVE RETENTION AND PASS RATES OF ALL STUDENTS WITH PARTICULAR EMPHASIS ON MARGINALIZED STUDENTS IN STEM CLASSROOMS.

SPECIFIC OUTCOMES:

1. Establish a baseline of D, W & F rates for all STEM departments across all student demographics.
2. When at least half of the faculty in a STEM department are LAMP-trained, compare D, W & F rates to the baseline.
3. Establish attrition/retention rates for all STEM departments.
4. When at least half of the faculty in a STEM department are LAMP-trained, compare attrition/retention rates.

METRICS OF SUCCESS:

- D, W & F rates will decrease for all students (with greatest decreases being seen for marginalized student groups) in a department once 50% of the educators in said department are LAMP-trained.

- Retention will significantly increase (with greatest gains being seen for marginalized student groups) once 50% of the educators in said department are LAMP-trained.

GOAL 10: ESTABLISH PROFESSIONAL DEVELOPMENT/COLLABORATION OPPORTUNITIES FOR SCIENCE INSTRUCTORS ACROSS THE STATE WITH THE GOAL OF IMPACTING WYOMING LEARNERS (K-COMMUNITY) AS THEY TRANSITION THROUGH EDUCATIONAL LEVELS.

SPECIFIC OUTCOMES:

1. LAMP will collaborate with the Roadshow, the WDE, the College of Education (The Education Initiative), The Office of Outreach and Engagement, the Math Science Teaching Center, The Wyoming School University Partnership and others (e.g. Wallup Initiative) to design, develop and implement a holistic, yearlong pedagogical and action research-based training program (including a summer institute) for K-community educators.
2. LAMP will collaborate with the Roadshow to support undergraduate students, graduate students and faculty in their design of inclusive, active curriculum for In-reach and Outreach.

METRICS OF SUCCESS:

- Partnerships will be solidified or established by 2022.
- The yearlong program (including the K-community Summer Institute) will be piloted no later than 2023.
- Trained teachers and community science educators will express increased satisfaction, will be more civically engaged, and will implement documentable community-based and problem-based learning projects.
- Students educated by trained teachers will spearhead community-based research.

GOAL 11: VISUALIZE AND DESCRIBE THE IMPACTS OF LAMP TRAINING ON EDUCATORS' CAMPUS, STATEWIDE, NATIONAL AND INTERNATIONAL SOCIAL CONNECTEDNESS AS WELL AS ON THEIR AFFECTIVE FEELINGS OF CONNECTION THROUGH COMMUNITY, THEIR ENGAGEMENT IN FUTURE LEARNING (EDUCATIONAL DEVELOPMENT) AND SELF-ASSESSMENT CAPACITY.

SPECIFIC OUTCOME:

1. Expand social network analysis (SNA) to encompass all LAMP-trained educators.
2. Expand corresponding qualitative analysis to garner how feelings and experiences of being alone/isolated shift to feelings of connection through community (feelings of inclusion).
3. Monitor LAMP educator involvement in post-LAMP educational development (including lifelong learning, community and civic engagement, outreach etc...).
4. Assess changes in self-assessment using the paired measures Science Literacy Concept Inventory and Knowledge Survey (KS-SLCI).

METRICS OF SUCCESS:

- A social network analysis and corresponding qualitative study in participation with a majority of LAMP-trained educators will be completed by 2026.
- Hypothesis: If we build a diverse cross-institutional community network than feelings of inclusion, support, and confidence as well as lifelong learning and self-assessment capacity for all in our network will increase.
- Hypothesis: The social network analysis will show that every faculty member of the 5 core SI departments is advised by a LAMP-trained fellow.