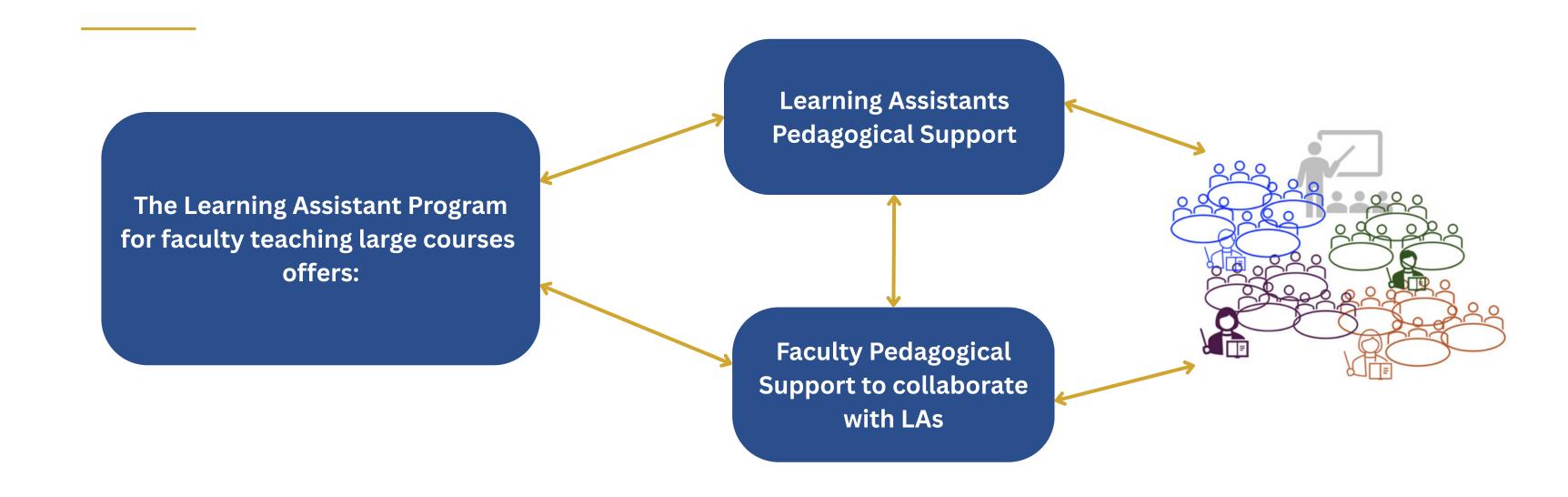




# Engagement, Community, and Sense of Belonging Don't Just Happen; They are Designed.



### Who/What are Learning Assistants?

A Learning Assistant (LA) is an undergraduate peer educator who receives pedagogical training and gains practical experience in supporting active learning in large courses.

LAs collaborate with faculty to facilitate learning in lectures, labs, and discussions. They can be an integral part of successful teaching. By integrating LAs into large courses, faculty can create a more engaging and collaborative learning environment that benefits our educational community.





### Benefits of Implementing LAs



Increase student grades and retention.

(Dawson, et al., 2014; Wilson & Varma-Nelson, 2016).



Increase instructor capacity, help to prevent burnout



Increase student engagement and collaboration

(Popichak et al., 2025)



Provide professional experience and mentorship to LAs

(Clements et al., 2025)

#### Sense of Belonging Themes Identified in Clements et al., 2025

Cynthia Brame (Vanderbilt University) explores how Learning Assistants impact STEM students' belonging and confidence across diverse science courses. The study of 1,146 students reveals context matters—LAs reduce isolation in group-based setups and offer feedback in lecture formats. Insights to help educators build more inclusive classrooms

#### **Belonging Themes**

#### **B1:** Decreased isolation

LAs (and the small groups they facilitate) decrease feelings of isolation.

#### **B2:** Inspirational role models

LAs serve as inspirational role models for students.

#### **B3: Mentorship & encouragement**

LAs act as mentors by encouraging students through challenges and by connecting them with the larger STEM community.

#### **B4: Engagement & confidence**

LA groups help students become engaged and more confident in their STEM-related knowledge and skills.

#### **B5: Approachability & relatability**

As near peers, LAs are effective sources of support because their approachability and relatability (especially in comparison with generalized STEM others) reassure students.

#### **Confidence Themes**

#### C1: Lower risk of judgement

LAs help foster an environment where students feel a lower risk of negative judgement.

#### C2: Feedback & explanation

LAs increase students' confidence by offering feedback, both by confirming students' understanding and by providing additional explanation.

#### C3: Expressing growing knowledge

Working with LAs helps students practice expressing their growing scientific knowledge, often through discussion with peers.

### How can faculty implement LAs to support large courses?

- Support active learning activities: LAs will support faculty and/or TAs by moving around and guiding their peers when engaged in small group conversations. LAs will encourage their peers and help them with small group facilitation such as formulating questions, assessing understanding, and difficulties.
- Student Feedback and Input: LAs can be assigned to engage in the peer-review process and to provide weekly (ungraded) feedback on assignments, projects, and group work. While some of these assessments may end up in the gradebook, the LAs are not assigning the grade. Instruction on how to give feedback should be given by the instructor.
- In-Class Logistical Support: LAs may help to prepare classrooms for active-learning activities, prep labs, pass out/collect homework/papers/tests, support TAs, assist in proctoring exams, support active learning technologies (if skills align) such as PollEverywhere, or manage breakout rooms in Zoom, etc.





### How can instructors implement LA to support courses?

- Learning sessions: LAs can host 'Learning Sessions,' which are similar to office hours, except LAs can only support students who need help with course content and assignments. Questions about grading or other administrative concerns should be directed to instructors and TAs.
- **Pedagogical Input:** LAs can design, assess, implement, and give valuable feedback on future lessons, activities, assessments, the Canvas page, and the syllabus.
- **Discussion Boards:** LAs can monitor, engage with, and respond to student discussion boards (or other discussion-type activities).

### LA Pedagogy Training Course

#### LA Pedagogy Training Course

• LAs participate in this training concurrently with their first semester working as an LA.



Theories of learning (metacognition, Blooms Taxonomy, etc.)



Critical thinking and leadership skills



Small group facilitation



Assessing student understanding and difficulties



Intellectual and cultural diversity in learning



Providing worthwhile feedback

This training course is facilitated by Adriana Signorini within the CETL. Once faculty submit their LA team list, LAs will be contacted for the pedagogy training.





### **How to Get Started**

- 1. Check out our LA website with program details: <a href="https://teach.ucmerced.edu/LAProgram">https://teach.ucmerced.edu/LAProgram</a>
- 2. Email your school's program chair with your interest.
- 3. Once approved, send Adriana Signorini the list of LAs to ensure that your LAs have a reserved spot in the pedagogy training program before the semester starts.
- 4. Join the LA Program in Catcourses site for resources and materials.
- 5. Schedule your first weekly teaching team meeting with your LA, TAs, and anyone else supporting your course.
- 6. Please contact Adriana Signorini <asignorini@ucmerced.edu> with further questions.



# For more information

Visit our Website:

https://teach.ucmerced.edu/LAProgram

Contact Program Lead:

Dr. Adriana Signorini <asignorini@ucmerced.edu>

## References

- Barrasso, A.P., Spilios, K.E. A scoping review of literature assessing the impact of the learning assistant model. IJ STEM Ed 8, 12 (2021). <a href="https://doi.org/10.1186/s40594-020-00267-8">https://doi.org/10.1186/s40594-020-00267-8</a>
- Clements K. A, Kyle T. Vallone, Thomas P. Clements, Elizabeth H. Catania, Lily L. Claiborne, Katherine L. Friedman, Todd R. Graham, Heather J. Johnson, Savanna R. Starko, Tara D. Todd, Jessica Watkins, and Cynthia J. Brame. mpacts of Learning Assistants on Student Belonging and Confidence Vary Across Science Disciplines and Course Contexts. CBE—Life Sciences Education 2025 24:2
- Dawson, P., van der Meer, J., Skalicky, J., & Cowley, K. (2014). On the effectiveness of supplemental instruction: A systematic review of supplemental instruction and peer-assisted study sessions literature between 2001 and 2010. Review of Educational Research, 84(4), 609–639.

   https://doi.org/10.3102/0034654314540007
- Popichak KA, Gruber PE, Suchman EL, McLean JL. Implementing an undergraduate learning assistant model to foster engagement and professional development in microbiology courses. J Microbiol Biol Educ. 2025 Jun 12:e0004225. doi: 10.1128/jmbe.00042-25. Epub ahead of print. PMID: 40503894.

https://pubmed.ncbi.nlm.nih.gov/40503894/