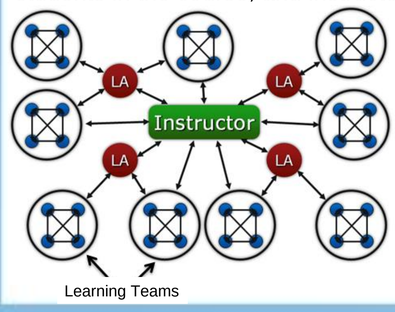
Partnerships in Teaching & Learning

The Learning Assistant Model

The overarching goal of the Learning Assistant (LA) model is alignment of courses and curriculum with evidence-based instructional strategies. Central to this model are partnerships between the LAs (paid and trained undergraduate students), students in the course, and instructors.



Barrasso, A. P.; Spilios, K. E., A scoping review of literature assessing the impact of the learning assistant model. *International Journal of STEM Education* 2021, 8 (1), 12.

See also: www.learningassistantalliance.org

What does an LA do?

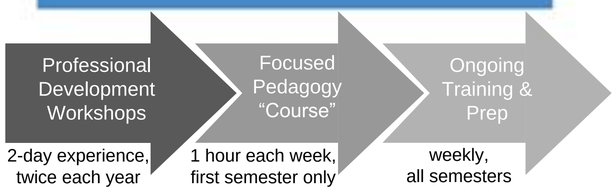
Plan with faculty. During weekly preparation sessions, LAs and their lead instructor meet as a team to prepare for future classes and exchange information about how students are interacting with the course

Learn and reflect on effective pedagogy. The pedagogy professional development series introduces LAs to research and strategies that support conceptual development by eliciting student ideas, listening and questioning, building relationships, and integrating learning theories with practice.

Work with students in groups. LAs guide learning teams focusing mainly on eliciting student thinking and helping each group member participate in developing a shared understanding.

www.learningassistantalliance.org

Investing in Learning Assistants



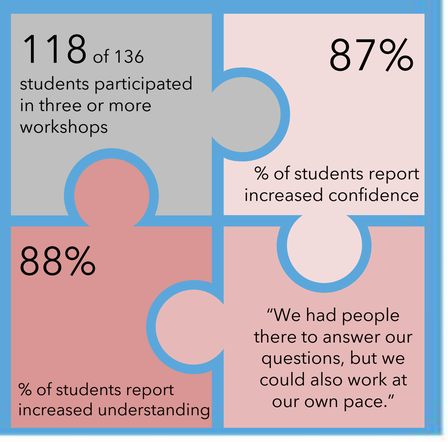
LAs learn and practice question-asking strategies during a pre-semester workshop.

Example: Dosage Calculations

Pre-nursing students actively participated in 30-minute dosage calculation workshops during the Fall 2022 and Spring 2023 semesters.

LAs led workshops and provided individualized support for participants.

Participation in workshops was for-credit; workshop content aligned with course content. Workshop format included mix of direct instruction and self-paced practice.



SUMMARY

The EKU Center for STEM Excellence initiatives critically rely on partnership amongst students, student partners, instructors, and other campus resources. We draw on the seminal work by Alison Cook-Sather and coworkers, who articulated and demonstrated various models for partnerships with students in teaching and learning, where collaborative reciprocity can yield authentic inclusivity. We seek to emulate these practices such that student voices are understood and integrally meaningful in creating more equitable, inclusive learning environments.

Cook-Sather, A., Dialogue across differences of position, perspective, and identity: Reflective practice in/on a student-faculty pedagogical partnership program. *Teachers College Record* 2015, 117 (2), 1-42.

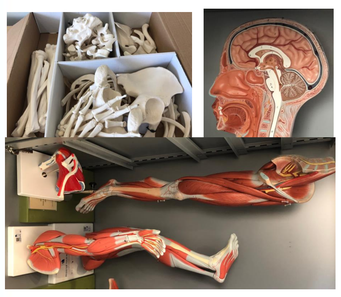
Felten, P.; Bovill, C.; Cook-Sather, A. In *Engaging students as partners in learning and teaching (1): benefits and challenges–what do we know*, Paper presentation, International Consortium on Educational Development Conference, 2014.

LAs in Anatomy and Physiology

All lab sections of BIO 307 (Human Anatomy & Physiology 1) and BIO 308 (Human Anatomy & Physiology 2) have one embedded LA who facilitates sense-making by asking strategic questions as students complete the lab exercise. Additionally, in BIO 308, LAs lead group-based practice and reinforcement activities at the end of each lab period.

Efforts focus on these courses because students often take the (very rigorous) courses in their first year of college, and historical DFW rates are high.

In preparation for their work with students, STEM Center Learning Assistants (above) portrayed meiosis I, meiosis II, or a cross section through the skin with cakes and candies.



Anatomy models and other learning manipulatives are available in the STEM Center for group practice, independent study, and focused tutoring.

While visiting the nearby University of Kentucky's Gross Anatomy Lab, LAs were able to explore medical research opportunities. Importantly, they were able to envision themselves thriving in future STEM careers.

Tips for Other Institutional Teams

Deep investments in LAs is critical to their successes and efficacies. Our professional development series begins with a 3-day intensive training just prior to the start of each semester and continues with weekly pedagogy workshops for the LAs first semester. All training and professional development workshops are considered work; accordingly, LAs are paid hourly for their time during these workshops.

BONUS: LAs that stay at EKU for graduate degrees are well-prepared to take over as instructors of record after working as LAs for the same course for one or more semesters.

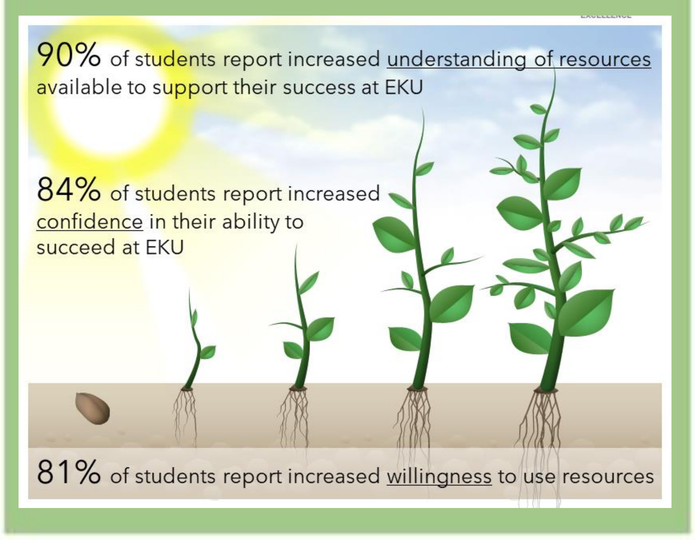
Investing in Learning Assistants

The STEM Center provides professional development for LAs and other student partners, including those who work in learning centers housed in academic departments.

At Winter Workshop 2024, sixty Learning Assistants from the STEM Center, the Biology Peer Mentoring Center, and the Math & Stats Tutoring Center used a statistics game to learn and practice scaffolding. Scaffolding is an instructional technique where support and guidance are gradually removed as students' skills and understanding grow. This is a particularly important technique for Learning Assistants to use because it helps build students' confidence and academic self-efficacy.

Example: Student Success Seminars

In Fall 2022, Learning Assistants were embedded in the College of STEM sections of EKU's Student Success Seminar (SCO 100). Students in SCO 100 are cohorted by major; a total of 233 first time first year students were in sections supported by LAs. Over the semester, LAs led six different 15-minute workshops designed to reinforce and amplify course content.



Summary

In Academic Year 2022 – 2023, the first full year of the Center's operations, Learning Assistants working in the Center for STEM Excellence facilitated nearly 14,000 interactions with EKU students in course-specific, for-credit learning activities and an additional 500 drop-in learning and professional development interactions.

Instructional partners include faculty, staff, and GAs.[a] There is some duplicated headcount.[b] Most students who visit the STEM Center join us more than once. Interactions include drop-in learning, skill-building workshops, math placement testing, and student partner training and professional development.

Because the bulk of STEM Center activities are other-than-optional, all students in courses with LAs experience the benefits of near-peer, evidence-based instructional techniques.

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Judy Jenkins, Eastern Kentucky University
Center for STEM Excellence Director
Associate Professor (Chemistry)
judy.jenkins@eku.edu