REPORT



CUES Mapping Educational Challenges Workshop on "Teaching & Learning Assistants (TAs/LAs) in the Classroom Across Disciplines"

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Introduction

This report summarizes high-level consensus recommendations from a two-day Mapping Educational Challenges (MECha) workshop at the University of Arizona (UArizona), held in April 2023, and dedicated to "Teaching & Learning Assistants (TAs/LAs) in the Classroom Across Disciplines." The workshop, organized and hosted by the Center for University Education Scholarship (CUES) at UArizona, included a multidisciplinary cross-section of 21 faculty and staff, spanning 5 academic colleges and 3 units/offices, discussed TAs/LAs in relation to the university learning experience. Resources and readings discussed during the workshop, and organizing committee member bios appear at the end of the report.

Framing the Challenge

There is a large variety in how TAs and LAs are assigned, vetted, and trained across the University. These differences also highlight the various forms and types of people who are part of teaching teams in classes. They include undergraduate preceptors, undergraduate TAs (UTAs) also sometimes known as Learning Assistants (LAs), graduate level graders and graduate TAs (GTAs). Team composition is further complicated by the fact that teaching teams may or may not include individuals who are studying in the field/content of the courses they are assigned to and have varying designations, pay scales, or credit bearing considerations. Building, training, and mentoring these teaching teams is essential for providing quality instruction.

Eliciting Perspectives on the Meaning and Composition of Teaching Teams

The teaching teams used in courses across the University of Arizona vary greatly based on the discipline they serve, the goals of the individual department, and individual motivations of both the TAs and the faculty. The variations in training for these teaching teams raise issues of equity of training, equity in duties, and challenges in staffing.

Four guiding questions helped organize the workshop's discussions over the two days:

- 1. Which roles do TAs/LAs play in your courses, and what is or isn't working well in that regard?
- 2. How do you support your LAs and TAs in their work, in terms of pedagogical training, content review, building a community of support, and/or addressing equity and inclusion?
- 3. Based on a panel discussion with current TAs/LAs, what would help the TAs/LAs play the most productive role in your class(es), which activities might empower them, and how can we help them build meaningful experiences?
- 4. How do we gather information on, and assess, the impact of TAs/LAs in our courses?

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Challenges and Opportunities Identified

In answering the guiding questions, specific challenges, and opportunities for undertaking scholarly and practical work on the workshop's theme were identified.

- 1. Understanding Duties and Responsibilities. In many cases, not all members of the teaching team are aware of their duties and responsibilities, and/or what is needed for the team to function as a system. The structures of teaching teams have their own subcultures (Uline & Berkowitz, 2000). These cultures are dictated by inherent power structures and roles. In order for the system to function fully, a clear definition of the roles of team members and their duties is necessary. Once this is established, the system is better able to adapt to challenges and demands on the system. This is most often created through the inputs of the leadership in establishing policy and practices (Lipscombe, Buckley-Walker & McNamara, 2020) that the team can clearly understand and apply to the class/learners.
- 2. Training and Mentoring. Currently there is no cross-campus standard for training and mentoring of teaching teams. Given the broad array of duties and responsibilities they take on, the varied roles depending on graduate or undergraduate status paid vs. for credit work as well as the different discipline specific needs, a basic level of training for both faculty and TA/LAs tailored to specific duties, responsibilities and context would be of value.

3. Providing Equitable Environments

- a. TAs/LAs do not always experience roughly equitable pay, even within individual fields. Establishing methods to address inequities tied to compensation and also training and capacity building is important.
- b. Teaching teams are often insufficiently diverse. Diverse teaching teams can provide more equitable environments and support for the students they serve, as well as their members. Exploring ways to increase opportunity for learners of all backgrounds to feel seen, identify role models and learn from teaching team members that they mesh best with is critical (Sellami, N., et al., 2017).
- 4. Gathering Information on the Impact of LA/UGTA/GTAs. There is a relative dearth of evidence-based knowledge on the value of LA/TAs and how they impact student learning and engagement (Clements, T. P., et al., 2022). Changes in demographics, technology, and use cases all demand a greater level of qualitative and quantitative analysis. In addition, efforts to create a university culture and ecosystem that values and encourages the assessment of learning impact created by different teaching teams and methods will improve overall usage of teams and their impact.

Recommendations

This section offers observations on the composition, training, and roles for members of teaching teams that suggest areas for further work on this topic, as well as recommendations for training. The term "institutional" as used here may refer to the unit, department, college, or university levels, as specified or appropriate.

1. Institutional Culture and Supports

Incentivize and sustain efforts that nurture a culture that values meaningful educational experiences, both for the members of the teaching teams and for the undergraduates they serve. Maintaining a culture that not only values teaching but promotes the use of teaching teams in various forms is paramount for timely and successful student help, feedback, grading, and classroom management.

1.1. Duties and Responsibilities

- Establish topographical maps of differences and similarities in training and coordination of TA/LAs within and across departments/units.
- Given the variety of ways TA/LAs are incorporated into courses, the broad categories of
 instructional environments (in-person lecture, collaborative in-person, hybrid, online, etc.),
 and the demographics of different departments, create a knowledge base of possible training
 and coordination methods.
- Review existing handbooks and manuals for duties of TA/LAs to establish guidance on best practices within similar disciplines.
- Create a single source in each department where TA/LAs know to go to for information on available training opportunities in that department.
- Establish a university-wide clearing house where departments and faculty looking for TA/LAs can register their needs and where students can go to learn about opportunities.

1.2. Training and Mentoring

- Develop faculty training modules to be shared among faculty.
- Establish recommended training for faculty working with multi-member TA/LA teams. Training should be flexible and speak to differences in disciplines.
- Improve institutional knowledge of best practices for mentoring teaching teams.
- Develop and expand on TA/LA training at an institutional level. Current available materials include: D2L Discover Courses: Learning Assistant Training Course (ITP), Learning Researcher Training Course (ITP), Instructional Manager Training Course (ITP) and GTA Training Materials.
- Beyond FERPA and HR training, establish, and publicize tools that discuss best practice.
- Develop scaffolded training that builds on experiences for more advanced TA/LAs vs. newly hired TA/LAs.
- Leverage culturally sensitive curriculum to include training on working with diverse populations in educational settings.
- Develop and expand on training that leverages informal discussions with teaching teams.
- Identify and publish the informal techniques that build strong teaching teams.

2. Providing Equitable Environments

2.1. Establish a baseline with regards to equity within duties, responsibilities and pay within disciplines.

- Collect institutional data on duties across TA/LA types and establish duties for each position.
- Where possible, make pay and duties equitable across units.

2.2. Identify existing and potential inequities based on student backgrounds and vulnerabilities.

- Students from various backgrounds have different concerns with regards to their TA/LA role.
 Gathering and analyzing data on student experiences in the role of TA/LA based on student backgrounds is essential.
- Gathering data on the experiences of international and underrepresented students in TA/LA roles is critical for establishing equitable experiences.
- Differential expectations for TA/LAs who are in paid or for credit positions may result in inequitable experiences, treatments, and outcomes. Collecting data on these experiences is important to create equitable experiences.

3. Gathering Information on the Impact of LA/TAs

- 3.1. Identify different teaching team compositions and purposes.
 - Identify how different team compositions impact student learning.
 - Collecting data on how teams operate in the classroom should be focused on which TA/LA roles impact student learning and identifying impactful practices is essential.
- 3.2. Identify training and orientation practices that allow TA/LAs to be more impactful.
 - Collect data on the differential impact various preparatory and training experiences have on student learning.
 - Identify practices that maximize TA/LA confidence for interacting with students in a manner that fosters learning.

APPENDIX

About the TA/LA MECha Workshop

In April 2023, CUES' third MECha workshop convened cross-disciplinary UArizona faculty to explore questions on the impact and value of undergraduate and graduate teaching/learning assistants (TAs/LAs) who support teaching and learning, across disciplines. During the two-day workshop, participants worked collaboratively to map current practices, share experiences, and identify research directions to understand the impact and value of teaching and learning assistants in university education. More information about the workshop and the Spanning Boundaries Challenge grant on the workshop's theme may be found on the CUES website, at:

cues.arizona.edu/events/2023-mecha-workshop-teaching-learning-assistants-classroom-across-disciplines

Author Bios

Deborah Hughes Hallett is a Professor of Mathematics at UArizona and an Adjunct Professor of Public Policy at the Harvard Kennedy School. With Andrew M. Gleason at Harvard, she organized the Calculus Consortium based at Harvard, which brought together faculty from a wide variety of schools to work on undergraduate curricular issues. She is regularly consulted on the design of curricula and pedagogy for undergraduate mathematics at the national and international level and she is an author of several college level mathematics texts. Her work has been recognized by prizes from Harvard, UArizona, and as national winner of the MAA Award for Distinguished Teaching.

Amy Graham is an Associate Professor of Practice in Chemistry and Biochemistry, who primarily teaches large-enrollment General Chemistry courses in Collaborative Learning Environments. She serves as the General Chemistry Preceptor Coordinator for the CHEM 151/152 courses and also works with the Graduate College in developing resources and training materials for Graduate Student Teaching Assistants. She has developed two D2L Discover Courses that contain materials to support Learning Assistants (Title: Learning Assistant Training Course (ITP)) and Graduate TAs (Title: GTA Training Materials) using funding from the NSF IUSE Instructional Teams Project and the Graduate College.

James Hunt is a Professor of Practice in Human Development and Family Science as well as the Senior Assistant Dean for the College of Agriculture, Life and Environmental Sciences (CALES). He assists in the oversight of curriculum, faculty training and outcomes assessment for CALES. He works with teaching teams in a large introductory human development course.

Joela Jacobs is an Assistant Professor of German Studies and Director of Graduate Studies for the MA and PhD programs in Transcultural German Studies, including the dual PhD/Doctor of Philosophy degree program with the Universities of Leipzig and Cologne in Germany. She is affiliated faculty at the Arizona Institute for Resilience: Solutions for the Environment and Society, the Department of Gender and Women's Studies, the Arizona Center for Judaic Studies, and the Graduate Interdisciplinary Program on Social, Cultural and Critical Theory. She works closely with TAs/LAs in her large General Education courses and has won several teaching awards.

Resources and Readings

The following articles helped inform the discussion during the workshop.

- Clements, T. P., et al. (2022). It made me feel like a bigger part of the STEM community: Incorporation of Learning Assistants Enhances Students' Sense of Belonging in a Large Introductory Biology Course. CBE—Life Sciences Education, 21(2), Ar26. Web.
- Lipscombe, K et.al. (2020). Understanding collaborative teacher teams as open systems for professional development. Professional Development in Education, *46*(3), 373-90. Web.
- Margoniner, V., et al. (2020). Learning-assistant-supported active-learning in a large classroom. *American journal of physics*, 88(11), 924-933. Web.
- Sellami, N., et al. (2017). Implementation of a Learning Assistant Program Improves Student Performance on Higher-Order Assessments. *CBE Life Sciences Education*, *16*(4), Ar62. Web.
- Uline, Cynthia L., and Joann M. Berkowitz (2000). Transforming School Culture through Teaching Teams. *Journal of School Leadership, 10*(5), 416-44. Web.

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