

WELCOME!

FIG-MLA Program Information Session

Faculty course modification incentive grant and
Maine Learning Assistant Program



Learning Assistant Program Overview



Learning Assistant (LA) Model
UNIVERSITY OF COLORADO **BOULDER**

LEARNING ASSISTANT ALLIANCE

A project of the University of Colorado Boulder LA Model

STUDENTS
Here to apply to your campus LA program?
START HERE
to submit a Learning Assistant application or login below

Username:

Password:

[New Passport](#)

[Login](#)

HELP: [username](#) [password](#)

NPR: Making Science Teaching More Than 'A Backup Plan'

National Public Radio visits the CU Boulder LA Program

[click for the story...](#)



The LA World

There are...

Active LA Programs: 73

Member Institution: 225

Faculty members:

Member Profile

[Click a member on the map.](#)

[Explore...](#)

LA Central

Online Program Management

Faculty submit course proposals, students apply for LA positions, departments hire LAs, and program coordinators manage hiring and other logistics. View and export program data for reports and publications. System available for Alliance member subscriptions in 2018.

LASSO

Online Assessments

An automated system for administering pre and post assessments to a class. Over 9 assessments are currently available, each including a short survey for instructor and students about LA use, demographics, college characteristics, and course characteristics. The system provides users with learning gain and effect size graphics at the end of the semester.

Snapshots

Track Your Program

View annual snapshots of your LA program and find other LA programs using search criteria such as discipline, two or four year college, school context, etc. Update your institutional data to contribute to LA Alliance statistics and to help others find your program.

Workshops

Learn & Share

Regional Workshops Spring 2017

Rutgers University

Florida International University

Chicago State University / Harold Washington College

Oregon State University

[More Info](#)

Resources

Video, etc.

Basic resources for implementing the program and for getting buy-in from faculty, administrators, and students. Materials include pedagogy course materials, different ways to use LAs, links to resources for transforming courses, data slides, LA program overview slides, tips about funding, and a collection of photos.

Research

Publications & Presentations

Read research articles and talks about the LA program and its impacts. Papers include research on teacher recruitment, undergraduate student performance, and the impact of the LA program on students from groups traditionally underrepresented in STEM.

LA Program Network

Navigate, Learn & Flourish

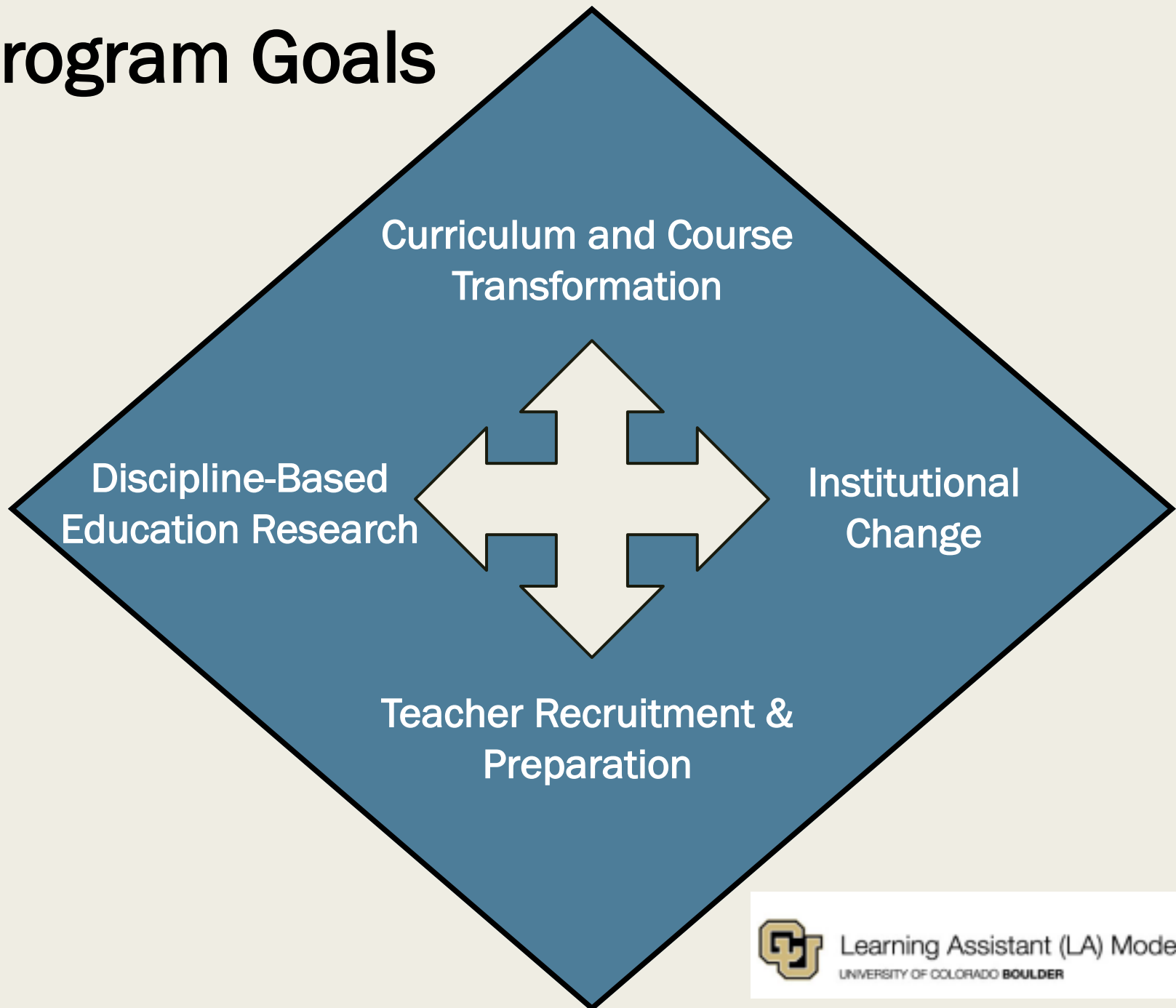
The LA Network is where LA Alliance members connect with each other and share information. Use this social network tool to share information about your program and follow your colleagues.

About

The Alliance

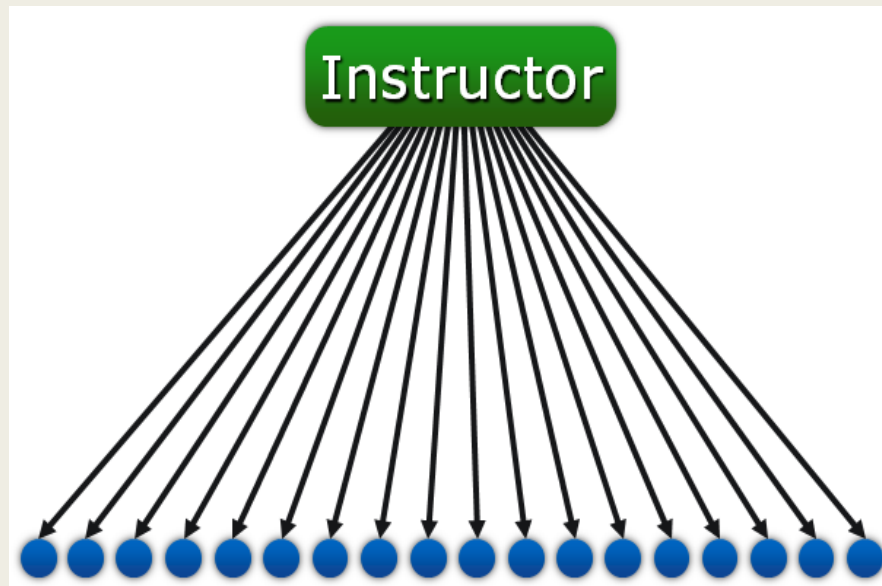
The Learning Assistant Alliance is a community made up of people from Institutions who share resources and experiences to transform courses within their disciplines and recruit future K-12 math, science and engineering teachers through the use of Learning Assistants.

Program Goals



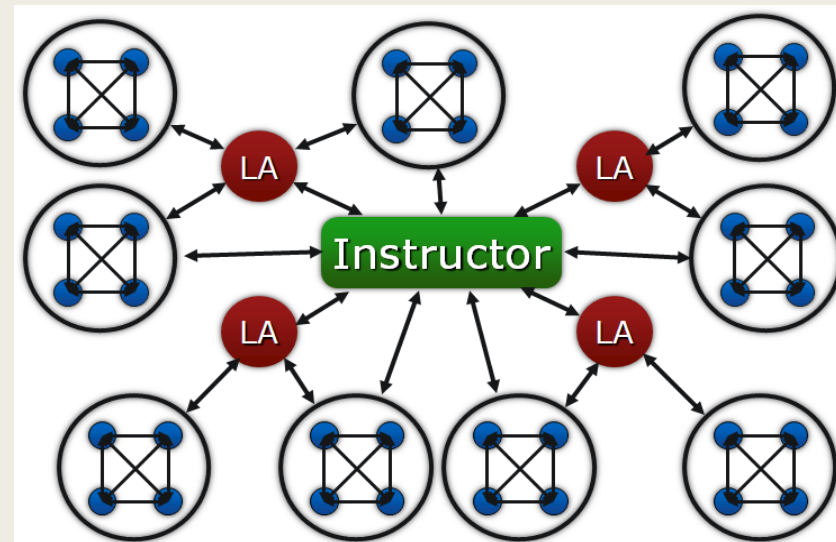
How are courses “transformed?”

Traditional



Students

Transformed



Learning Assistant (LA) Model
UNIVERSITY OF COLORADO BOULDER

Why Transform Courses?

Meta-Analysis
225 Studies Comparing
Learning in Traditional Lecturing vs.
Active Learning in Science and Math Classes

Traditional Lecture



Active Learning
Ex: Clicker Questions

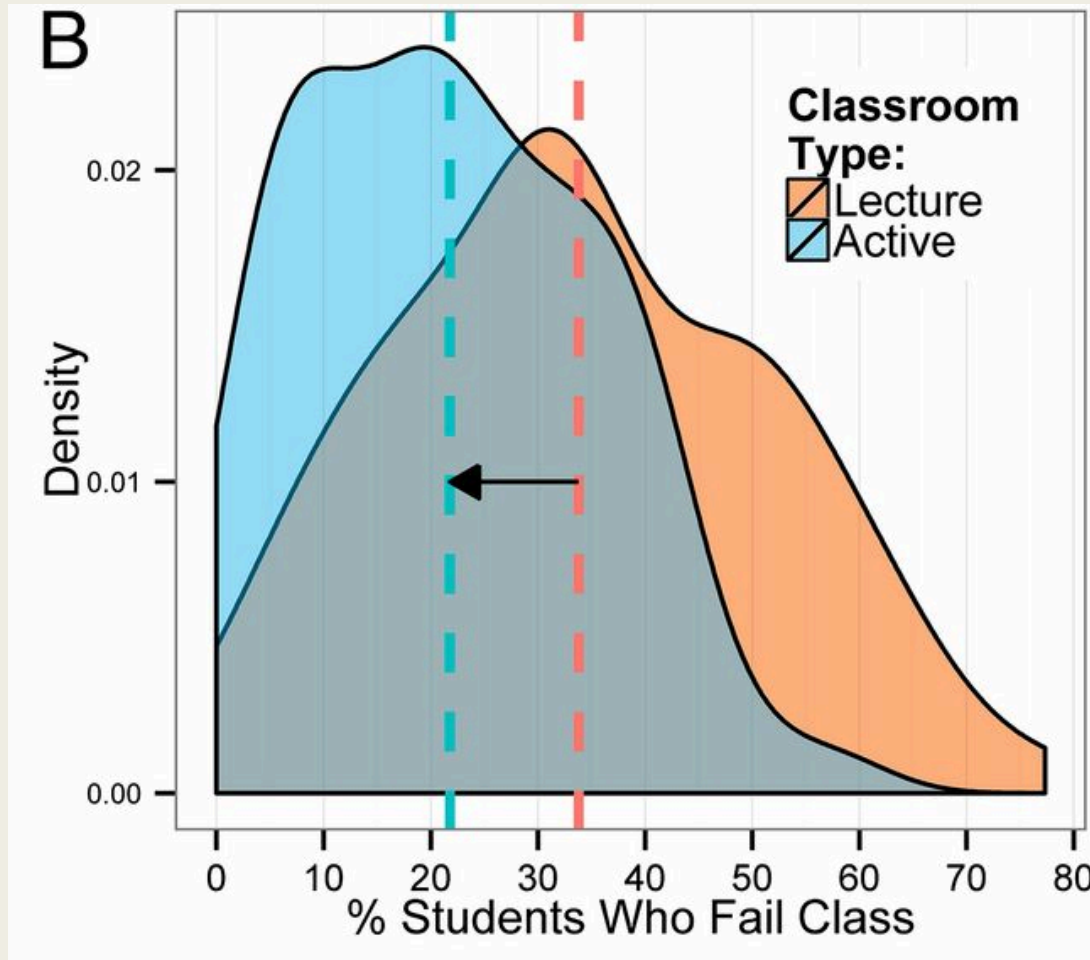


vs.

Common Assessment and Failure Rate

Freeman S, Eddy S, McDonough M, Smith MK, Okoroafor N, Jordt H, Wenderoth MP (2014). Active learning increases student performance in science, engineering, and mathematics. Proc Natl Acad Sci USA 111, 8410–8415.

Results of Meta-Analysis



Failure rates under active learning and under lecturing. The mean failure rates under each classroom type (21.8% and 33.8%) are shown by dashed vertical lines.

The LA Experience

Practice: Lead Learning Teams

Facilitate discourse



Content: Weekly Prep Meeting

- Reflect on past week
- Prepare for next week
- Work through materials
- Plan strategies/questions
- Examine student work



Pedagogy: LA Course

- Questioning strategies
- Promoting discussions
- Formative assessment
- Learning theories
- Weekly teaching reflections



UMaine FIG-MLA Program



- Designed to
 - enhance instruction in undergraduate STEM courses
 - promote interactive engagement and student-centered instruction through peer facilitation
 - raise interest in careers in teaching

* Otero et al. (2010). A physics department's role in preparing physics teachers: The Colorado learning assistant model, *Am. J. Phys.*, 78 (11).

Maine Learning Assistants



- Undergraduate students who
 - excelled in the course
 - express interest in exploring careers in teaching

Many MLAs have continued on to the Master of Science in Teaching (MST) program at the University of Maine

- Maine Learning Assistants (MLAs) participate in weekly prep meetings with FIG instructor, weekly MLA seminar, and in-class facilitation
- MLAs do not grade or meet one-on-one with students

Faculty Course Modification Incentive Grants

- Faculty propose course modifications intended to:
 - Add or enhance student-centered learning opportunities
 - Incorporate effective use of MLAs
 - Improve course rigor and student retention
- Faculty develop an evaluation plan to guide evidence-based course improvements
 - Data collection may include pre/post content and attitude surveys, exams, quizzes, in-class activities, and more.

Since the FIG-MLA program began in 2012...

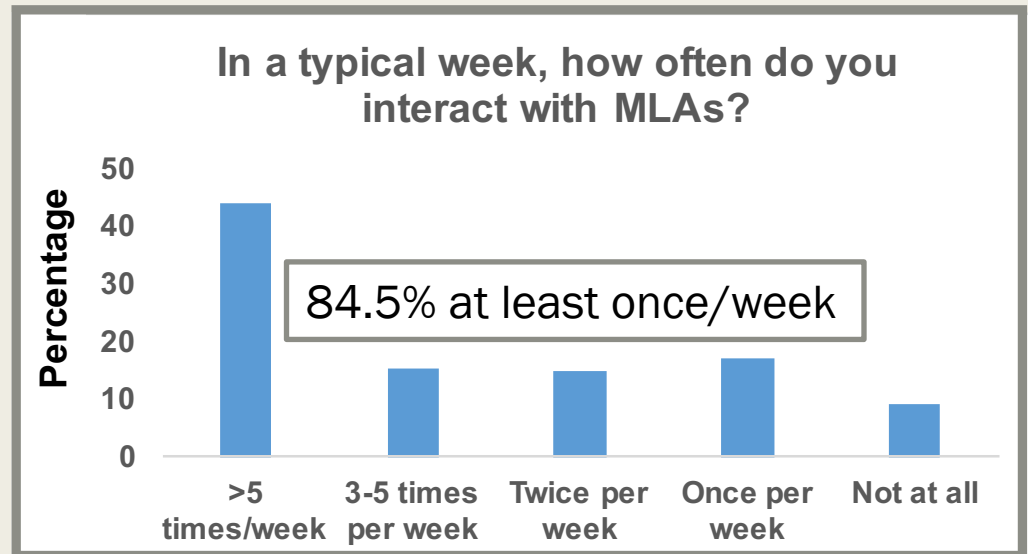
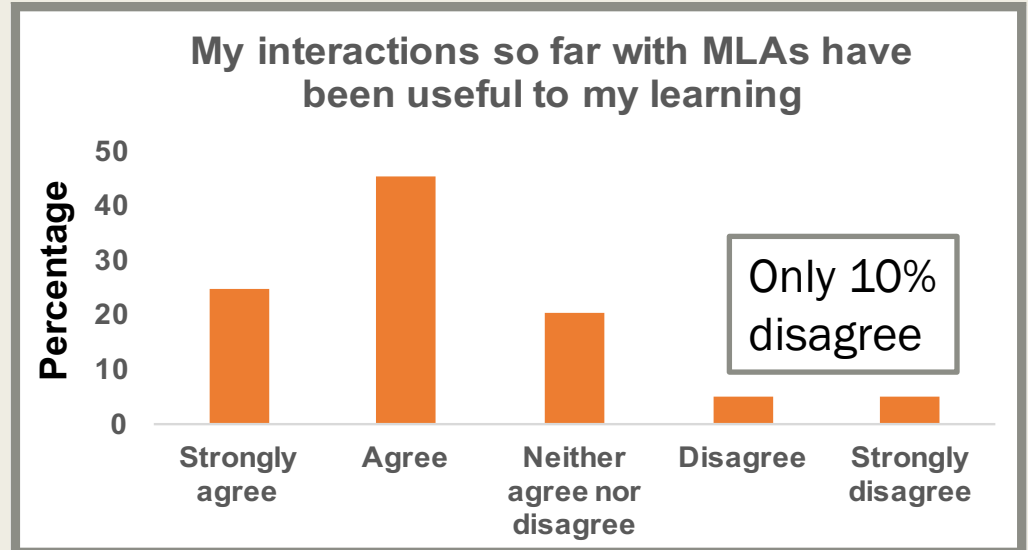
34 *instructors involved,*
29 *courses modified in* **12** *departments, and*
236 *undergraduates have been MLAs!*

Biology * Chemical Engineering * Chemistry * Computer Science
Earth Sciences * Ecology and Environmental Science * Food Science
Electrical Engineering * Mathematics * Marine Science * Physics
Molecular & Biomedical Sciences

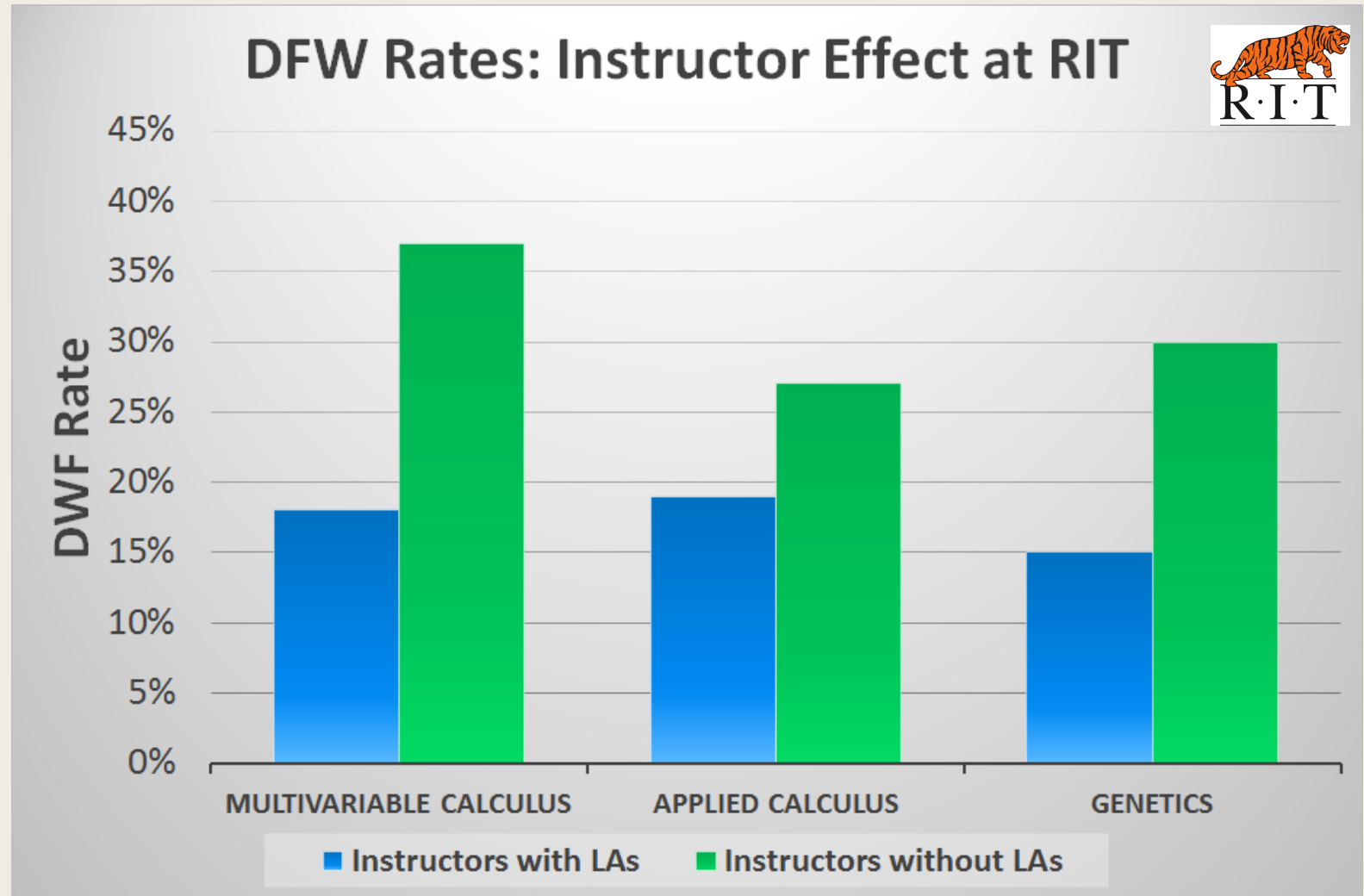
*Impacting over 5,000 students
this academic year alone!*

Impact of FIG-MLA Program on Students

- Data collected via student surveys and institutional data for all FIG-MLA courses
- Fall 2016, 15 courses, 577 responses
- DFW rates are currently being analyzed for 5 years of FIG-MLA data



Impact of FIG-MLA Program on Students Research at the RiSE Center



Benefits to Instructors

- Involved in a community of STEM instructors interested in STEM teaching and learning
- Use of Maine Learning Assistants to assist with and provide feedback on course modifications
- Assistance using data to inform: course improvements, assessments, in-class activities, and student misconceptions
- 20 hours of Master of Science in Teaching (MST) graduate student time to help with data analysis
- Summer stipend of \$2500 for Year 1 and for Year 2
- **Improve student learning and retention!**

FIG-MLA Cost Schedule

- RiSE Center/UMaine covers:

Year 1 & 2: 100% of the costs of MLA tuition*, MLA stipends**, and faculty stipends

Year 3 & 4: 50% of MLA tuition and stipends

Year 5+: 25% of MLA tuition and stipends

- Speak with your department about this cost schedule before you submit a proposal. The goal is for long-term sustainability of FIG-MLA courses.

*Tuition ranges from \$279-908

**Current MLA stipend is \$1008