

Incorporating Learning Assistants into Math Courses

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About Georgia Tech

Located in Atlanta



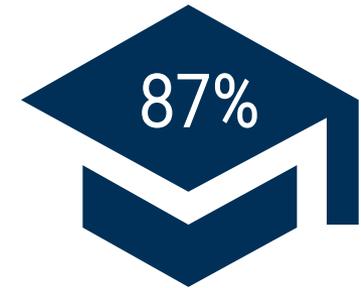
32,722



Total Enrollment

16,047 Undergrad

87%



Graduation Rate

32

Average
ACT

1439

Average
SAT

97%



First
Year
Retention

61%



Residential

Background and Context

- Teach: Math 0999, 1111, 1113
 - Fall 2018 – 57 in 1113 and Fall 2021 – 144 in 1113
- All GT students must take Calculus regardless of program of study
 - Calculus is the “first” math class
- Students entering GT below Calculus, need critical help in order to satisfy their degree requirements

What are Learning Assistants?

- Learning Assistants (LAs) are students who are prepared to provide support for student learning in an interactive classroom environment. LAs can help facilitate active learning and collaborative groups inside the classroom. LAs can guide or coach students by sharing skills and knowledge they have already learned from taking the course. In addition, they can use their skills to identify and address student difficulties with course content.

Who are Learning Assistants?

- Students who recently completed the course they are being hired to support
- High performing students in the subject
- Interested in helping fellow students and/or in careers in the field of education

What do LAs Contribute?

- Work directly with students in the classroom, helping to make course more student-centered using interactive techniques with an emphasis on exploratory questions
- Meet weekly with course instructor to discuss upcoming assignments/activities and common difficulties
- Hold office hours, exam review sessions, and assist with grading as needed
- Take 1-credit pedagogy training course

Why are LAs Important?

- Learning Assistants provide a viewpoint different than the instructor or TA. Since the LA has more recently taken the course, they may have unique insights of where students struggle and can help students grasp the concept in a more relatable way.
- One of the biggest advantages of having an LA in the classroom is it provides another point of contact for the student.
- It decreases the student to teacher ratio, which can be valuable for larger lecture courses.

TA vs. LA

TA

Focuses on “**logistics**”

Teach studio, recitation, lab (Class MC)

Grade quizzes, midterm exams and finals

Monitor online discussion forum (Piazza)

LA

Focuses on “**student learning**”

Address students in small groups not as a class

May assist activity and attendance grading as needed

Quizzes, Midterm Exam and Final Grading NOT allowed

Activity and Discussion Facilitation

Office Hours (as directed by instructor)

Provide assistance on graded material (as directed by instructor)

A Look at the Numbers @ GT

- Spring 2021:
 - 1 course
 - 1 faculty member
 - 2 LAs
- Fall 2021:
 - 11 courses
 - 10 faculty members
 - 17 LAs
- Spring 2022:
 - 14 courses
 - 12 faculty members
 - 30 LAs

LAs in Action



LA Facilitation

- Hot Seat Game ([Activity #5.pdf](#))
- Crossword Puzzle ([Buzzer #3.pdf](#))
- Secret Word Activity ([Studio Worksheet 2-4-21.pdf](#))
- Worksheets ([Worksheet #4 \(1.1 and 1.2\).pdf](#))
- Kahoots! ([Exam #3 Review](#))

Student Testimonials

- “While the Professor was lecturing, the TAs would go around and check to see that we got the right steps for the problem we were solving. They were super casual and explained things in a manner we could understand. They were very patient.” Student, MGT 2250
- “During in-class activities, the Learning Assistant was always walking around the room giving advice to all students, and whenever I had a question, I could ask them and they would answer right away, helping me to understand it better before moving on to the next activity.” Student, MGT 2250
- “When I didn't feel comfortable asking my Professor or TA a question, I could always ask my LA, knowing that she could help me.” Student, MATH 1113

LA Testimonials

- "Being an LA has taught me to be adaptable in my teaching to account for how students respond to different types of explanations." Sophia Desisto, LA, MATH 1113
- "I have demonstrated great communication skills. I respect my students and allow them time to answer redirecting questions. I have also offered additional support to some students via office hours and some tutoring sessions." Aboubacar Barrie, LA, MATH 1113

Faculty Testimonials

- "Both of the LAs for CHEM 1211K have great student interactions and willingness to help (inside and out of the classroom). I would love to have them as Learning Assistants again!"
Michael Evans, CHEM 1211K
- "LAs are invaluable in core classes where many majors take a particular mandatory course. They bring a perspective that helps humanize the experience for the students and help build a community. Also, I found that LAs who struggled with the class give important perspective to help students who are not as comfortable with the material." Antonia Antoniou, COE 3001

Questions?

Thank You!

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