PEER TO PEER LEARNING:

# THE ULA PERSPECTIVE

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DATA SOURCES

- Department of Computer Science Returning ULA Applications
  - At the end of the semester, ULAs who plan to continue the following semester are asked "What have you gotten out of being an LA this semester, besides the stipend?"
  - Fall 2022 / Spring 2023 Application cycles: 216 responses, 151 ULAs
- Informal Survey on Experiences of Undergraduate Learning Assistants
  - 14 responses (as of 3/22/2023) on various aspects of the ULA experience
  - 8 from stipend-based assistantship programs (7 COMP, 1 PHYS), 6 from course credit / volunteer assistantships (BIOL, ECON, MATH, POLI, PSYC)
- Reddit Comments (source code / raw data)
  - 84 comments (25 relevant) from the past few years with the keywords "ULA," "UTA," "peer mentor," and variants
- UNC 2022-23 Catalog (source code / raw data)
 - < 10 departments mention some form of ULAing in Program Opportunities

WHAT DO ULAS DO?

- Dependent on department (different models exist)
- The Department of Computer Science follows a model based on Brown University
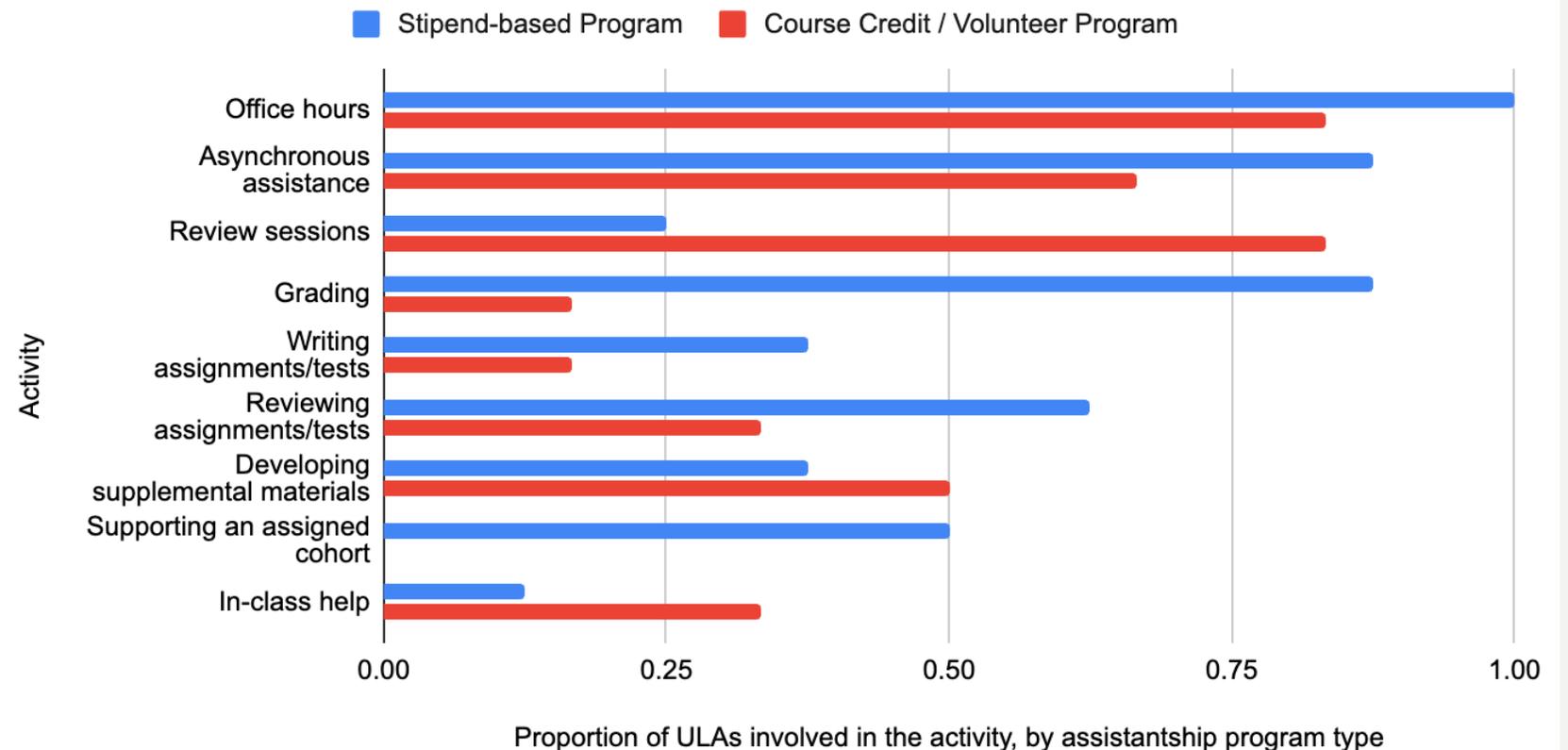
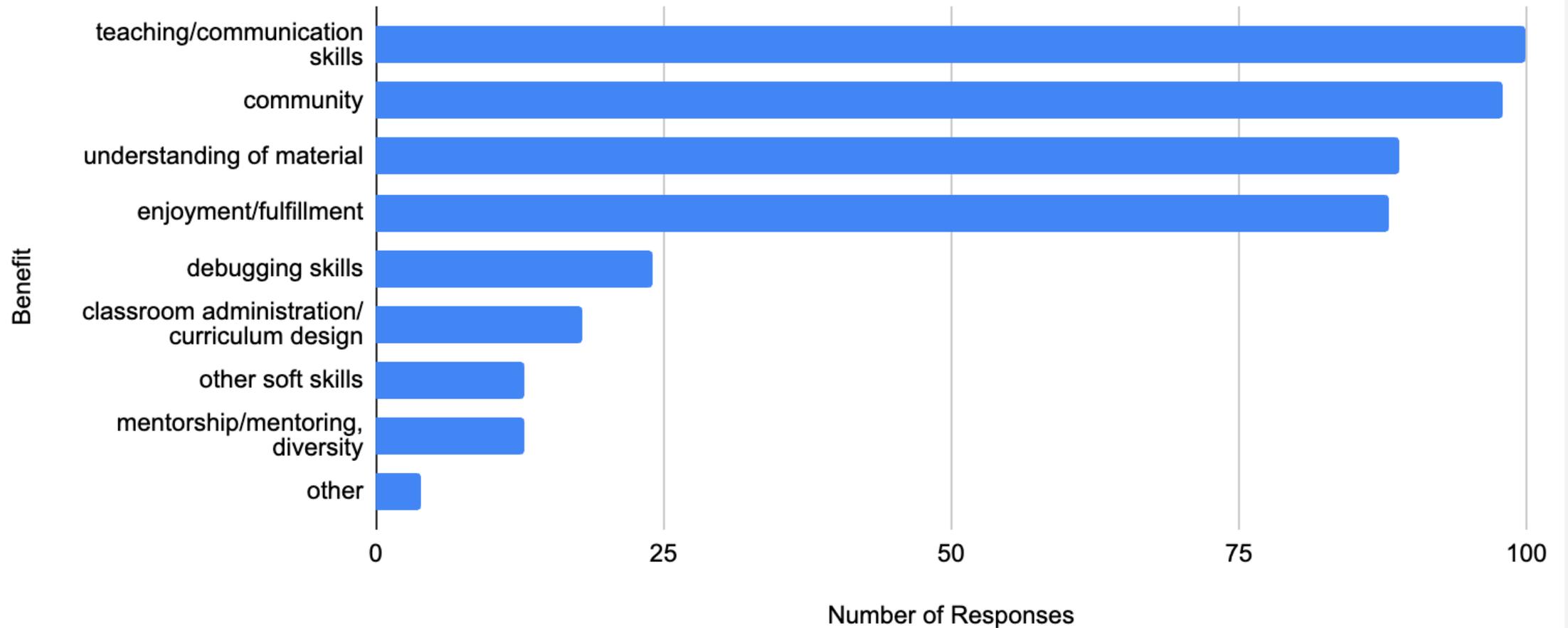Data source: Survey on Experiences of Undergraduate Learning Assistants

WHAT KINDS OF QUESTIONS ARE ULAS ASKED?

Types of Questions Students ask ULAs
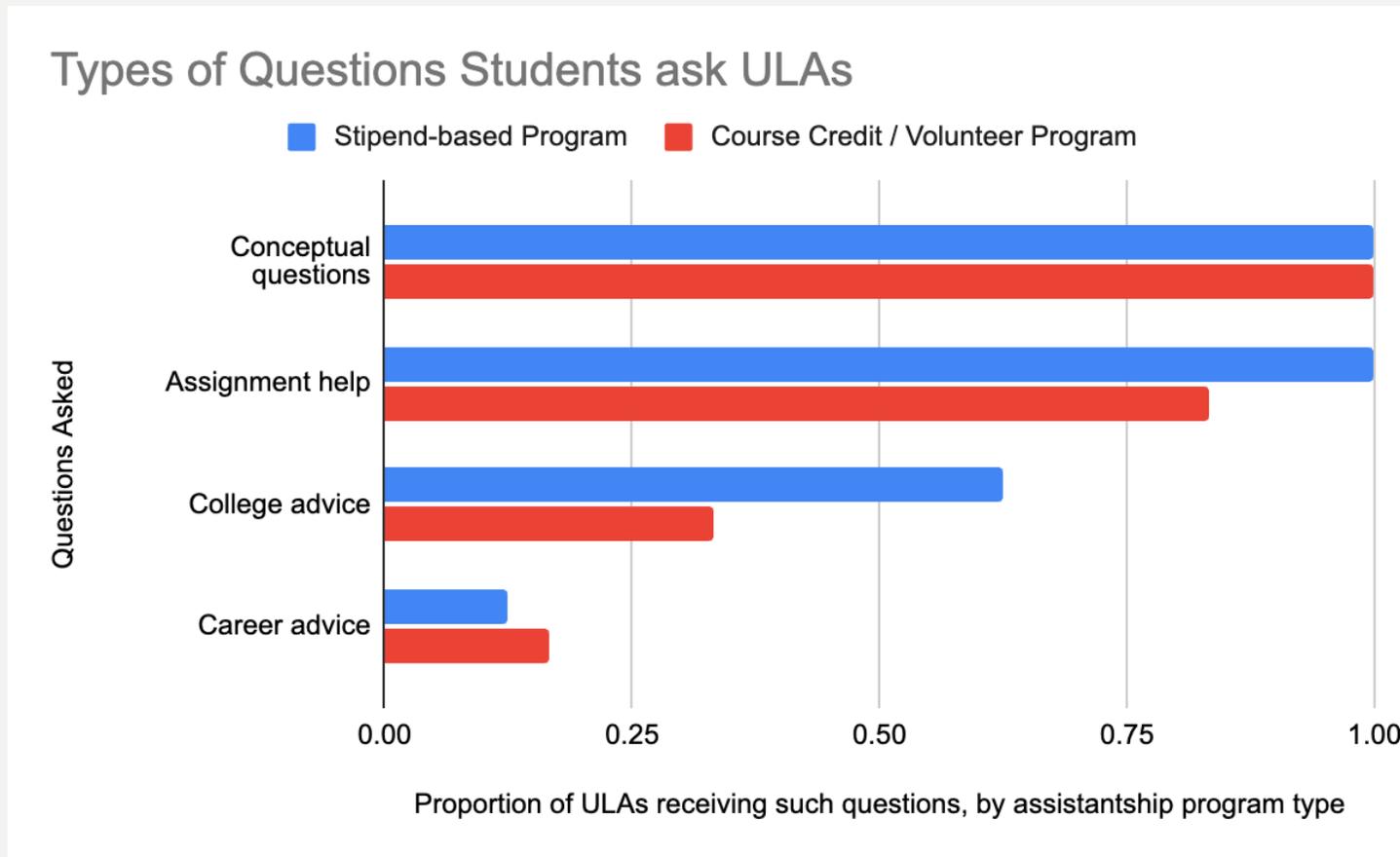
Data source: Survey on Experiences of Undergraduate Learning Assistants

HOW DO ULAS BENEFIT FROM PEER-TO-PEER TEACHING?

Data source: Department of Computer Science Returning ULA Applications

TEACHING / COMMUNICATION SKILLS

- Adapting to student needs
  - Each ULA has unique perspectives and experiences they can bring to students
  - ULAs learn how to reach students where they are

"I have … learned a lot about how people think about the same concept in many different ways and how I can best adapt my explanations to fit with their 'framework for understanding' (i.e., if their existing knowledge/understanding is a certain puzzle piece, I have to be able to find the right matching puzzle piece to fit in with it so that they can more easily learn new things)."

- Confidence
- Patience, understanding, empathy
- Interest in pursuing education as a career
- Experience in classroom administration and curriculum development

"Since this semester was my first time being a ULA, I experienced a lot of growth not just in my understanding of computer science concepts, but also in my ability to communicate, empathize, and understand my students and peers. I started off excited about this role but nervous about my ability to answer all of the student's questions, but quickly realized my capabilities and role in helping students."

UNDERSTANDING OF MATERIAL

- Explaining material in different ways
- Going beyond material in discussions and office hours

"I had the opportunity to relearn the class from a whole new perspective. This time, not only did I need to understand all the contents, but I also needed to tell my students in a way that all of them could understand.

… I have learned to summarize the problems that other students may encounter while doing it. This way I can help them more effectively during my office hours."

COMMUNITY

- Passing on a passion for the material
- Mentoring students
- Fostering diversity through inclusive environments

"When I took COMP 110 the fall of my freshmen year, the LAs – in addition to making course content approachable to beginners – talked extensively about clubs, hackathons, and other resources for how to get involved in computer science. It was this encouragement to get involved in CS that gave me the confidence to change my major to CS without any coding experience prior to college.

The best thing I've gotten out of being an LA this spring is being able to contribute to this community by making coding concepts more accessible, and showing other students that computer science at UNC isn't as intimidating as it may appear on the surface.

For Hack110, I co-led a workshop on how to get involved in computer science at UNC. … After the workshop I was able to talk one-on-one with students about the major, the B.A. vs. B.S., hackathons, clubs – about anything related to CS at UNC. It seems like a lot of beginning students are interested in CS, but just need some encouragement and guidance (I know I did at least)."

- Receiving mentorship
- Camaraderie with others in the department
- Close friendships with other ULAs
- Support system
  - ULAs
  - Students
  - Professors

"Being an LA has allowed me to both be a mentor and receive mentorship, something that is incredibly important for all students within the CS department! As a mentor, I have been able to interact with and offer guidance to so many incoming or new major-students in terms of both course-related and non-course work. I love sharing a passion for CS and I try to offer as many tips, programs, and experiences as I can.

On the flip side, I myself have been able to meet older and seasoned major-students who have many helpful things to say. They have encouraged me as a TA and educator, told me about programs & conferences, and helped me choose electives and the topics I am interested in! Being a TA has allowed me to truly become immersed in the CS department and I love participating in this student support system that fosters learning and growth!"

ENJOYMENT / FULFILLMENT

- Making a meaningful impact on others' lives
- Sharing a passion for the course material and for learning/teaching with students and the instructional team
- Building memories

"I have found myself much more invested in the success of students in the class than I thought I would be, I am right there with them celebrating the victories of figuring out a hard problem or getting a good score on the midterm. I was initially unsure how much I would enjoy being an LA, but it has been a truly impactful experience that has helped me find a hidden joy for peer teaching/support. After this semester I want to incorporate it into all remaining semesters I have at UNC if possible."

SKILLS FOR WORK AND LIFE

- Problem Solving
- Conflict Resolution
- Time Management
- Teamwork
- Leadership

"My experience as an LA got my foot in the door for a lot of places that valued strong communication and conflict-resolution skills, and ultimately it's a huge part of why I was able to land a job offer so early on in my senior year."

HOW DO PROGRAMS BENEFIT?

- Enhances the understanding of course material

- Builds a pipeline of passionate students

- Fosters community within departments

- Creates opportunities for improved pedagogy

Photo credit: Rebekah Seawell

Photo credit: Anish Toomu

HOW CAN ULAS BE SUPPORTED?

- Improved compensation (via increased stipend or graded credit)
    - "This was … my first paid job, I have had unpaid work before but the idea that my work was now worth something encouraged me to be independent and do my best."
    - Disparity with private tutoring jobs, graduate teaching assistants
- Support structure
    - Training
    - Weekly meetings, regular communication
    - Encourage mentorships between more experienced and less experienced ULAs
    - Build an alumni network

- Provide spaces for community
  - Online (Slack, GroupMe, Discord)
  - In-person (informal gatherings)
- Allow ULAs to take ownership of aspects of the learning experience
  - Trust your ULAs in the same way you would trust graduate TAs (see advice from Professor Kris Jordan's 2017 CFE Presentation)
  - Solicit their input and involvement in pedagogy
  - Encourage them to organize events/initiatives for the instructional team and/or students
    - Community-building
    - Educational

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- Survey respondents (ULAs from the Department of Computer Science and other departments)
- Undergraduate Learning Assistants
- Instructors of courses, especially those with ULAs