Supporting Professional Development of Statisticians through Teaching Assistantships

> Julie Deeke & Kelly Findley jdeeke@illinois.edu & kfindley@illinois.edu University of Illinois, Urbana-Champaign USCOTS 2023



Agenda

- Introductions
- Compare TA responsibilities and roles across institutions
- Activity on TA skills
- Identify gaps in TA skills
- Develop strategies to bridge the gaps
- What's your key takeaway?

Learning Objectives

At the end of our session, we hope that you will be able to:

- Communicate the transferable and intersectional skills that teaching experiences can foster in graduate students
- Identify strategies to incorporate into pre-semester training and/or meetings with teaching assistants to help target these skills
- Develop a process for feedback and mentorship to continue to support our teaching assistants
- Consider whether and how to scale up these efforts to apply to a full department, cohort, or set of teaching assignments with the potential for leading towards institutional change

Group Introductions

Introduce yourself, sharing your:

- Name
- Current Role, Department, and Institution
- How do you currently interact with TAs?
- Are you involved in any TA training efforts?
- Why did you pick this session?

Small Group Discussion

First, describe the context for teaching assistants at your institution.

- What are TA responsibilities?
- Do TAs teach?
- Is there a teaching requirement at your institution?



Brainstorming Question 1 for Poster

What skills or experiences would be useful, competitive, or marketable for statistics graduates that pursue careers outside of academia?



Brainstorming Question 2 for Poster

Now, think about the tasks that TAs actually do. What skills are they developing through these tasks? [Note: Q1 is about job market. Q2 is about teaching.]



Post-It Tour

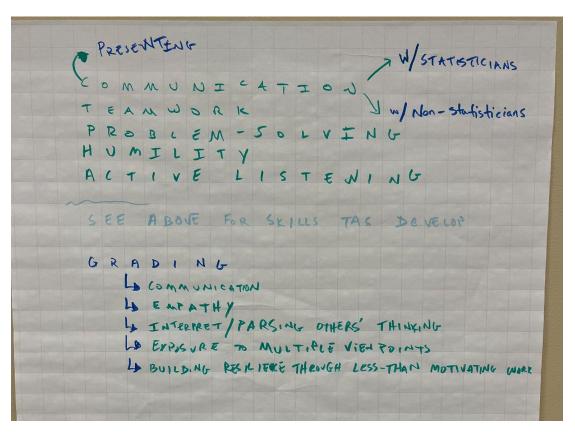
As a group, you will tour the room and read through the other post-its.

As you go through the room, you may discuss what you see with your group. We will have a larger group discussion in a few minutes.

Virtual Post-It Tour, Stop 1 (Focused on Grad TAs)

Top text: Q1, job context

Bottom text: Q2, TA assignment



Virtual Post-It Tour, Stop 2 (Focused on Grad TAs)

Black text: Q2, TA assignment

Blue text: Q1, job context

Graders - secins different studiet skotsta - Consequences of procrastination (- responsibility/balancing work/kind ('Teaching' TAs Countant being in Front of ppl - Small gloup/one on one communication (- Understanding material more deeply - Outling / planning Communicating to different audiences lime management Communicate verbald written Conflict resolution Work W other people for others Understanding Material better when teaching it.

Virtual Post-It Tour, Stop 3 (Focused on Grad TAs)

Left text: Q1, job context

Working W/policy docs Conflict Monag Equity (DEI) Organization Boundary Settings Communication Conflict Management Empathy Educate others Problem Solving Be open to life long learning. pan work Critical Thinking. Time Management Presentation Skills Management People + Environments Personverance job market

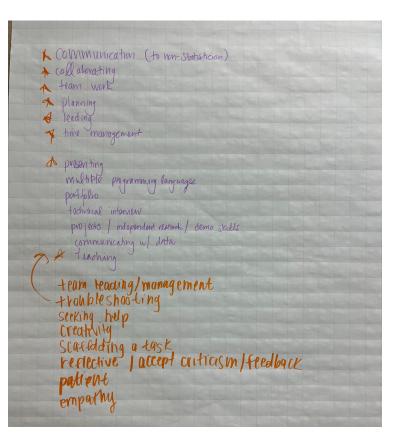
Right text: Q2, TA assignment

Leson - Development / Preparation Presentation Skills Facilitate Time Management Working Win Policy Working w/Technology (LMS) Communication Problem Solving Equity (DED), Empathy, Critical Thinking teaching

Virtual Post-It Tour, Stop 4 (Focused on Undergrad TAs)

Purple text: Q1, job context

Orange text: Q2, TA assignment



Common Themes

What common themes did you identify as you toured the room?

- To what extent does your training/model prepare TAs and/or develop these skills in TAs?
- To what extent is there a mismatch between these two sets of skills?
- Are teaching experiences necessary for graduate students?

Reflect on the Disconnect

There are mismatches between the marketable set of skills statistics graduates would benefit from and the skills they actually obtain through teaching assistantships. What are these mismatches?

What are some of the reasons that these two sets of skills are disconnected?

You'll have a few minutes to reflect on and write your answers to these questions.

Solutions

How can we creatively or strategically address any mismatches?

[Notes from group discussion follow]

- Bring in alumni to share the skills that helped them succeed
- More professional development
- Offer consulting or upper level tutoring as an alternative to teaching requirement
- Training for tutoring or consulting
- Writing learning objectives for TAs for their assignments to identify transferable skills



What do I want to do differently next year?

What do I want to share with someone else?

Thank You for Coming!

Feel free to reach out with any comments or questions: jdeeke@illinois.edu kfindley@illinois.edu

