

Developing New Statistics Instructors and Student Leaders Through Peer Mentoring

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- STAT 218: Introduction to Statistics (non-calculus based)
- 14-16 sections each semester; 30-45 students per section
- Nominal teaching load for graduate students: 3 or 4 sections per year
- STAT 218 may used to fulfill the quantitative reasoning general education requirement; writing is a supporting area
- Wide variety of student backgrounds, majors, class standing

Evolution of TA Training

Pre-2008

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Introduction
and History

Implementation

Student
Feedback

Changes and
Challenges

- Department of Statistics created in 2003
- Inherited undergrad curriculum from math department; needed to be modernized
- Completely dependent on graduate student instructors
- Limited instructor training
- Problems!

Evolution of TA Training

2008: Implementation of TA Preparation Course

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Changes and
Challenges

- Born out of a Faculty Leadership for Writing Initiative faculty discussion group
- Initially conceived as “Writing for Statistics;” focus on writing-to-learn
- Required for new TAs
- Meets once per week during the fall semester
- Assignment and rubric construction; peer and instructor assessment; LOTS of discussion; trouble-shooting conceptual gaps
- Classroom visits

Evolution of TA Training

2010: Mentoring

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Changes and
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- GAANN Grant—more TAs than we needed to staff the planned sections
- Unique opportunity to give the TAs an extra semester to acclimate to graduate school
- Paired new TAs with experienced TAs

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Changes and
Challenges

- Varies depending on mentor/mentee relationship
 - Co-teaching: both instructors have primary roles in the classroom
 - Teacher assisting: mentee has secondary role
 - Most pairings fall somewhere in between

- Mentees responsible for...

- Developing lesson plans on 2-3 topics during the semester
- Leading at least 4-5 class sessions as primary instructor
- Helping write assessments (homeworks and exams) and assist with grading

- Mentors responsible for...

- Providing constructive feedback and suggestions
- Helping mentees adjust and prepare for full teaching responsibility
- Being a “sounding board” for concerns and questions

- Feedback about the mentoring experience has been overwhelmingly positive
 - New teaching assistants feel more comfortable in the classroom
 - Mentors feel more energized about their teaching
 - Each semester mentees have taken on more responsibility
- Best endorsement: student evaluations!

Changes and Challenges

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Changes and
Challenges

- Maintaining the peer mentoring role
 - Mentees take on more responsibility, while maintaining mentor as “instructor of record”
 - Extending the mentor/mentee role beyond the first semester
 - Balance between peer and leader

TA Preparation Course and Beyond

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Changes and
Challenges

- TA Prep Course
 - Less tied to STAT 218 syllabus
 - Ask the new TAs to visit classrooms besides their mentor's
- Continuing TA Development
 - New TA Support Group during spring semester
 - Graduate College Teaching Development Program

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Changes and
Challenges

- Transitioning to faculty-taught sections, with TA-led recitations
- Some small sections will be retained for PhD students particularly interested in teching
- Funding?

Thank You!

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Changes and
Challenges

- All of the mentors
- Steve Kachman, Jenny Green and Pam Fellers
- All of you!