Training and Career Development of Physics Teaching Assistants

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Background and Motivation

• Disconnect in previous TA training:
  – One half-day general TA orientation
  – Weekly content-specific meetings (“next week’s lab is…”)

• Problems:
  – TAs’ lack of effective teaching skills
  – Overworked TAs (research vs teaching)
  – Low TA motivation (“why does this matter anyway?”)

(context: large enrollment calculus-based intro physics)
CETL 8000: “GTA Preparation”

Physics pilot in Fall 2013
Course Structure

• JumpStart to Teaching
  – First Day of Class
  – Active Learning
  – Engaging Explanations
  – GT Policies
  – Time Management
  – Microteaching
  – Classroom Management

• Semester Meetings
  – Group Work
  – Grading
  – Leading Discussions
  – Midterm Evaluations
  – Professional Development
Usefulness of Course Topics

Microteaching
Midterm Evaluations
Grading

Active Learning
Classroom Management
Group Work
Time Mngmnt.
Explanations

Teaching Phil.
Discussions
First Day

← Most useful →

Most useful
Least useful
Cycle 1 (Pilot): Fall 2013

PEDAGOGY
- Group work
- Active learning
- Explanations
- Discussions
- Grading
- Classroom management
- Micro-teaching
- Midterm evals

PHYSICS
- Time management
- Teaching philosophy
- GT policies

PROFESSIONAL DEVELOPMENT
Cycle 2: Fall 2014

Removed:
- group work,
- explanations,
- discussions,
- teaching philosophy

Modified:
- classroom management,
- active learning,
- grading,
- time management,

New:
- problem solving
- midterm evals
- teaching as leadership
- becoming a physics TA
- GT policies
- time management
- micro-teaching
- classroom management
- active learning
- grading
- classroom observations

Pedagogy

Physics

Professional Development