

# A New Survey: Faculty Perceptions of Teaching as a Profession

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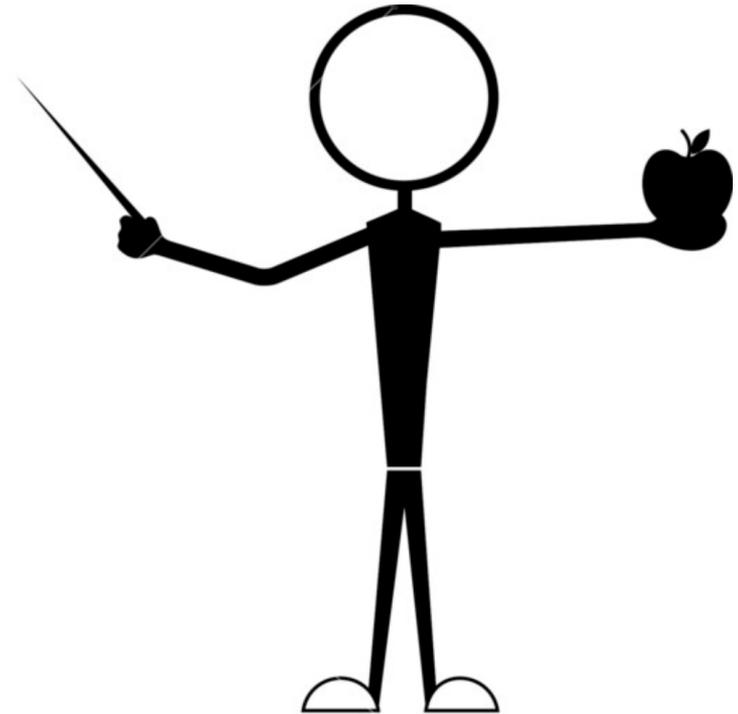
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# Introduction

- K-12 science and math teachers are in **high demand!**
- Why don't more STEM majors go into teaching?
  - Many are discouraged by **misperceptions** about teaching as a profession
- We aim to change this by spreading **correct information** about the teaching profession
- Step 1: **measure perceptions** among students and faculty



# Survey: Perceptions of Teaching as a Profession (PTaP)

- The PTaP is a survey instrument designed to probe STEM **students'** beliefs and attitudes about teaching as a profession
- The PTaP was developed in 2017;
  - **58** statements
  - 1-5 disagree/agree scale (Likert-type)
  - Takes **about 8 minutes** for students to complete
- Sample statements:
  - “My department would be proud if I became a grade 7-12 teacher”
  - “I would become a grade 7-12 teacher if the pay were equal to my other career options”

# FPTaP: Faculty Perceptions of Teaching as a Profession

- The FPTaP is a survey, similar to the PTaP, designed to measure **faculty perceptions and attitudes** about teaching.
- Survey containing:
  - **49** statements
  - 1-5 disagree/agree scale (Likert-type)
  - Typically takes **~10 minutes** to complete
  - Still in **development!**
- Shorter, but taking **longer** to complete - faculty have thought about teaching careers more than students have, but perceptions are not necessarily more accurate

# FPTaP: Faculty Perceptions of Teaching as a Profession

- Sample FPTaP statements:
  - “I have suggested grade 7-12 teaching to a student.”
  - “There are scholarships available specifically for prospective grade 7-12 teachers.”
  - “I would feel comfortable if one of my strongest students became a grade 7-12 teacher.”

# FPTaP Survey Development

- We started by developing statements – **how?**
  - Talked to faculty
  - Used modified PTaP statements
- General **protocol**:
  - Develop questions
  - Interview faculty members
  - Collect data
  - Modify statements
  - Interview faculty again
  - Collect final data

# FPTaP Interviews

- We use a think-aloud protocol to validate our survey questions
  - Faculty answer survey questions aloud and discuss their **reasoning** and **interpretation**, we record the results
- We have conducted **27** faculty interviews at **5** institutions
  - Generally, question interpretations have been consistent
  - We plan to do **10-15** more interviews after modifying statements

# FPTaP Results

- Common faculty **misperceptions** in interviews have included:
  - Underestimating teacher **salaries** by about ~\$10,000
  - Underestimating teacher **retention rates** (answer: 79% remain at 5 years)
  - Lack of knowledge about **loan forgiveness** and **scholarships**
  - Underestimating **interest in teaching** from STEM students

# FPTaP Questions

- “I regularly discuss general career options with students.”
  - 80% agree      12% neutral      8% disagree
- “I regularly discuss grade 7-12 teaching as a career option with students.”
  - 50% agree      8% neutral      42% disagree

**Faculty are not discussing teaching as a career option!**

# FPTaP Questions

- Open-ended question: “What percentage of students do you think have considered grade 7-12 teaching as a career in your university?”

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- Open-ended question: “What percentage of students do you think have considered grade 7-12 teaching as a career in your university?”
  - Interview answers: 2% - 10%
  - Actual answer: 50%!

**Faculty hugely underestimate interest in teaching!**

# Conclusions

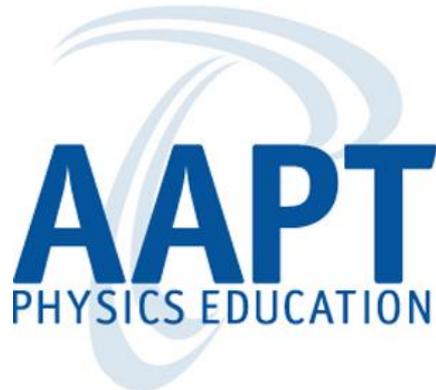
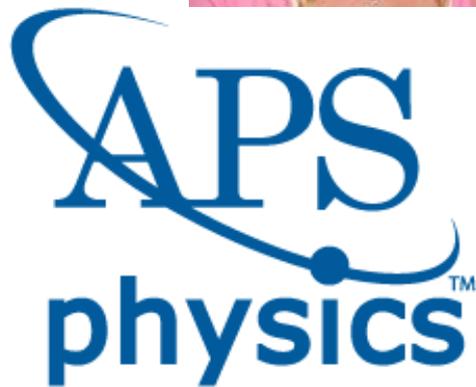
- There are **strongly-held misperceptions** about teaching as a profession among STEM students and faculty
- We have developed surveys to **measure** these misperceptions
- Notable misperceptions are related to **salaries, loan forgiveness, scholarships, interest in teaching, and retention rates**
- We have also developed **workshops** and **other tools** to dispel misperceptions about teaching – contact us for more information!
  - **“Get the Facts Out”** campaign

# Acknowledgements

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Thank you for coming!

**Questions?**

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# PTaP Results

- The PTaP has been completed by ~1000 students at ~15 institutions
- Responses show that STEM students have strong **misperceptions** about several topics, including:
  - Teacher **salaries** (underestimated by ~\$10,000)
  - Private sector **salaries** (overestimated by ~\$10,000-\$40,000)
  - Don't think teachers can **retire** comfortably
  - Think teaching would be **boring** after a few years
- We have developed materials to “**get the facts out!**”
- What about **faculty** perceptions?