Increase Physics Enrollment

Melissa Girmscheid & Zak Kovach
11/4/2017
Melissa Girmscheid

- Physics, AP Physics
- Centennial High School (Peoria, AZ)
- Computational Modeling in Physics First Workshop Developer
- Mentor for ASTA Teacher Leadership Program
- Currently developing two new physics courses for Peoria USD
Zak Kovach

- Physics, AP Physics, AP Environmental Science
- La Joya Community High School (Avondale, AZ)
- Physics Modeling Lead Instructor for AMTA @ ASU
- Officer for AZ Section of the American Association of Physics Teachers
- PhysTEC Regional Physics Teacher of the Year 2017
- Arizona Science Teachers Association Science Teacher of the Year 2014
- *Increased Physics enrollment from 45 (2013-14) to 436 (2017-18)*
Mystery Tube

Critical Thinking
Scientific Reasoning
Belief in Physics

Why should I take Physics? (Elevator Pitch)
How can physics help me? (Philosophy)
“Teaching is about making some kind of dent in the world so that the world is different than it was before you practiced your craft. Knowing clearly what kind of dent you want to make in the world means that you must continually ask yourself the most fundamental evaluative questions of all — What effect am I having on students and on their learning?”

Stephen Brookfield, from *The Skillful Teacher* (1990)
Why should I take Physics? (Elevator Pitch)

Simon Sinek at TEDxPuget Sound

How great leaders inspire action

https://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action#t-271020
I can help you see our world for the amazing place that it is, unlock the mysteries of the universe, as well give you skills that will benefit your future no matter what you do.

We do this by doing a bunch of cool projects, building things, going outside, hands on labs, and working together to solve problems.

This is PHYSICS, and you can’t love without it 😊
Write Your Own Elevator Pitch

- Why should kids take your physics class? What is it that you can do that no other teacher/class can?
- How are you going to give them what you promised in the previous question?
- Then tell them, with pride, what they will be taking!

Tips
- Make them care
- Leave them wanting more
- Have a call to action
- Be natural
How can Physics help me? (Philosophy)

- What you tell students when they are in your class
- Reinforces why they took physics
Zak’s Philosophy

“The least important thing I can teach you is the content of physics itself. Not that it’s not important, it is just the least important thing I can teach them. The most important things I can teach you are skills related to critical thinking, problem solving, group dynamics, public speaking, and a general scientific literacy. It’s these skills that will benefit you no matter what their future holds, be it college, career, military, etc. I can make you a better you!”
Writing a Philosophy

- The shorter the better
- Make it memorable and unique
- Live your philosophy…it is for you
- Each philosophy is very personal by nature
- It’s an evolving philosophy and won’t come to you overnight…take time to get it right
Know Your Audience

Physics helps with:

- Understanding other sciences
- Score better on ACT/SAT/etc.
- College recruiters
- Science, engineering, pre-med majors
- Better jobs
“Your vision is only actionable if you say it out loud. If you keep it to yourself, it will remain a figment of your imagination.”

Simon Sinek
Balancing Nails
BREAK!!!!!!!