Who can change physics education?

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Overview:

1. Background on my Internship
2. Education Technology
3. Education Research
4. Education Policy
5. My Next Steps
My experiences have led me to think often and a lot about physics education.

Who makes decisions and creates change in physics education?

What influences one’s physics identity?

How do we create inclusive physics classrooms with diverse students?
The Life of an AAPT Intern

● Edited and wrote grant proposals.
● Edited, created and conducted outreach activities and materials.
● Organized and supported conferences and workshops.

Pictured: Krystina talking to teachers at the AAPTSM about the Sunspots Digikit.
Education Technology
Computational Modeling in Physics First Classrooms in Chicago, Illinois.

- Physics First - Where a student takes physics in the ninth grade.

- Modeling - a method of teaching physics which involves presenting multiple models of a phenomena.
Goal:
Create an animation to show how a ball would slow down or speed up when rolling through sand or in front of a fan.
Education Research
Conference in Miami, Florida

Conference Goals:

- Reveal and review data on effectiveness of SU4W materials.
- Revise SU4W Materials.
- Brainstorm ways to propagate SU4W.
Education Policy
AAPT/AIP Master Teacher Policy Fellows
There are so many people who affect education policy.

- National Association for the Education of Young Children
- Organization of American States
- The National Academies
- U.S. Department of Education
- State Science Supervisors
- Local Chambers of Commerce
- American Association of Colleges for Teacher Education
- American Society of Engineering Education
- National Governors Association
- National Science Foundation
Teachers and students can -and do!- cultivate change.
My Next Steps:

- Developing and organizing collaboration between AAPT and Math Teacher’s Circles.
- Co-leading a SU4W workshop for STEMTeachersNYC.
- Promote community building and deeper understanding of physics at my college.
Thank you:

- Rebecca Vieyra
- Every teacher I’ve met
- The SPS Intern Family
- AAPT, SPS, APS & AIP
What questions do you have?