

Resources from AAPT
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It is critical for the US and the world to produce more physics majors. We will need a diverse workforce especially to provide talent for science and technology positions that will be available in the near future. As Dean Dixon, Ruth Howes, and others have said, all of us need to concentrate on how to make changes to physics undergraduate programs especially those changes that affect students and student learning.

You are now in a place that you are probably wondering how to proceed with making changes to your undergraduate physics program. AAPT has a number of programs and resources that can help you.

First, the Executive Board of AAPT endorsed a diversity statement in January 2009 (see <http://www.aapt.org/Resources/policy/diversity.cfm>).

I will describe three areas of resources: transforming the classroom, recruitment, and infrastructure.

1. Transforming the classroom.
 - a. New Faculty Workshop (see <http://www.aapt.org/Conferences/newfaculty/nfw.cfm>) - provides an opportunity to develop new faculty and introduce them to a small number of techniques that have been proven to be effective in a variety of environments. We hope to plant seeds of change in as many physics departments across the US as possible.
 - b. AAPT annual meetings (one in summer and one in winter) – provides workshops, plenary sessions, and regular sessions to talk about physics education research as well as techniques to use in the classroom (see <http://www.aapt.org/Conferences/meetings.cfm>)
 - c. AAPT section meetings – like national meetings but local (see <http://www.aapt.org/Sections/>)
 - d. Department chairs meetings – for physics department chairs held every other year with the next one in 2012 (see <http://www.aapt.org/Conferences/depchairsprogram.cfm>)
 - e. Journals: American Journal of Physics, The Physics Teacher, and Physical Review Special Topics – Physics Education Research (see <http://www.aapt.org/Publications/>)
 - f. New collaborative project with Project Kaleidoscope on “Mobilizing Disciplinary Societies on Behalf of Our Students and our Planet” (see <http://www.aacu.org/pkal/disciplinarysocietypartnerships/mobilizing/index.cfm>) - on adding sustainability to the undergraduate curriculum.

- g. Physics Education Research community – “how do you know what you know” – see <http://www.aapt.org/Membership/PERLOCInfo.cfm> for the Physics Education Research Leadership Organizing Council as well as links to PER resources
- 2. Recruiting majors
 - a. “Why Study Physics” group (collaboration between AAPT, APS, and SPS)
 - i. “Seven Myths About High School Physics” brochure (in English and Spanish, see - <http://www.aps.org/programs/education/posters.cfm>)
 - ii. Marketing the major – new project and looking for test sites
 - iii. Physics careers website (see <http://www.compadre.org/careers/>)
- 3. Infrastructure
 - a. AAPT committees provide opportunities for the community to work together to solve issues facing physics education (undergraduate, K12, graduate, etc) – see <http://www.aapt.org/aboutaapt/organization/#committees> - these committees welcome new members and friends to participate in their work
 - b. ALPhA “Advanced Laboratories in Physics Association” provides opportunities to experience upper-level physics labs and prepare to teach them (see <http://www.advlab.org/immersions.html>)
 - c. PhysTEC “Physics Teacher Education Coalition” – a coalition of institutions to improve and promote the education of future physics and physical science teachers (see <http://www.phystec.org/>) - to help address the problem of not enough qualified physics teachers

We are in this together – let me know how AAPT can help you!