

# American Physical Society

## Committee on Education

### 2011 Annual Report

#### Meetings

Teleconferences took place on Jan 27, 2011 and June 30, 2011. Face-to-face meetings were held on April 2, 2011 (College Park) and October 22, 2011 (Tucson). Of the 12 committee members (not counting APS staff and visitors) an average of 9 people participated in both the teleconferences and face-to-face meetings.

Subcommittees communicated with each other via email, a new wiki-structure and via teleconference. Subcommittees were encouraged to meet and conduct business to report at the quarterly COE meetings. The subcommittee chairs coordinated their efforts with the Chair (Finkelstein) and APS staff (Hodapp and Ratnikova).

#### Committee Organization

The division of labor between the overarching committee and subcommittee structure ((K-12 Education, Undergraduate Education, and Graduate Education) initially established in 2009 continued worked well, allowing for more work to be conducted, and for productive quarterly meetings. In addition a working group related to COE, focusing on APS Education Policy was established and is comprised of the current and immediate past two chairs of COE.

The K- 12 Education Subcommittee consisted of Jean Krisch, (Chair) David Bennum, Mary Lanzerotti, and Lawrence Woolf. The Undergraduate Education committee: Andrew Zwicker (Chair), Eric Brew, and Rebecca Christianson. The Graduate Education committee: Marvin Marshak (Chair) Chandralekha Singh, Lawrence Woolf, Michael Thoennesen, and Renee Diehl. David Bennum, owing to other personal commitments effectively stepped down from the committee in January 2011.

An Education Policy working group was established this year: Peter Collings (chair, and immediate past COE chair), Michael Marder, Noah Finkelstein, and Ted Hodapp. Christianson and Marshak also attended and contributed to some of these meetings.

#### Infrastructure changes:

In 2011, COE established an internal wiki-infrastructure to support communications, working documents, and archiving of materials.

The teleconferences were shifted from 60-minute meetings to 90-minute meetings to accommodate more time for discussion and review of subcommittee work.

#### Summary of Activities/ Outcomes:

Within the K12 Education subcommittee, the year was spent exploring and reviewing a variety of program emphases to focus on. COE has considered engaging in reviewing and making recommendations about alternative licensure programs the TIMSS 2015 study, and

a variety of other current issues in K12 physics education. The current focus of the K12 education subcommittee is on examining and making recommendations about a functional relationship between physics and engineering education in K12, responding to the new national frameworks for next generation science standards (NRC/BOSE), providing a set of articles for K12 education to inform the broader physics community (through APS News, FED Newsletter, etc), and overlapping with/ providing a supporting role for Outreach (in such as efforts as PhysicsQuest).

Within the Undergraduate subcommittee, two major efforts were launched successfully: 1) the PER Speakers Database, and 2) COE Award for Excellence in Undergraduate Education. The PER Speakers database was established and populated (now hosting 41 talks), and is available at: [www.aps.org/programs/education/speakers/](http://www.aps.org/programs/education/speakers/). The database will be reviewed and managed jointly by the COE undergraduate subcommittee and PER Leadership Organizing Council, to ensure that it is current, relevant, and useful. The COE Undergraduate Award was successfully launched, with information at <http://www.aps.org/programs/education/undergrad/faculty/award.cfm>. The committee, ahead of schedule has selected 4 awardees to be announced at the April meeting. Current undergraduate education subcommittee projects include: establishing a resource and protocols for program review at the undergraduate and graduate levels, and establishing a clearinghouse of links to resources for undergraduate education.

At the graduate level, the subcommittee has been focusing on pursuing funding for the second conference on graduate education (currently awaiting NSF response to a proposal from 2011), and establishing coordinated ties with the Forum on Graduate Student Affairs (with invitation to graduate liaisons to the COE meetings). Current efforts are to establish a list of priorities for the coming year, and considering options for reviewing and making recommendations graduate education.

The policy working group was established this year and has held several teleconferences and email working meetings. The working group established working protocols and membership guidelines (including the chain of COE chairs, current and past two). The Education Policy Group has established a draft of three priority lobbying initiatives, and shared these with APS staff and the PPC. The Policy Group has also focused concerted efforts on addressing the policy initiatives around the nation that are seeking to close low enrollment physics programs (esp. Texas, see Oct APS News) and associated APS response letter from Barish. Finally Education policy provides a standing report on education at the regular PPC meetings.

COE maintains and seeks to expand its strong ties with other APS communities, hosting CIP representatives and sending a representative to CIP and PPC meetings, including members of Outreach and FGSA to COE meetings, and seeks to establish ties with FOEP.

New Members have been selected to join COE for 2012 and COE thanks Lawrence Woolf, Marvin Marshack and David Bennum for their service to this committee.

  
1 Dec 2011  
Noah Finkelstein, Chair COE 2011