

Committee on Education Annual Report -2003

The members of the Committee on Education (COE) for 2003 have been: Robert Beck Clark, Chair, Beth Cunningham, Vice Chair, Shila Garg, Martin Paul Gelfand, Kenneth S. Krane, Leon M. Lederman, Usha Mallik, Gary Gladding and Harold Metcalf. Paul Hickman has served as a consultant to the Committee. The representatives of interested groups who have served as liaisons to the COE are Warren Hein, AAPT and Jack Hehn, AIP. Fredrich Stein is the APS liaison and Sue Otwell the APS staff member who has served the committee ably and with great dedication. Wolfgang Christian, the chair of the APS Forum on Education, has also served as a liaison. Kenneth S. Krane has also served as the liaison to the National Task Force on Undergraduate Physics (NTFUP).

The COE met twice during 2003: first on April 11-12 at the American Center for Physics in College Park, MD and second on September 18 at Brigham Young University in Provo, UT. Robert Beck Clark also represented COE at the APS Retreat in Annapolis, MD, June 19-21.

Organizational Activities in 2003

During 2003 several action subcommittees continued with specific responsibilities for educational issues:

Monitoring Pending Legislation:

Beth Cunningham and Kenneth S. Krane

This subcommittee was charged with the responsibility of making recommendations regarding suggested actions of the COE associated with pending legislation. The COE might then approve and forward these recommendations to the Forum for its consideration. Mike Lubell provided updates from his office to this subcommittee regarding pending legislation of educational interest.

Advanced Physics (Advanced Placement and International Baccalaureate Physics Programs)

Martin Gelfand and Usha Mallik

This subcommittee was charged with the responsibility of considering the recent National Research Council (NRC) report on Advanced Physics and materials from the College Board regarding Advanced Placement Physics and making recommendations to the COE at subsequent meetings regarding action which might be taken by the APS regarding proposed reforms for Advanced Physics programs at the pre-college level..

APS Education Award Implementation

Wolfgang Christian (chair), Beth Cunningham and Fred Stein

At the October 2002 COE Meeting the Education Award Subcommittee recommended that the COE proceed with the development of a specific proposal for the implementation of an APS Education Award including criteria and procedures for the selection of award recipients in time for the April, 2003 COE meeting. This work was completed on schedule and a proposal for the Education Award, complete with a funding plan, was submitted to the APS leadership for approval.

COE Actions and Support Activities in 2003

Physics for Everyone

During the 2003 meetings of the COE, the movement to encourage the reform of the order in which science is taught in secondary schools was considered extensively. During the April meeting, a detailed presentation on the Physics First initiative was made by Leon Lederman and Paul Hickman. After extended discussions, a revised statement for consideration by the APS Council entitled, Physics for Everyone, was passed unanimously by the COE and forwarded to the Council. The proposed statement was considered by the APS Panel on Public Affairs and eventually tabled. Due to the urgency of this matter, the COE has agreed to resubmit the proposed statement for reconsideration.

New Faculty Workshop

The COE has been enthusiastic in its support for the New Faculty Workshop and is particularly pleased at the announcement that the NSF has awarded the consortium of AAPT, APS and AIP funding for an additional 5 years of this highly successful program. It has been proposed by COE members that a worthy goal for the APS would be to raise the funding necessary to endow the long-term continuation of the New Faculty Workshop. It is estimated that the sum of \$3 million could accomplish this purpose.

Proposed Commission on Graduate Education

The COE has met with the AAPT Executive Board to discuss an AAPT proposal to form a Commission on Graduate Education. A proposed charge for the Commission has been written and the COE has proposed to the APS Council that the APS join with the AAPT in sponsoring this Commission.

National Task Force on Undergraduate Physics (NTFUP)

The COE applauds the organizers of the NTFUP program and its success in completing its survey of the U. S. undergraduate physics programs with an enviable response rate of 74% and the completion of visits to 23 institutions with reportedly successful undergraduate physics programs. The report summarizes the lessons learned regarding the common characteristics that appear to be responsible for the success of these programs. The COE has also encouraged the NTFUP and the physics community to disseminate the results of this study as widely and

frequently as possible

International Year of Physics in 2005

At the COE meetings reports have been presented on the plans for the International Year of Physics in 2005. The COE recommends that the APS give its fullest support to the organization and presentation of the International Year of Physics and its theme of Einstein in the 21st Century.

APS Office of Education and Outreach Initiatives

At the COE meetings this year, the APS Office of Education and Outreach has reported on a number of innovative activities and initiatives in which it is playing a role. In February 2003 a conference on Mobile Physics Outreach was held involving the leaders of local physics outreach programs. The COE is most enthusiastic in its support of this much-needed activity. The COE has also received continuing reports on the progress of the PhysTEC program and its progress and commends the APS Office of Education and Outreach for its outstanding work with this excellent program.