

**APS Committee on Education Annual Report
2022**

Committee Charge

The membership of the Committee on Education consists of the Chair, Past-Chair and Chair-Elect from the Forum on Education and nine (9) persons selected by the Committee on Committees and appointed by the President-Elect to staggered three-year terms. The President-Elect appoints the Chair from among the members. The Committee is responsible for activities in the area of physics education designated to it by the Council. It reports periodically to the President and the Council on physics education. It may suggest and supervise studies and programs to improve the cooperation between the educational community and other parts of the physics community.

2022 Committee Members

Co-Chair: **Eric Brewe**
Drexel University

Co-Chair: **Catherine Crouch**
Swarthmore College

Member: **Neal Abraham**
Mount Holyoke College

Member: **Daniel (Dan) Harris**
Brown University

Member: **Rajeswari (Raj) Kolagani**
Towson University

Member: **Maajida Murdock**
Morgan State University

Member: **Anderson Sunda-Meya**
Xavier University of Louisiana

Member: **Kasey Wagoner**
Princeton University

Member: **Jamie D White**
Juniata College

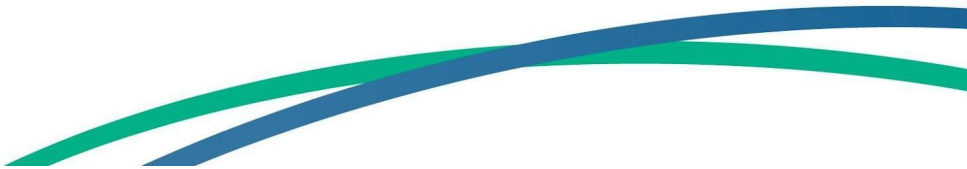
Member: **Stefan Zollner**
New Mexico State University

Chair-Elect to COE: **Lawrence Woolf**
General Atomics Aeronautical Systems,
Inc.

Chair-Elect, FEd: **Susan Blessing**
Florida State University

FEd Chair to COE: **Eric Brewe**
Drexel University

FEd Past Chair to COE: **Catherine
Crouch**
Swarthmore College



SUMMARY OF MEETINGS AND ACTIVITIES IN 2022

The committee met twice online (January 14 and June 28) and twice in person (March 26 in Washington, DC and October 1 in Swarthmore, PA): Subcommittees met and conducted their work virtually between meetings. The Committee on Education's largest set of activities revolved around the Effective Practices for Physics Programs (EP3) initiative. Members also worked with the Educational Policy Committee (EPC). Other tasks were completed or initiated as described below.

Effective Practices for Physics Programs COE continued to spend a great deal of time on the processes of the Effective Practices for Physics Programs (EP3) in order to be ready to put in place a system to continue the operation of EP3 once its Task Force concludes its term. Across all meetings, the COE worked with the APS Liaison (Wittmann) and the EP3 Taskforce on the drafts of the bylaws for the EP3 Editorial Board. During the Fall meeting, COE voted in favor of the slate of candidates for the EP3 Board. This slate was ultimately approved by the APS Council, and the Council acknowledged the work of COE and the EP3 Editorial Board on 11 November. COE provided a number of suggestions for potential future sections of the EP3 guide, including an expansion to graduate education and how to spin off efforts related to EP3 that could be managed by other units.

Education Policy Committee: EPC continues to serve as the major conduit of information from Governmental Affairs (GA) to COE and back. The committee devoted considerable attention to three main areas in 2022: Advocating for Noyce Scholarship program to reform into a true fellowship program; Changes to the Department of Energy (DOE) engagement with Education - DOE budget established new mandates for workplace development, outreach, and education; and providing input on the budget and Bills (CHIPS, COMPETES). With regard to Noyce, there were several aspects of the advocacy to convert to a Fellowship model: 1) to reconsider or possibly eliminate the payback provision, as it disincentivizes participation among financially needy students, is a burden to institutions, and has little evidence to support the idea that it promotes sustained teaching careers; 2) to modify stipends to allow for local true cost-of-attendance (instead of capped for all); and 3) to allow for stipends to continue through certification, not just graduation.

The EPC met roughly monthly throughout the year. 2022 EPC membership is as follows:

COE members: Noah Finkelstein - University of Colorado, Rajeswari Kolagani - Towson University, Kasey Wagoner - Princeton University, Maajida Murdock - Morgan State University

GPER member: Leslie Atkins - Boise State University



FEEd member: Scott Franklin (EPC Chair)- Rochester Institute of Technology, Michael Marder - University of Texas, Wendy Adams - Colorado School of Mines.

APS Staff: Michael Wittmann, Nico Hernández Charpak

Other 2022 COE Activities

Additional work of the committee includes these actions:

- Annual review of COE priorities
 - This year focused on Priority #2, which was revised to: To support schools and departments in recruiting and retaining students from groups that are underrepresented in physics, with the goal of increasing their representation at all levels in physics and physics-related fields.
 - We accomplish this by:
 - promoting awareness of contributions by individuals from backgrounds traditionally underrepresented in physics, including within physics and physical science courses;
 - promoting evidence-based pedagogical techniques that promote recruitment and retention of students from underrepresented populations; and
 - promoting strategies that mitigate or remove academic, cultural, and financial barriers faced by students from underrepresented populations.
 - Active committee work includes: EP3, EDI Training Fellowship (October meeting), Improving Undergraduate Education Award, Graduate Education Conference
 - Active and potential partnerships for this work: AAPT, CSWP, COM, FDI and related groups such as NSBP and NSHP
 - Related initiatives and projects: STEP UP, APS Bridge, IGEN, NMC, CUWIP and APS-IDEA, Top Educator recognition
 - Next year COE will focus on Priority #3 with Kasey Wagoner leading the review.
- Instituted a new Vice Chair / Chair Elect to smooth leadership transitions, Lawrence Woolf will serve as Chair of COE beginning in 2023.
- Began using the new language for the Improving Undergraduate Education Award and reviewed the language following the discussion and deliberation of awards.
- Generated a proposal (in partnership with APS Staff member Midhat Farooq), for a Graduate Education Conference to be held in June, 2023 immediately following the Department Chairs meeting.
- Two projects moved out of COE as part of the maturation process:
 - EDI Fellows moved to the Innovation Fund Grantees - COE participated in a trial run of the EDI Fellows Workshop at the October 1 meeting.
 - Leadership Training moved from COE to APS Leadership.

- The Teaching Evaluation Task Force consisted of representatives appointed by CSWP, COM, GPER, and COE, with the COE Chair serving ex officio as the task force chair. The goal was to encourage APS to make a statement about appropriate use of teaching evaluations, and particularly to make APS membership aware of the biases typically displayed in standardized global items from student evaluations of teaching. The task force met several times February-May 2022 and arrived at a draft of a statement with a set of references/resource materials which Catherine Crouch as Chair then used to pitch the need for a statement to POPA in June 2022. The presentation was very favorably received and POPA is now taking this up as part of their work.
- Supported activities related to awards and grants
 - Selected recipients of Award for Improving Undergraduate Physics Education.
 - Reviewed & selected recipients of APS Prize for a Faculty Member for Research in an Undergraduate Institution.
 - Reviewed Innovation Fund Award proposals related to COE.