

New Faculty Experience for TYC Physics Instructors

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The project that I work with is the New Faculty Experience for Two-Year College Physics Instructors. This project consists of an intensive training experience to enhance STEM student learning through developing new physics faculty members at two-year colleges. To make a significant impact, the New Faculty Training Experience consists of, for each of the two cohorts of faculty members, 18 months of mentoring and professional development for two-year college physics faculty members who are in their first five years of teaching. This experience includes online discussions of seminal papers in physics education research, a four-day intensive training conference held at a two-year college led by instructors that have a proven record of teaching at a successful two-year college physics program, 15 months of mentoring these participants and a three-day commencement conference held in tandem with an American Association of Physics Teachers (AAPT) national summer meeting.

The project works with 30 new instructors per cohort, dramatically improving the way these instructors interact with students over the course of their careers. By scheduling the follow-up sessions in conjunction with the AAPT national meeting, the project will be able to introduce participants to the professional development opportunities available to them through this professional organization to support their professional growth as their involvement in this experience concludes. It also allows AAPT to play a role in developing the next generation of physics instructors.

The intellectual merit of the proposed project includes:

1. Reaching a significant number of new two-year college physics instructors to give them the intellectual knowledge about recent developments in physics pedagogy.
2. Presenting the material in an active engagement environment that models the type of classroom management that we desire them to implement.
3. Mentoring the participants to provide them the support they need to make significant changes in their programs.
4. Having a leadership team with extensive experience in mentoring new physics faculty members.

The broader impacts resulting from the proposed project include:

1. Significantly enhancing the use of interactive engagement techniques experienced by the students at the two-year colleges at which the participants teach.
2. Strengthening the physics content knowledge for the students taught by the participating instructors.
3. Strengthening the students' skill sets that are valued by employers by developing more robust learning environments using active engagement strategies.

4. Disseminating the results of the Two-Year College New Faculty Experience through talks and publications.
5. Developing a national model for two-college STEM faculty professional development.

More information can be found at <http://www.aapt.org/Conferences/newfaculty/tyc.cfm>.