

A glimpse at the workings of PhysTEC Comprehensive Site and APS Bridge Program Site at UCF

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The Physics Teacher Education Coalition (PhysTEC) comprehensive site at UCF is bringing about several notable systemic changes, thanks to the support of departmental faculty and university administrators. It appears to be working as a catalyst not only in preparing students for careers in teaching, but also in reforming physics instruction at all levels. The effort has been facilitated with the introduction of the Learning Assistant (LA) program and collaborative classrooms in the form of studios and “mini-studios.” Mandatory training of LAs and graduate teaching assistants in pedagogy, accompanied by semester-end poster presentations on pedagogy, has helped create a student-centered departmental environment in which research and education are intertwined. Furthermore, a survey conducted on the background and needs of physics teachers in the greater Orlando area has triggered occasional involvement of our LAs in high school lesson preparation and delivery. At the same time, the APS Bridge Program has facilitated the recruitment of several graduate students from under-represented minority groups. The strong emphasis on various forms of mentoring for the Bridge Program students has in turn made us more aware of the mentoring needs of all graduate students. In this talk I will discuss our strategies for recruiting, mentoring and retention of students in both programs, highlighting good practices that have led to successes and lessons learned from our failures. I will also comment on some of the effects these two programs have had on departmental culture, climate and attitudes towards students.

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