

Abstract Submitted
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**Synergistic Activities toward Physics Teacher Development Programs
at Worcester Polytechnic Institute**

¹ RUDRA KAFLE, IZABELA STROE, DOUGLAS PETKIE, Worcester Polytechnic Institute (WPI), THOMAS NOVIELLO, WPI and Leominster High School, SHARI WEAVER, The STEM Education Center, WPI — WPI is in the first year as a PhysTEC Comprehensive Site. As a polytechnic university without an education college or department, the STEM Education Center provides an ecosystem through partnerships with the Massachusetts Department of Elementary and Secondary Education, among academic programs, regional schools, teachers, and community members to support teacher preparation and professional development programs for pre-service and in-service teachers. Both the Physics Department and STEM Education Center oversee the Physics Teaching Preparation program that engages both physics and aligned majors in a Project Based Learning (PBL) curriculum that allows students to complete an initial licensure to teach high school physics within the context of their four-year disciplinary STEM major. Since the award, the WPI PhysTEC team has started several synergistic activities like the appointment of a Teacher-In-Residence, utilization of the PBL curriculum with field experiences, implementation of physics teaching pedagogy course, formation of Teacher-Advisory-Group, collaborative recruitment strategies, organizing meetings among the team members, the students, and the local high school physics teachers. We are presenting an overview of WPI PhysTEC Team's current activities and plans, particularly in the context of the PTEPA rubric.

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Rudra Kafle
Worcester Polytechnic Institute (WPI)

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