PhysTEC: Building a Solution to the National Physics Teacher Shortage

There is a severe national shortage of qualified high school physics teachers in the U.S. Since 2001, the Physics Teacher Education Coalition (PhysTEC) project has engaged and supported physics departments in building the infrastructure needed to address the physics teacher shortage. The project has developed model teacher preparation programs, disseminated information on effective practices, and advocated for teacher preparation within the physics community. A study of thriving physics teacher education programs identified effective practices and produced a self-assessment rubric to identify opportunities for program improvement. The project also developed research-based materials to promote the teaching profession after studies revealed negative misperceptions and that few physics departments promote teaching as a career option. PhysTEC is a project of the American Physical Society and the American Association of Physics Teachers, with support from the National Science Foundation (#1707990).