How Well Do We Build the Foundation of Physics? - The Report of the National Task Force on Physics Teacher Preparation
DAVID G. HAASE, North Carolina State University

Only a third of US high school physics teachers have a major in physics or physics education. Each year about 400 teachers are hired with such qualifications, but this is only one-third of the number needed to replace teachers leaving the classroom. This state of affairs affects national science achievement, equitable access to science careers and national economic competitiveness. The AAPT, AIP and APS charged the National Task Force on Teacher Education in Physics (T-TEP) with investigating strategies for increasing the numbers of qualified high school physics teachers, identifying best practices in physics teacher preparation, and examining the research, policy and funding implications of expanding the number of qualified physics teachers. The Task Force consulted the research literature, partnered with other interested organizations, and surveyed or visited numerous campuses which educate physics teachers. The Task Force has produced findings about the current state of physics teacher preparation and recommendations concerning the commitment, quality and capacity of our physics teacher preparation. Although the current national picture is grim, we have identified thriving teacher preparation programs that can serve as models and resources for other institutions. We have also called upon the physics departments, the colleges of education, and the national science agencies to develop a coherent vision for discipline-specific teacher professional preparation and development. I will discuss the activities of the Task Force, its recommendations and findings, and how we as physicists should respond to this national concern. The activities and report of the Task Force are described at http://www.ptec.org/webdocs/TaskForce.cfm.