

Abstract Submitted  
for the APR09 Meeting of  
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**Professional Development for K-12 Teachers of Physics and Physical Science** JIM NELSON, American Association of Physics Teachers — With the assistance of the National Science Foundation and the American Physical Society, the American Association of Physics Teachers (AAPT) has developed the Physics Teaching Resource Agent (PTRA) Professional Development Model for physical science and physics teachers. This model includes development of peer mentors and professional development leaders, systemic infrastructure, assessment instruments, and a professional development curriculum based on experienced mentors and Physics Education Research (PER). The AAPT/PTRA Professional Development Model provides an opportunity for teachers to experience professional growth from training in the content areas of physical science and physics (e.g., Energy, Kinematics, Newton's Laws, etc.), integration of instructional technology into curricula (e.g., Computer-based Measurements, Graphic Calculators, Simulations, etc.), and teaching strategies based on PER (e.g., Inquiry Learning, Ranking Tasks, Modeling, Learning Cycle Model of a Lesson, etc.). The AAPT/PTRA Program has developed several assessment instruments used to track teacher improvement in the areas of content, learning progress and to identify areas of improvement.

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