

Teaching Physical Science through Inquiry and Embedded Assessment: Professional Development to Support Teacher Collaboration

Nashua School District, through a competitive grant awarded by the NH Department of Education, is able to provide professional development aligned with the brand new physical science frameworks. Sessions will have a special focus on those target areas likely to be included on the 2008 Tri-State Assessment. A main goal of the sessions, however, is to provide you an opportunity to collaborate with colleagues on ways to engage learners in key concepts in physical science and incorporate CPO materials into the science curriculum. The project has two independent components: (1) the on-site inquiry-based sessions with colleagues; (2) online coursework in basic chemistry and physics.

Description of the On-Site Sessions

- CPO (Cambridge Physics Outlet) materials will be used as a resource to promote understanding of challenging academic content as well as the nature of scientific inquiry. Topics will include: Force and Motion, Electricity and Magnetism, and Conservation of Energy.
- A portion of each session will be devoted to thoughtful discussion and reflection of the inquiry methodology used during the session to enhance participants' use of inquiry in their own classrooms.
- Participants will use their experiences to develop an inquiry-based learning experience for the students they teach. The learning activity will utilize embedded assessment as a means to follow and assess student learning.

Description of the Online Component

- The project incorporates online coursework to extend and support participants' understanding of fundamental concepts.
- Coursework includes units in; basic chemistry, stoichiometry, and basic physics.

The on-site sessions will be held at Nashua South and facilitated by college faculty from the departments of Education and Science. The on-line component will be developed and taught by college Science faculty. *Staff development credit will be awarded. Graduate credit will be available for a reduced tuition rate. Credit will be awarded by Rivier College.*