

RAISE Professional Development Day

The RAISE Professional Development Day will take place on SATURDAY, JANUARY 22, 2005 at Polytechnic University. RAISE is an acronym that stands for REVITALIZING ACHIEVEMENT using INSTRUMENTATION in SCIENCE EDUCATION. This is a one-day hands-on workshop that will provide teachers of high school science and mathematics with valuable training in the use of modern sensors, instrumentation, and measurement techniques.

Teachers selected for this program will receive a stipend of \$200, plus an equipment kit for use in their schools, thanks to a generous funding grant from the New York Space Grant Consortium. To apply, please download the application form that is attached and submit the completed form by fax or mail on or before December 17, 2004.

The explosion and prevalence of computer technology in all spheres of human activity present teachers with an opportunity to redesign high school science laboratory instruction. By participating in this workshop, the skills in science, technology, engineering, and mathematics (STEM) of the 20 selected teachers will be enhanced. Each teacher will learn how to integrate modern technological tools in their labs. Integrating modern instrumentation and data acquisition techniques will engage students in the laboratory experience and ignite their interests in experimentation and research.

AGENDA FOR WORKSHOP

Polytechnic University's NSF-funded GK-12 project has acquired and distributed sensor kits for Living Environment and Physics classes from Vernier Inc. The sensor kits will be provided to each participating teacher in this full-day workshop, which is open only to teachers of high school science who are not currently affiliated with our GK-12 project. They will also receive curriculum materials and tools developed under the GK-12 project.

During the workshop, participating teachers will be introduced to four sensor-based lab exercises. Each lab presentation will involve:

- a 30-minute lecture plus demo
- a 60-minute hands-on activity in two-person teams
- a 30-minute reflection/discussion on the lab lesson.

BENEFITS TO TEACHERS

The RAISE Professional Development Day is an opportunity for teachers to:

- reinforce their present science and mathematics skills;
- become familiar with modern sensors and their use;
- enrich their STEM experience through exposure to real world engineering applications;
- develop and hone their technical skills; and
- network with other local area STEM educators;

BENEFITS TO SCHOOLS

After successfully completing the one day professional development workshop, teachers will be capable of:

- mentoring students in conducting sensor-based research and participating in science competitions
- serving as science and technology ambassadors in their schools.

ELIGIBILITY

- Regular teaching assignment at the high school level in a school located in New York City (all five boroughs), Westchester, Long Island, or New Jersey.
- A minimum of one year of experience in teaching high school math, physics, or living environment courses.
- Signed endorsement by your school's principal.
- Teachers at the following New York City schools, which are currently participating in Polytechnic University's GK-12 project, are not eligible to apply: George Westinghouse HS, Paul Robeson HS, Seward Park HS, Marta Valle Secondary School.

STIPEND

Participants who successfully complete all workshop requirements will receive a stipend of \$200 and an equipment kit worth ~\$100 to utilize at their school. Any income tax obligation incurred by the stipend is the responsibility of the teacher.

APPLICATION DEADLINE AND SELECTION INFORMATION

Twenty teachers will be selected to participate in the RAISE Professional Development Day, which will take place on January 22, 2005, from 9:00 am to 5:00 pm. All applications must be postmarked by Friday, December 17, 2004. The application form can be downloaded [here](#).

Selection to participate in the workshop will be on a competitive basis. Applicants may submit their application either by mail or fax. Teachers will be selected by January 10, 2005 and will be notified shortly thereafter. Names of those selected for the workshop will also be posted on the RAISE web site, <http://raise.poly.edu>.

CONTACT INFORMATION

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