

# Project RAISE

## Mission

### Participants

- Schools
  - George Westinghouse HS
  - Marta Valle HS
  - Paul Robeson HS
  - HS of Telecommunication Art and Tech.
- Courses
  - Marine Science
  - Regents Physics
  - Regents Biology
  - Conceptual Physics

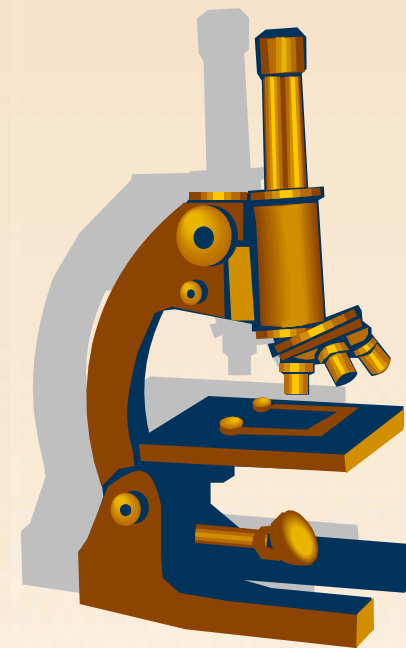
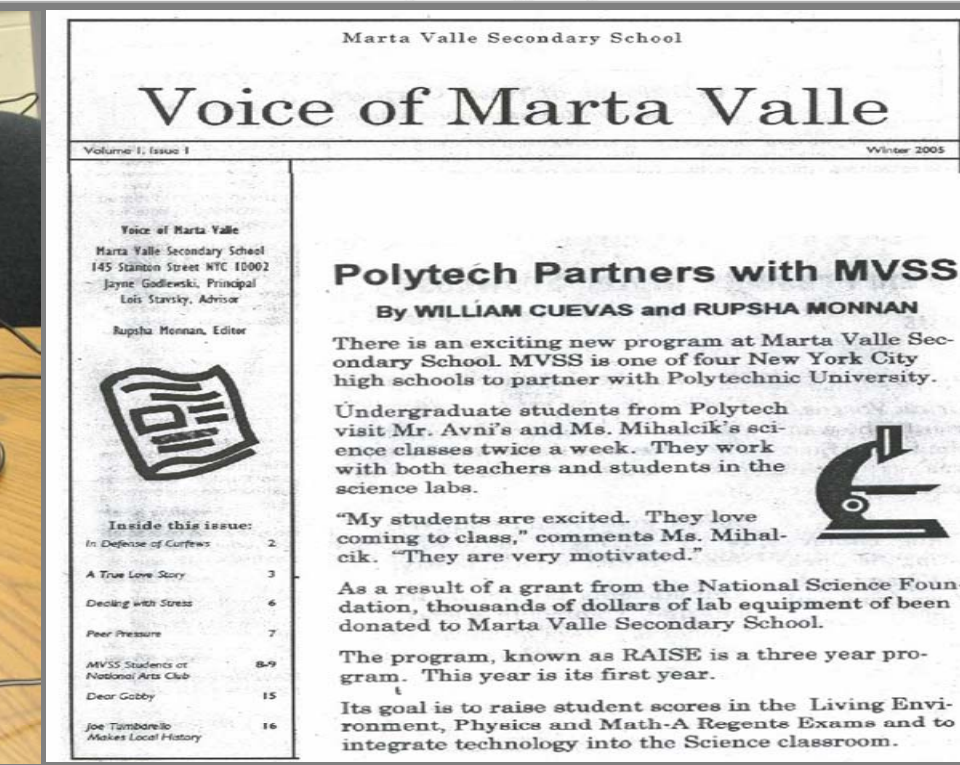
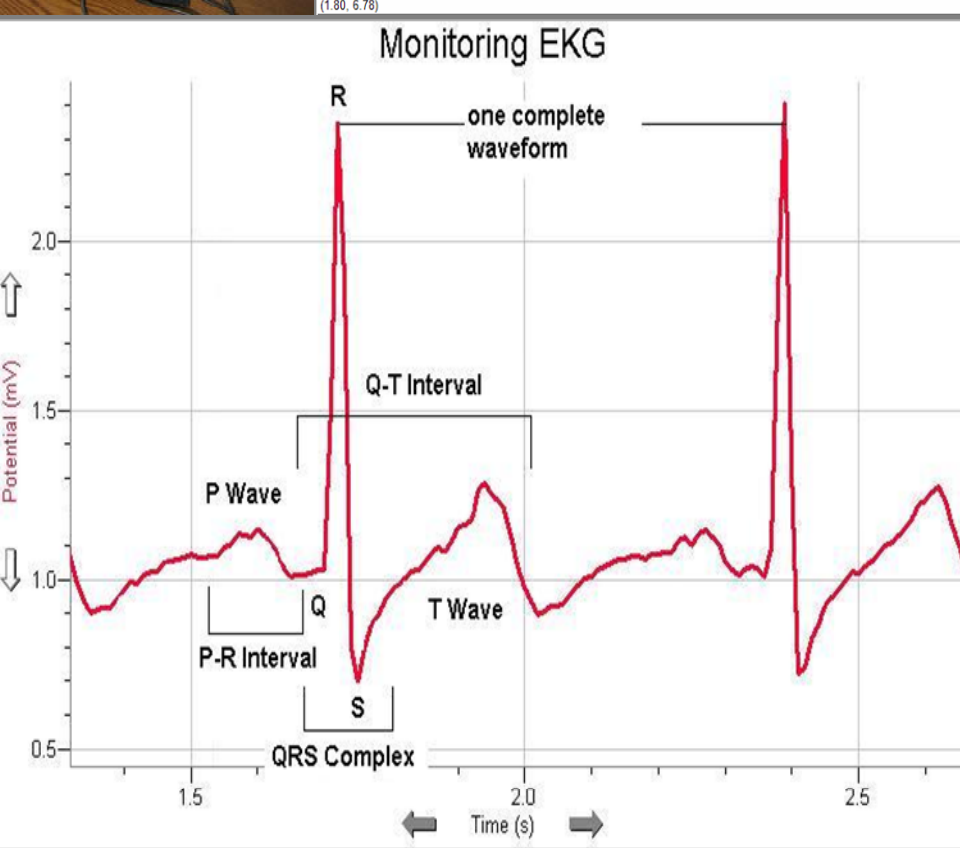
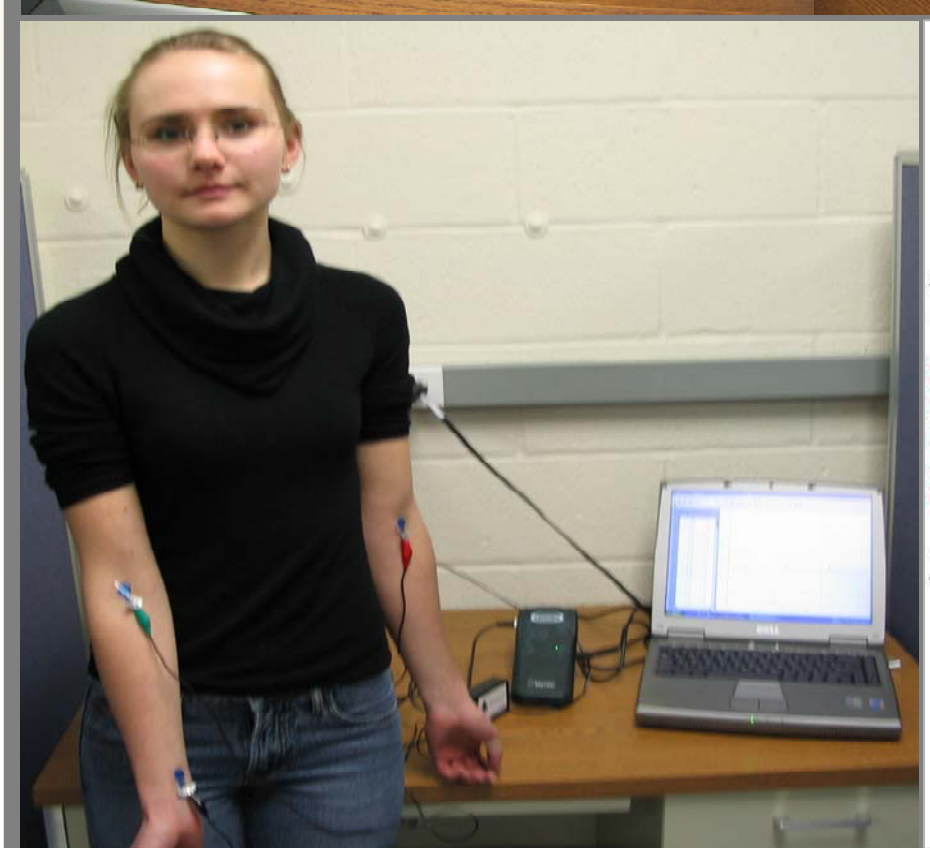
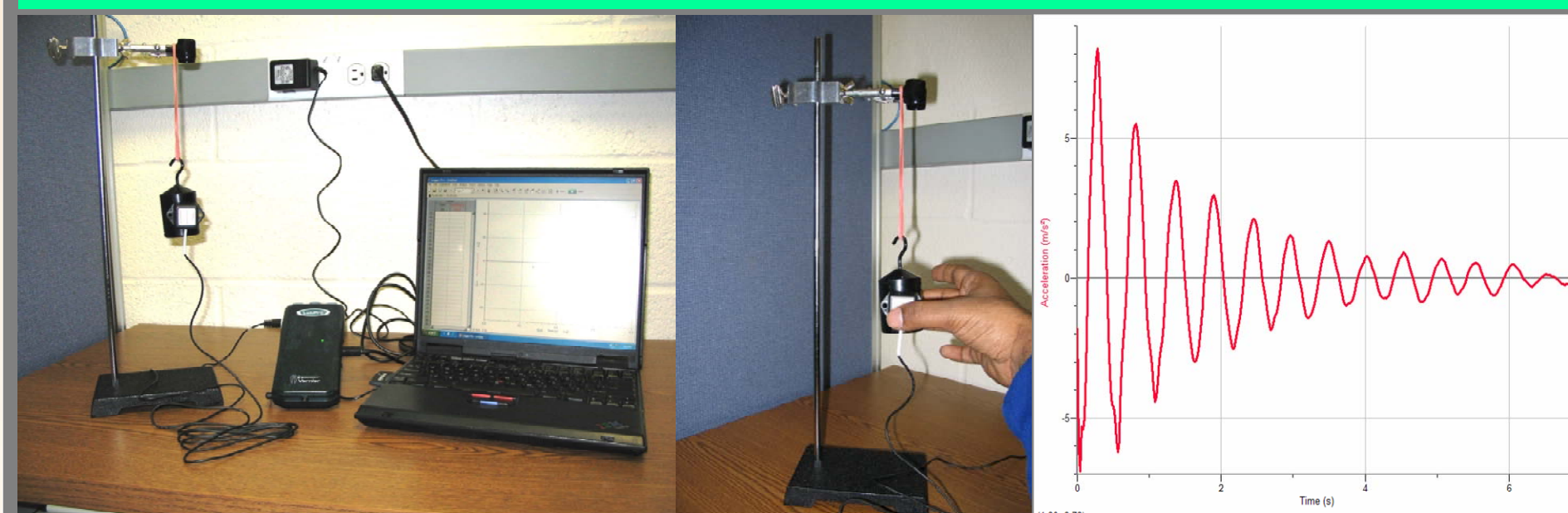
**R**evitalizing  
**A**chievement by using  
**I**nstrumentation in  
**S**cience  
**E**ducation

To promote science and academic achievement through the effective use of technological tools



### GK-12

From 2005–2007, RAISE project focused on integrating sensor technology in the science labs of 4 NYC schools. This year, we have focused on project sustainability. We received funding from the Independence Community Foundation (\$25,000) and Hebrew Technical Institute (\$15,000), through which 5 Fellows were selected and deployed in 2 schools for the spring 2008 term.



### Central Brooklyn Robotics Initiative (CBRI)

We received funding from the Independence Community Foundation (\$175,000) and the Chase Foundation (\$50,000) to develop the Central Brooklyn Robotics Initiative (CBRI), modeled after the GK-12 Fellows program. Under CBRI, 10 Poly students developed a partnership with 10 teachers at 10 schools to challenge their students to design, build, and operate robots in response to the FLL robotics competition. At the 2007 Brooklyn Borough FLL competition, 5 CBRI teams won various awards, including the top award, and qualified for the NYC FLL competition, where 3 CBRI teams won awards.



Members of the Brooklyn-winning PS 21 team at the city championship tournament



Kelechi Stuart and Thomas Smith from P.S. 21 (a CBRI school) in Brooklyn took the top prize, the Director's Award, in the Brooklyn-wide qualifier event, and won the Team Spirit Award in the New York City "FIRST LEGO League Championship Tournament," January 26, 2008.



### Workshop in Instrumentation, Sensors & Engineering (WISE)

We received \$297,455 from the Engineers of the Future Program of NYS Education Department for WISE. Under WISE 20 teachers were recruited and mentored in hands-on engineering design in a two week workshop. The program introduced teachers to numerous sensor-based activities by drawing on the RAISE experience.



Nineteen teachers submitted implementation efforts:

- Lesson plans
- Teaching power points
- New experiments
- Videos of classroom activities



### WISE PARTICIPANTS

- 13 Men, 7 Women
- Age: 25-57
- Experience: 0-32 years
- Area of Teaching
- Physics: 5
- Biology: 2
- Chemistry: 1
- Math: 5
- Earth Science: 2
- Technology: 5
- Polytechnic Team
- 3 professors
- 6 Students (1 undergraduate)

