**EPICS High: High Schools Improving Lives with Engineering Projects**

The EPICS High School Program is quickly sweeping across the country with 35 schools currently engaged. The program is poised for large-scale growth and continues to build partnerships and resources to support the program. Companies, universities, professional societies, and individuals are working to help schools build successful programs and give more students the experience of this innovative, hands-on program. Students surveyed have said that they are now more interested and have a better understanding of engineering and science because of their experiences in EPICS High.

EPICS High is working hard to address the decline of students interested in STEM fields by teaching design while serving local community not-for-profit agencies. The EPICS High program is designed to give all students the opportunity to take part, utilizing their individual interests to play a role on a project team. Reports from EPICS High schools in the spring of 2009 indicate EPICS is impacting minorities and lower-income students. Of the 1200 students participating, 34% are underrepresented minority populations, far surpassing current numbers of minority groups in collegiate engineering and computing programs. In relation to gender, 41% of the participants are female. Numbers generated also show that over 50% of the students participating are in the free and reduced lunch program. The 35 EPICS High schools are located in urban, suburban, and rural areas. Over 75% have integrated the program into the schools academic curriculum. Schools are delivering projects to their community partners and making a real difference for the residents that agency serves.

EPICS has made getting started for schools easy! Their first step is to contact EPICS. Summer training is offered to anyone interested and is designed to give teachers and administrators the tools and resources needed to implement a program. EPICS High now has various models of successful schools for new schools to draw implementation strategies from. To attend a training and find out more about EPICS High please visit the EPICS High website at [http://epics-high.ecn.purdue.edu](http://epics-high.ecn.purdue.edu)

The current list of amazing EPICS High Schools positioning themselves as leaders in their field are:

**In Indiana** - Jefferson HS (Lafayette), Columbus Area Career Connection, Bedford North Lawrence HS, IPS Career & Tech Center (Indianapolis), Arsenal Tech (Indianapolis), George Washington Comm. School (Indianapolis), eSchool Academy (Indianapolis), Thomas Carr Howe Comm. School (Indianapolis), Arlington HS (Indianapolis), Park Tudor (Indianapolis), Northrop HS (Ft. Wayne), McCutcheon High School (Tippecanoe County), Indiana Academy (Muncie), and Frankfort HS.

**In Massachusetts** - Leicester High School, Agawam High School, Prospect Hill Academy (Cambridge)

**In California** - High Tech High School (San Diego), Pacific Ridge (San Diego), Andrew P. Hill (San Jose), Yerba Buena (San Jose), and Pleasant Grove HS (Sacramento).

**In New York** - Frederick Douglass Academy, A. Phillip Randolph Campus, Shoreham-Wading River HS, Henninger High School (Syracuse), and Columbia Secondary School for Math, Science & Engineering.

**Michigan** - University High School (Ferndale), Huron County Intermediate School District: Harbor Beach, Lakers Schools, North Huron, Owendale-Gagetown, Caseville, Ubly, and Bad Axe.

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**How You Can Support EPICS**

EPICS relies on partnerships with corporations, foundations, institutions, and friends of EPICS to carry out its programs. Your involvement can be either in the form of financial support and/or leadership support. Examples of how you can support the program:

- Sponsorship of a high school program and/or team
- Mentor high school teams
- Provide project materials to local schools
- Support to the EPICS Program

Please contact Pamela Dexter at pdexter@purdue.edu
EPICS High Project Examples

Pacific Ridge Campus Stewardship
- Campus Recycling Implementation and Maintenance
- Worm Bin (Food Composting)
- Athletic Equipment Needs
- PRS Garden (Using Worm Compost)

Frederick Douglass Academy
- Aquaponics System in Harlem Senior Center to Improve Air Quality
- Design a Water Quality Sampling Station for the East River
- Partner with Elementary Feeder School to Design Science Equipment for their Classrooms

High Tech High
- Portable Raptor Cage
- Light Writer Pendulum
- Mobile Art Cart for Art Teacher
- Adaptive Eating Tray for Special Needs Student
- Custom Stage Stairs for Animals

Leicester High School
- Portable Exhibit for Local Science Museum
- Conducting Energy Audits for Low Income Housing Using Thermal Imaging
- Constructing insulation out of Recycled Materials
- Incorporating Green Technologies for Local Middle School

Yerba Buena High School
- Students Designed and Built a Playhouse Structure for the Backyard at JW’s House for Families with Children in the Hospital
- Solar Lighting Project on School Campus to Light Athletic Fields