She wants to make a difference with a career in Science, Technology, Engineering and Math...

...and she already has real world experience and career skills.

EPICS HIGH

High Schools Improving Lives with Engineering Service-Learning Projects

- Building Partnerships
- Hands on Learning Experiences
- Helping the Community
- Innovative Teaching
- Learning Leadership and Teamwork
- Professional Development Opportunities for Teachers
- Engaging More Students

Participation in Engineering Programs

- Female Students
- Underrepresented Students

National Average EPICS Participation

- 19%
- 15%
- 42%
- 37%
EPICS (Engineering Projects In Community Service)

EPICS is a design-based, service learning program that teaches students about engineering, computing and technology fields while civicly engaging them in their local communities. Founded at Purdue University, the program has grown to include national and international university (EPICS University) and high school (EPICS High) sites.

In EPICS, teams of students work on projects to address the engineering and technology-based needs of community service and education organizations. This partnership provides many benefits to students and community alike. Students gain experience while community not-for-profit organizations gain access to resources for the creation of products to improve services.

Examples of Community Partners Include:
- Local non-profit organizations (Habitat for Humanity, YWCA)
- Local Government Offices (County Probation Department, City Parks Department)
- Feeder or Sister Schools (Local Middle and Elementary Schools, Area High Schools)
- Area Museums and Zoos

EPICS High has the potential to play a role in addressing current issues including:
- Dropout rates
- Declining interest in science & engineering fields
- Underrepresentation of women and minorities in STEM (Science, Technology, Engineering, Math) fields
- Compelling needs of the underserved in communities
- STEM education reform
- Global workforce competitiveness

EPICS High Demographics
- EPICS implemented in over 50 Schools
- 11 States
- Over 2,200 Students
- 44% Female
- 61% Underrepresented
- Over 250,000 people positively impacted

How can community and industry get involved?
- Talk to local schools about starting a program
- Identify teachers and/or administrators at schools to send to training
- Help schools identify projects to pursue
- Mentor student teams to add engineering and other expertise to compliment teachers
- Provide materials and supplies (gifts in kind)
- Financially support (sponsor) teams
- Contact EPICS High Coordinator for opportunities (mindy@purdue.edu)

Benefits of being an EPICS High:
- Affordable...NO FEE to become an EPICS High!
- Encourage long-term partnerships within your community and across the EPICS high network
- Engage students in Science, Technology, Engineering and Mathematics fields
- Teach students the professional skills needed to succeed
- Teacher training that gives schools the tools to run an EPICS High program
- Network of schools across the country
- Flexible EPICS High Curriculum developed to lead teachers in facilitating EPICS
- Web tools and resources
- Gives students access to experts in local community organizations, businesses and companies
- Products offered to EPICS schools from program partners

Easy to Start with EPICS High Summer Training
EPICS summer training provides teachers and administrators with the tools and resources needed to implement and grow this exciting design-based service-learning model for high school students.

Trainings include sessions in:
- Using the EPICS High Curriculum
- Best Practices – lessons learned from seasoned EPICS High Teachers
- Creating and Maintaining Partnerships
- Project Management for Students and Teachers
- Leadership Skills
- How to Teach Design
- Meeting Standards with EPICS

Participants will receive hotel accommodations at discounted group rates and most meals are included. Scholarships to attend may be available through the EPICS High headquarters at Purdue University. Visit our website for training dates: www.engineering.purdue.edu/epicshs

Examples of EPICS High Projects:
- A greenhouse to grow vegetables for local community gardens, Lakers HS, MI
- English as a Second Language software to aide in communications between parents and the school, McCutcheon HS, IN
- Water quality sampling station for East River, Frederick Douglass Academy, NY
- Campus recycling program and educational materials to encourage other schools to adopt the program, Pacific Ridge HS, CA
- Adaptive lunch tray for special needs students, High Tech High, CA
- Sustainability plan for Lake Michigan Beach, Westinghouse College Prep

www.engineering.purdue.edu/EPICSHS