PLTW Engineering: Principles of Engineering (POE)
2015-2016 Scale-Up Program

Overview: Funding will assist educators in implementing and expanding Project Lead The Way's Engineering program by providing tuition for Principles Of Engineering (POE) Core Training for one educator and six VEX PLTW Engineering Robotics Kits.

Grade Levels: 9-12

Program Summary
Project Lead The Way (PLTW) is a nonprofit organization and the nation’s leading provider of K-12 science, technology, engineering, and math (STEM) curricular programs—including PLTW Launch* (K-5), PLTW Gateway* (6-8), and three high school programs: PLTW Engineering*, PLTW Computer Science* and PLTW Biomedical Science. PLTW’s world-class, activity-, project-, and problem-based curriculum and high-quality teacher professional development model, combined with an engaged network of educators and corporate partners, help students develop the skills needed to succeed in our global economy. PLTW’s rigorous and relevant curriculum is collaboratively developed and consistently reviewed and improved by PLTW staff, teachers, university educators, industry experts, and school administrators. It leverages an innovative, project-based approach, fostering collaboration and building critical thinking skills.

*Part of 2015-16 Iowa Governor’s STEM Scale-Up selected programs

What does the project provide?
Funding will assist Iowa high schools in implementing the PLTW Gateway program by providing...

1. This project will provide selected LEA sites with teacher training for PLTW Engineering: Principles of Engineering (POE). One educator is required to attend the 2-week Core Training this summer at The University of Iowa College of Engineering, Iowa City, IA (exact training dates to be released in March).
2. Six VEX Robotics Kits that will ship to selected schools, once the teacher(s) have completed Core Training. These kits, representing more than two-thirds of one-time equipment costs, will allow schools to adequately outfit one lab with the robotics equipment needed for up to 24 students (one kit for every four students) per class.

What is required by the applicant in order to implement this program?

- Sites need to review the Iowa Governor’s STEM Advisory Council’s 2015-16 Scale-Up Programs info and pertinent PLTW information: PLTW Engineering Program Requirements, the sample PLTW Agreement, the PLTW Partnership Team Guidebook and the PLTW Guide to Successful Implementation PDF.
- Sites will then need to apply for the Iowa Governor’s STEM Scale-Up and register the program with Project Lead The Way. Registration does not commit the site to PLTW implementation; however, it does provide valuable information about a site’s program and Scale-Up award interest to Project Lead The Way and the Iowa Gov.’s STEM Adv. Council.
- Review the PLTW Register Now webpage. Choosing either 1) My school or organization already has one or more PLTW programs OR 2) This is my school or organization’s first PLTW program and follow the instructions listed.
- Register the school district and/or the participating schools. Select a District Administrator (DA) and School Administrator (SA) (for each school) to serve as the main points of contact with PLTW and be responsible for providing and maintaining accurate data and information. Upon registration, the DA will receive an email with a link to the PLTW Agreement.
- Review site’s PLTW agreement with authorities such as the school board, superintendent, and legal department to ensure all parties are aware of district and school responsibilities. After obtaining the authorized signatures, email agreement to PLTW School Support Team.
- Execute LEA Agreement with PLTW as a part of the Scale-Up before attending Core Training and before purchasing materials.
- Select a teacher to attend PLTW Engineering: POE Core Training. Teachers should be excited to teach a project-based curriculum and meet the requirements of the PLTW agreement. After the signed agreement has been received and processed, the DA and/or SA should contact the PLTW School Support Team (877-335-7589) to add and/or update district/school contacts, including teachers.
- Register teachers for POE Teacher Training (2-week training). Teachers must successfully complete and pass all required online PLTW CSE Readiness Training modules prior to attending and passing Core Training. Award covers tuition for one teacher, which includes parking and lunch meals; however, this does not include other costs associated with Core Training, such as lodging, teacher stipend, additional meals, etc. Training sites will provide training lodging/meals packages for participants.
- Review the PLTW Order Instructions, the PLTW Engineering: POE Pricing in Engineering Inventory Workbook and PLTW Computer Specifications to order the necessary equipment and supplies for the course. Start the ordering process early to ensure the lab is fully equipped before the new school year.

Website to View Program and Standards Alignment: http://alignment.pltw.org/site/index
Program Video: https://www.youtube.com/watch?v=yyDn9dXJ3MI&list=PLcCTPHuIp75l4OB5bdEiFmryWewqxbXRT&index=8