

Professional Development

The STEM Education Center develops and conducts PDs for P-12 educators at WPI and in schools during PD days. All programs offered by the Center emphasize STEM integration; they are aligned with the NGSS and model key elements of the MA Teacher Evaluation Rubric.

Engineering a Story *

The Engineering a Story is a great program to engage K-8 teachers in the integrative nature of STEM. Designed specifically for educators of all subjects, this workshop offers a hands-on approach to weaving together engineering practices, thinking skills, and literacy. The collection of methods presented in the program lead to an enriched reading experience coupled with a gain of engineering concepts. The program is aligned with the Common Core and the NGSS.

* This program is an adaptation of *Engineering Lens*, a program created by Bill Wolfson.

Teaching and Learning with STEM Projects

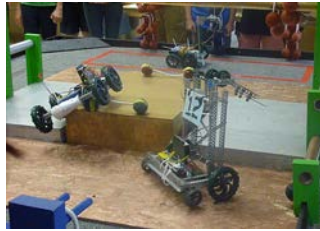
A truly integrated approach to teaching STEM. This PD weaves together theoretical and practical methods by introducing design challenges that require participants to use scientific and mathematical concepts for solving a real problem. Project-based teaching and learning approach is linked to better learning, retention of content, and student engagement. All projects and design challenges presented in this PD are aligned with the NGSS.

Robotics for Educators

The STEM Education Center in collaboration with the Robotics Resource Center host two summer Robotics PD for educators: VEX and LEGO. The week-long programs offer educators a blend of robotics experiences with STEM education topics. Participants will learn to build, design, and program LEGO/VEX robot and will learn about the different sensors and mechanics of the robot. In addition, the programs connect the robotics experiences to the NGSS standards. The programs culminate in a robotics challenge. Robotics for Educators offer unique format as teachers work in small groups along middle/high school students and therefore get to appreciate students capabilities.



Summer 2014 PD dates



LEGO Robotics for Educators

July 14-18, 2014; 8:30-4:30; \$465; 35 PDPs

Engineering a Story

July 21-22, 2014; 8:30-3:00; \$165; 12 PDPs

Teaching and Learning with STEM projects

July 24-25, 2014; 8:30 – 3:30; \$185; 13 PDPs

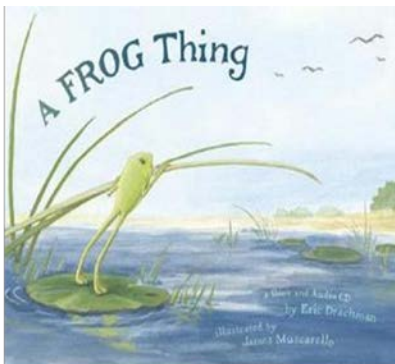


VEX Robotics for Educators

August 4-8, 2014; 8:30-4:30; \$465 ; 35 PDPs

Advanced Vex Robotics for Educators

July 21-August 1, 2014; 8:30-4:30; \$720 ; 70 PDPs



A Frog Thing is about a frog that wants to fly – the team designed a set of wings and a special kite to solve his problem.

