

Professional Development Plan

Topics to be explored:

- Developing a Collaborative Classroom Community
- Introduction to the Engineering Design Process
- Exploring the Conceptual Learning Model and inquiry-based science instruction
- Implementing the Science and Engineering Practices through the use of Models and Simulations
- Implementing the Science and Engineering Practices through Data Analysis and Interpretation
- Implementing the Science and Engineering Practices through Argumentation
- Implementing the Science and Engineering Practices through Communication of Scientific Knowledge

Embed the science and engineering practices of asking questions and defining problems, planning investigations, mathematical and computational thinking, and the use of technology and literacy strategies to obtain and communicate scientific knowledge within each session.

Additional Activities for Consideration:

*STEM Expo for families and community; one in fall and one in spring to take place as a PTO event;

*Engineering Week: February 23-27, 2015

<http://www.discovere.org/our-programs/engineers-week>

*Journey North - an online project providing opportunity for relevant use of technology as a global community of scientists; very simple; limited time commitment

<http://www.learner.org/jnorth/>