



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 available as a half-day, full-day, or two-day workshop format.

Sample Agenda

What is engineering? What are engineering practices?

- The Next Generation Science Standards (NGSS) and engineering practices
- The engineering design process
- Reviewing books to identify problems

Divergent and convergent thinking: Generating creative and innovative ideas

- The brainstorming process
- Sorting the ideas into categories
- Defining constraints and choosing solutions
- Creating a matrix to evaluate possible solutions

Build-test-redesign

- Test and re-design is a key process for problem solving and critical thinking
- Every design can be improved
- Providing feedback in a supportive way
- Children as honest peer reviewers
- Presenting redesigned projects to the group

Putting it all together: Teachers choose a book/story and go through the process of identifying problems, developing and choosing a solution, designing a prototype and building the solution (if time permits).

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