

Curricular Materials

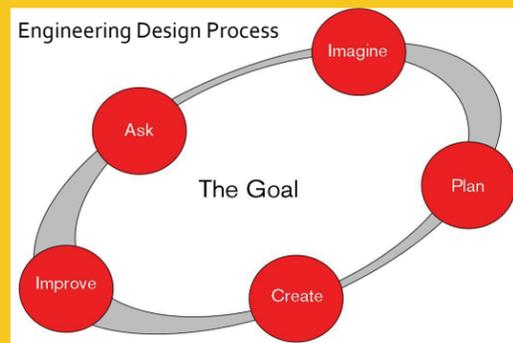
Each of the 20 Engineering is Elementary units engages students in an exciting design challenge that requires them to apply their knowledge of a science topic.

All Lesson Materials

- Are available at two levels: basic (grades 1-2) and advanced (grades 3-5)
- Connect to science, mathematics, language art, and social studies
- Meet the International Technology and Engineering Educators Association (ITEEA) Standards for Technological Literacy.

Each EiE Unit Includes a Teacher Guide with

- **A storybook** in which a child character from a different country engineers a solution to a "real-world" problem. Each story demonstrates that with some creativity and knowledge of the engineering design process, everyone can engineer!
- **Lesson plans** with detailed instructions for teachers.
- **Duplication masters** ready to photocopy for students.
- **Background information** and additional resources for teachers.
- **Assessment** sheets and rubrics.
- **Materials lists** with details of all activity materials.
- Complete materials kits are also available for purchase.



What Can EiE Do for Your District?

Connections to Science

Each EiE unit links to science topics taught in elementary school classrooms. To help educators integrate EiE into their science teaching, each unit is mapped to FOSS, GEMS, Insights, STC, and Science Companion curriculum units. Each EiE unit also includes a list of the major science concepts that are reinforced within each lesson.

Online Educator Resources

Part of the EiE website, this page supports and enhances the experience of EiE curriculum users, who can access:

Content Connections:

This searchable, dynamic database of lessons, authored by EiE staff, teachers, and community members, explicitly connects EiE lessons to mathematics, social studies, language arts, science, and fine arts.

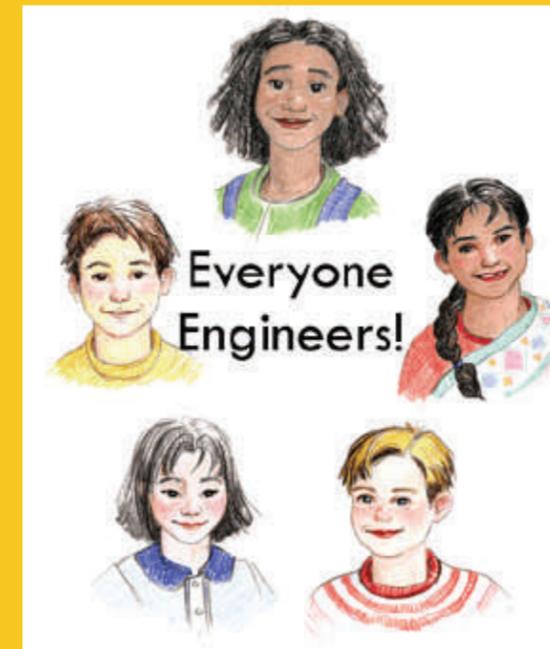
Multimedia Resources:

A directory of online videos created by EiE staff gives educators access to exemplary lessons and helps them organize and prepare materials for their own EiE lessons.

Supporting Documents:

Presentations, overviews, images, and other documents are created by teachers and EiE staff to support EiE use.

Engineering is Elementary Professional Development



Engineering is Elementary (EiE) Problem Solving, Inquiry, and Innovation

EiE is a project of the National Center for Technological Literacy (NCTL), established by the Museum of Science, Boston. EiE promotes elementary-student learning of engineering and technology while helping educators enhance their own understanding of engineering concepts and pedagogy.



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About EiE Teacher Education

Engineering is often an entirely new discipline for elementary school teachers. To foster understanding of the engineering design process, EiE offers workshop and resources for elementary school educators.

These sessions introduce teachers to broad engineering concepts and skills, review the structure and philosophy shaping EiE curricular materials, engage participants in EiE activities, and foster reflection about appropriate instructional strategies.

The goals are twofold: to increase elementary school educators' abilities to teach engineering and technology and to modify educational systems to include engineering at the elementary school level.

“Teaching these concepts to young children is really about showing them that science and technology and design are very creative and a lot of fun.”

- Workshop participant and elementary school teacher



Public & Custom Workshops

The Imaginarium EiE Educator Institute hosts workshops in Fort Myers, Florida and offers custom workshops that travel to your location!

Everyone Engineers! Workshops allow participants to explore introductory engineering and technology activities and become familiar with EiE units.

Imaginarium EiE staff will work with you to tailor individual sessions for school, district, or organization. The workshops engage participants in hands-on introductory activities that provide foundational knowledge of technology and engineering—vital to a teacher’s ability to bring these concepts to life.

Sample Workshop Agenda

(schedule may vary)

- 9:00** Introductions and goals
- 9:10** **Intro activities:** *What is Technology? And What is Engineering?*
- 10:15** **EiE teacher guide overview and project background**
- 10:30** **Lesson 1** (storybook) **and Lesson 2** (in-depth look at an engineering field)
- 12:00** **Lunch Break**
- 1:00** **Lesson 3** (scientific data informs engineering design) **and Lesson 4** (engineering design challenge)
- 2:30** **Wrap-up and reflections**
- 3:00** **End session**



Workshop Session	At Imaginarium	Within 50 Miles from Imaginarium	50+ Miles from Imaginarium
Half-Day (Weekday) with one EiE unit (Up to 3 hours, Previous EiE workshop required)	\$500	\$750	N/A
Full-Day (Weekday) with one EiE unit (3-6 hours)	\$1000	\$1,250	\$1500
Full-Day (Saturday/Sunday) with one EiE unit (3-6 hours)	\$1250	\$1500	\$1750

Fee: includes the services of one facilitator, use of PD kit, consumable workshop materials, preparation time, and PD certificates. Fee does not include curricular materials, associated travel costs (airfare, ground transport, mileage, tolls, hotel stays, meals, and materials' shipping costs) or the presentation of additional units. **Capacity:** 25 participants per workshop (fees incurred if more than 25 participants).

Requirements: Workshop host must complete and return a signed copy of the EiE workshop contract three weeks (15 business days) prior to start date.