



Figure 3. Designing a Filtering System. Courtesy of Sandy Cavanagh.

engineering for all: classroom implementation

EfA has opened the door to my classroom and provides other instructors and community members a clearer understanding of what it means to teach using the Informed Design process.

Introduction

The Engineering for All (EfA) program focuses on engineering as a potential social good, revisits major Technology and Engineering (T&E) themes (design, modeling, systems, resources, and human values) in two authentic social contexts (Food and Water), and uses informed design pedagogy. For further detail relative to the program's conceptual design and the informed design methodology using Knowledge and Skill Builders (KSBs), ITEEA members can refer to the prior EfA article in the November 2017 issue of *Technology and Engineering Teacher* (Hacker, Crismond, Hecht & Lomask, 2017) (www.iteea.org/Publications/Journals/TET/TETNov2017.aspx) and the November, 2017 EfA webinar recording (www.iteea.org/STEMCenter/EbD-PD/STEMWebinars/96925.aspx).

This article focuses on EfA classroom implementation. The contributing authors are teachers who have served in leadership roles during the development and classroom testing of the program. Dr. Sandy Cavanaugh was lead writer for the Water Unit; Alta Jo Longware and Matthew Plummer were lead Water Unit teachers; and Chris DeHaan and Matt McGuire were lead Food Unit teachers. These expert T&E educators have conducted, and

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