Hands-on K-12 Engineering Curricula

Initial K-12 Curriculum Providers

- University of Colorado at Boulder
- Worcester Polytechnic Institute
- Colorado School of Mines
- Duke University

K-12 Curriculum Content Sources

- Four NSF GK-12 grants
- Department of Education FIPSE grant
- NSF Math Science Partnership grant
- Other K-12 outreach initiatives

In the future... your K-12 engineering curricula?

TeachEngineering Digital Library

What: A web-based digital library collection of standards-based, hands-on

K-12 engineering lessons, activities and real-time 'Living Laboratories.'

Why: To use engineering as a vehicle to integrate science and math in the classroom.

To increase K-12 student and teacher awareness of engineering as a career path.

Engineering College Partners: Jackie Sullivan, University of Colorado at Boulder

Martha Cyr, Worcester Polytechnic Institute Mike Mooney, Colorado School of Mines

Gary Ybarra, Duke University

Software Infrastructure by: René Reitsma, College of Business, Oregon State University

Collection Host: Open Source Lab, Oregon State University

ASEE Partnership

- Disseminates and promotes the TeachEngineering collection
- Evolves the TeachEngineering collection long term



- Conducts engineering faculty workshops
- Conducts K-12 teacher workshops

Engineering Faculty

- Use the on-line digital library to partner with local teachers to incorporate engineering (applied science and math) into K-12 classrooms
- Take ASEE 'How to Use' Workshops
- Contribute original lessons and hands-on activities content to the collection

K-12 Teachers

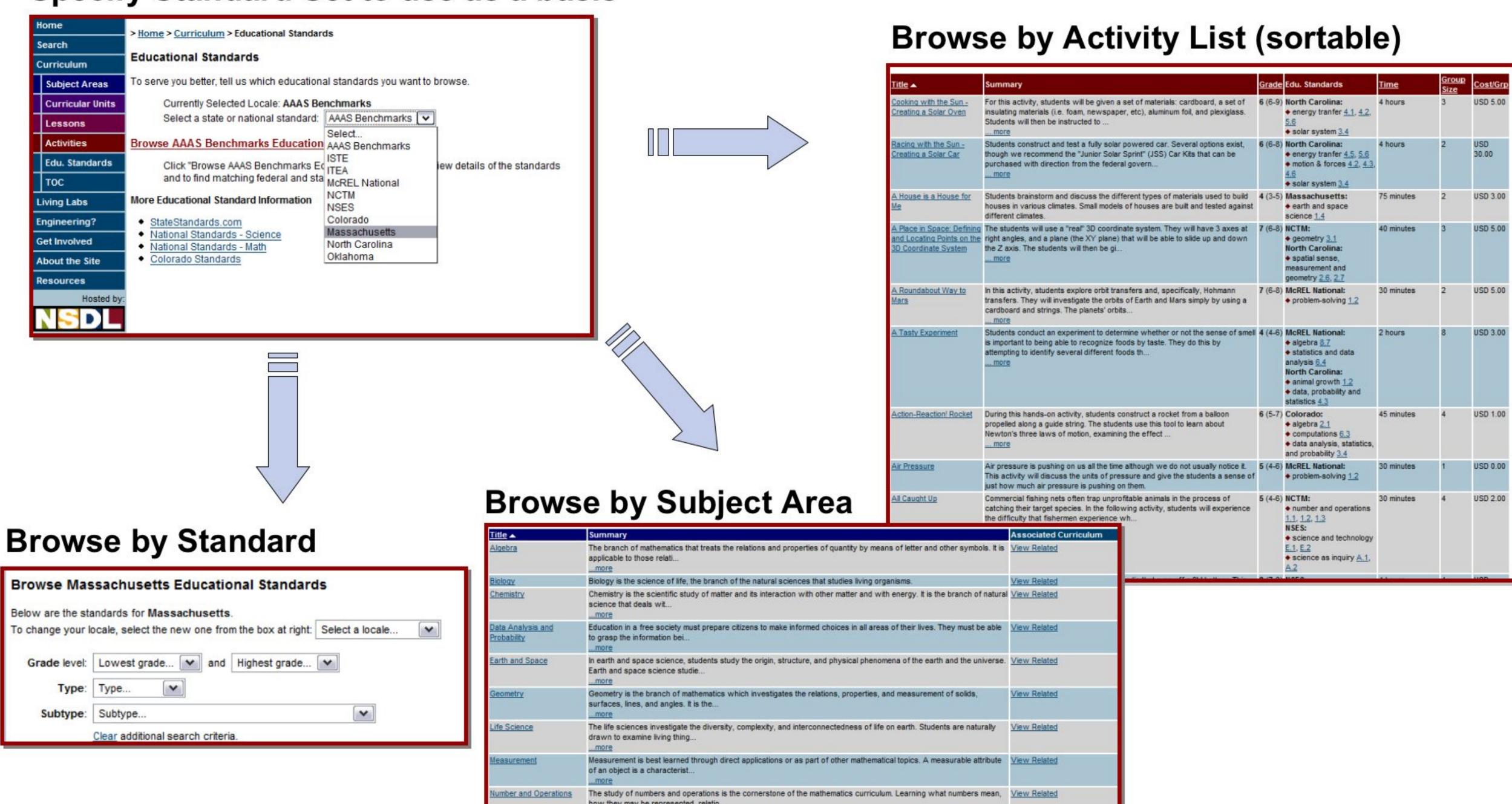
- Use the on-line digital library to locate curricula to use in the classroom
- Take ASEE 'How to Use' Workshops
- Provide online feedback to the collection

Digital Library End Users

Standards Based Engineering Curriculum

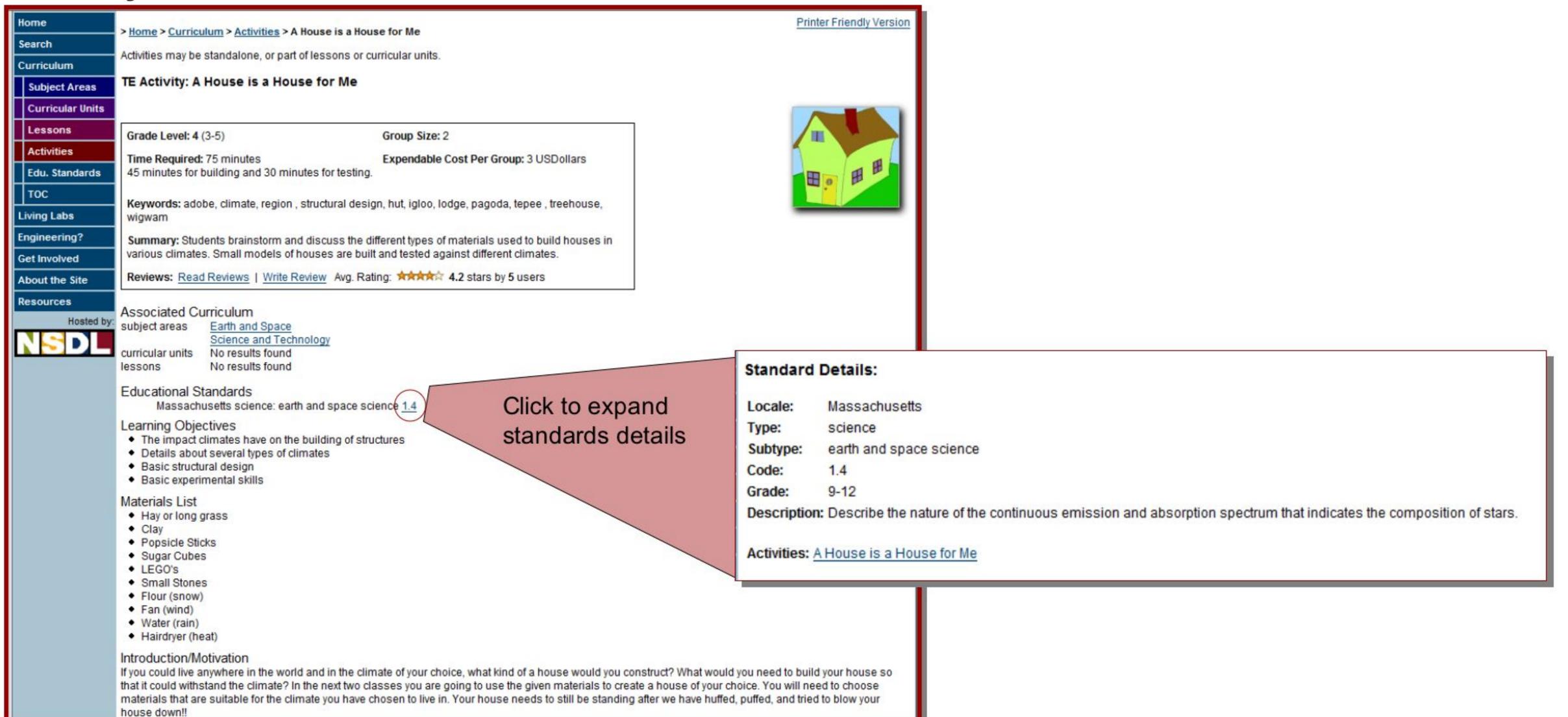
Multiple Approaches to Select Activities:





Physical science is the science of matter and energy and their interactions and examines the physical world around us. View Related

Activity Selected



Physical Science

Engineering

