

# Engineering Our Future – Teaching Engineering in the High School Setting

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# Why Teach Engineering

- The country needs more engineers, especially women engineers
- Engineering provides a context for teaching math and science that provides relevance and meaningful applications
- Engineering is (should be) taught in a project-based format that is fun!!



# How We Got Started

- High Schools came knocking
- Reviewed existing curricula (there are some good programs)
- Developed new model
  - Affordable
  - Adaptable
  - Accessible
  - Scalable

# Engineering Your Future

- Introduction to Engineering Course
  - Engineering Disciplines
  - Engineering Design Process
  - Teamwork
  - Communication
  - Problem Solving
- Most teaching from web-based instructional videos

# Engineering Your Future

- Project-Based
  - Do engineering more than talk about engineering
  - Instructor led
  - Teams
  - Projects not labs
  - Many possible solutions



# Engineering Your Future

- Course Outcomes
  - Students have experiences that inform their decision to pursue (or not) engineering in college
  - Technologically literate citizens
  - Development of critical thinking, collaboration and communication skills
  - Math and science have increased relevance as tools for solving problems

# Engineering Your Future

- What Does It Take?
  - The right teacher (and administrator)
  - Space
  - About \$2500
  - A little training
  - Willingness to struggle the first year





# Engineering Your Future

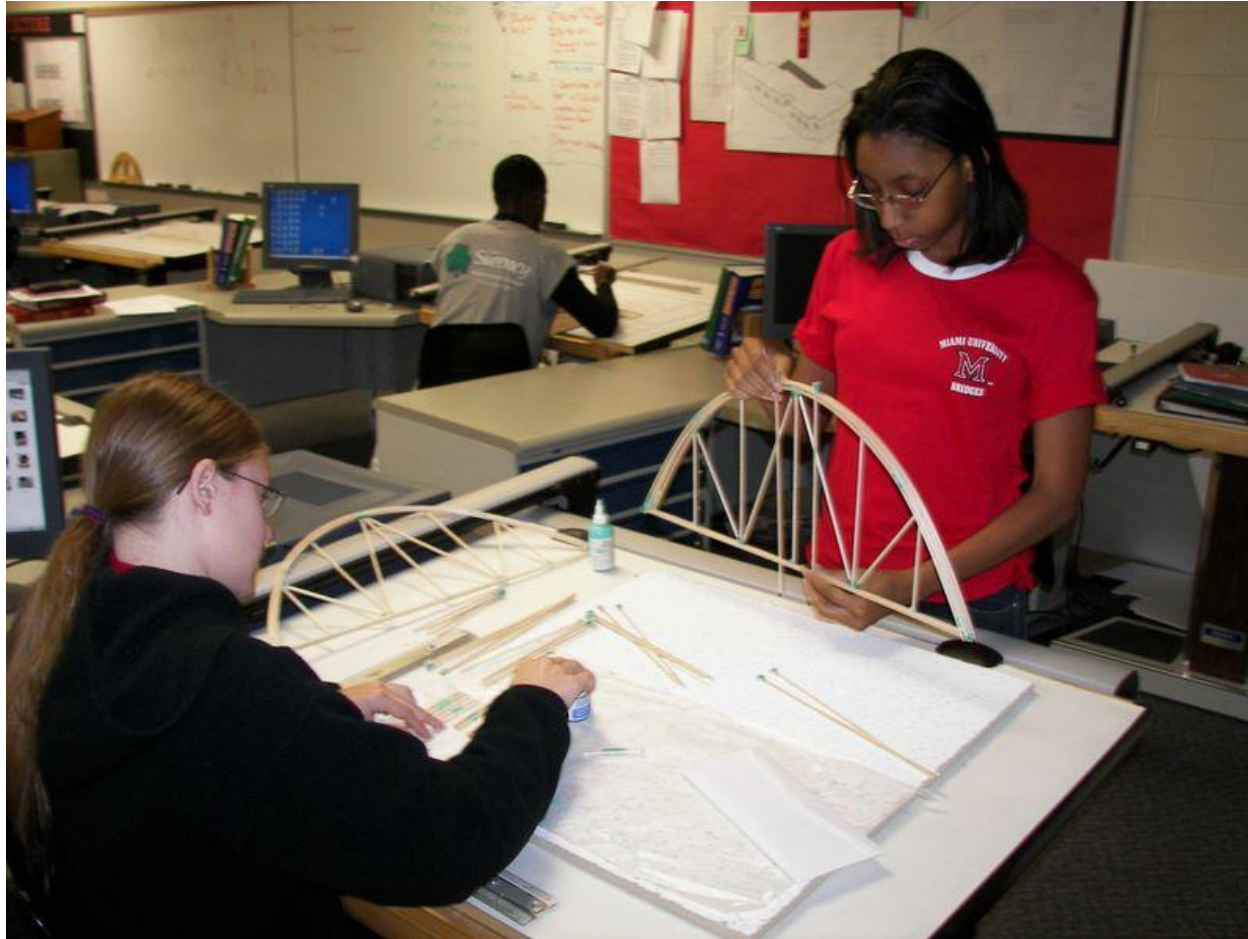




# Engineering Your Future



# Engineering Your Future





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# Engineering Your Future

- Started with 4 schools and about 80 students

EYF Ohio

Engineering Your Future -  
Ohio

Collaborators

Info on the Project/Course

Project Materials

Teaching

What's New

Files

Sitemap

Discussion Area



Engineering Your Future - Ohio





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## Engineering Our Future

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| Getting Started       |
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| Project Resources     |
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EOF Home



Welcome to Engineering Our Future

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