



Hydrogen Education for K-12 Grades

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Hydrogen Education

- Curriculum Development
- Outreach & Special Projects
- Professional Development for Teachers
- Partnerships

Curriculum Development

- Solar Matters I, II & III
- Understanding Solar Energy
- High-energy Hydrogen I, II & III

Materials and Kits

- Each curriculum unit can be used with a kit of materials available on loan from FSEC
- Items included in the kits:
 - Fuel Cells
 - Photovoltaic cells
 - Multimeters
 - Hydrogen rockets

Outreach & Special Projects

- Middle School Science Bowl Hydrogen Demonstration
- High School Hydrogen Sprint
- Exemplary Projects in Energy and Conservation (EPEC) Awards

Middle School Science Bowl



- Regional host for southeastern U.S. (2 part competition)
- Science and math Q&A
- Hydrogen Workshop
- Hydrogen Demonstration at the Energywhiz Olympics

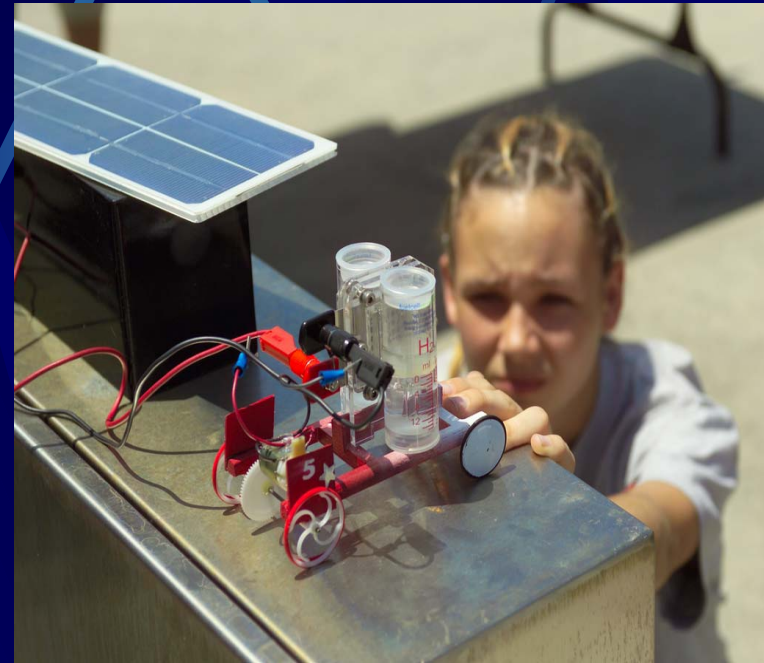
National Science Bowl



- Regional teams from throughout the U.S. compete at nationals
- Florida has finished in the top three positions for the past three years

High School Hydrogen Sprint

- Teams design, build and race hydrogen vehicles.
- Team presentations on a hydrogen topic are also required



Hydrogen Sprint Judges



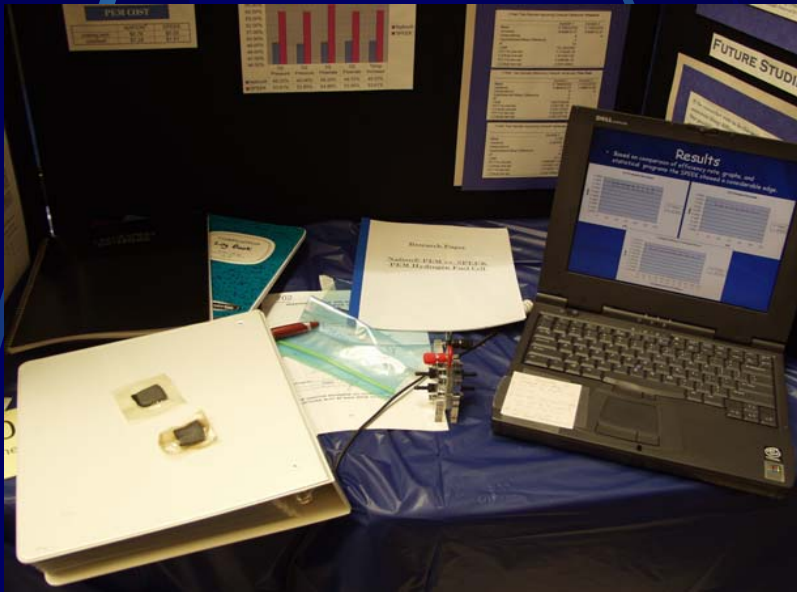
- Judges include volunteers from:
- Canaveral Council of Technical Societies
- Society of Automotive Engineers and
- NASA at KSC

EPEC Awards



- Exemplary Projects in Energy and Conservation
- Student recognition for outstanding research in energy and energy conservation

Science Fair



● Hydrogen Fuel Cell Project

Professional Development for Teachers



- Seven K-12 teacher workshops
- Hydrogen content was included in every workshop

Energywhiz Website



- Info on:
 - Hydrogen curriculum
 - Science fair assistance
 - Special activities and
 - Opportunities for schools, students and teachers

Partnerships

- Space Coast Science Education Alliance
 - Group of informal science educators dedicated to improving science literacy throughout the community
 - Provides additional support to extend outreach
 - Approximately 24 organizations are represented

Hydrogen: The Power and the Potential

- Partnership with Progress Energy
- Eight Schools involved
- 24 Teachers
- Culminates in a student designed summit

K-12 Hydrogen Education

● Questions?

For More Information:

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Or

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THANK YOU!