

Selected Programs

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U.S. Department of Energy
CWSEM Roundtable
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Overview

- ◉ Secretary Chu is committed to building robust clean-energy workforce
- ◉ DOE's 18 National Labs: Where the rubber meets the road for DOE programs
- ◉ Selected DOE Programs for discussion
 - Workforce Development of Teachers and Students (WDTS)
 - Clean Energy Education & Empowerment (C3E)

Workforce Development of Teachers and Students (WDTs)

- Mission

- To help ensure that DOE and the Nation have a sustained pipeline of highly trained Science, Technology, Engineering, and Mathematics (STEM) workers

- Student programs

- Science Undergraduate Laboratory Internships (SULI)
- Community College Institute of Science and Learning (CCI)
- National Science Bowl

- Educator programs

- Academies Creating Teacher Scientists (ACTS)
- Faculty and Student Teams (FaST)
- Albert Einstein Distinguished Educator Fellowships

- Other

- Laboratory equipment donation program, evaluation studies, outreach, and workforce studies.

Clean Energy Education & Empowerment (C3E)

- Founded at Clean Energy Ministerial (2010)
 - The clean energy revolution will progress farther and faster if it draws on the brightest minds everywhere.
 - Every young woman discouraged from studying science and engineering represents potential innovation lost.
- C3E Mission
 - To advance the clean energy revolution by preparing and inspiring underrepresented talent
- Scope
 - Spans the continuum from K-12 through Postdoctoral and Early Career Researchers; also aims for young women
- C3E International Collaboration
 - Governments of Australia, Denmark, Mexico, Norway, South Africa, UAE, UK, U.S.A
- C3E Domestic Network
 - Leaders from the public, private, non-profit, and academic sectors
 - DOE, DOI, DOS, DOD, NASA, WH Council for Women & Girls, CEQ, etc.

Sample Best Practices

- Leveraging the internet and social media to educate and encourage girls in STEM
- Utilizing assessment tools to assess effectiveness of programs
- Improving messaging, using consistency and thoughtful themes
- Enabling exposure for young girls
- Providing hands-on learning experiences
- Demonstrating high expectations
- Supporting work/life balance
- Supporting girls/women in all stages of life continuum
- Forging Public-Private Partnerships to create interdisciplinary programs
- Encouraging girls to aim high by plugging into their interests
- Advising girls who do not go to college to enter high-paying non-degree careers that involve STEM
- Organizing high-profile science awards and competitions
- Convening international, interdisciplinary teams to solve problems
- Supporting and training STEM teachers
- Providing exposure to real problems and inspiration to solve them
- Creating programs for girls and underrepresented minorities that identify young talent
- Enabling girls to work alongside established female scientists and engineers
- Profiling successful women on institutions' websites
- Creating partnerships
- Working with other agencies and departments
- Gearing online community to offer networking and competition opportunities
- Ensuring grants are effective and distributed to diverse groups

Sample C3E Commitments

- Susan Bass (Earth Day Network)
 - Committed to promoting and coordinating the filming of inspirational talks by women STEM leaders and featuring these presentations on Earth Day TV
- Ellen Ochoa (Johnson Space Center)
 - Committed to assessing NASA program with an eye for enhancing their focus on energy and gender equity
- Mary Robinson (Former President, Ireland)
 - Committed to establishing a broad-based network of Women Leaders on Climate Justice and Clean Energy leading up to COP 16 in Cancun and beyond
- Maxine Savitz (NAE)
 - Committed to promoting women by soliciting bios from C3E participants and populating studies by NAE's Research Council



Thank You

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