



STAR_Net Webinar Series

December 14th 2016

Dream Big to Build a Better World

Host: Jeannine Finton, American Society of Civil Engineers

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Dream Big to Build a Better World

December 14, 2016

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Outreach

American Society of Civil
Engineers (ASCE)

Certified Library Associate,
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What is Civil Engineering?

- Poll

Civil Engineering

Civil engineers design, build, and maintain the foundation for our modern society – our roads and bridges, drinking water and energy systems, sea ports and airports, and the infrastructure for a cleaner environment, to name just a few.

Think of a civil engineer when you:

- Turn on your tap to take a shower or drink clean water
- Flick on your lights and open your refrigerator
- Drive to work on roads and bridges through synchronized traffic lights
- Take mass transit or take a flight for a vacation
- Toss your empty coffee cup in the recycling bin



What makes an engineering activity?

- A problem to solve
 - Constraints such as time or equipment allowed
 - Open-ended solution
-
- Example: paper bridge



Resources for a Librarian

- Finding presenters
- Finding activities

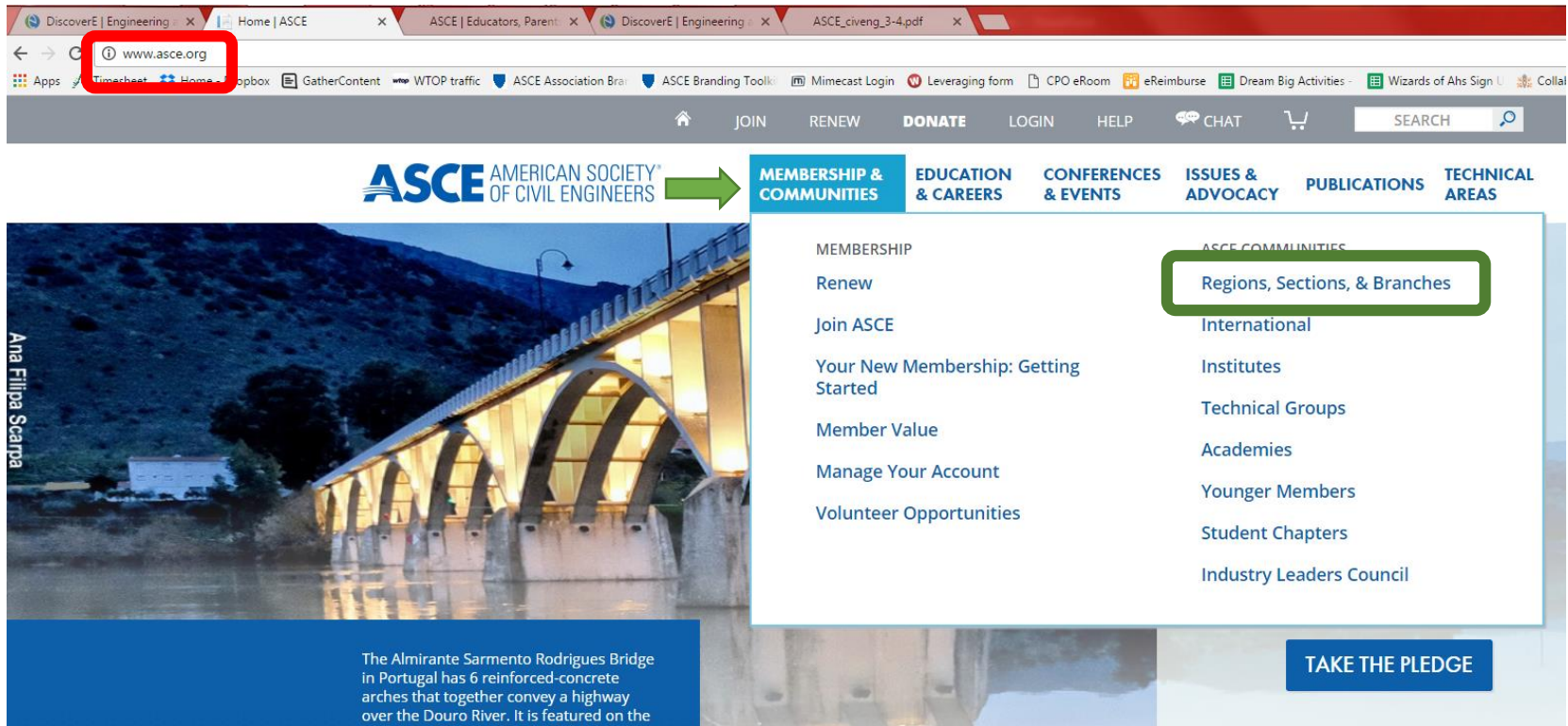


Finding local STEM presenters

- STEM professionals already use your library. Find them by putting up a recruitment flyer.
- Make connections with the local school system's science teachers.
- Some teachers may be willing to conduct a presentation themselves.
- Look for local hobby groups in astronomy, rocketry, rocks and minerals.



Finding an Civil Engineer



The screenshot shows the ASCE (American Society of Civil Engineers) website. The browser's address bar highlights www.asce.org. The main navigation bar includes links for JOIN, RENEW, DONATE, LOGIN, HELP, CHAT, and a SEARCH bar. Below this, the ASCE logo is followed by a green arrow pointing to the 'MEMBERSHIP & COMMUNITIES' section. This section has a dropdown menu open, listing various options. The 'ASCE COMMUNITIES' sub-menu is highlighted with a green box, and 'Regions, Sections, & Branches' is the selected item. A large image of the Almirante Sarmiento Rodrigues Bridge in Portugal is visible on the left, with a caption describing its 6 reinforced-concrete arches. A 'TAKE THE PLEDGE' button is located at the bottom right of the page.

DiscoverE | Engineering x Home | ASCE x ASCE | Educators, Parent x DiscoverE | Engineering x ASCE_civeng_3-4.pdf x

← → www.asce.org

Apps Timesheet Home Dropbox GatherContent WTOP traffic ASCE Association Brand ASCE Branding Toolkit Mimecast Login Leveraging form CPO eRoom eReimburse Dream Big Activities - Wizards of Ahs Sign U Colla

JOIN RENEW DONATE LOGIN HELP CHAT SEARCH

ASCE AMERICAN SOCIETY OF CIVIL ENGINEERS →

MEMBERSHIP & COMMUNITIES EDUCATION & CAREERS CONFERENCES & EVENTS ISSUES & ADVOCACY PUBLICATIONS TECHNICAL AREAS

MEMBERSHIP

- Renew
- Join ASCE
- Your New Membership: Getting Started
- Member Value
- Manage Your Account
- Volunteer Opportunities

ASCE COMMUNITIES

- Regions, Sections, & Branches**
- International
- Institutes
- Technical Groups
- Academies
- Younger Members
- Student Chapters
- Industry Leaders Council

Ana Filipa Scarpa

The Almirante Sarmiento Rodrigues Bridge in Portugal has 6 reinforced-concrete arches that together convey a highway over the Douro River. It is featured on the

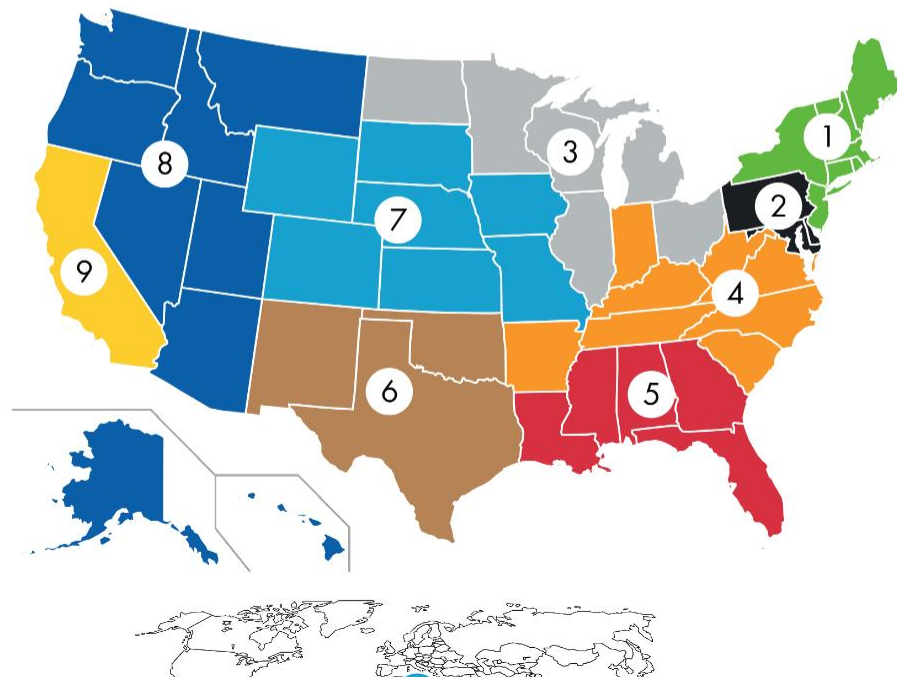
TAKE THE PLEDGE

REGIONS, SECTIONS & BRANCHES

SHARE



ASCE is comprised of 9 domestic regions and a region comprised of 24,000 international members. The 9 domestic regions include 75 Sections, 158 Branches, and 130 Younger Member groups. There is a Section or Branch in nearly every corner of the country.



FIND A GROUP

USA INTERNATIONAL

Enter Zip Code

OR BROWSE ALL GROUPS

REGION, SECTION & BRANCH RESOURCES

Find the information you need to run an active Region, Section or Branch.



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Finding Other Engineers and STEM Professionals

ACS	American Chemical Society	Acs.org
AISES	American Indian Science and Engineering Society	aises.org
AIAA	American Institute of Aeronautics and Astronautics	https://www.aiaa.org/
AIChE	American Institute of Chemical Engineers	http://www.aiche.org/
ASABE	American Society of Agricultural and Biological Engineers	http://www.asabe.org
ASCE	American Society of Civil Engineers	http://www.asce.org/
ANS	American Nuclear Society	http://www.ans.org/
ASME	American Society of Mechanical Engineers	https://www.asme.org/
EWB-USA	Engineers Without Borders USA	http://www.ewb-usa.org/
IEEE-USA	Institute of Electrical and Electronics Engineers	https://www.ieeeusa.org/
ISA	International Society of Automation	https://www.isa.org/
NAE	National Academy of Engineering	http://www.linkengineering.org/
NACE International	Formerly known as: National Association of Corrosion Engineers	http://www.nace.org/
NSBE	National Society of Black Engineers	http://www.nsbe.org/home.aspx
NSPE	National Society of Professional Engineers	http://www.nspe.org/
SAME	Society of American Military Engineers	http://www.same.org/
SHPE	Society for Hispanic Professional Engineers	Shpe.org
AIME	The American Institute of Mining, Metallurgical, and Petroleum Engineers	http://www.aimehq.org/
SWE	Society of Women Engineers	http://swe.org/
	Women in Biology	http://www.womeninbio.org

Guiding a New Volunteer

- Plan the program together. As a librarian you probably have experience with the audience and can guide the experience.
- Set clear time limits.
- Keep the focus on an activity, or end by showing the presenter's unusual collection.
- Allowing kids to move around, experiment, and/or touch objects is important!



Cautions



- Scientists and engineers may need some help explaining information on an age appropriate basis.
- Practice
- If you find a dud, don't give up. You may be able to work with this speaker to improve for the future, or at the very least you will have a better idea of how to pre-screen for the next time.



Finding Engineering Activities

- For librarians or other presenters

Dream Big



Film Content

- Wind engineering
- LIDAR technology
- Humanitarian engineering
- Robotics
- Solar energy
- Flood barriers
- Earthquake engineering
- Bridges
- Smart cities
- Hyperloop



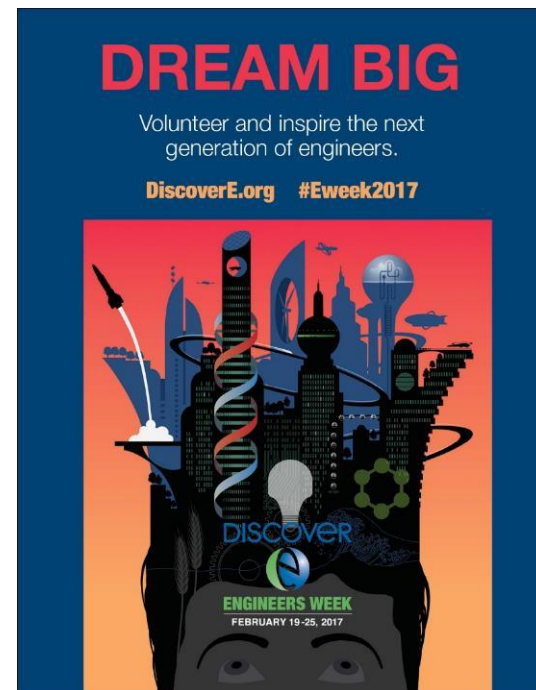
Dream Big Outreach Assets

- 45-minute IMAX feature film
- 50 hands on activities
- 15 lesson plans for school teachers
- 11 web videos
- Planning guides
- Community screenings in non-IMAX areas in 2018
- Discovere.org/dreambig



Discovere.org

- A coalition of over 100 engineering firms and societies
- Provides activities and programs that enhance engineering
- Over 420 activities in their database



Finding More Civil Engineering Activities



- ASCEville.org
- Site developed for ASCE
- Links to civil engineering activities, many through PBS

Questions?





For More Information

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