OVERVIEW of STEM MENTORING CAFÉ MODEL

To help engage middle-school students with STEM (science, technology, engineering, and mathematics) professionals around the country, in 2014 the Departments of Energy and Education, along with the Association of Science-Technology Centers (ASTC), and the National Girls Collaborative Project (NGCP) started STEM Mentoring Cafés. At a Café, STEM professionals engage in quick-show-and-tell chats about their STEM careers and how their work impacts society. Students and professionals are arranged at tables of 8-10 with the professionals rotating tables throughout the event. This allows students to hear first-hand about various careers and interests.

The event is open to everyone, but the Café is especially geared towards connecting students and STEM professionals to increase interest from groups that are historically under-represented in STEM fields. Events are hosted at volunteer ASTC sites throughout the country, with the capacity based on available space. The STEM Mentoring Café team works with the local museum to find the most opportune time to engage both formal and informal education communities. The Corporation for National and Community Service (CNCS), the agency that administers AmeriCorps, will be joining us to promote these Cafés amongst the hundreds of national service programs across the nation. This partnership will expand our reach to schools, neighborhoods and educators.

The following information describes the roles of mentors, educators, students, and museums in planning and participating in a Café.

ROLE of STEM MENTORS

We ask STEM professionals, in particular under-represented minority and tribal employees from Department of Energy National Laboratories and federal agencies, to be STEM mentor participants on the day of the event. Whenever possible, we ask women in the Department of Energy’s Women @ Energy series (www.energy.gov/womeninSTEM) to participate in Cafés. The professional comes with “tools of their trade” to provide an interactive experience. The STEM professionals are responsible for sharing how they got their start in STEM, what interests them most about their job, what exciting projects are they currently involved with and why STEM matters on a larger scale to our society. At each Café we recruit one mentor for groups of 6-8 students. STEM professionals are strongly encouraged to serving an additional 20 hours annually as a mentor in order to fulfill the United We Serve Initiative. Mentors volunteer their
contact information and share a headshot to include in our volunteer contact sheet to be shared with educators. When a STEM Mentoring Café is held at a location that is not near a Department of Energy National Laboratory, mentors are recruited from energy and STEM private sector and nonprofit organizations, other federal agencies, and academia.

**ROLE of EDUCATORS and STUDENTS**

We seek a student to educator ratio of approximately 5:1 at each event. Please note that this ratio may vary depending on location capacity. Alternatively, teachers could bring entire classrooms – this will be determined by the host’s preference and community needs. Educators are asked to bring signed permission slips, one per student, to the event. DOE will provide the permission slip prior to the Café and all forms will be collected by the museum upon registration. Additionally, educators are expected to brief their students before the event, explaining the acronym STEM and the purpose of meeting these professionals and learning about their careers. Educators are provided take-home material to help engage their students in STEM learning beyond the Café. Educators are also provided contact information for STEM professionals to encourage continued involvement with the STEM professionals beyond the day of the event. Students are asked to come prepared to ask questions to the mentors and fill out handbooks during the event to track the STEM professionals met and cool facts from their conversations.

**ROLE of MUSEUM**

Museums volunteer to host the event at no cost to the Department of Energy. Museums are asked to provide support that includes:
- Working with the STEM Mentoring Café team to select a date and time for the event and the event capacity.
- Coordinating logistics including sharing directions/instructions for entry to the building, parking and transportation, access to restrooms, signage for entry, registration table, etc.
- Distributing last minute detail information to guests will be coordinated between DOE and museum.
- Producing a volunteer contact sheet, using STEM mentor’s contact information and profile pictures. DOE and the museum will work collaboratively. Contact sheet will need to be compiled and printed the day of the event.
- Providing tables that can seat 8-10 people (1 mentor, 1 educator and up to 8 students).
- Providing table tents visible with table number and name of mentor.
- Providing a podium and microphone.
- Providing a coordinator for planning and day-of-event facilitation.
- Providing volunteers for day of event to assist with event facilitation, including registration table, flow, etc.
- Providing a welcome speaker.
- Facilitating marketing materials and external communications in partnership with the Department of Energy.
● Sending invites to local students, teachers, and organizations including Boys and Girls Clubs, YMCA/YWCA, etc. (the National Girls Collaborative Project, DOE, Department of Education, and other federal agencies will assist).
● Recruiting STEM professionals (on a case by case basis).
● Collecting permission slips/photo releases from registrants. Responsible for coordinating a plan for those who do not give permission for photos to be taken or used publicly (i.e. stickers for those who do not give photo permission).
● Facilitating social media following the Café (blogs, tweets, Facebook posts).
● (Encouraged but optional) Agreeing to allow guests access to the museum following the Café free of charge.
● Providing a photographer or videographer if available.

ROLE of STEM MENTORING CAFÉ PLANNING TEAM

The planning team is responsible for:
● Identifying the ASTC location.
● Coordinating and facilitating of meetings with the museum prior to Café.
● Overseeing communications between mentors, educators, and museum hosts, including marketing and communication for the day of the event.
● NGCP will provide outreach to attendees through their member organizations, provide material for educators and students, provide guidance to STEM mentors and host the registration page on their website.
● DOE is responsible for recruitment of STEM professionals in coordination with museums if applicable.
● Assisting with recruitment of educators and students through network and local partners.
● Securing a keynote speaker for event to provide brief remarks before the start of the mentoring session.
● Providing a Café planning team member to maintain flow of event if available.
● Providing sample resources to be modified as needed, including STEM handbook for students to capture and highlight STEM interactions.
● Sending thank you notes to educators and mentors following the Café.

PAST CAFÉs

Learn about previous STEM Mentoring Café events on our website, www.energy.gov/diversity/stem-mentoring-caf including videos and blogs of past events.

CONTACT US

Request more information via email to STEMED@energy.gov