

Explore STEM Philly 2019-2020

Explore STEM Philly (ESP) is an enrichment STEM program provided by the Philadelphia Education Fund (PEF). Its goal is to expand access to STEM education and career awareness among historically underserved student populations. Through ESP, PEF staff recruit, train, and schedule STEM professionals to provide 1-hour presentations in the five High Schools that are part of its College Access Program (CAP).

ESP CAP Students:

- Are part of an initiative that promotes the benefits of a college education and provides readiness services to 1,300 students citywide.
- Attend one of five Philadelphia public high schools: Roxborough, Olney Charter, Kensington CAPA, Furness, or John Bartram.
- Are in 9th or 10th grade.

Presentations Should Include:

- A description of how you became a STEM professional, what you do in your current occupation, and the content knowledge and skillsets needed to do your job.
- Hands-on activities presented to and/or in which the students themselves participate.
- A variety of teaching tools such as PowerPoint presentations, interactive experiments.
- A focus on diversity in terms of jobs options, career paths, demographics, etc.
- Follow-up information such as suggested websites, events, and similar resources.

Effective Presenters:

- Explain rules and expectations ahead of time.
- Introduce themselves to the students (and vice-versa).
- Ask open-ended questions.
- Ask for volunteers to demonstrate activities.
- Provide individual and small-group exercises.
- Minimize (or define) jargon.
- Integrate lessons that promote reading, listening, doing...
- Make the information relevant
- Ask for questions and comments

Program Logistics Include:

- Working with PEF staff to schedule presentations.
- Participating in an optional orientation webinar, scheduled once a month.
- Providing PEF staff with PowerPoints at least 1 week prior to a presentation.
- Being prepared with a Plan B, in case technology fails the day-of.

Additional Details:

- All presentations take place during regular school hours.
- Presenters will be guided through procuring 3 clearances (Child Abuse, PA Criminal Background, and FBI).
- You do not need to be an expert educator to provide students with a wonderful experience.
- Reliability and communication are critical. Contact PEF staff with any questions or concerns.