Supporting Youth Needs with Core Engineering Research Experiments

Project SYNCERE

Engineering Workshop at McKinley Technology HS

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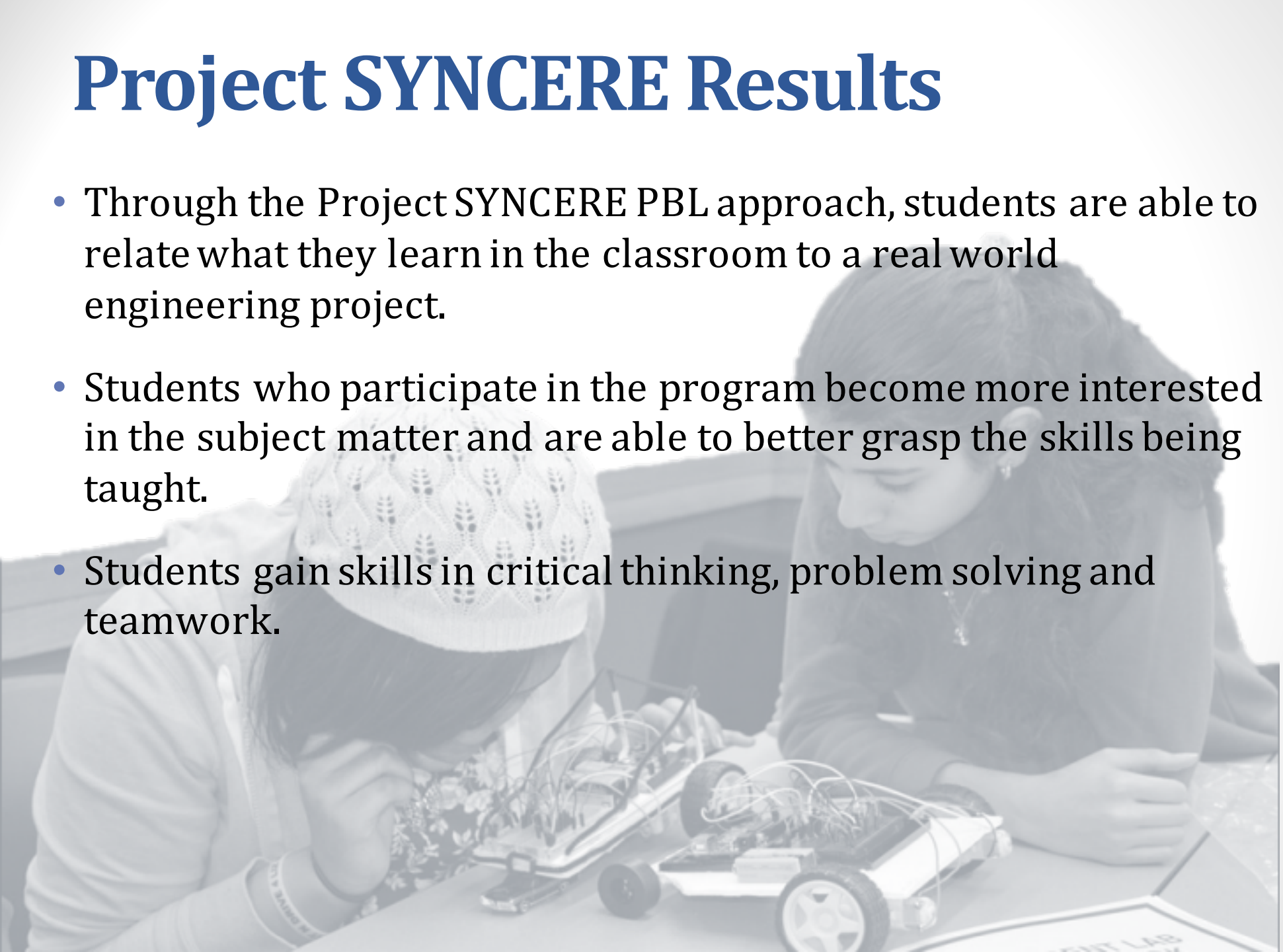
Project SYNCERE

- **S**upporting **Y**outh's **N**eeds with **C**ore **E**ngineering **R**esearch **E**xperiments
- **Mission**: The mission of Project SYNCERE is to prepare the minds and create pathways for underrepresented and disadvantaged students to pursue careers in Science, Technology, Engineering and Mathematics (STEM).

- Raises awareness and interest in STEM fields among students aged 6-18.
- Relates student classwork to real world activities.

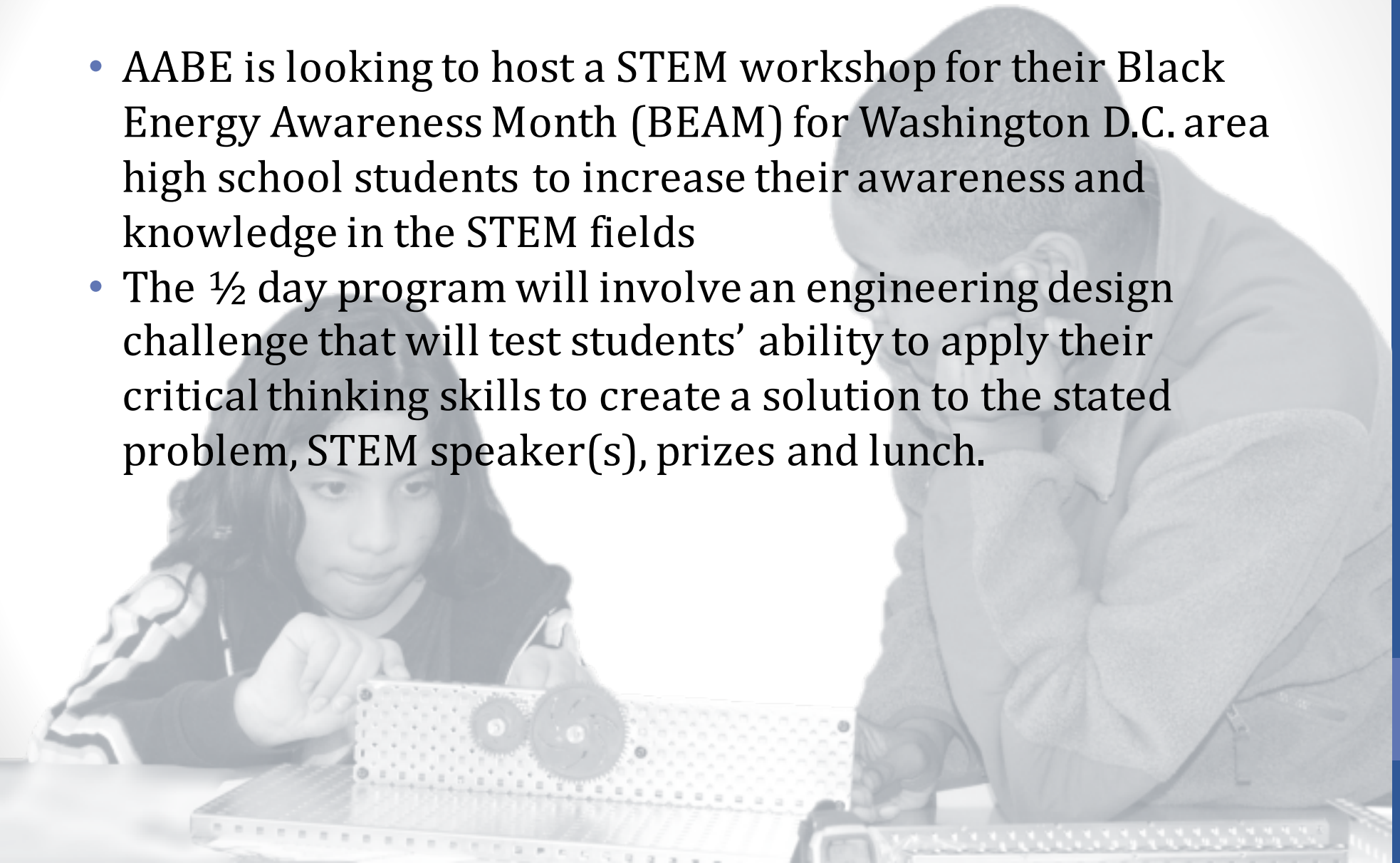
Project SYNCERE Results

- Through the Project SYNCERE PBL approach, students are able to relate what they learn in the classroom to a real world engineering project.
- Students who participate in the program become more interested in the subject matter and are able to better grasp the skills being taught.
- Students gain skills in critical thinking, problem solving and teamwork.



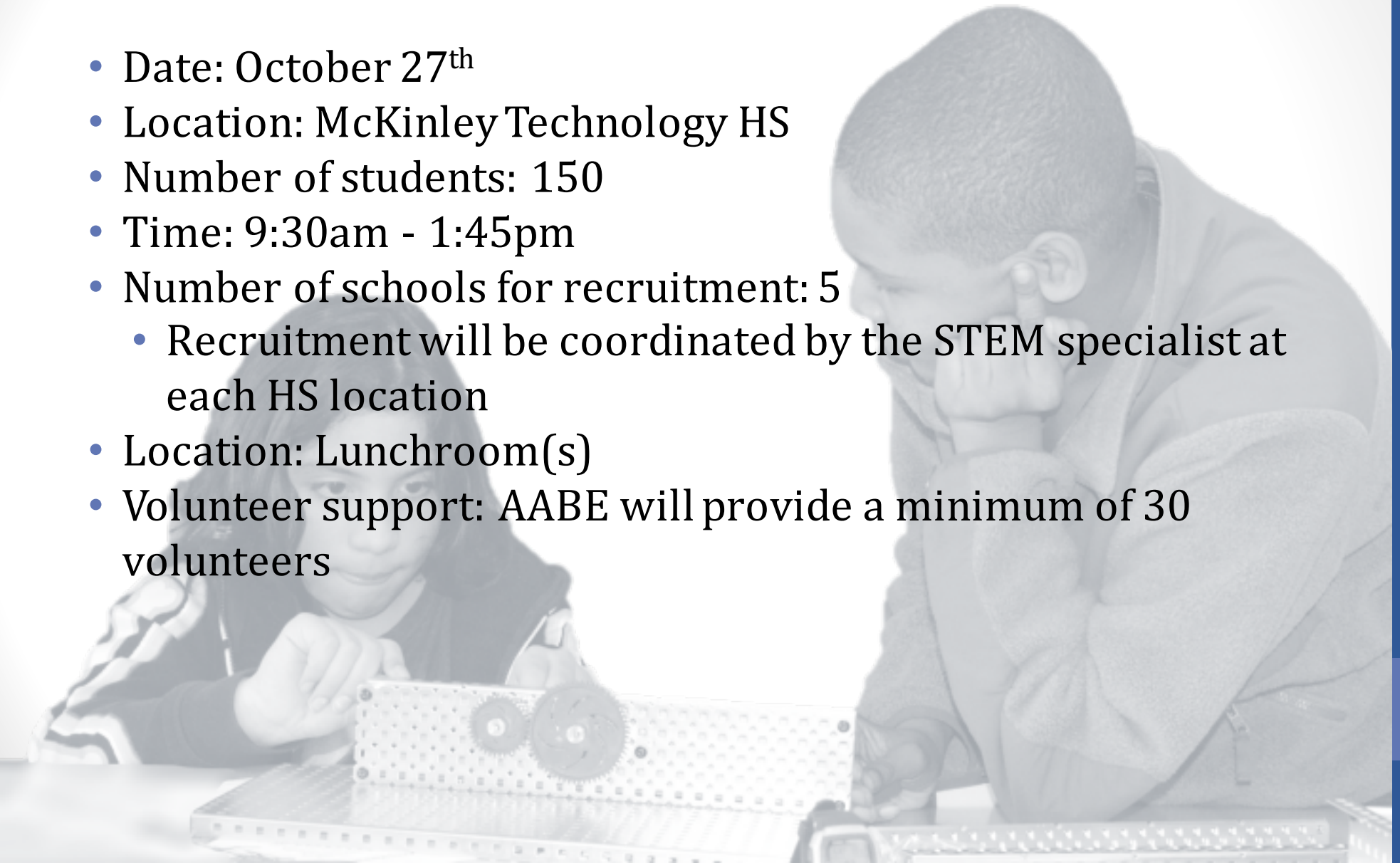
Scope of Services

- AABE is looking to host a STEM workshop for their Black Energy Awareness Month (BEAM) for Washington D.C. area high school students to increase their awareness and knowledge in the STEM fields
- The ½ day program will involve an engineering design challenge that will test students' ability to apply their critical thinking skills to create a solution to the stated problem, STEM speaker(s), prizes and lunch.



Workshop Specifics

- Date: October 27th
- Location: McKinley Technology HS
- Number of students: 150
- Time: 9:30am - 1:45pm
- Number of schools for recruitment: 5
  - Recruitment will be coordinated by the STEM specialist at each HS location
- Location: Lunchroom(s)
- Volunteer support: AABE will provide a minimum of 30 volunteers



Engineering Challenge Details

- Students will participate in a 2-hour engineering challenge
- Students will be split into teams of 4 students
- Students will participate in a design competition, which challenges them to design an automated wrapping machine
- Each group of students will be given a box of materials and tools to make their best possible solution
- Teams will be given a scoring rubric, which details the criteria for their design

Itinerary

- 9:30 - 9:45: MC addresses the crowd and sets the tone for the day
- 9:45 - 10:00: Guest speaker
- 10:00 - 10:15: Overview of project and expectations
- 10:15 - 10:30: Students head to lunchroom and pick up project materials
- 10:30 - 12:30: Students work on engineering challenge
- 12:30 - 12:50: Judging of projects
- 12:50 - 1:15: Presentation of awards
- 1:15 - 1:45: Students eat lunch and pick up swag bags
- 1:45: Student dismissal

Contact Information

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