SABES Master Goals & Strategies

- Catalyze the achievement of STEM literacy in a variety of high-need urban neighborhoods.
- Engage teachers in classroom best practices around a strong, project-based STEM curriculum.
- Build a STEM teacher professional learning community around a process of peer-review and discussion.
- Provide opportunities for teachers to acquire rigorous understanding of core science and engineering concepts and their pedagogy.
- Develop afterschool STEM programs where students initiate inquiry-led projects relevant to their community in collaboration with faculty, students, and other visiting experts.
- Spotlight student achievements at biannual STEM Showcases that leverage the expertise of community development corporations to engage the broader community.

Partner Schools

**Lower Park Heights**
- Arlington Elementary/Middle School
- Dr. Martin Luther King Jr. Elementary/Middle School
- Pimlico Elementary/Middle School

**Greater Homewood**
- Barclay Elementary/Middle School
- Dallas F. Nicholas Sr. Elementary School
- Margaret Brent Elementary/Middle School

**Highlandtown/Greektown**
- John Ruhrah Elementary/Middle School
- Highlandtown 215 Elementary/Middle School
- Highlandtown 237 Elementary/Middle School

*SABES: STEM Achievement in Baltimore Elementary Schools*

*SABES City Schools-JHU Math and Science Targeted Partnership supported by the NSF under Grant No. DUE-1237992*

SABES Program
Faculty Partnership

It takes a community to raise an engineer.
What Is SABES?

sabes [saˈbes] transitive verb:
1. /Spanish/ 2nd person present indicative of saber "to know, to find out"

The STEM Achievement in Baltimore Elementary Schools (SABES) project is a partnership between JHU and Baltimore City Public Schools. SABES seeks to foster STEM within the world of the child to improve grade 3-5 student learning outcomes in three demographically and culturally distinct Baltimore City neighborhoods.

SABES will involve a sustained collaborative effort:
- ...to identify and adopt best practices for project-based STEM learning,
- ...to establish afterschool programs in which students work on inquiry-based STEM projects relevant to their communities, and
- ...to engage broad participation in biannual community-wide STEM Recognition Events.

JHU faculty, staff, post docs and students, as well as STEM experts from the local community, will support these activities through sustained engagement in afterschool projects. SABES will also produce STEM professional development materials available to all City School teachers, with input from JHU content experts, to improve STEM knowledge amongst elementary school teachers in the city.

How Can I Participate?

JHU faculty can participate in Afterschool Engagement. Afterschool Engagement requires a full-academic-year commitment (September - June). Faculty can also serve as guest speakers for school day and/or afterschool SABES.

In addition, the Faculty Outreach Oversight Board will evaluate faculty efforts and provide written documentation that can, at the faculty member’s discretion, be included in grant applications and promotion case files.

Additional information regarding volunteer opportunities and how to sign up can be found at engineering.jhu.edu/sabes/get-involved/.

Afterschool Engagement

Faculty, together with the postdocs and graduate and undergraduate students from their research groups, will form a team that works closely with a trained facilitator to undertake age-appropriate engineering activities in an adopted afterschool classroom. Engagement will begin with structured lessons and will culminate in a project relevant to the students and their community. Team members will visit the afterschool program regularly to provide engineering expertise in support of the facilitator and to mentor the young student engineers as they work on their projects.

Two public STEM Showcases will occur during the year, during which the team will be invited to interact with parents, teachers, administrators, business members, and community members in the context of STEM-related activities and recognition of student efforts. Faculty are expected to devote at least 10 hours per year and to establish a plan for their team’s engagement.