



2022-23



Anne Arundel County Public Schools

STEM/BMAH MAGNET PROGRAM

THE STORY

The STEM/BMAH Office is committed to ensuring greater access to rigorous opportunities for students within all student groups. The 2022–2023 school year focused on increase collaboration with:

- Anne Arundel County Government Agencies
- Anne Arundel Community College
- Chesapeake Bay Foundation
- Fort Meade Alliance
- Maryland Business Roundtable
- Maryland Hall & Chesapeake Arts Center
- Maryland Science Center and regional museums
- Smithsonian Environmental Research Center
- STEM industries & businesses
- UMBC, Morgan State U, UMD, USNA and other regional universities

The 2022-2023 school year also embraced some new STEM opportunities highlighted below:

- BWMC and AAMC job shadows, field trips, and internships
- Partnerships with high school signature programs
- Medical, engineering and robotics clubs
- STEM career guest speakers for classrooms and assemblies

DATA/METRICS

2,200 students are enrolled as STEM middle school or STEM/BMAH high school magnet programs

1,200 high school STEM students participate in job shadow and industry/higher education field experiences annually

600 high school STEM students take at least 1 AP course and 1 AP exam annually

300 high school STEM seniors (100%) engage in a professional internship or apprenticeship prior to graduation

1,500 6–10th grade STEM students participate in 1 four-day summer STEM/BMAH camp experience

300 11th grade STEM students complete a STEM summer of service project

52% high school STEM students identify as female which is significantly greater than the 28% national average of females in STEM professions

35% high school STEM magnet students are African American which is 13% greater than the district-wide African American student percentage and 26% greater than the national average of 9% African American STEM professionals in the workplace

ACCOMPLISHMENTS

- Greater analysis of data conducted to increase diversity recruitment of students and teachers for the STEM/BMAH programs
- Targeted professional development offered to support teachers to decrease and eliminate opportunity and achievement gaps between student groups in the STEM program
- Magnet Schools of America recognized all three AACPS STEM Magnet Middle Schools for national distinction and excellence
- Tailored Systems Thinking professional development offered to teachers to increase a systems thinking approach to learning and problem solving
- Increased number of students attended STEM/BMAH field experiences and clubs
- High-quality STEM guest speakers invited to speak in STEM/BMAH courses—either virtually or in-person
- Increased numbers of STEM/BMAH students engaged in AP or advanced coursework
- Scholarship increases occurred for STEM/BMAH students at all three STEM/BMAH high schools
- Increased number of STEM students served as regional or state level leaders in co-curricular organizations
- STEM/BMAH teachers recognized statewide by STEM professional organizations:
 - *Maryland Tech Council named North County High School STEM teacher, Michelle Hymowitz, as one of two STEM Teachers of the year*
 - *Project Lead the Way named Central Middle School teacher, Rob King, one of their Outstanding PLTW Teachers of the Year*

For more information on the AACPS STEM/BMAH Magnet suite of programs, please visit the website at: www.aacps.org/stem