

BOARD BRIEF

Date: June 7, 2024

For ACTION

For INFORMATION

FROM: Gregory Tardieu, Ed.D., Manager of Grants and Partnerships
Taneika Taylor Tukan, Executive Director of Community Partnerships & Engagement

THROUGH: Julia Burgos, Chief of School and Community Relations
Melanie Kay-Wyatt, Ed.D., Superintendent of Schools

TO: The Honorable Michelle Rief, Chair and
Members of the Alexandria City School Board

TOPIC: National Institutes of Health AIM-AHEAD Continuation Federal Grant

ACPS 2025 STRATEGIC PLAN GOAL:

- Goal 1: Systemic Alignment
- Goal 2: Instructional Excellence
- Goal 4: Strategic Resource Allocation
- Goal 5: Family and Community Engagement

SY 2023-2024 PRIORITY AREA:

- Academic Achievement
- Student Supports
- Student Connection and Attendance
- Staff Supports
- Continue Culture Building

FY 2024 BUDGET PRIORITY:

- Increase Support for Social and Emotional Learning

SUMMARY:

The National Institutes of Health (NIH) awarded two Artificial Intelligence/Machine Learning Consortium to Advance Health Equity and Researcher Diversity (AIM-AHEAD) grants to Alexandria City Public Schools (ACPS) – in partnership with The George Washington University (GWU) and later, Virginia State University (VSU) – for pilot programming that encourages young girls from underrepresented communities to become more involved in science, technology, engineering and math (STEM) as a career pathway, specifically a Health Sciences STEM pathway. In September 2022, a grant of \$497,830 was awarded for ACPS’ pilot program and a continuation grant was awarded in March 2024 for \$100,000. Current funding supports programming through September 2024. ACPS has been invited to reapply for this grant for \$150,000 for another year of this pilot program.

BOARD BRIEF

DETAILS:

The NIH AIM-AHEAD grants support ACPS after-school activities that use high-tech computers, iPads, and virtual and augmented reality equipment at Francis C. Hammond Middle School, George Washington Middle School, Jefferson-Houston PreK-8 School and Patrick Henry K-8 School. To that end, ACPS has used grant funding to acquire many new types of high-tech STEM equipment for student use including:

- Complete Anatomy Augmented Reality (AR) software
- 360-degree Chemistry AR software
- Solar-powered cars
- Lego Robotics
- Marty 2.0 programmable Robots
- Class virtual reality goggles and lessons.

Grant funds have also supported professional development for middle school science teachers so that they can discover and plan which equipment and lessons could work best in their regular classrooms. Our after-School STEM club provides the time and support for teachers to investigate this equipment alongside their students.

In addition to the 116 students and seven teachers who have participated in our after-School STEM club in 2023-24, middle school science classes have also had the opportunity to explore the GWU Immersive Learning Center – thanks to the guidance of GWU professors as consultants and a full-time After-School STEM Coordinator Ms. Kelly Brockway.

NIH grant funding will also allow 15 ACPS students (10 middle school, five high school), and parent and teacher chaperones to attend a week-long summer STEM camp on campus at VSU. The middle school students will engage in activities ranging from 3D printing and augmented reality to design thinking. High school students from the Alexandria City High School (ACHS) Teachers for Tomorrow program will participate in VSU's Gaining Real Opportunities with Students week-long teacher preparation residential program and learn about college academics, teaching careers and STEM careers. Both groups of students will have access to artificial intelligence (AI) and machine learning at the university.

BACKGROUND:

The NIH AIM-AHEAD grant program aims to assist students from disadvantaged backgrounds in entering and successfully completing health professional certifications and degrees. ACPS piloted an after-school STEM Club in 2023 to expose and engage students with STEM-H technologies and encourage them to pursue STEM-H courses of study and careers.

RECOMMENDATION:

The Superintendent recommends that the School Board review the National Institute of Health continuation grant information.

IMPACT:

The NIH AIM-AHEAD grant program has effectively engaged students from underrepresented

BOARD BRIEF

groups into the STEM world so that they can become the next healthcare leaders using AI or, with luck, ACPS teachers using AI. In addition to providing great academic enrichment, this prestigious grant has placed ACPS at the forefront of STEM-H leadership in the Commonwealth.

ATTACHMENTS:

None

REFERENCES:

[June 2, 2023 Board Brief - National Institutes of Health AIM-AHEAD Federal Grant](#)

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