The SEED School of Maryland

Grant Proposal: Integrating Artificial Intelligence Policy, STEM Innovation Day, and Professional Development for Technology Educators

Funding Request: $30,000
Grant Period: October 2025 – June 30, 2026

I. Project Summary

The SEED School of Maryland (SEED MD) seeks $30,000 to design and implement a comprehensive Artificial Intelligence (AI) Policy Framework, host a STEM Innovation Day, and provide targeted professional development for its Cyber Lab Director, Computer Science Teacher, and Technology Instructor.

This initiative will ensure SEED MD remains a statewide model for equitable access to AI and computer science education while aligning with Maryland State Department of Education (MSDE) standards in Computer Science, STEM, and CTE pathways.

The project will strengthen SEED MD's capacity to:

- Create a formal AI Policy and Implementation Plan aligned with MSDE and national AI education standards.
- Develop a schoolwide STEM Day that introduces middle school students to AI, robotics, coding, and real-world applications of STEM.
- Support educators through AI-focused and specialized professional learning experiences that build technical and ethical capacity around emerging technologies.

II. Statement of Need

The rapid expansion of AI technology across education and industry requires Maryland schools to prepare students for a data-driven, technology-rich workforce. SEED MD currently offers strong Cybersecurity and Computer Science programming but lacks a unified policy to guide AI instruction, ethics, and use of generative tools.

In addition:

- Teachers need professional learning opportunities to stay current with MSDE's Computer Science, technology and AI education standards.
- Students need hands-on exposure to STEM and AI to inspire postsecondary and career pathways in technology fields.
- There is an urgent need for clear guidelines on AI use for teaching, learning, and assessment that promote safety, equity, and responsible innovation.

This project will close those gaps and position SEED MD as a statewide leader in AI education integration.

III. Goals and Objectives

Goal	Objectives	Measurable Outcomes
1. Develop SEED MD's first AI Policy Framework	1.1 Establish a cross-departmental AI Task Force by November 2025. 1.2 Draft and adopt AI policy by February 2026.	– Approved AI Policy Document aligned with MSDE AI Framework – Presentation to SEED MD Leadership and Board
2. Build staff capacity in AI and STEM education	2.1 Send Cyber Lab Director, Technology Teacher, and Computer Science Teacher to certified AI/STEM professional development programs. 2.2 Conduct 3 internal training sessions to cascade learning to all staff.	– 3 educators complete PD and earn certificates – 25 staff trained in AI awareness and integration
3. Engage students through a schoolwide STEM & AI Day	3.1 Host a STEM Innovation Day in January 2026 featuring AI labs, coding demos, robotics, and guest speakers from tech industries and stakeholders.	– 100% of middle school students participate – 85% demonstrate increased interest in STEM careers (survey)

IV. Project Design and Activities

1. AI Policy Development (October 2025 – February 2026)

- Convene an AI Task Force including administrators, educators, IT staff, and student representatives.
- Conduct a review of existing MSDE policies and national AI education standards (ISTE, UNESCO, CS for All).
- Develop a SEED MD AI Policy Framework covering ethics, data privacy, academic integrity, instructional use, and teacher training.
- Submit the policy to SEED MD's leadership for review and adoption.

2. Professional Development (November 2025 – June 2026)

- Fund attendance for three educators at leading programs such as:
    - Maryland Center for Computing Education (MCCE) AI and Computer Science Bootcamps
    - AI Education Project or Google AI for Educators training
    - Cyber Maryland Conference and ISTE AI in Education Summit
- Each educator will complete a capstone project that applies specialized concepts to SEED MD's cyber or computer science curriculum.

- Conduct three in-house PD workshops to share learning schoolwide.

3. STEM Innovation Day (January 2026)

- Design and host a STEM + AI Day for Grades 6–8 with themes of innovation, creativity, and career readiness.
- Activities include AI demos, robotics challenges, coding games, and "AI for Good" projects.
- Partner with SEED MD's partners, board of trustees, and stakeholders (Morgan State, Coppin State) and industry partners (e.g., Northrop Grumman, Google, Microsoft Philanthropies) for guest speakers and mentors.
- Showcase student work in a STEM Expo open to the SEED community.

V. Timeline

Activity	Timeline
Project Launch & AI Task Force Formation	Oct – Nov 2025
Professional Development Enrollment	Nov – Dec 2025
AI Policy Drafting & Review	Dec 2025 – Feb 2026
Internal AI/Tech PD Sessions	Jan – Apr 2026
STEM & AI Innovation Day	January 2026
Evaluation & Final Report	May – June 2026

VI. Budget Summary ($30,000 Total)

Category	Description	Amount
Professional Development	PD registrations, travel, and materials for 3 educators	$12,000
AI Policy Development	Task Force meetings, consultation, printing, and communications	$2,000
STEM Innovation Day	Materials, equipment rental, guest speakers, student projects	$12,000
Technology Resources	AI software licenses, lab materials, student tools, and equipment	$3,500
Evaluation & Reporting	Data collection, surveys, and reporting support	$500
Total		$30,000

VII. Evaluation and Outcomes

Evaluation will measure:

- Policy completion and leadership approval by February 2026.
- Educator training completion and certification.

- Student engagement metrics (attendance, participation, survey feedback).
- Evidence of AI integration in lesson plans or projects.

Data will be collected through pre/post surveys, attendance logs, professional learning reflections, and student work portfolios. A final report will be submitted to MSDE by June 30, 2026.

VIII. Alignment with MSDE Standards

This initiative aligns directly with:

- Maryland Computer Science Standards (K-12) emphasizing algorithmic thinking, data analysis, and responsible computing.
- Maryland CTE Pathways in IT and Cybersecurity.
- Maryland AI Education Framework (2024), emphasizing ethics, human-centered AI, and equitable access.
- Maryland Blueprint Pillar 4 – High-quality and diverse teachers and leaders through professional development in emerging technologies.

IX. Sustainability

SEED MD will integrate the AI Policy and professional learning modules into ongoing teacher induction and technology orientation. The annual STEM & AI Day will become a recurring signature event supported by Title IV-A (STEM/Tech), community sponsors, and future MSDE innovation grants. Educators trained in this grant cycle will serve as internal AI Champions to sustain capacity building.

X. Contact Information

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