

The background of the entire page is decorated with an abstract geometric pattern. It consists of numerous teal-colored cubes of various sizes, some of which are 3D-rendered to show depth. These cubes are interconnected by a network of thin, dark grey lines that form a complex, web-like structure. The overall aesthetic is modern and technological, fitting for a STEM-themed report.

2024

STEM EDUCATION ADVISORY BOARD LEGISLATIVE REPORT

2024 Virginia STEM Education Advisory Board Legislative Report



Federal Congressionally Directed Funding Granted:

The STEM board secured \$1,028,000 in congressionally directed funding to support the creation of the state STEM ecosystem and the creation of regional STEM hubs. The Virginia Department of Education is the fiscal agent for these funds. The STEM Advisory Board and VDOE will be working together to create the infrastructure to support STEM education in the Commonwealth.

The Virginia STEM Education Advisory Board (2021 HB#2058) completed its third year of work. The STEM board's work continues to focus on ensuring all youth in Virginia have access to high-quality STEM education. The Governor's STEM Education Advisory Board met quarterly in 2024. This 16-member board consists of representatives from the Secretary of Education; Secretary of Labor; Secretary of Diversity, Opportunity, and Inclusion; as well as SCHEV, The Science Museum of Virginia, VDOE, and 10 citizen members.

Recent changes to the STEM Board Legislation:

In the spring of 2024, the board legislation was changed to add the following board remit: "Identify strategies to promote the participation of historically underrepresented students in STEM education." While not spelled out in our original legislation, this addition is a welcome addition and has been part of the dialogue and planning since the inception of the board. Through a subcommittee, the STEM board created an actionable goal and discussed strategies to meet this new legislation. Over the coming year, the Board will determine gaps (coursework, electives, Standards of Learning, pathway opportunities, credentials, etc.) and propose recommendations with a focus on historically underrepresented students of existing K-12 school, institutions of higher education, private sector, and community STEM educational programs within regions in Virginia.



Amy Sabarre: VA STEM Board Chair Spoke at the White House Summit on STEMM Equity and Excellence, May 1, 2024

SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM) EDUCATION APPLIES DISCIPLINE-SPECIFIC CONTENT-LEARNING EXPERIENCES WHERE ACADEMIC AND TECHNICAL DISCIPLINES INTERSECT IN COMPLEX RELATIONSHIPS. STUDENTS ENGAGE IN THE DESIGN THINKING PROCESS TO CREATE, AND COMMUNICATE SOLUTIONS TO A SPECTRUM OF UNIVERSAL HUMAN CHALLENGES. STEM LITERACY PREPARES ALL LEARNERS TO PARTICIPATE IN A VIBRANT AND THRIVING COMMONWEALTH OF VIRGINIA, AND CONTRIBUTE TO A STEM-ENRICHED WORKFORCE.

2024- 2026 STEM Board Goals

At the end of FY 23 the STEM board created three multi- year goals in anticipation of the federal funding.

Two of these have been the major focus of work this year.

1. Define the parameters for state STEM hubs and create a process for applying and selecting regional hubs
2. Create a website and STEM asset map that will allow students, parents and educators to have access and information about STEM Education throughout Virginia.

The STEM board will continue to create systems with VDOE that use the expertise of the board and the resources housed at VDOE to support these goals.

BOARD MEMBERS :

10 CITIZEN MEMBERS:

- CHRIS DOVI, CODE VA
- AMY SABARRE (CHAIR), HARRISONBURG PUBLIC SCHOOLS
- PADMANABHAN SESHAIYER (VICE CHAIR), GEORGE MASON UNIVERSITY
- AMY WHITE, VIRGINIA WESTERN COMMUNITY COLLEGE
- EDWARD MONROE, FAIRFAX COUNTY PUBLIC SCHOOLS
- VICTORIA CHUAH, APEX
- AMY THOMPSON, RETIRED PHYSICIAN
- RASHID FARRELL, GLOBAL HR EXECUTIVE
- RAJ JOSHI, AMC TECHNOLOGY (TERM STARTED JULY 2024)
- TERRY L. WHIPPLE, M.D. FAOA, (TERM STARTED JULY 2024)
- ZAINA TARAFDAR, ASTROPHYSICS STUDENT AT THE UNIVERSITY OF VIRGINIA (TERM ENDED JUNE 2024)
- GARY ARTYBRIDGE JR., NEWPORT NEWS SHIPBUILDING (TERM ENDED JUNE 2024)
- CASEY ROBERTS, NEW HORIZONS (TERM ENDED JUNE 2024)

6 STATE MEMBERS:

- VIRGINIA DEPARTMENT OF EDUCATION: ANNE PETERSEN
- SCIENCE MUSEUM OF VIRGINIA: RICH CONTI
- STATE COUNCIL OF HIGHER EDUCATION FOR VIRGINIA: EMILY SALMON
- SECRETARY OF LABOR OFFICE
- SECRETARY OF EDUCATION OFFICE
- CHIEF DIVERSITY, OPPORTUNITY, AND INCLUSION OFFICER

Regional STEM Hubs are envisioned as an interconnected web of centrally located physical resources, responsive to regional needs and serving as the connector and facilitator of resources for each region. Although hubs may look different based on their regional workforce and community needs, each hub will share across the network professional development offerings and resources serving a variety of community stakeholders - including educators, industry partners, families and students.