

Virginia STEM Education Advisory Board  
CodeRVA  
300 E Broad St, Richmond, VA 23219



Meeting Minutes

December 8, 2023

10:00 am – 2:00 pm

In Attendance:

**Board Members Present:** Amy Sabarre (Chair), Dr. Padmanabhan Seshaiyer, Amy White, Victoria Chua (ZOOM), Gary Artybridge Jr., Casey Roberts, Edward Monroe, Chris Dovi, Zaina Tarafdar,

**Ex-officios and Staff:** Deputy Secretary of Labor Anthony Reedy, Deborah Love (Office of Attorney General), Justine Taylor-Raymond (Deputy Secretary of Education) and Ada Sue Siler (Science Museum of Virginia Staff), Dr. Anne Petersen (VDOE Office of STEM & Innovation Science Coordinator),

**Guests:**

**Topics:**

- Review of mission and goals
- Review and approve minutes from September 8, 2023
- Updates from Virginia Department of Education
- Updates from the Secretary of Education's office
- Discussion on Virtual Meeting Policy
- Bylaws and Chair Positions
- Initiatives and STEM Activities Across the State
- Goals for 2024-2026
- Legislative Report and Budget Discussion
- Public Comment and New Business
- Motion to adjourn

### **Welcome and Opening Remarks**

Ms. Sabarre called the meeting to order at 10:06am. She welcomed everyone and noted a quorum was not yet present. When a quorum arrives, action items will proceed.

Ms. Sabarre Introduced Justine Taylor-Redmond, Assistant Secretary of Education. Ms. Taylor-Raymond was thanked for attending and for her support as an ally of STEM.

### **Presentation from Deputy Secretary of Education Justine Taylor-Raymond**

Deputy Secretary Ms. Taylor Raymond provided an update on STEM initiatives by VDOE.

Ms. Taylor-Raymond provided updates from the Department of Education and the Secretary of Education's office, touching on various topics such as lab schools, PISA Mathematical Performance measures, and University of Mary Washington's data science program. She mentioned three approved lab schools and focusing on teachers.

Additionally, she discussed initiatives aimed at addressing educational challenges such as chronic absenteeism and loss in Standards of Learning (SOL) test scores among 3rd to 8th graders. Concerns regarding homeschooling data and strategies to support homeschoolers were also raised.

Mr. Dovi suggested utilizing STEM hubs to supplement science education and emphasized the importance of supporting homeschoolers through non-traditional structures. Discussion also centered around potential ways the board could support these efforts. Finally, Ms. Taylor-Raymond highlighted the significant drop in math performance among 15-year-olds post-COVID and indicated that she would share relevant data later.

### **STEM Developments at Virginia Department of Education**

Dr. Petersen emphasized the importance of mathematics as she discussed the adoption of new standards and the implementation of best-in-class standards in the coming year. She highlighted the rigorous nature of the math standards and the need for structures and support systems for teachers. Mentioning gaps left at the Virginia Department of Education (VDOE) by Tina Mazzacane, she discussed hiring to fill those gaps and maintaining momentum with cohesive instructional guides and resources for professional development.

Dr. Petersen also shared her new role as the director of STEM education at VDOE, noting the importance of ensuring educational standards across different regions. She emphasized the need for teachers' involvement in the revision process and the integration of data science into education, aligning resources with standards and fostering student engagement in science and engineering topics.

Dr. Shanta emphasized supporting teachers and connecting them with resources, while Ms. Taylor-Raymond focused on identifying quality resources, especially for homeschool students, and aligning them with standards.

Overall, the discussions centered on enhancing education through effective resource utilization, teacher support, and alignment with educational standards.

Ms. Sabarre noted that a quorum was now established in person.

### **Approval of Minutes (September 8, 2023)**

Ms. Sabarre asked for any edits to the September 8, 2023 minutes before approval. None heard.

Dr. Shanta called for a motion to approve the minutes as presented. The motion was seconded by Mr. Dovi. All approved, motion carried.

### **Updates on Work Groups**

Ms. Sabarre addressed workgroups during the meeting, providing guidance on their function and operation.

She clarified with Ms. Love the definition and procedures for workgroups, emphasizing the importance of appointing a point person if tasks need completion between meetings. It was noted that if more than two board members are present at a meeting, it must be public, and adherence to posting requirements for workgroups was stressed.

Ms. Sabarre highlighted the need to maintain transparency in all discussions. A new policy regarding workgroups was discussed, with Mr. Dovi inquiring about potential overlap with lab school collaboration meetings. Ms. Sabarre confirmed that overlapping discussions were acceptable as long as distinct boundaries were defined to prevent matters of the board from being discussed inappropriately.

### **Board Chair and Vice-Chair Discussion**

Mr. Roberts initiated a discussion regarding the election of the chair and vice-chair, following up on a recent conversation with Ms. Love.

It was noted that according to the bylaws, candidates for these positions must have at least two years left on their term, a criterion no current members meet. A proposal was made to extend the terms of current chair and vice-chair until new ones are established, acknowledging the need for adjustments to the bylaws.

Ms. Sabarre called for a motion to extend the chair positions until July 1, expressing concerns about potential turnover in the summer. Mr. Dovi suggested that too many new board members could lead to a loss of momentum and information.

It was suggested that current leaders continue until the end of their terms to maintain institutional knowledge. Ms. Love highlighted the two-year term limit as per the bylaws, proposing the suspension of this provision for the immediate situation.

It was agreed to extend the current officers' terms until June 2025. Ms. Love stated that a motion is needed to suspend the bylaw clause, section 4, paragraph one as to terms of officers.

Ms. Sabarre asked for a motion to suspend the first paragraph of section 4 of the Bylaws regarding the term of officers, Mr. Dovi called the motion, second by Ms. White. No discussion heard. A vote was taken by show of hands, none opposed, motion carried

Mr. Dovi called the motion to extend the current officers term until June 2025. Ms. White called the second. A vote was taken by show of hands, all in favor. Motion carried.

Ms. Sabarre emphasized the need for those interested in serving to apply to the Secretary of the Commonwealth and reminded reapplying members to inform Ms. Taylor-Raymond via email.

### **STEM Asset Mapping Across the State**

Ms. Sabarre discussed the idea of creating a STEM asset map for the state, expressing hope that connections could help realize the goals of the Board's initiatives. She highlighted the benefits of using GIS software for this purpose, emphasizing the identification of resources and opportunities for students and teachers.

The mapping would provide an overview of Virginia's STEM landscape, serving as a communication tool for hubs and aiding schools, businesses and industries in finding relevant programs. It would also allow teachers to search for professional development offerings and target funding to specific areas.

Dr. Shanta emphasized the importance of linking assets to zip codes for better searchability. Ms. Tarafdar stressed the need for virtual options independent of regions, ensuring resources are regularly updated.

Dr. Petersen highlighted the importance of listing prices for accessibility. Discussion revolved around the key layers and functionalities of the mapping tool, with optimism about securing funding and considerations about its implementation and accessibility.

The group took a break for lunch from 11:33 am to 12:15pm.

### **Virtual Meeting Policy Discussion**

Ms. Sabarre initiated discussion regarding the policy for virtual meeting and the eligibility criteria. Mr. Dovi suggests amending the policy to allow the chair to approve or disapprove virtual meetings and to have the authority to refine the language of the policy.

This proposal is supported by Ms. White. Ms. Love reviewed the criteria for remote participation, which includes being more than 60 miles away and having personal reasons or health concerns, with a limit of two instances, whichever is greater.

A motion was called by Mr. Dovi and seconded by Ms. Tarafdar to approve the proposed electronic meeting policy. A vote was taken by verbal affirmation, all approved and none opposed. Motion carries.

### **Meeting Schedule for 2024**

During the meeting, there was a discussion regarding the scheduling of meetings for the year 2024. Proposed dates included a virtual meeting on February 23, 2024, with consideration for moving it to March 1.

An in-person meeting was proposed for April 26, 2024, with the location to be determined later.

Another virtual meeting was suggested for June 21, 2024, followed by an in-person meeting on September 13, 2024. There was deliberation about potentially moving the latter meeting to the end of September or the beginning of October, ultimately deciding on September 27, 2024. Dr. Shanta volunteered to possibly host this meeting at NCI in Martinsville.

Lastly, it was agreed upon to hold an in-person meeting on December 6, 2024, with Code Va expressing willingness to host.

### **Virginia STEM Initiatives**

The discussion centered around compiling a comprehensive listing of STEM-related activities and initiatives across Virginia, aiming to increase awareness of ongoing efforts and align them with the board's goals.

Dr. Petersen suggested adding the Virginia Space Grant Consortium to the list, while Mr. Dovi proposed including chamber initiatives such as the Greater Washington Partnership's workforce initiative along the I-95 corridor and 757 Connect's focus on workforce development in high-need areas.

Other contributions included the Richmond Chamber of Commerce's STEM-focused job fair and Dr. Petersen's mention of competition programs like LEGO robotics and tech competitions. Mr.

Dovi highlighted the importance of capturing statewide and regional programs targeting minority groups, such as Hispanic engineers, the Society of Black Engineers, and girls' empowerment groups.

Discussion also touched upon leveraging programs like Go Virginia, VTOP, and FastForward, with Ms. White emphasizing the need to identify leverage angles. Mr. Dovi stressed the importance of taking action rather than just compiling lists, suggesting the need for a Request For Bid (RFB) to hire a web developer for the initiative

### **Looking Forward: Goals**

The discussion revolved around reviewing slides that identified goals and the timing of accomplishments, including items completed on schedule and those pushed back. Initial goals were also revisited, with Dr. Seshaiyer emphasizing the importance of data across various disciplines. Ms. Sabarre prompted consideration of the board's scope of work for the next two years, urging reflection on what should be added and prioritized based on current knowledge.

It was mentioned by Ms. Sabarre that federal funding is likely forthcoming, pending approval from the House and Senate. Mr. Dovi indicated discussions with staff members of Senators Warner and Kaine, suggesting that the funding is expected to pass through the Virginia Department of Education (VDOE) to another entity for management, with the possibility of utilizing Code VA to manage the funds.

Dr. Petersen cautioned about the complexities of subcontracting to non-profit organizations and emphasized the importance of selecting an appropriate state agency for managing the funds to avoid procurement challenges. The Southwest Higher Education Center initially proposed to manage the funds, but careful consideration was advised to avoid high fees associated with subcontracting.

The discussion centered around identifying goals for the next two years and brainstorming ideas. Dr. Seshaiyer highlighted the importance of connecting education with workforce needs, emphasizing work-based learning, reskilling, and upskilling.

Ms. Sabarre mentioned creating the infrastructure for regional hubs. Mr. Dovi expressed the need for formal avenues for students to gain meaningful work experience through internships or externships, suggesting potential barriers and legal constraints.

Dr. Petersen suggested leveraging existing programs in the Shenandoah Valley for internships and high school apprenticeships instead of reinventing the wheel. Discussion ensued regarding the application process and structure of the hubs, with considerations for partnerships with the state STEM advisory board and the need for competitive negotiation rather than low-bid contracts. Legal considerations regarding contracts and grants were addressed by Ms. Love. Ms. White raised questions about soliciting input from all regions, prompting further discussion on defining the map, solicitation methods, and selection criteria for the hubs.

The discussion revolved around the creation of a website and application process for the regional hubs initiative. Dr. Shanta emphasized the need for a database and mapping tool, with funding allocated for website maintenance.

Mr. Dovi stressed the importance of hiring a qualified individual with a comprehensive background in STEM, ensuring evaluative criteria are in place. Ms. Sabarre underscored the importance of the hired individual having a broad focus across STEM disciplines. Ms. Tarafdar inquired about the target audience for each hub, advocating for an inclusive approach.

Dr. Petersen suggested starting small to pilot the program and adapting based on identified needs. Ms. Sabarre proposed consulting with other states to learn from their experiences, considering it a valuable resource. Mr. Dovi suggested simulating hub operations with a partner and emphasized the importance of identifying needs and weaknesses.

Dr. Seshaiyar proposed organizing a summit with businesses and industries to discuss their unique needs. Ms. White suggested offering student credits for participation in exercises, with community colleges facilitating credit issuance. Ms. Sabarre tasked Dr. Seshaiyar and Amy White with drafting a plan for implementing the exercise. Ms. Tarafdar and Dr. Shanta agreed to collaborate on asset mapping and website development. Ms. White and Dr. Seshaiyar committed to organizing a pilot experiment with students for credit issuance through community colleges.

### **STEM Legislative Report**

During the meeting, Ms. Sabarre presented the draft legislative report for recapping 2023, urging members to review it for any changes.

Ms. Sabarre stressed the need for sustainability, suggesting advocating for a state funding line in the annual budget as a potential goal. Ms. Taylor-Raymond outlined the process for advocating

for state funding, emphasizing the need for a formal proposal with specific, measurable deliverables and potential amendment by a legislator.

Mr. Dovi sought clarification on how to identify a legislator, with Ms. Taylor-Raymond offering assistance in identifying one. Ms. Taylor-Raymond suggested long-term planning and proof of concept before advocating for funding, emphasizing the importance of demonstrating impact.

Mr. Dovi requested permission to begin talking with legislators and building connections to advocate for state budget inclusion in the future.

Ms. Taylor-Raymond emphasized the importance of informing the Secretary's office before reaching out to legislators. She also discussed requests for travel funds and reimbursements.

Dr. Seshaiyar highlighted the relevance of STEM and AI topics to current interests. Ms. Tarafdar suggested edits to the legislative report, while Dr. Seshaiyar recommended including affiliations for board members and color-coding stars and names of members.

#### **Public Comment and New Business**

Ms. Sabarre asked for any public comment. None heard.

Ms. Sabarre asked for any new business.

#### **Adjournment**

The meeting concluded at 1:57pm. The next meeting will be held virtually on February 23 2023. The meeting notes were recorded by Ada Sue Siler.