Virginia STEM Education Advisory Board
Science Museum of Virginia
2500 West Broad St, Richmond VA 23220

Meeting Minutes - APPROVED

February 20, 2026 10:00 am – 2:00 pm

In Attendance:

Board Members Present: Amy White, Edward Monroe, Rashid Farrell, Amy Thompson (virtual), Dr. Padmanabhan Seshaiyer, Dr. Terry Whipple, Dr. Yu-Shen Lin, Shaina Srivastava

Board Members Not Present: Victoria Chua, Rajbans Joshi

Ex-officios and Staff: JC LaRiviere (Office of the Attorney General), Dr. Anne Petersen (Virginia Department of Education), Dr. Jeffery O. Smith (Secretary of Education), Emily Salmon (SCHEV), Jessica Looman (Secretary of Labor Office), Dr. David Dore (Chancellor of VA Community College System), Jenna Conway (Virginia Superintendent of Public Instruction), Ada Sue Siler (Science Museum of Virginia Staff), Nicole Overly (Commissioner of Public Works)

General Public Attendees: Blake Corcel, Amy Sabarre (virtual)

Opening and Meeting Administration

Chair Dr. Padmanabhan Seshaiyer called the meeting to order at 10:11 am, and noted that some members may be late due to traffic caused by the weather conditions.

Dr. Seshaiyer shared a video of the Student Showcase from the General Assembly yesterday. Students shared recent projects in STEM from across the state including rural school districts, students were highlighted and presented posters of their projects and STEM futures for them.

He then asked members to introduce themselves and share their connections to STEM.

Dr. Seshaiyer reviewed the agenda and topics discussed in the September meeting.

It was noted that a quorum was not yet present. Amy White called a motion to amend the agenda and postpone the approval of the minutes until a quorum is present. The motion was seconded by Edward Monroe. A vote was taken by verbal affirmation. Motion carried.

Dr. Seshaiyer shared an overview of the board's objectives and accomplishments.

Review of Prior In-Person Meeting

Updates on STEM ecosystems from September 2025 were discussed. The team reviewed the stakeholder engagement strategies and also examined the implementation timeline, which is set for June 2026. The board reviewed the recommended selection process parameters. Additionally, updates were shared about the upcoming K–5 STEM Professional Development webinar series from VDOE. The revision and modernization of the board's bylaws and other areas were addressed. Subcommittee arrangements were also discussed, along with STEM engagement activities.

Dr. Yu-shen Lin commented on the importance of AI in the workforce

Ms. White mentioned that a massive manufacturing plant closed and 500 people will lose their job. In response to this, the community college system hosted a job fair. It was a sobering experience seeing workers now having to look for a job and create a resume after working for the manufacturing plant for over 20 years.

Jessica Looman said that the efforts of the Secretary of Labor is about supporting Virginians, reskilling and upskilling to meet people with compassion.

Dr. Terry Whipple commented that the use of AI has a huge impact on the labor force and asked if there is concern in the Department of Labor regarding the impact of social media on AI development.

Ms. Looman responded that AI is used in the workspace as a tool and sometimes as a replacement for job functions. We need to make sure that we are thinking about employer's use of these tools and that we don't ignore this. AI can be a great tool and employers across the country have wrestled with social media. We are seeing a shift as many young folks are leaning on becoming an influencer. Many of our existing systems are not set up to support individual contributors. Industry is set to support the industrial model.

Mr. Monroe emphasized the importance of helping K–12 students understand how their education can be applied in professional settings, as well as understanding what various work environments look like, and where they can fit in.

Ms. Looman responded that the average longevity of employment in a single role has been reduced to five years. Working at one place for twenty years is no longer the norm and employers need to focus on creating a stable work environment for employees.

Employment is transactional and we need to rethink what retention and success mean. The education system is set up to teach a skill until completion and employment is functioning on a similar model but we need a more circular approach to career development.

Dr. Seshaiyer mentioned that Virginia is the first state to have an SOL exam on data science and data science as a 4th grade math credit available.

Ms. Looman mentioned that the median time in a job is 3.5 years.

Dr. Seshaiyer mentioned that a quorum was now present, and asked the group to review the minutes from the September and December 2025 board meeting.

Dr. Seshaiyer asked for a motion to approve the minutes. Dr. Whipple called the motion and Ms. White called second. No discussion was heard. A vote was taken by verbal affirmation, none opposed, motion carried

Virginia Works Presentation

Commissioner Nicole Overley presented on preparing and supporting Virginia's STEM workforce. She asked for the Board's input on how Virginia Works can address both current and future STEM career opportunities to better prepare the workforce. Virginia Works emphasized its focus on expanding access to opportunities and supporting individuals seeking career transitions. It was noted that career paths are often non-linear, and the workforce development system plays a key role in connecting individuals with employers while providing effective training and support.

Ms. Srivastava asked if the resources are available outside the state. Ms. Overly stated that resources can be accessed in any state due to the vast majority being online.

Dr. Lin asked to create a connection between Virginia Works and Cigna.

Ms. Overley discussed how employers utilize the workforce system to support their hiring and retention needs. She explained that the system works directly with employers on a daily basis, providing a direct connection to workforce resources and job candidates. Services include assistance with job postings, general recruitment support, and coordination of both in-person and virtual hiring events. She also highlighted support for on-the-job training and employee upskilling as strategies to help prevent layoffs. In addition, Ms. Overley emphasized the importance of effective onboarding and its impact on employee retention, as well as the availability of light-touch HR support for employers.

The organization also provides employee upskilling, internship and registered apprenticeship support, and access to self-service resources. Further services include resume development, job search assistance, and access to work-based learning opportunities.

Dr. Whipple asked about the extent to which the workforce organization is connected to Veterans Affairs. Ms. Overley responded that the Department of Veterans Services (DVS) is in regular communication with the organization to explore and strengthen connections, particularly around creating registered apprenticeship opportunities.

Ms. Overley emphasized a strong focus on supporting veterans and their spouses by connecting them and their families to workforce resources and licensing opportunities through close coordination with Veterans Services.

Dr. Whipple noted that the U.S. Department of Veterans Affairs is highly engaged in military workforce initiatives in states such as North Carolina and suggested exploring that model.

Virginia Works supports the STEM workforce through on-the-job training and classroom instruction, with apprenticeship programs offering progressive wages, clear career pathways, and nationally recognized credentials. The Board was encouraged to consider strategies for building a future-ready talent pipeline, balancing technical and durable skills, and expanding equitable access to high-quality work-based learning. Virginia Works has advanced these efforts through apprenticeship expansion funding, AI and career skills training via Skills Hub in partnership with Grow with Google, and collaborations with key partners on strategic workforce initiatives.

Bylaws Update

J.C. LaRiviere provided an update on the bylaws, including revisions to the document's language. He noted changes on page three, including the removal of the executive committee, which no longer convenes, and the addition of language empowering the Chair to establish ad hoc committees as needed.

Mr. LaRiviere also clarified guidelines for board communication between meetings, explaining that discussions involving three or more members constitute a meeting and are subject to FOIA requirements. He recommended committees consisting of five members, with three constituting a quorum, and suggested that committees meet on the same day as the full Board. He further reviewed eligibility requirements for Chair and Vice Chair positions, emphasizing the importance of staggered terms to preserve institutional knowledge, and invited questions or comments.

Dr. Seshaiyer discussed the potential for creating subcommittees in the future and noted the importance of including committee members in travel reimbursement policies. Mr. LaRiviere highlighted the need to establish a date for the election of officers. Ms. White recommended holding elections after the summer, allowing a new Chair to be selected at the September meeting and assume the role in December.

Rashid Farrell called a motion to approve the bylaws as presented with the noted changes. The motion was seconded by Dr. Whipple and passed unanimously by verbal affirmation.

Mr. Whipple also introduced the idea of developing a formal mission statement and suggested increasing communication opportunities through more frequent meetings, potentially every other month. Further discussion and a vote on these items will take place at the next meeting.

Adjournment for lunch at 11:44 a.m.

STEM Website Updates and Overview

Dr. Anne Petersen presented an update on the STEM website. She explained that the homepage introduces STEM for K–12 audiences and outlines the mission of preparing students for workforce readiness, supported by data highlighting growth in STEM-related job markets. Dr. Petersen noted that, due to limitations in obtaining parental consent for student images, stock images are currently being used.

Dr. Petersen also shared that development of the website is being conducted in partnership with a VITA-approved vendor, Terminal 4, and highlighted recent progress. A “Find a STEM Opportunity” feature has been added, allowing teachers and parents to search for opportunities by zip code. She emphasized the need for Board support in gathering information from organizations across the state to populate this tool. An approval process has been established to ensure all submitted information is vetted, and statewide initiatives will appear across search results.

Additional site features include a STEM Lesson Plans section aligned with Virginia Standards of Learning, as well as design briefs organized by grade level and subject area. The website also includes content on Virginia’s STEM ecosystem models and selected regional ecosystems. Dr. Petersen then opened the floor for questions and comments.

Mr. Farrell asked how Board members could assist in soliciting content for the resource section of the website. Dr. Petersen responded that a submission link is available and will be redistributed via email. Dr. Whipple inquired about the site's capacity for additional content, and Dr. Petersen confirmed that the platform allows for an unlimited number of pages. She also noted that the group photo on the site needs to be updated.

STEM Education: Discussion on Impact of AI on Workforce development, KWL (Know, Want to Know, Learn)

The group took a few minutes to introduce themselves and their connections to STEM again due to new guest speakers present.

Dr. Jeffery O. Smith, Secretary of Education, introduced himself and appreciated his invitations to attend this meeting along with the State Superintendent. He recounted his career, areas of interest and focus, professional growth, authentic learning experiences for young people, etc.

Dr. Seshaiyer mentioned Executive Order 4 from Governor Spanberger. He drew attention to the fastest growing jobs needed by 2030, which are big data specialists, fintech engineers, and AI Machine Learning.

Dr. Seshaiyer asked the group to mention AI opportunities in their field.

Dr. Smith said AI is a tool to elevate and provide connections.

Virginia Community College System Update

Dr. David Dore of the Virginia Community College System (VCCS) presented an overview of the system's mission and initiatives. He emphasized a focus on affordability in higher education and maximizing outcomes, with a mission centered on expanding access to skills development to strengthen individuals and communities. VCCS includes 23 colleges serving communities across Virginia and provides direct pathways to well-paying, high-demand careers, with community colleges serving approximately half of all higher education students in the Commonwealth.

Dr. Dore highlighted the importance of STEM education, noting that many students in Virginia remain in the state to work. He reported that, in the past year, community colleges supported 58,000 dual-enrolled high school students, with the greatest demand in career and technical education. He also discussed the development of a passport program and a college and career readiness pathway designed to support student

progression. The system has set a goal of producing 300,000 additional credentials by 2030.

He noted that community college tuition is approximately one-third the cost of universities, with hundreds of credential programs available for less than $1,500. Increased access to education and credentialing, he explained, can reduce reliance on public assistance programs such as SNAP, TANF, and Medicaid. Current priorities include expanding capacity in high-cost, high-demand programs and increasing investment in dual enrollment.

Dr. Dore also outlined several STEM-focused initiatives, including a statewide Industry Summit on Information Technology and Artificial Intelligence held in the fall. These summits bring together employers and college leaders to address workforce needs and have resulted in action plans such as increasing the number of high school teachers credentialed to teach dual enrollment courses, particularly in STEM fields. He also highlighted the growth of the James Clark Engineering Transfer Pipeline Program, supported by a $3 million investment from HCA, and noted that new state leadership is expected to further advance these efforts.

Dr. Seshaiyer mentioned advanced placement courses and new Advanced Placement offerings will be available in areas of engineering in the upcoming year.

Dr. Dore said many community colleges are of the same caliber and quality of four year universities.

Ms. Srivastava asked for clarification on the FastForward program

Dr. Dore explained that this is a fast paced upscaling opportunity for anyone that is entry level, and builds credentials towards a degree. Outreach is very important and they intentionally seek out less served locations to encourage enrollment in programs and offer opportunities to Virginians across all communities.

Dr. Yu-shen Lin mentioned seeking newly retired individuals as adjunct faculty.

Dr. Seshaiyer mentioned utilizing veterans to help fill the gaps.

Jenna Conway, Superintendent of Public Instruction, Virginia Department of Education presents on VDOE Goals and Achievements

Jenna Conway, Superintendent of Public Instruction for the Virginia Department of Education (VDOE), presented on the agency's goals and achievements. She noted her prior role as Chief of Early Learning and Specialized Populations and highlighted her leadership over the past seven years in strengthening Virginia's birth-to-five early childhood system to ensure school readiness. Her responsibilities also include oversight of special education, behavioral health, student safety, and adult education, with a focus on supporting learners of all backgrounds and abilities.

Ms. Conway discussed her role in implementing the Virginia Literacy Act and other key legislation in partnership with school divisions to support educators, engage families, and improve student outcomes. She highlighted ongoing efforts to address barriers such as access to affordable childcare, which impacts workforce participation. She also noted concerns regarding recent math performance data, acknowledging that Virginia is no longer ranked among the top-performing states nationally, and emphasized the importance of strengthening curriculum quality and instructional standards.

Ms. Conway stated that the current administration is highly focused on education, with an emphasis on progress over partisanship. She underscored the importance of supporting students' social development in addition to academic achievement. While technology remains a useful tool, she emphasized that it should not replace high-quality instruction, noting the importance of intentional, meaningful classroom engagement. She also shared that VDOE is in the process of rolling out a new accountability framework.

VDOE Updates

Dr. Anne Petersen, Director of the STEM Science and Health Unit at the Virginia Department of Education (VDOE), presented updates on ongoing STEM initiatives. She shared a report summarizing progress since the last Board meeting, including a PowerPoint presentation featuring snapshots of the STEM website, which is currently in the testing phase. She noted that the final slide of the presentation includes two questions that will be discussed later in the meeting.

She reported strong interest in the STEM Ecosystems grant program, with many applicants seeking available funding. VDOE is also developing a dedicated STEM Ecosystems website and exploring additional funding opportunities while leveraging existing resources to support these initiatives. Additionally, a proposal has been introduced to create micro-courses focused on modeling and data use, providing long-term access to these learning resources.

STEM Ecosystems

In 2022, the Virginia STEM Board developed a proposal that was submitted to the federal appropriations committee and subsequently approved for funding to support the expansion of STEM ecosystems across Virginia, with VDOE serving as the fiscal agent. A STEM ecosystem was defined as a collaborative network that connects education, business, and community partners to strengthen STEM learning pathways and workforce development statewide.

As defined by VDOE, the Virginia STEM Ecosystem supports innovative, community-driven STEM education to prepare students from preschool through grade 12 for postsecondary education, employment, and enlistment, while fostering a culture of collaboration, innovation, and leadership. The initiative is grounded in the principle of collective impact, emphasizing a shared vision and responsibility to achieve common outcomes. VDOE serves as the backbone organization, while leadership is provided by the STEM network and advisory board. The initiative also oversees the distribution of funds and the collection of data to ensure accountability and alignment of STEM priorities across Virginia's eight superintendent regions.

VDOE initiated the application process with the goal of establishing four regional hubs, with plans to expand to eight. Key objectives include developing coordinated infrastructure; supporting teacher professional learning in areas such as mathematics, data literacy, science, STEM literacy, and computer science; leveraging regional expertise to provide free webinars; creating data dashboards and STEM asset maps; securing sustainable funding; and engaging regional stakeholders through summits.

Board members were asked to consider several key questions, including how to better support teachers and connect them with professional learning opportunities, how to secure sustainable funding beyond the current grant period, and how to engage regional stakeholders. Members were also encouraged to reflect on the Board's shared vision and collective responsibility in advancing these efforts.

Southwest Virginia Higher Education, established in 1991 in Abingdon, Virginia, was the state's first multi-college higher education institution. It serves Region 7 of the Department of Education and offers over 110,000 square feet of space for conferences, classrooms, laboratories, and meetings, equipped with advanced AV and IT resources. The institution collaborates with eight public and private colleges and universities to provide degree programs, certificates, and professional development courses, and partners with two community and workforce organizations to support the regional economy.

Southwest Virginia Higher Education is home to the A. Linwood Holton Governors School, providing dual enrollment courses to over 700 students across 17 school districts, and the Healthcare Excellence Academy Lab School, which offers high school students hands-on learning and career shadowing in healthcare. Additional programs include a K–5 STEM Academy offered in spring and fall, hosting UVA Wise's TechSplash summer professional development for teachers, organizing the Annual Regional LEGO Robotics and KidWind competitions, providing on-site STEM field trips and off-site programming through the Director of Educational Outreach, conducting Summer STEM Camps for middle and high school students (including programs in coding, AI, and energy), and operating Healthcare Simulation Labs to educate the healthcare workforce.

Board members were invited to suggest engagement events, including webinars and professional learning series in AI, data science, healthcare credentialing, and computer science integration for K–8; internships and externships; student leadership and women in STEM initiatives; regional STEM competitions; the engineering design process; STEM professional learning across Virginia associations; federal and state legislative updates; and partnership panels.

Potential opportunities for Board engagement include developing a grant strategy to support sustainable funding, creating an advocacy plan to attract champions, establishing a strategic outreach plan to activate partnerships and board networks, supporting regional hub leaders, maintaining the STEM website in collaboration with STEM hubs, and developing a communication plan to strengthen connections with backbone organizations.

Public Comment and New Business

The board had a brief discussion of pilot programs and decided to discuss this topic in the next meeting.

April 24, 2026 from 12-4 p.m. was tentatively scheduled. Members agreed upon an afternoon meeting time but the April date is subject to change.

Call for public comment. No public comment was raised.

Adjournment

Ms. White called a motion to adjourn and the motion was seconded by Dr. Whipple and unanimously approved by all board members at 2:12 p.m.