



Annual Report 2023



< A letter from our Executive Director



Dear CodeVA Community,

I am honored and grateful to join the incredible family of CodeVA as the new Executive Director. As we celebrate the remarkable milestone of the organization's 10-year anniversary, I am energized by the opportunity to lead CodeVA into the next decade of advancing computer science education for all students.

First and foremost, I want to express my heartfelt gratitude to the entire CodeVA community—founders, staff, volunteers, educators, students, and supporters—for the tireless dedication and passion that has propelled this organization to where it stands today. Your commitment to ensuring that every student has exposure and opportunities in computer science education is genuinely commendable.

I am inspired by the impact CodeVA has made over the past 10 years, transforming lives and shaping the future for countless students. I am eager to build upon this foundation and work collaboratively with all stakeholders to innovate, expand, and enhance our programs to meet the evolving needs of the educational landscape.

Together, we will continue to bridge gaps, break down barriers, and foster a community where every student, regardless of background or circumstance, has the chance to explore and excel in the world of computer science.

I look forward to learning from each of you, listening to your insights, and charting a course that reflects the collective vision of CodeVA. With your unwavering support and dedication, I am confident that we will achieve even greater milestones in the future.

Thank you for welcoming me into the CodeVA family. Let's embark on this exciting journey together and make a lasting impact on the lives of students across Virginia.

**With gratitude,
Tina Manglicmot, ED. D.**

CodeVA's Strategic Goals

- Reach more students, especially historically underrepresented populations
- Engage, educate, and inspire educators and leaders to reach more classrooms
- Advocate and articulate to a wider audience the importance of CS education
- Diversify the types of services and products and method of dissemination to a larger audience
- Contribute to the body of evidence to support expansion of CS education both in Virginia and beyond
- Build a strong and sustainable organization that can effectively address the critical CS educational challenges of learners



A letter from our former Executive Director



To the CodeVA community,

Computer Science for ALL has been the vision and goal of CodeVA since its inception a decade ago. Since that time, while we've certainly made strong progress toward Computer Science for Many, we remain far from Computer Science for ALL.

And 2023 has brought a whole host of new challenges to that vision. ChatGPT and the advent of AI as a commonly available, seemingly ubiquitous - and also vaguely menacing - tool of invention and innovation has obscured what had once seemed a relatively clear path forward for computer science K-12 education.

And then there's the proliferation of what, in the education community swiftly is becoming known as "All the ALLs" - STEM for ALL, CS for ALL, Engineering for ALL. Everyone has an all now - AI, Cybersecurity, Machine Learning, and, even the quaintly unique Data Science 4 Everyone.

With so many ALL movements, with apologies to Alexander Dumas, 2023 has begun to look like it's "All for One and None for All."

What's a poor educator to do?

True to CodeVA's long commitment to advocating for meaningful and reasonable policy solutions, and useful and actionable support for educators, CodeVA helped this year to launch a national conversation about the need to join these many voices under one flag.

**Sincerely,
Chris Dovi**



IMPACT STATISTICS



785 Kids

Attended one of our 30 camps



564 Hours

of Professional Development
delivered



5 Robotics Teams

Directly supported by CodeVA
Robotics



351 Curriculum Items

Created this year



1100 Educators

reached through our delivered Professional
Development

ROBOTICS

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“The growth of the robotics league in the past year has been amazing to watch. It is truly remarkable, once provided access at their level, the aptitude and interest students show in STEM.”

*- Zach Mulcahey
Director, Eureka Education*

The 2022/23 CodeVA VEX Robotics season was a triumph! Teams from across Richmond displayed innovative solutions, demonstrating exceptional skills and teamwork. The season saw record participation, with over 90 students overcoming numerous challenges to create remarkable robots. Their passion for STEM and focus on the challenge was truly inspiring. Students from CodeVA, the Henrico Police Athletic League and Cultural Roots Homeschool co-op all earned awards from their participation in robotics this year!

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Cultural Roots Home School

During the 2022/23 school year, working with Cultural Roots, we piloted a robotics program for students in 3rd through 5th grade. We worked with two different groups of students at their school over the course of 2, 16-week sessions where we were able to explore the VEX Go platform. The program was hugely successful with students building multiple robots and having a blast with this introduction to STEM. We are excited to continue using the platform with other partners and in-house!

EUREKA

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Our partnership with Virginia Tribal Education Consortium continues to grow. Our instructor Carlton Nivens, featured recently by VCU News, works to support their programming.

ASCV partnered with CodeVA educators to expose children with autism and their families to concepts and creativity that are inherent to computer science.

Over three weeks, participants learned all about circuits: starting with the basics and then working their way up to crafting cards with LED lights, and designing a mini light show using Lite Brites.

"Since our first summer of kid camps, we've witnessed the incredible creativity, imagination, and thoughtfulness that so many students with autism are able to express through the creative communications medium of computer science," said Chris Dovi, the executive director at CodeVA.

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Our CSEDWEEK activities were highlighted by our Family Code Adventure event. In partnership with The Oak Avenue Complex, Henrico Library, Richmond Redevelopment and Housing Authority, Virginia Tribal Education Consortium, and Henrico County Public Schools, the day featured activities involving STEM, CyberSecurity, Algorithmic Thinking, and Robotics!

Has participating in the CodeVA Robotics League been a good experience for your student why or why not?

"Yes, he loved the experience and was always excited to come to meetings and compete."

CURRICULUM



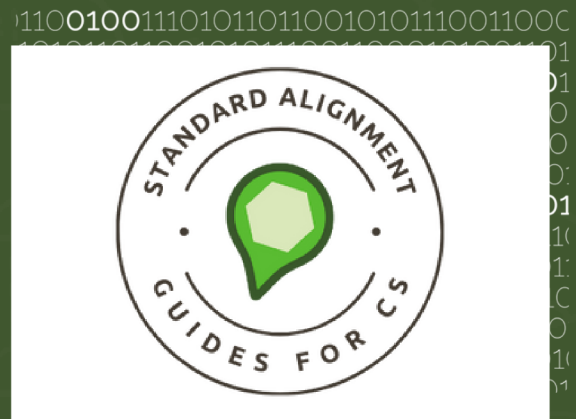
www.curriculum.codevirginia.org

In December 2023, CodeVA's curriculum team proudly launched the CodeVA Curriculum Library. This dynamic platform features a rich array of learning products from state and federal projects, resources tailored to Virginia standards, and adaptable classroom lessons. Continuously evolving, the site not only enriches computer science education but also enables the team to track user engagement and interests, guiding future resource development.

- Perry Shank
Director of Curriculum

Standards Alignment Guides

CodeVA's curriculum team, with part-time writers, developed a series of one-page lesson plans known as Standard Alignment Guides. Covering Computer Science standards from Kindergarten through Eighth grade, these guides assist educators in curriculum workshops and provide insights into integrating challenging standards. Crafted by experienced teachers, the lessons include essential vocabulary, computer science lesson summaries, and assessment guides to gauge student proficiency. Serving as a valuable tool for statewide computer science integration, these guides are freely available for educators to use and adapt, enhancing the teaching and learning experience in this vital subject area.



Twine-focused partnerships & projects!

The CodeVA curriculum team developed materials throughout the year to support various partnerships and projects, including professional learning resources to support the NSF grant project CS for Social Studies and the VDOE ACSE Pilot Grant with the Shenandoah Valley Computer Science Regional Partnership in northwestern Virginia.

CURRICULUM

In tandem with the efforts toward completion of the Standards Alignment Guides, the Curriculum team offered services and created activities for many outside organizations. A few examples include 7th Grade Math Statistics lesson plans, Micro:bit lessons, and a Lock Box Challenge for the JROTC.

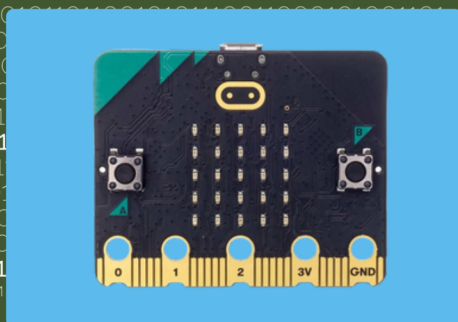
7th Grade Math + CS

The 7th Grade Math + CS lesson set consists of four sets of integrated CS and math lesson plans. These plans are aligned with the Probability & Statistics and Computer Science Virginia Standards of Learning (SOLs) and are designed to engage students in various domains of inquiry using diverse tools and methods. The primary aim is to enhance 7th Grade Math education by integrating text-based programming, thereby improving student performance and encouraging the creation of original, expressive work.

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Micro:bit

Over the past year, the Micro:bit has emerged as a cost-effective and student-friendly technology, featuring numerous sensors and an LED light grid that engages young learners in programming. High school students also benefit, with expansion possibilities through GPIO connectors. The CodeVA curriculum team enjoyed the creative process of successfully completing two impactful Micro:bit projects, and the team plans to integrate this technology into more projects to enhance learning experiences for Virginia's students.

Lock Box Challenge

One of the CodeVA curriculum team's Micro:bit projects involved a fun Lock Box Challenge, designed for a JROTC summer STEM camp north of Richmond, uses block-based programming to teach students programming skills with the Micro:Bit and the MakeCode development platform. In this engaging project, students learn coding basics from the very start and work to build a puzzle box enhanced by LED animations. The project also introduces the use of variables and conditional logic and prompts learners to perform mathematical operations in their programs, enhancing students' computational thinking, coding ability, and problem-solving skills.]

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EDUCATOR PROGRAMS

In response to the dynamic needs of educators, CodeVA's Educator Programs demonstrated a thoughtful and strategic approach to advancing access to computer science (CS) education throughout 2023. Informed by insights gathered through educator surveys, we recognized the importance of tailoring professional development (PD) to meet their unique needs.

- Natalie Rice
Director of Educator Programs

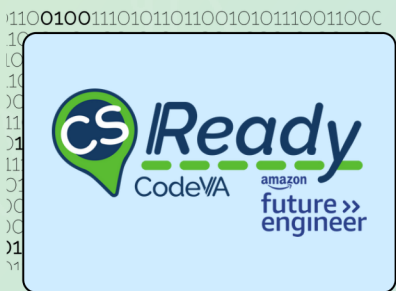
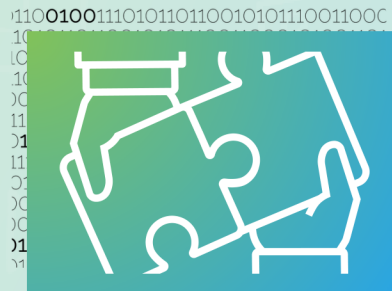


Professional Learning Model

Our distinctiveness lies in offering a variety of modalities for educators to receive their PD. This approach ensures a thoughtful response to the diverse preferences of educators, meeting them where they are. Modalities include virtual and self-paced courses, in-person sessions, on-site workshops within regions, and supporting district-level strategic planning to seamlessly integrate computer science into curricula.

Strategic Collaborations

We actively partnered with schools, divisions, and organizations to tailor PD to their specific needs. Our presence at statewide events broadened awareness, built relationships, and expanded CS education opportunities. Invitations to division-level PD days and events served as additional avenues to provide CS learning opportunities.



Dynamic CS Ready Program

Our CS Ready program constantly evolves and undergoes modifications to ensure the provision of necessary supports, resources, and learning opportunities. This commitment is integral to helping schools continually progress in their CS initiatives.

Approximately **1100 educators** were reached through 36 presentations by curriculum, EP, and faculty teams. **564 HOURS of PD** were offered by CodeVA in 2023.

EDUCATOR PROGRAMS

Building on these thoughtful and strategic initiatives, our high-level goals for 2024 are designed to further enhance our impact on CS education through: Formalized Prioritization, Comprehensive Continuum Approach and New Collaborative Partnerships.

*- Natalie Rice
Director of Educator Programs*

New Collaborative Partnerships

The goal is to initiate new partnerships with 20 Virginia schools, districts, and organizations. Through these partnerships, we intend to deliver student and educator programs that deepen computer science content knowledge.

Formalized Prioritization

The goal is to provide a formalized way for schools or divisions to prioritize CS learning initiatives through partnerships with CodeVA. This strategic approach ensures tailored support and addresses specific educational needs.

Comprehensive Continuum Approach

Our aim is to implement a comprehensive continuum approach, fostering strategic partnerships and establishing a structured support system. This initiative ensures the successful engagement of schools, divisions, and educators at all levels in the CS Ready program.

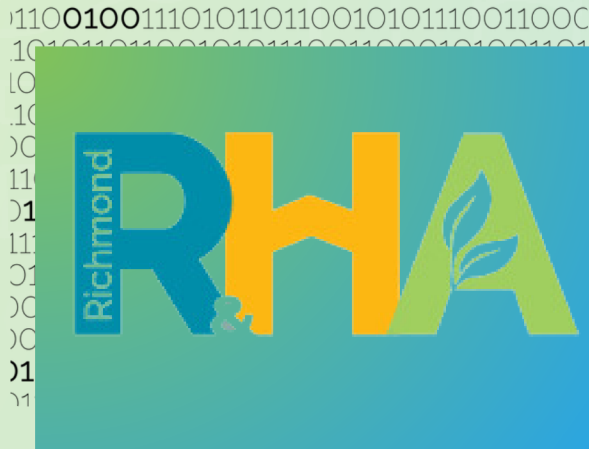
Challenges and Increased Capacity:

As we look ahead, certain challenges necessitate an increased capacity for our programs:

- **Full-Time Facilitators:** To meet the growing demands and needs of school divisions during school hours, there is a need to hire full-time facilitators. This ensures dedicated and accessible support for educators.
- **Increased In-Person Sessions:** Responding to requests, our plan is to increase in-person sessions by providing professional learning at the school location, conferences, or events. This approach enhances the accessibility and responsiveness of our programs.
- **Bespoke Curriculum Development:** To meet the unique needs of division requests, we will focus on developing bespoke curriculum. This tailored approach ensures that our programs align seamlessly with the specific challenges and objectives of each division.
- **Awareness and Engagement:** A critical challenge is to increase awareness and engagement of CodeVA educator programs. We will actively promote our ability to partner with divisions and schools, advocating for the transformative impact of our tailored CS education initiatives.

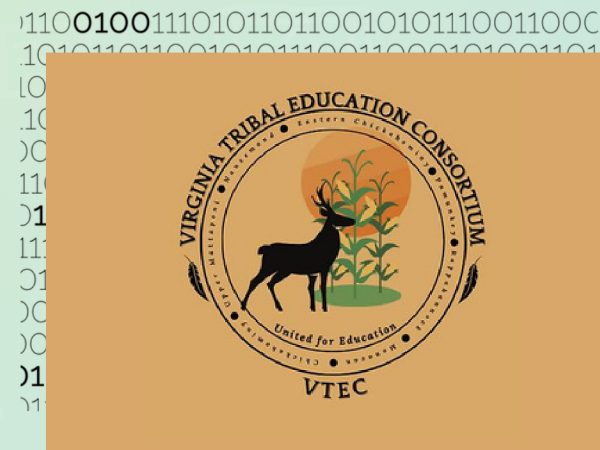
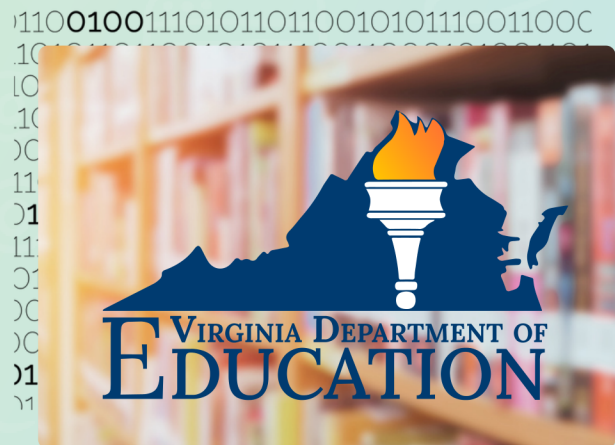
As we navigate these challenges and pursue our goals, CodeVA's commitment to thoughtful and strategic education remains unwavering. We look forward to the continued growth and impact of our programs in 2024 and beyond.

WE ♥ OUR PARTNERS



We are diving into community collaboration in Fairfield Court! We're thrilled to unveil preparations for the Fairfield STEM Lab, opening its doors in the new year. This project is in tandem with Richmond Redevelopment and Housing Authority, one of our long-term partnerships.

Our partnership with the Virginia Department of Education has grown as we pursue greater coverage of computer science education across the state.



CodeVA, with VTEC, was awarded a \$25,000 grant to teach senior tribal citizens the digital literacy skills needed to stay connected and succeed in today's digital world; part of Comcast's Project UP.

OUR SPONSORS

\$500,000+

amazon future engineer

\$100,000 - \$499,999

Google

\$50,000 - \$99,999



\$10,000 - \$49,999



OUR SPONSORS

\$5,000 - \$9,999



Altria



VIRGINIA LOTTERY.



\$1,000 - \$4,999



OUR PARTNERS



2023 FY FINANCIALS

Revenues

Revenue Source	Amount (\$)
Contributions and Grants	\$4,116,641
Program Service Fees	\$99,134
Interest Income	\$3,175
Forgiveness of Refundable Advance	\$0
Sales	\$22,533
TOTAL	\$4,241,483

Expense	Amount (\$)
Program Services	\$2,891,306
Management and General	\$929,330
Fundraising	\$460,486
TOTAL	\$4,281,123
Net Assets at the Beginning of the Year	\$1,524,686
Change in Net Assets	\$466,745
Net Assets at the End of the Year	\$1,057,941

Expenses

*Preliminary data pending completion of audited financial statements through June 30, 2023



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