Last revision: August 31, 2022
Pending Revision: June 30, 2023

Virginia College Partnership Laboratory School Application

Approved by the Virginia Board of Education
July 26, 2012
Updated August 31, 2022
Pending Revision June 30, 2023

School Name: **UVA Innovation Hub at Charlottesville Middle School**

Date of Submission to Virginia Board of Education: 11/8/2023

Name of Authorized Official: **Catherine Thompson, CRA**
(V1 revisions: 12/21/2023;
V2 revisions 1/22/2024;
V3 revisions 2/26/2024)

Signature of Authorized Official: **Date:**

Application Completion Instructions & Mailing Information

All applicants for a college partnership laboratory school should read the College Partnership Laboratory School Application Process before completing the application. The process is available on the Virginia Department of Education's website at the following link: https://www.doe.virginia.gov/teaching-learning-assessment/specialized-instruction/laboratory-schools

Complete the cover page and insert the name of the college partnership laboratory school into the footer before completing the application. Each gray section in the document must contain a response.

Completed applications and supporting documents must be submitted to labschools@doe.virginia.gov. The Department may return or reject applications that are incomplete.

Note: The *Virginia Freedom of Information Act* (FOIA), § 2.2-3700 et seq. of the *Code of Virginia*, guarantees citizens of the Commonwealth and representatives of the media access to public records held by public bodies, public officials, and public employees. Please be advised that documents submitted to the Virginia Department of Education are subject to FOIA and must be released in response to a FOIA request unless the records are exempt as specifically provided by law.

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Part A: Applicant Information

School Information

Lab School Name: UVA Innovation Hub at Charlottesville Middle School

Does the applicant have access to an existing facility suitable for a school with relevant local safety and health standards, such as fire, building, and sanitation available to students?

Check one of the following: Yes ☒ No ☐

If the answer is yes to the question above, provide the following information each location:

Full address: 1000 Cherry Ave, Charlottesville, VA 22903

Describe the facility in which the school will be located. Include information on how the site is appropriate to the mission and instructional program for the college partnership laboratory school.

The UVA Innovation Hub will be embedded within Charlottesville Middle School (currently Buford Middle School), which is the sole middle school in the Charlottesville City School Division serving 7th and 8th grade students. In the 2026/27 school year, all 6th grade students will join CMS.

Has the school obtained a valid Certificate of Occupancy for Education? N/A

Description of the Facility:

- Total square feet:
- Number of Classrooms:
- Number of Restrooms:

Other Rooms:

- Cafeteria
- Auditorium:
- Gymnasium:
- Music Room:
- Art Room:

Laboratory:

Ownership: Fee Simple Lease

Describe the method of finding a facility if one is not readily available currently including information about the spatial needs of the school to best suit your adopted educational program and instructional methodologies.

If the college partnership laboratory school is going to be a partnership with an existing local school district, provide a describe the facility space including total square footage, number of classrooms, restrooms and Other Rooms that will be dedicated to the college partnership laboratory school.

The UVA Innovation Hub will be embedded in Charlottesville Middle School (currently Buford Middle School). The school is currently undergoing a $100 million dollar renovation that is scheduled to be completed for the 2026/27 school year. The science and engineering classrooms and labs are not being updated as part of that renovation. We will use lab school startup funding to prepare the science classrooms to support the UVA Innovation Hub. The UVA Innovation Hub will be a flexible space with tools and materials to support students in designing, prototyping, and testing computation-rich and community-based projects, and a space where researchers, preservice teachers, and community members will be able to engage with students.

Provide a comprehensive facilities plan, including any backup or contingency plans. Facilities information must include:

(1) the provision of suitable instructional space.
(2) provisions for library services.
(3) provisions for the safe administration and storage of student records and medications.
(4) information regarding compliance with building and fire codes and compliance with the
federal Americans with Disabilities Act.
(5) general information on emergency evacuation plans.
(6) information regarding site location and preparation.
(7) the structure of operation and maintenance services; and
(8) financial arrangements for facilities, including any lease arrangements with school divisions
or other entities and whether debt will be incurred.

Find the facility plan details in section 6.7 of this application.

Is the applicant a public, nonsectarian, nonreligious school in the Commonwealth established by a public institution of higher education, public higher education center, institute, or

authority; or an eligible institution, as defined in § 23.1-628 related to the Tuition Assistance Grant Program?

Yes

Proposed Opening Date**:** We plan to do a soft launch in the Fall of 2024, with the UVA Innovation Hub serving all seventh grade students in CMS. We will add capacity for 8th grade students in year 2 and 6th grade students, when they join CMS, in year 3.

Grades to be Served for the Full Term of the Contract (Check All That Apply) *			
Pre-K	☐	Sixth Grade	X
Kindergarten	☐	Seventh Grade	X
First Grade	☐	Eighth Grade	X
Second Grade	☐	Ninth Grade	☐
Third Grade	☐	Tenth Grade	☐
Fourth Grade	☐	Eleventh Grade	☐
Fifth Grade	☐	Twelfth Grade	☐

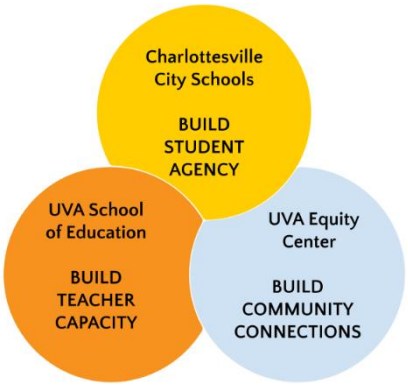
*If the college partnership laboratory school intends to add or change grade levels at some point during the school's operation, provide this information in the education program section of the narrative.

If the college partnership laboratory school is going to have a specialized focus (e.g., Science, Technology, Engineering, Mathematics [STEM], at-risk students, special education, career and technical education, gifted education), describe the specialized focus and why this focus was chosen to address the needs of students in your location:

The lab school will have a specialized focus on infusing STEM and computer science (STEM+CS) education including data science through project-based learning (PBL) experiences. PBL has been shown to increase student engagement, address 21st century learning competencies and lead to positive development and learning outcomes (Drake & Reid, 2020). STEM+CS pedagogical approaches, such as experimentation and collaboration, engage students in creating new technology to solve real-world problems. This specialized focus was chosen to help address student performance on the Virginia Science Standards of Learning (SOL) assessments as well as help teachers meet the Virginia Computer Science SOL's that call for CS to be integrated into K-8 core content.

If the college partnership laboratory school is going to be in partnership with local school division(s), name the school division(s) and describe the agreement between all the parties or

provide a copy of the agreement that set the terms and conditions of the relationship(s), including the distribution of responsibilities of the partnership briefly.



The lab school is in partnership with Charlottesville City Public Schools (CCS) and builds upon a rich history of collaboration with the UVA School of Education and Human Development (EHD). For example, in 2016, CCS and UVA collaborated on the iSTEM initiative, with the goal to teach foundational concepts, assist teachers in making math-science-technology connections, and integrate STEM and design activities for all students throughout the division. CCS and UVA EHD expanded their relationship in 2019 when they established a research-practice partnership with funding through a Virginia State Department of Education Advancing Computer Science grant and worked with three cohorts of K-8 teachers across three summers to help them integrate CS into their classrooms (Wilkens et al., 2021).

The UVA Equity Center is the third partner in the lab school (Figure 1). The Equity Center aims to serve local communities by bringing rich research resources to bear on the work of redressing poverty and racial inequality, and also equip students to lead in building a just society. The Equity Center has built strong community partnerships and worked closely with CCS to connect students to the local community.

For this application, we have drafted an initial Distribution of Responsibilities (Appendix B) among UVA EHD, CCS, and the Equity Center. If the UVA Innovation Hub at Charlottesville Middle School is granted lab school status, we will seek representation and counsel as appropriate to create a Memorandum of Understanding (MOU) formalizing the distribution of responsibilities and the terms and conditions of the partnership.

Contact Information

Name of Individual/Organization Submitting Application:	**University of Virginia**		
Name of Contact Person for Application:	Kim Wilkens		
Title/Affiliation with Individual/Organization Submitting Application:	Education and Outreach Director		
Office Telephone:	**434-825-3698**	Mobile Telephone:	**434-825-3698**
Fax Number:		E-mail Address:	**ksw8y@virginia.edu**

Prior Experience

1. Has the applicant had any prior experience operating a college partnership laboratory school or similar school?
   Check one of the following: Yes ☐ No ☒

2. If the response to the question above is "yes," describe any prior experience with establishing and operating college partnership laboratory schools and/or similar schools. Provide information such as the name of the school, the state where it is located, years of operation, and contact information for the school. If the school is no longer operating, provide the reason(s) for closure:

3. Describe the relevant experience of the applicant or members of the college partnership laboratory governing board:

   The UVA Schools of Education and Human Development and Engineering and Applied Sciences partnered with CCS on a lab school planning grant and launched the Buford Engineering Design Academy in 2013. The funding provided by the Commonwealth of Virginia and a National Science Foundation grant was matched by the Charlottesville City Schools which resulted in new facilities, equipment, and an engineering curriculum at Buford. The research and curriculum development from this lab school were incorporated into the Engineering by Design program that is now taught by 5000 teachers worldwide. Although the planning grant effort was not turned into a formal lab school, it has become an integral part of Buford's current engineering program which includes a one-semester Engineering Foundations elective class for 7th or 8th-graders and a year-long Engineering I class for 8th-graders.

The proposed lab school between the University of Virginia (UVA) and Charlottesville City Schools (CCS) Division leverages UVA's expertise in positive youth development, science, technology, engineering, mathematics, and computer science (STEM+CS) education, teacher education to empower students to use and create computing technologies to solve relevant, authentic, and community-based problems. UVA will bring together various resources and expertise from Teacher Education, the Equity Center, the Remaking Middle School and the Youth-Nex programs, the School of Data Science, and the School of Engineering and Department of Computer Science.

Contact Information – Institution of Higher Education Partner

Name of Contact Person for Application:		Kim Wilkens	
Title/Affiliation with the Institution of Higher Education:			Education and Outreach Director
Office Telephone:	**434-825-3698**	Cell Telephone:	**434-825-3698**
Fax Number:		E-mail Address:	**ksw8y@virginia.edu**

Part B: Description of Proposed Laboratory School

The application narrative must contain all of the elements in § 22.1-349.5 of the *Code of Virginia*.

I. ELEMENT 1 – Executive Summary

1. Describe briefly, in no more than 500 words, the focus, goals and objectives of the proposed college partnership laboratory school. Highlight the innovations this school plans to bring to its educational vision for students. This description will be used in public releases of information to interested parties, such as: the media, the State Board of Education, parents or guardians, school systems, and in various documents produced by the Governor's Office. It must be concise and relate directly to the mission of the school.

The UVA) Innovation Hub at Charlottesville Middle School builds on a rich history of collaboration between Charlottesville City Schools (CCS) and the School of Education and Human Development (EHD) at the University of Virginia. Central to this lab school's mission is enhancing student outcomes through a blend of computationally-rich, project-based learning combined with community-based partnerships to engage all students in personally meaningful and interdisciplinary learning experiences. The lab school is more than a mere space for skill acquisition; students are encouraged and supported to synthesize knowledge from various disciplines through interdisciplinary projects and capstone initiatives, reflecting the lab school's commitment to holistic, experiential education.

The lab school will be founded on three guiding principles to improve student outcomes:

1. Developing a community of practice around education that incorporates interdisciplinary, project-based, computationally-rich learning experiences.
2. Engaging students by incorporating their voices and choices throughout the learning process.
3. Making meaningful community connections to engage students, teachers, and families in real-world problem-solving, mentorship, and career explorations.

Research science has increasingly identified early to mid-adolescence – youth aged 10-15 in grades 4-9 – as the most consequential developmental period outside early childhood. Yet, middle school years are the most under-addressed segment along the pre-K through post-secondary continuum despite the evidence showing adolescence is a substantive period of development and critical inflection point for subsequent academic performance and social and emotional well-being. Improving the quality of the middle school experience, especially for underrepresented youth, can significantly shift the educational trajectory for those students who are most at-risk.

By transforming school experiences in a way that elevates the developmental needs of young adolescents through student-driven, community- and design-based projects, our lab school aims to elevate the voice and agency of middle school students in ways that

align with research-based practices for positive youth development and asset-based pedagogy (Ryoo et al., 2013). This approach addresses current high-priority needs at CMS including:

1. Increasing student engagement in school and in Science.
2. Professional development that helps teachers connect different content areas in a way that is relevant to and builds on the assets of their students.
3. Increasing student performance on state assessments.

The lab school partnership supports UVA goals. The EHD at UVA is one of the leading education schools in the country with a mission to foster authentic partnerships to spur transformative change in education through rigorous practice-informed scholarship and professional preparation. As with national trends, the EHD has seen fewer teacher candidates pursuing STEM fields (Feder, 2022). The UVA Innovation Hub provides opportunities for the EHD to strengthen its partnership with CCS, to work with pre- and in-service teachers to help them unlock powerful student-driven, interdisciplinary, inquiry-based learning experiences, and share the outcomes of this work to the education community. In addition, the UVA Equity Center aims to prepare students to be responsible, respectful and impactful citizen-leaders and professionals through community-engaged research. The UVA Innovation Hub provides the opportunity for the Equity Center to address goals such as strengthening its partnership with CCS and expanding its pipeline programs in K-12.

2. Sustainability Plan Overview

   For Lab Schools, sustainability requires constant refocusing and reinforcing of school models by engaging not just staff and students, but also community partners and other stakeholders, in both the "why" and "what" of the school. Describe your plan for initiating the school community and stakeholders to help you develop practices and next steps that will reinforce the proposed Lab School model. Include the following factors in your response:

   - What resources (e.g., financial, political capital, staff talents and interests) will support the proposed model?
   - What regular check-in structures are in place to ensure continued efficacy of the proposed school/programs?
   - What community and/or non-profit partnerships will be developed?
   - What public sector leaders and private corporations are interested in our work?
   - Who is the coalition/advisory group of supporters who will champion the school externally?

   Engaging stakeholders has been at the heart of our planning grant work and we have a strong model for engaging the community in our proposed lab school. During this year, we have engaged a variety of stakeholders:

   - Science teachers at CMS have been engaged in the lab school work through the Curriculum Design Accelerator this summer and continue to be engaged through coaching, mentoring, and role modeling.
   - We engaged a wide variety of community stakeholders including WillowTree, C4K, UVA School of Data Science, UVA Biomedical Engineering,

STEAMKITX, Barron Associates, and Tech-Girls by establishing and running the CS Pathway through the Starr Hill Pathways.

- The Boys and Girls Clubs of Central Virginia, who works closely with CCS as many CCS students are involved in BGC out-of-school programs, will host a Random Hacks of Kindness Jr. for regional middle school students that will provide a model for engaging students in real-world problem solving with mentors from industry and a local non-profit.
- We have provided lab school updates to the CCS School Board, Buford PTO and the general public.
- In the final quarter of the planning grant and beyond, we will focus efforts to engage CCS families and students through focus group sessions that will eventually lead to a family/student advisory council for the lab school.

Charlottesville and its surrounding region boast a thriving and expanding technology sector. Businesses and organizations dedicated to advancing the area's innovation and technology-based economy recognize the critical need to cultivate an educator pipeline capable of imparting essential workforce skills demanded by the 21st-century economy. Leveraging this dedication, we aim to enhance the sustainability of the UVA Innovation Hub by actively pursuing diverse avenues for collaboration, including internships, externships, mentoring, job shadowing, and sponsorships, to bolster and magnify the workforce development pipeline. Our efforts toward this work have already been recognized by the Charlottesville Business Innovation Council as the Lab School Partnership was named as a finalist for their Partnership award in May 2023.

The lab school will leverage the UVA EHD Foundation. The UVA EHD foundation is the official fundraising organization for the school, whose mission is to advance the teaching, research, and outreach programs of the school. The lab school will work in close partnership with the development team and the continued generosity of alumni, parents, and friends of the school. For example, the foundation recently launched *Tomorrow's Teachers Fund* (Appendix C), which is a campaign aimed at increasing access to high-quality teacher preparation, reducing the cost of becoming a teacher, improving teacher quality, and increasing compensation for teachers. We plan to use an innovative approach to recruiting and retaining STEM teachers to the lab school by using an "endowed" chair model (Robinson & Candal, 2023). An endowment model provides for higher salaries, state-of-the-art technology, and funding professional development for the UVA Innovation Hub Lab Manager and teachers participating in the Innovation Academy Fellowship. The lab school startup funds will initiate the position and the fellowship and UVA will work with corporate sponsors and philanthropists to endow the position.

A big component of this lab school effort is to do research around innovations in teaching and learning. UVA is a leader in research funding, with EHD bringing in $58.1 million in 2022. With the UVA lab school we will be able to apply for grants from federal and foundation sources to study different aspects of the lab school. We will also leverage partnerships with other schools at UVA, namely the School of Engineering and Applied Science and the School of Data Science, who have already expressed interest in collaborating on research grants for the lab school. Together the

research grants and EHD Foundation efforts will sustain the lab school at UVA, including technology and other resource replacements after the initial startup funding.

II. ELEMENT 2 – Mission and Vision

State the mission and vision of the proposed college partnership laboratory school. The following components must be addressed:

1. A description of the college partnership laboratory school's mission and vision.

   The mission of the UVA Innovation Hub at Charlottesville Middle School is to engage all students in personally meaningful, computationally-rich and interdisciplinary learning experiences.

   The vision of the UVA Innovation Hub at Charlottesville Middle School is to provide educational opportunities that inspire curiosity, fuel innovation, and empower all students to solve problems and pursue lifelong learning.

2. An overview of how the college partnership laboratory school will comply with the following:

   - College Partnership Laboratory Schools, § 22.1-349.3 of the *Code of Virginia*.
   - *Standards of Quality* (SOQ), § 22.1-253.13:1 through § 22.1-253.13:8.
   - Virginia *Regulations Establishing Standards for Accrediting Public Schools in Virginia* (SOA), 8VAC20-131-390 through 400; 8VAC20-131-420 through 430.

   The UVA Innovation Hub at Charlottesville Middle School will adhere to the provisions of § 22.1-349.3 of the Code of Virginia through its partnership between UVA and CCS. The lab school will be embedded in CMS. The lab school will make use of the existing out-of-district application process in place at CCS and modify it to support a lottery system. Lottery seats will be based on availability. A governing board will operate the lab school including budget preparation, contracts, and personnel matters and other responsibilities outlined by an MOU between the partners. CCS consistently upholds the Standards of Quality (SOQ) as specified in sections § 22.1-253.13:1-8. The CCS commitment to the Virginia Regulations for accrediting public schools, especially the SOA sections 8VAC20-131-390 to 430, is consistent and strong.

3. A description of any specific area of academic concentration.

   Our research-based methodology emphasizes integrating computer science along with data science into STEM education, igniting students' curiosity, encouraging lifelong learning, and highlighting the relevance and significance of science in their everyday lives and future careers (e.g., Ryoo et al., 2013). By fostering these real-world

connections, we enable students to evolve into critical thinkers and problem solvers, ready to contribute actively to their communities. The ultimate aim is to equip them for academic success and prepare them for their future careers and endeavors.

4. The college partnership laboratory school's strategic academic goals and core philosophy in alignment with a performance-based assessment model.

   Our philosophy is grounded in educational research that underscores the importance of fostering active student participation and autonomy in learning, (e.g. Barron et al., 1998, Hmelo et al., 2007, Huberman et al, 2014, National Academies of Science, Engineering, and Medicine, 2021). By infusing technology and computer science within the science curriculum, we enable learners to actively participate in their educational journey. Students are equipped with essential tools and resources for exploration, discovery, and creativity, thereby encouraging a sense of self-agency within their academic experiences.

5. Identify and describe in detail the college partnership laboratory school's targeted student population.

   The lab school will serve all students at Charlottesville Middle School (currently Buford). In the 2022-23 school year, Buford Middle School served 302 7th and 281 8th-grade students. Fall membership by subgroup reported for 2022 included students classified by the division as: 30.4% Black, 36% White, 14.8% Hispanic, 13.2% Multiple races, and 5.7% Asian, with 76.7% qualified for free and/or reduced lunch.

   In 2026, all 6th grade students in the Charlottesville City Schools will start attending Charlottesville Middle School. In 2022-23, there were 299 6th grade students enrolled in Walker Upper Elementary School. Fall membership by subgroup reported for 2022 included students classified by the division as: 26.6% Black, 38.9% White, 14.6% Hispanic, 14.3% Multiple races, and 5.7% Asian.

	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
6th grade			300	300	300
7th grade	200	300	300	300	300
8th grade		300	300	300	300
Total students	**300**	**600**	**900**	**900**	**900**

The UVA lab school model enriches the entire educational environment at Charlottesville Middle School by ensuring every student participates in the unique offerings of the UVA Innovation Hub. The lab school acts as a dynamic center for experiential learning, where 6th-grade students begin their middle school journey with

a focus on exploring diverse interests and developing essential technical and real-world problem-solving skills. As students progress to 7th grade, they undertake two comprehensive, interdisciplinary projects designed to provide practical experience and exposure to various industries, enhancing their understanding of real-world applications of their studies. The culmination of this integrative lab school experience is seen in the 8th grade, where students develop capstone projects. These projects represent a synthesis of their learning journey and prepare them for future academic and professional challenges.

6. The innovative nature of the academic program or operational aspects that can model future best practices for other schools within the Commonwealth. For the purposes of this question consider innovation as the application of a promising or well-theorized educational principle that the university is poised to support within the academic environment of this school.

   The UVA Innovation Hub at Charlottesville Middle School aims to meet the three main goals: developing a community of practice; engaging students' voices and choices in learning; and making meaningful community connections that are each based on evidence-based practices for middle school youth (Figure 2). Thanks to the lab school planning grant, we were able to launch a variety of initiatives that will become the building blocks for the UVA Innovation Hub. The lab school will also employ a fellowship model through the Innovation Academy to provide support for and incentives to teachers who engage with the UVA Innovation Hub. As we research, evaluate, and iterate these programs, we will look for opportunities to model and share the successes throughout the Commonwealth.

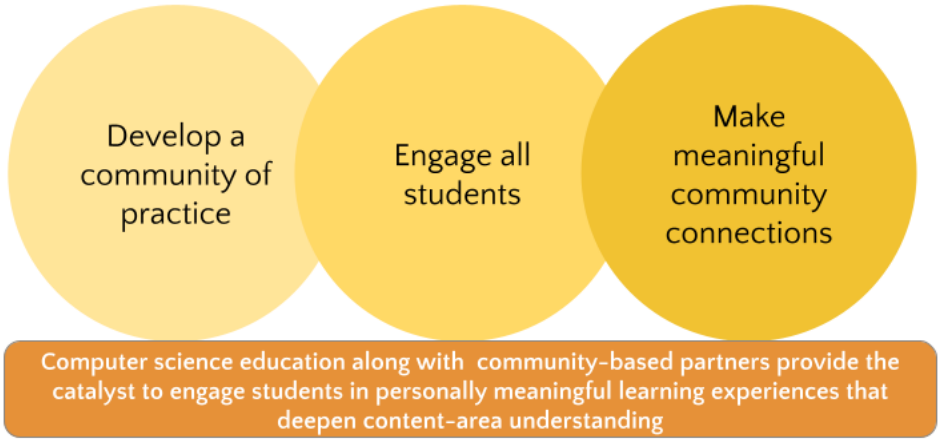


Figure 2: Lab School Guiding Principles

To develop a **community of practice around education that incorporates interdisciplinary, project-based, computationally-rich learning experiences**, we launched the summer Curriculum Design Accelerator (Appendix D) in 2023 to support pre- and in-service teachers to develop confidence in integrating computationally-rich

activities in student-driven, project-based learning experiences, to apply equitable teaching strategies that foster students' positive identity development and their sense of belonging in STEM fields and to leverage community-based resources and assets with students to solve locally relevant problems.

We will continue to bring pre- and in-service teachers together throughout the school year with the placement of UVA EHD Master of Teaching candidates in internships and undergraduate teacher candidates in practicum experiences in the UVA Innovation Hub. In addition, the UVA Equity Center will provide substitute teacher coverage during the school year, to allow for ongoing PD opportunities for in-service teachers.

The UVA Innovation Academy Fellowship is a testament to University of Virginia's School of Education and Human Development's investment in the educational advancement of Charlottesville Middle School. This fellowship is tailored to provide substantial support to six CMS educators annually. Designed as a year-long, cohort-based program, it offers flexibility to meet the unique learning needs of each teacher. These include personalized coaching and mentoring, tailored professional learning experiences, and valuable externship opportunities, leveraging UVA's extensive network and resources. This collaboration is focused on empowering educators to implement student-driven, computationally-rich Project-Based Learning (PBL) experiences, utilizing community assets effectively. The fellowship culminates in the awarding of a certificate of completion from UVA EHD, symbolizing the professional growth and development achieved by the participants. Through this fellowship, UVA demonstrates a strong commitment to enhancing the quality of education at CMS and fostering a sustainable, innovative educational ecosystem.

To **engage students by incorporating their voices and choices throughout the learning process**, students will engage in solving personally relevant and meaningful problems in the UVA Innovation Hub. We piloted these approaches by creating the CS pathway as part of the UVA Equity Center's Starr Hill Pathways. This 3-week summer program was designed to offer Charlottesville area youth, career, and college exploration opportunities. The purpose of the CS pathway is to provide students the opportunity to explore computer science concepts through hands-on activities and to use their newfound knowledge and skills to solve real-world problems. In addition, participants gain exposure to CS-related career pathways with guest speakers and field trips. The interdisciplinary project-based activities were designed to give participants a lot of choice within well documented design constraints and to give participants a variety of ways to express their creativity.

The CS pathway also serves as a catalyst for the Curriculum Design Accelerator where pre- and in-service teachers get an opportunity to see and engage with examples of projects that integrate computer science concepts, engage student interest, and connect with community partners. The UVA Innovation Hub Lab Manager will work closely with UVA EHD Curriculum & Instruction faculty, Science Learning Facilitator, and

Science teachers at Charlottesville Middle School to incorporate and support these types of project-based, student-driven learning experiences during the school year.

The lab manager will routinely collect student feedback regarding their aspirations and interactions with the UVA Innovation Hub and present it to the governing board. Additionally, a council comprising families and students will be set up to provide insights and comments to the lab school's governing body.

To **make meaningful community connections to engage students, teachers, and parents in real-world problem-solving, mentorship, and career explorations**, we will build upon the wide network of partners we developed during the planning year. We engaged community partners C4K, a local nonprofit that provides technology-based mentoring to middle school youth and WillowTree, a full-service digital product consultancy with over 1,000 team members during the summer CS Pathway. C4K recruited guest speakers in biomedical engineering and ran hands-on activities to inspire two cohorts of students during the CS Pathway. They also provided space and inspiration for pre- and in-service teachers during the Curriculum Design Accelerator. Their space is a great model for the UVA Innovation Hub and the methodology they employ with their members offers many wonderful examples of student-driven PBL. WillowTree also hosted two cohorts of students from the CS Pathway at their new headquarters in Charlottesville. During their time at WillowTree, students experienced the usability lab as a product designer would, bringing in their video game controller prototypes to test and experience giving and getting usability feedback on their designs. They also got more behind-the-scenes time, touring the 85,000 square feet state of the art space and having small group time to interact with employees to learn about what it's like to work in tech and the wide variety of opportunities that are available.

We are also working with the Boys & Girls Clubs of Central Virginia to host a Charlottesville Random Hacks of Kindness event to engage young people in a hackathon experience where they learn new skills, collaborate, think creatively, problem solve, and communicate their vision of applying technology to achieve social good. The annual event will be a UVA Innovation Hub outreach endeavor that will connect industry and community partners with the lab school efforts resulting in sponsorships, job shadowing, classroom guest and mentors, and real-world problem statements that can then be integrated into the UVA Innovation Hub curriculum during the school year. For future iterations, we envision lab school students will be engaged during the school year in planning, organizing, and running the event.

The UVA Innovation Hub director will work closely with these community partners and the UVA Equity Center's Community Partnerships Program Manager to establish and strengthen community connections for students and teachers. These community connections will support student career explorations, real-world problem solving, mentorship opportunities for teachers and students.

III. ELEMENT 3 – Educational Program and Statutory Assessments

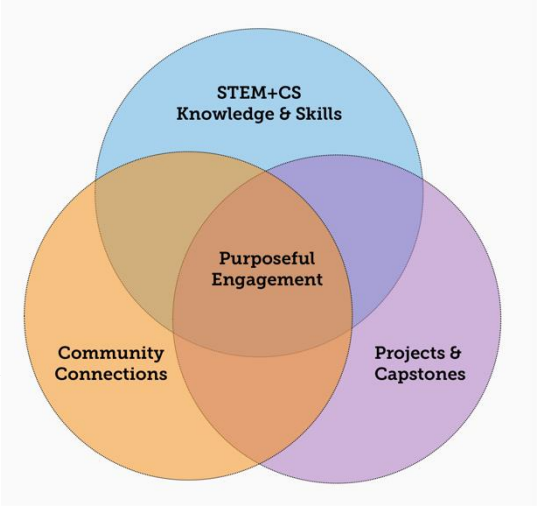
State the goals and objectives to be achieved by the college partnership laboratory school, which must meet or exceed Virginia Board of Education's Standards of Learning. Give thorough explanations and answer all sections completely.

1. A description of the college partnership laboratory school's academic program, educational theory, foundation of the model and proposed innovative offerings and how it is aligned with state standards.

   Keisha walks a mile to school because there is a bus driver shortage at CCS. She notices that on some of the smaller streets the sidewalks are not as well maintained as on the larger streets. She often must walk in other people's yards and try to stay away from cars. She brings this back to her project cohort meeting in the UVA Innovation Hub and learns that many other of her peers share this same problem. With the support of their teachers, the group ideates a variety of approaches to address this problem – researching traffic patterns during school commutes, investigating ways to make pedestrians more visible, and researching city policies on how sidewalks get created and maintained. They decide to ask community experts to come into their project meetings to help provide relevant information and data and then go out to the different walking paths as a project team to explore the context. Working together with community leaders and experts, students decide to decompose this larger problem into smaller sub-problems, and work in groups to address specific tasks of their choosing. Some students choose to create a presentation to the community about investing in safer sidewalks, including costs, benefits (Science PS.8), and challenges. Other students choose to create an app where students can annotate (Science PS.5) walking paths around the school with relevant information from their friends and peers. Another group decides to create their own Lab School walking vest that lights up (Science PS.9) in sync with music that they play while walking to and from school.

   The core of this lab school is providing these kinds of transformative and research-based effective learning experiences for students and teachers grounded in authentic, community-based, and computationally-rich projects. Research across different educational disciplines and domains underscores the importance of school environments that: actively engage students in learning; connect to the local community with involvement from parents and guardians; provide personalized learning in spaces that are physically and emotionally safe; challenge each student to reach their full potential; and prepare students for success in college or future employment in the global workforce (Lewallen et al., 2015). For example, a recent consensus report published by the National Academies that summarized decades of research on how people learn emphasized the effect of learners' social and cultural contexts on individual brain development and how school environments should: (1) engage the learner to direct their own learning through setting goals and challenges that are personally meaningful; (2) use asset-based approaches that support all learners to connect out-of-school experiences and build upon learners' prior knowledge, interests, and experiences in their social and cultural contexts; and (3) purposefully engaging students in disciplinary practices to help students develop a deep understanding of subject areas instead of rote memorization of concepts (National Academies of Science, Engineering, and Medicine, 2018).

The UVA Innovation Hub provides a learning environment where students have agency and voice to pursue questions and problems of consequence to their lives. Within these projects, students have hands-on experiences with specific content objectives to concretize and motivate in depth learning. Breaking down the walls of content classes enables the lab school to put together innovative interdisciplinary approaches that address VA SOLs across domains. For example, to create a presentation to the community about sidewalk use, students would need to engage in a variety of research approaches (English 8.9), ask questions, define problems, plan and carry out investigations (Science PS.1), be able to solve area and perimeter problems (Mathematics 8.10) with graphs of data (Mathematics 8.12 and 8.13), understand how public policy is made at the local level (Civics CE.10), evaluate how civic and social duties address community needs and serve the public good (Civics CE.3), use interview techniques to gather information (English 8.1) and develop oral presentations (English 8.2). In this way, students create customized learning trajectories of standards-based content that are rooted in their own experiences and interests.



Research demonstrates that learning experiences that are relevant and meaningful to students result in durable student understanding of content and skills (National Research Council, 2000; 2018). Students engaged in authentic, interdisciplinary project-based work that integrates content understanding with disciplinary practices see increases in student learning outcomes. Moreover, learning that builds on students' assets and resources helps students feel valued and empowered in classroom settings. The emphasis on computer science will help prepare students to be college and career ready, and the collaborations with experts at the University and community members will enable students to be exposed to a range of careers. Long-term outcome goals include increased student performance on state standardized tests, increased teacher retention, reduced student absenteeism, and increased awareness of different careers.

2. An overview of the curriculum design, courses of study, teaching approach, teaching methods, and a description of the learning environment to be used at the college partnership laboratory school. Include research-based instructional strategies and/or educational theories to ensure that student engagement and achievement are occurring that align with the school's mission.

Middle school years mark a pivotal phase in adolescent development. According to Blakemore & Choudhury (2006), it is during this period that the brain undergoes its most significant transformations since early childhood. Furthermore, Nagaoka et al. (2015) highlighted the lasting impact of choices made during adolescence, noting that academic and socio-emotional decisions during these years significantly influence future performance and overall well-being.

At this pivotal stage, young adolescents have distinct educational needs. They value autonomy, strive for competence, and seek a sense of belonging. Taking charge of their learning, setting definitive goals, and cultivating metacognitive and self-regulating skills become essential. With heightened attention to peer dynamics, it is crucial for middle schoolers to envision themselves in diverse academic roles. However, despite extensive research advocating these methodologies, many educational structures remain rooted in outdated industrial models characterized by rigid schedules, compartmentalized subject teachings, and teacher-centric learning environments.

The evolving landscape of educational policies at the national level and in Virginia offers a beacon of change. The emphasis is progressively shifting towards competency-based, interdisciplinary instructional methodologies. These paradigms empower students to craft their learning objectives, partake in project-based endeavors, and teach a growth mindset. Such a shift not only fosters peer collaboration but seamlessly integrates community and project-based learning, yielding an educational experience that is more holistic and authentic.

Numerous studies, including those by Barron et al. (1998) and Blumenfeld et al. (1991), promote the benefits of project-centric learning. Zeiser et al.'s (2014) 'Study of Deeper Learning' revealed that institutions with this approach outperform traditional ones. Such schools showcased elevated levels of student collaboration, engagement, and self-confidence. Also, their graduation rates surpassed those of conventional schools. Chiu et al. (2013) further substantiated these findings, showing seventh graders engaged in interdisciplinary projects excelling in state mathematics tests.

The Lab School envisions transitioning from traditional pedagogies to a model emphasizing student-centric, project-based learning with a foundational emphasis on computer science (CS). Recognizing potential gaps in middle school educators' CS proficiency, the school's strategy will be to promote simultaneous learning for both teachers and students. This shifts the educators' role from mere information dispensers to collaborators, as underscored by Goode et al. (2014).

Key to this transformation are specific research-backed teaching strategies:

- The integration of high standards with practice-based teaching, moving away from teacher-centric methods (Windschitl & Calabrese Barton, 2016).
- Leveraging students' existing knowledge base and interests to shape computationally-rich projects (González, 2006; Ryoo et al., 2020).
- Cultivating a learning environment that challenges prevailing computing stereotypes (Margolis et al., 2008 & 2012).

The Lab School's strategy revolves around integrating computer science into core subjects such as science, mathematics, and social studies. In science, computational methodologies serve alongside theory and investigations. Language Arts can utilize CS for digital narratives and in-depth textual analyses. Social studies can harness computational tools for rich historical insights. This enriched curriculum aims to provide students with the skills essential for the modern workforce. Engaging in work-based learning modules will offer them a glimpse into industry norms. Collaborative programs,

like co-ops and apprenticeships, will ensure mentorship and hands-on experiences. The intent is not just to familiarize students with diverse career paths but to enable them to envision their success within these domains. Periodic evaluations, through surveys and interviews, will ascertain curriculum alignment with professional preparedness.

The Lab School's forward-thinking approach aims to redefine the landscape of middle school education. By seamlessly integrating computer science into traditional subjects and emphasizing student-driven, project-based learning, the school is poised to meet the dynamic needs of today's learners. Leveraging robust teaching techniques and fostering an inclusive milieu, the institution will sculpt a future-ready generation. As we look forward to this transformative journey, The Lab School's students are undoubtedly poised to lead the next educational frontier.

3. Who will be developing/designing/creating educational content and guidelines for the college partnership laboratory school? Provide a background on their credentials and experience.

   Dr. Tonya Coffey holds a Doctorate in Curriculum and Instruction and has a diverse educational background. Her expertise covers teaching in K-6 classrooms, tutoring, instructional design, and integrating technology and computer science into education. She has experience providing professional learning to fellow educators. As the Coordinator of Science and Innovation at CCS, Dr. Coffey ensures that the iSTEM, engineering, and computer science programs consistently uphold high standards and remain aligned with the latest educational practices.

   Dr. Kim Wilkens holds a Doctorate in Curriculum and Instruction and is currently an Education and Outreach Director at the UVA EHD. As the K-8 CS Coordinator at an independent school for 6 years, she built the K-8 CS program from the ground up based on a methodology of working with the K-8 teachers to integrate CS into their curriculum. She has extensive experience creating and delivering professional learning experiences to empower K-8 educators to create equitable CS experiences for all their students.

   Dr. Jennifer Chiu holds a Ph.D. in Education in Mathematics, Science, and Technology and is currently an Associate Professor in the Department of Curriculum, Instruction, and Special Education at the UVA EHD. She has extensive experience developing educational curricular materials, with multiple federal, state, and foundation-funded projects to develop, implement, and research evidence-based, computationally-rich experiences for K-12 students and teachers nationwide.

4. A description of how the curriculum and/or course of study will rely or build upon the local school division’s sequence of study. Describe any prerequisite course work requirements as well as course requirements for graduation (if the college partnership laboratory school is to be high school).

The UVA Innovation Hub embodies the major tenets of a lab school including innovation, curriculum development, professional growth, research, and teacher preparation. Our model significantly enhances the curriculum for grades 6-8 at Charlottesville Middle School by integrating computer science-based interdisciplinary projects. Beyond aligning with the local school division's sequence of study, the lab school enriches it with advanced methodologies, interactive experiments, and real-world applications. This approach provides students with foundational knowledge from the local division, augmented by the lab school's specialized curriculum enhancements. We aim to deepen understanding and ignite a passion for science and computer science, preparing students for advanced studies and inspiring lifelong learning. The lab school model here is designed to prepare students for advanced academic pursuits and instill a lifelong passion for these subjects, effectively positioning them for future educational and career opportunities in a rapidly evolving technological landscape. Students completing their 8th-grade capstone project will have a distinct advantage — robust skills, including critical thinking, problem-solving, and interdisciplinary knowledge. These skills and their project experience will provide a strong foundation for their high school education and beyond, giving them an edge in both academic and real-world settings.

The lab school will build on the proposed elective and Career and Technical Education (CTE) pathway for grades 6-12, which complements the current K-8 Innovation Pathway and the K-12 FutureWISE pathway envisioned by CCS. This cohesive structure aims to prepare students for the future by fostering world-ready, innovative skills and education. The UVA Innovation Hub builds on the 2023-28 Charlottesville City Schools Strategic Plan by expanding opportunities for middle school students to Increase Academic Achievement, increasing family/student engagement to Provide a Culture of Safety, Wellness, and Belonging, increasing the retention rate of teachers and effectiveness of professional learning to Support Our Staff.

5. A description of plans for identifying, evaluating, and successfully serving students with disabilities, students who are English Language Learners, students who are academically behind, and gifted students including the planned processes for compliance with applicable laws and regulations.

The UVA Innovation Hub at Charlottesville Middle School is committed to inclusively serving a diverse student body, including students with disabilities, English Language Learners (ELL), academically challenged students, and gifted students. In alignment with CCS procedures, we will actively implement strategies for identifying and evaluating these students' unique educational needs. For students with disabilities, our lab manager will collaborate with CMS administration and teachers to support the effective implementation of Individual Education Plans (IEPs) and 504 plans, ensuring compliance with the Individuals with Disabilities Education Act. ELL students will receive specialized support tailored to their language development needs, fostering their academic growth and integration. We will employ intervention and remediation programs for academically behind students to align them with the academic standards. Gifted students will be engaged through an appropriately differentiated educational

program, developed by the Board of Education regulations and reviewed annually by a local advisory committee. This approach to education ensures all students receive the necessary support and enrichment to thrive academically, in full compliance with state and federal laws and regulations.

6. A description of planned procedures of how the college partnership laboratory school will provide assistance to students who are not performing at expected levels to ensure the continued progress of student growth. The applicant needs to define their "expected levels" of performance and delineate a plan for corrective actions in the event that pupil performance at the college partnership laboratory school falls below the standards outlined in the SOA. (*See* Part VIII of the SOA.)

   The Lab School will establish clear "expected levels" of performance based on the state's Standards of Quality (SOQ) and internal academic benchmarks. When students do not meet these levels, CCS MTSS-based intervention offers small group sessions and focused remediation to ensure continued student growth. Continuous monitoring tracks the effectiveness of these interventions. If the collective performance at the Lab School falls short of the SOA standards, particularly those detailed in Part VIII, a corrective action plan will be initiated. This plan encompasses a thorough review and refinement of our teaching methodologies, curriculum, and resources, all aimed at upholding the standards and ensuring every student's academic progression.

7. Information regarding the minimum and maximum enrollment per grade for the full term of the contract as well as class size and structure for each grade. (*See* § 22.1-253.13:2 of the *Code of Virginia*.)

   Given that the lab school will be within Charlottesville Middle School, we will adhere to the existing minimum and maximum enrollment for Charlottesville Middle School and existing class size and structure.

8. The proposed calendar which includes at least 180 days of school and sample daily schedule which outlines proposed benchmarks for any innovative school schedule(s).

   The UVA Innovation Hub at Charlottesville Middle School will follow the CCS academic calendar. The UVA Innovation Hub lab manager will work with the CCS Science and Innovation Coordinator and Charlottesville Middle School administrators to ensure all students have scheduled time in the UVA Innovation Hub as outlined in the MOU. As an example, all 7th and 8th grade students will have time scheduled in the UVA Innovation Hub one core per week.

Table 1: UVA Innovation Hub Sample Schedule

A-Day	7th grade	7th grade	8th grade	8th grade
1 - 8:30	Core 1A		Core 1A	
2 - 9:18		Core 1A		Core 1A
3 - 9:52				
4 - 10:40		Core 2A (with lunch)		Core 2A
5 - 11:28			Core 2A	
6 - 11:56	Core 2A			
7 - 12:27		Core 3A		
8 - 1:18	Core 3A		Core 3A	Core 3A
9 - 1:58				

B-day	7th grade	7th grade	8th grade	8th grade
1 - 8:30	Core 1B		Core 1B	
2 - 9:18		Core 1B		Core 1B
3 - 9:52				
4 - 10:40		Core 2B (with lunch)		Core 2B
5 - 11:28			Core 2B	
6 - 11:56	Core 2B			
7 - 12:27		Core 3B		
8 - 1:18	Core 3B		Core 3B	Core 3B
9 - 1:58				

9. For each grade or course in the college partnership laboratory school, provide a detailed description of how the SOL and the corresponding SOL Curriculum Framework will be used as the foundation for curricula to be implemented. Include within the description how the goals and objectives of the curricula will meet or exceed the SOL.

The curriculum in the UVA Innovation Hub will be aligned with the Standards of Learning (SOL) and SOL Curriculum Framework, and will be specifically designed to exceed SOL standards in every grade and subject, focusing on enhancing critical thinking and creativity. The lab manager will work with the teachers that are part of the Innovation Academy Fellowship to determine how timing of student-driven projects and capstones fit within the existing pacing guides and identify appropriate subject-level SOLs to infuse into the project curriculum. Instead of receiving traditional grades through the UVA Innovation Hub, students will receive comprehension evaluation and feedback, including formative and summative evaluations, and project-based assessments from the lab manager and specialist. We believe the work from the lab school will be reflected in measurable student outcomes and we have set specific goals:

- Increase students' critical thinking and problem-solving skills by at least 20%, assessed through real-world simulation projects and problem-solving tasks.
- Achieve at least 80% mastery in Science SOL-aligned topics, measured using various assessments, including exams and practical applications.
- Improve students' collaboration and communication skills by 25%, evaluated through group projects and presentations with peer and teacher feedback.

These goals are integrated into our outcome-based learning objectives and consistent progress evaluations. Our curriculum is further enriched by real-world applications through capstone projects, aligning practical experiences with SOL objectives. Continuous curriculum evaluation and adaptation ensure our students meet and excel in the educational goals set by the SOL, preparing them effectively for future academic and career.

10. Provide a detailed description of how the college partnership lab school will meet all state and federal testing requirements (including at least 95% participation in the *All Students* group and in each student group) and state test administration requirements. Include in the description who (the role) will provide oversight of the testing program in the college partnership laboratory school, who will ensure technology requirements are met, who will provide training to test examiners, proctors and others to ensure test security is maintained, the frequency of training, and how training will be tracked. Also include the process by which test record data quality will be maintained and verified. (Virginia SOL Assessment Program, SOL Test Administration & Development, ESSA Consolidated State Plan, Standards of Quality)

    In collaboration with UVA, CCS will ensure a minimum of 95% testing participation across all student groups. The CCS Testing Coordinator oversees the testing program, while the IT Director ensures technology readiness. Annual training on test administration and security, led by the Testing Coordinator, is tracked in the CCS Professional Development Management System. The Director of Assessment and Accountability maintains and verifies test record data quality. All procedures align with Virginia's SOL Assessment Program, ESSA Consolidated State Plan, and Standards of Quality.

11. Provide a description of the school's balanced assessment plan to include all formative and summative assessments, their purpose, their administration periods (when they will be administered), how and when the data will be reported and to whom, who will analyze the data, and when, and how the data will be used to monitor and inform instruction.

    We expect that through the rich, project-based learning experiences of the lab school, we will see increased numbers of students achieving proficiency on disciplinary state standardized tests. Building upon the assessment expertise in UVA EHD, we will craft a framework of interdisciplinary performance assessments to provide students with clear benchmarks of success as well as data for teachers and researchers about the kinds of skills and understandings that students develop during their projects in the UVA Innovation Hub. Based on this initial data, this framework will include establishing baseline performance data in our first year of operation and setting specific, measurable targets for student improvement. We will conduct annual assessments to track student progress, ensuring alignment with our goals. Formative assessments, such as project milestones and reflective journals, are administered throughout the academic year to

monitor real-time student progress. Summative assessments, like project presentations and final products, evaluate comprehensive understanding. Specifically, 8th graders will undertake a year-long capstone project, 7th graders will complete two significant PBLs throughout the year, and 6th graders will participate in three foundational mini-PBLs. Data from these assessments will be regularly reviewed by the Science Learning Facilitator and Lab Manager, ensuring timely feedback is provided to students. This PBL-centric approach ensures that students receive continuous feedback, promoting deep understanding and hands-on learning application. By providing rich formative feedback to students during the projects and opportunities to learn content through applied and customized pathways, we expect students to increase performance on disciplinary VA state tests, with the progress documented and evaluated against the established benchmarks annually.

12. Describe how program effectiveness will be measured. The description should include measures by which the program will be measured, and the targets for improvement over time. Student performance data should be one of the measures and student performance targets should be established for each of the first five years. The applicant must address how all measures will be established and documented in the first year of operation and how the data will be measured over the successive four-year period before the contract of such school is renewed by the Board.

Goal: Increasing student engagement in school and in science through project-based learning.
In the 2022-23 school year, 35.92% of Buford Middle School students were chronically absent. An informal poll of students during the planning grant period found that just 6.1% of rising 7th graders and 2.3% of rising 8th graders expressed interest in the subject of Life Sciences.

- Performance targets/outcomes:
    - Each academic year, students self-report an enhanced interest and engagement in science subjects.
    - Each academic year, students complete the required PBL.
    - Each academic year, there is an increase in project-based learning skills such as critical thinking, problem solving, collaboration, communication, creativity, and technology/computer science competencies among students.
- Measurements:
    - Student surveys will assess interest and engagement changes, complemented by classroom participation and performance observations.
    - Student PBL artifacts.
    - A combination of formative assessments, project-based assignments, and performance tasks will be used to evaluate proficiency in these skills.

Goal: Increasing student performance on state assessments.
In the 2022-23 school year, the school was performing below the state standard in Science. An analysis of student performance data from 2021-22 reveals significant

achievement gaps in Science between Black students with a pass rate of 20.39% and White students with a pass rate of 77.00%.

- Performance target/outcome: each academic year, there is a reduction in the achievement gap between white students and students of color in science subjects.
- Measurement: student performance will be evaluated using state-standardized testing data, with additional assessments for formative and summative learning outcomes.

Goal: Professional development to help teachers connect different content areas in a way that is relevant to and builds on the assets of their students.
A CCS Science Committee consisting of K-12 teachers and community members stressed the need for ongoing PD opportunities for teachers including the need to enhance their skills and knowledge in utilizing technology and computer science. A national report identified that five of the hardest school positions to fill are in STEM education (Zalaznik, 2022) and CCS has experienced this struggle in recruiting and retaining STEM teachers.

- Performance targets/outcomes:
    - All participating teachers will engage in continuous PD opportunities provided by the lab school, demonstrating evidence of applying what they learn in their teaching practice.
    - Each academic year, participating teachers will demonstrate improved proficiency in integrating technology and computer science into their science teaching.
- Measurements:
    - Tracking of the participation and completion of PD and assessment of their application in teaching practice through classroom observations and teacher reflections.
    - Proficiency will be assessed through the evaluation of lesson plans, classroom observations, pre- and post-program assessments measuring teachers' confidence and competence in integrating technology and computer science into their teaching practice.

13. Who will provide oversight to ensure that the college partnership laboratory school will meet the long-range planning and continuous improvement requirements in SOA (8VAC20-131-400) application of the school quality indicator performance levels to actions?

    The UVA Innovation Hub Director and Governing Board, once established, will provide oversight to ensure that the lab school meets long-range planning and continuous improvement requirements in SOA.

14. Details on how the college partnership laboratory school plans to involve parents or guardians and community members within the school.

    Communication began during the planning grant period with lab updates given during CCS School Board and PTO meetings. In addition, the UVA Remaking Middle School

team plans to facilitate focus group sessions with families and students to gather feedback on the lab school plans. They will also facilitate an UVA Innovation Hub family/student advisory council that will provide input and feedback to the lab school governing board.

The following components should be addressed if applicable to the college partnership laboratory school:

15. A detailed description of any alternative accreditation plan, in accordance with the SOA (8VAC20-131-420), for which the college partnership laboratory school will request approval from the Board.

    Not applicable.

16. A general description of any incentives/partnerships that the college partnership laboratory school intends to have with school divisions to enhance both the educational program of the college partnership laboratory school and the partnering school division(s).

    The lab school is a partnership between UVA EHD, CCS, and the UVA Equity Center as stated above.

17. If the college partnership laboratory school plans to use virtual learning in its educational program, a description of how virtual learning will be used and estimates of how many students will participate.

    Not applicable.

18. If the college partnership laboratory school plans to provide co-curricular and extracurricular programs and how they will be funded and delivered.

    Because of construction, the UVA Innovation Hub will initially be embedded with the science classrooms at CMS to help establish the project-based learning and capstone pathways for 7th and 8th grade students respectively.

    The UVA Innovation Hub Director and Lab Manager will collaborate with the Equity Center and other youth-serving out-of-school programs such as Boys and Girls Clubs of Central Virginia and C4K to help connect students to specific after school opportunities. The UVA Innovation Hub will also facilitate community members offering extracurricular programs.

IV. ELEMENT 4 – Lab School Governance

The following components must be addressed:

1. Background information on the proposed founding governing board members and, if identified, the proposed school leadership and management team. (See §§22.1-289 through 22.1 -318.2 of the *Code of Virginia*.)

Initial Governing Board Members

Dr. Stephanie Rowley is the Dean of the UVA School of Education and Human Development. Rowley's research explores how parents' attitudes toward race and gender, and their own social experiences influence their children's motivation in school. Most recently, she undertook a longitudinal study of African American parents' beliefs about STEM disciplines and how those beliefs affect middle school youth. Her work has been continuously funded by the National Science Foundation. Before joining UVA, she was previously the Provost, Dean, and Vice President for academic affairs at Teachers College. Nationally, she currently serves on the Governing Council for the Society for Research and Child Development and the Ethics Committee of the American Education Research Association. Rowley has won numerous awards for her research, teaching, service, and mentorship.

Dr. Jennifer L. Chiu is an Associate Professor at the School of Education and Human Development at UVA. Her research focuses on increasing learners' access to STEM and computational fields to foster independent, innovative, and critical citizens who can solve important and meaningful problems. She pursues these goals by studying how technology-enhanced environments can help learners understand challenging STEM and computer science concepts, by investigating how integrating instructional technologies into classrooms can support student engagement in STEM practices, and by helping teachers understand and promote student thinking in diverse learning contexts. Dr. Chiu has a B.S. in Engineering from Stanford University and a M.A. and Ph.D. in STEM Education from the University of California, Berkeley, and previously worked as an engineer for Hewlett Packard and a high school math and science teacher. She has published over 70 peer-reviewed publications and book chapters about learning and teaching in STEM contexts and has served as PI or Co-PI in grants totaling over $18 million; funding sources include the National Science Foundation (with a CAREER grant), the Department of Education, private foundations as well as state and intramural funds.

Dr. Royal Gurley, CCS Superintendent. Dr. Royal A. Gurley, Jr., brings over two decades of dedicated experience to the field of education, championing equity and transformative leadership. Currently serving in his third school year as superintendent of Charlottesville City Schools, Dr. Gurley's commitment to fostering inclusive learning environments has been recognized through a renewed four-year contract, extending his impactful leadership until 2027. Prior to his current role, Dr. Gurley held the position of assistant superintendent for academic services at Dinwiddie County Public Schools from 2017. His diverse career includes roles as a building administrator, director of special education, instructional technology integrator, teacher, and service in the armed forces. Dr. Gurley is an alumnus of Virginia State University and Virginia Commonwealth University. In 2020, he completed the Urban Superintendents

Academy at the University of Southern California. He resides in Charlottesville with his husband Derrek and daughter Hollan.

Dr. Katina Otey, CCS Chief Academic Officer. With almost 30 years of dedicated and visionary experience in educational leadership, Dr. Katina Otey has continually demonstrated an unwavering commitment to transforming student outcomes and fostering a globally competitive educational environment. Her extensive expertise spans various administrative and instructional roles, including her current position as Chief Academic Officer at Charlottesville City Schools, as well as previous roles as Director of Elementary School Leadership at Chesterfield County Public Schools, and Principal at two Title I schools within Henrico County Public Schools. Throughout these roles, she consistently showcased an unparalleled drive to enhance teaching methodologies and elevate student achievement. Dr. Otey's exceptional leadership has been distinguished with prestigious awards, recognizing her outstanding contributions to creating an exceptional educational environment. Her illustrious career stands as a testament to her passion for educational excellence, visionary leadership, and unwavering dedication to providing equitable and enriching education for all students. Her ongoing commitment to innovation and student success continues to shape the landscape of educational leadership.

Dr. Ben Allen, UVA Equity Center Executive Director. Dr. Allen is a first-generation "quadruple Hoo" born and raised in Charlottesville, Virginia. He earned his Ed.D. from the UVA School of Education and Human Development and has research interests around culturally responsive leadership and establishing strong community partnerships. Additionally, he is a lecturer in the School of Education Administration and Supervision Program. He has worked as a high school history and AVID teacher in Washington, DC, and Charlottesville, and most recently as an elementary school associate principal in Albemarle County. Allen also is a captain in the Army Reserves and an intelligence analyst, and he has served as a logistician and police officer in the military.

Conner Brew, Community Partner rep. Mr. Brew represents WillowTree, a Charlottesville-headquartered international digital services firm. He works as a Technical Project Director overseeing Artificial Intelligence R&D initiatives, specializing in the field of Generative AI and Natural Language Processing. He is a Marine Corps veteran and a graduate of UC Berkeley's Master of Information & Data Science program and has extensive leadership experience supervising cross-functional technology teams. In addition to his professional experience, Conner is a contributor to the National Institute of Standards and Technology's Risk Management Framework for Responsible AI and serves as the Development Chair for the Emergency Food Network, committed to the expansion of equitable food security throughout Charlottesville and Albemarle County.

Family/student Advisory Council Rep - a representative will be selected by the advisory council to serve on the governing board for a one-year term.

UVA Innovation Hub Director. Dr. Kim Wilkens will be the acting UVA Innovation Hub Director. In her role as Education and Outreach Director in the UVA EHD, she has been leading UVA's lab school planning grant and application efforts. Dr. Wilkens has previous experience building education-related programs from the ground up including a globally recognized K-8 CS program at an independent school and the non-profit Tech-Girls, with a mission to address the gender gap in technology through K-12 outreach. During her doctoral studies at UVA, she helped initiate and organize several efforts aimed at helping K-8 teachers integrate CS into their teaching practice, including the Charlottesville CS Community and the Global Center for Equitable CS Education. Dr. Wilkens also has previous experience in the tech industry with extensive experience in managing complex projects across a variety of stakeholders.

2. A well-defined organizational chart showing the roles and responsibilities of all positions included as well as the relationship of the school's governing board to the administrative staff of the college partnership laboratory school. This organizational chart should include the functional reporting structure, including lines of authority and reporting between the school's governing board, school leadership, school management, teaching staff and any functional administrative teams. Also include related functions such as advisory boards, parents/guardians, and teacher councils or external organizations that will play a role in managing the school.

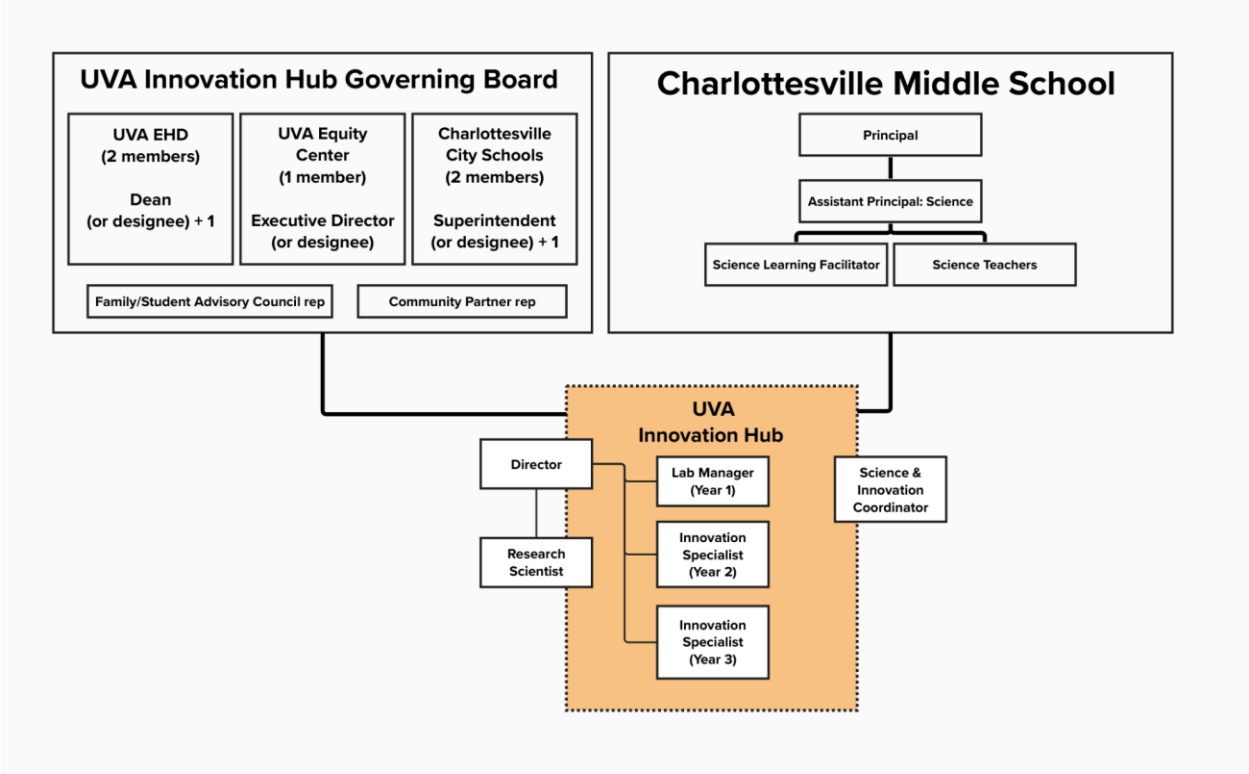


Figure 3: Lab School Governing Board

The primary role of the governing board is to ensure the effective operation and oversight of the lab school. This includes policy development, financial oversight,

curriculum and program oversight, stakeholder engagement, personnel decision, legal and ethical oversight, strategic planning, and reporting and accountability.

Roles & Responsibilities	**Details**
Policy Development	Curriculum and Instruction, Research and Innovation, Equity and Inclusion
Financial Oversight	Lab school budget, External Funding
Curriculum and Program Oversight	Review and Approval, Continuous Improvement
Stakeholder Engagement	Community and Industry Relations, Feedback Mechanism
Personnel Decisions	Innovation Lab Manager & PD
Legal and Ethical Oversight	Compliance, Ethical Standards
Strategic Planning	Long term goals & Risk Management
Reporting and Accountability	Regularly report on performance, research findings, and financial status.

3. A clear description of the functions, roles, and duties of the governing board and its proposed composition and bylaws, the location of the public meeting space, and how it will comply with regulations such as the Freedom of Information Act. The description must detail the specific role of the governing board in the operation and oversight of the college partnership laboratory school.

   UVA shall establish the Governing Board that will create, manage, and operate the UVA Innovation Hub as required by § 22.1-349.1 of the Code of Virginia. The Governing Board, under the control of UVA, is responsible for selecting the members of the Governing Board.

   The Governing Board, as selected by UVA, shall comprise five members from the lab school partnership including two members from the UVA School of Education and Human Development, one member from the UVA Equity Center and two members from Charlottesville City Schools plus two additional members including one member representing one of our community partners and one member representing the Family/Student advisory council. Each member of the Governing Board shall serve a two-year term, except for the local industry rep and FamilyStudent advisory council rep who shall each serve a one-year term.

The Governing Board shall establish the beginning dates of its members. If a member of the Governing Board ceases to be a member of their respective lab school-related organization, that person shall also cease to be a member of the Governing Board on the same effective date of the former. Each organization shall nominate a member to the Governing Board to fill vacancies in its membership on the Governing Board for the unexpired term of the vacating member. The Governing Board shall review and approve said nominations. UVA shall appoint a Chair to preside at the meetings of the Governing Board. In addition, UVA shall appoint a Vice Chair who shall preside in the absence or inability of the Chair to act or at the request of the Chair.

The duties of the Governing Board, include, but are not limited to, the following:

- Draft, review, and amend policies to guide the operations, standards, and expectations of the lab school.
- Oversee the lab school's budget and ensure transparency and efficacy in the use of external funding.
- Monitor and review curriculum and programs to ensure they meet established standards and objectives.
- Foster relationships with community and industry stakeholders to ensure the lab school's programs remain relevant and beneficial.
- Establish and maintain a feedback mechanism for teachers, students, parents, and the broader community.
- Monitor timely hiring, development, and management of the Innovation Lab Manager and professional development (PD) staff.
- Support CCS and UVA commitments to compliance with local, state, and federal regulations
- Set long-term goals for the Lab School and develop strategies to achieve them.
- Hold meetings on a quarterly basis to receive updates on progress towards the goals and objectives of the lab school.
- Approve and provide guidance for the development of innovative programs designed to supplement and enhance the lab school.
- Refer potential donors to school leaders at the University of Virginia School of Education and Human Development or Charlottesville City Schools, depending on the donor’s intent.

Bylaws

1. The Governing Board shall hold an organizational meeting every two years in January. The purposes of this meeting include the election of a Chairperson and Vice Chairperson and the appointment of a Secretary.
2. The Governing Board shall establish and approve a calendar of quarterly meetings in January. Additional meetings may be scheduled as necessary, with proper notice given to all board members.
3. Special meetings of the Governing Board may be called by the Chairperson or a designated representative of the Governing Board, assuming notice is provided promptly to all board members.
4. At least three (3) working days before a scheduled meeting, other than a special meeting, all Governing Board members must receive a notification of the time

and place of the meeting. This notice should include a draft agenda and relevant documents for review.

5. A majority of the Governing Board members shall constitute a quorum for any meeting. A majority vote of those present is required to approve any action item.
6. All meetings of the Governing Board shall comply with applicable public transparency and disclosure laws, including the Freedom of Information Act or any relevant state statutes. This includes but is not limited to, public notice of meetings, accessibility of meetings to the public, and the availability of meeting minutes for public review.
7. These bylaws may be amended by a two-thirds majority vote of the Governing Board, provided the proposed amendment has been introduced and discussed at a prior meeting.

4. A description of the governing board's relationship with the affiliated public or private institution of higher education and its Board of Visitors, any local school boards, parents/guardians, and community organizations.

   The lab school contract will be between the Virginia State Board of Education and the Lab School which is operated during the funding period by the University of Virginia. The Lab School Governing Board works on behalf of the University of Virginia to implement the goals and objectives stated in our Lab School grant. UVA and CCS will work as full partners to achieve student success under the grant's terms.

   If approved as a lab school, the UVA Innovation Hub will seek representation and counsel from UVA's Board of Visitors as appropriate to formalize this partnership with CCS. All engagements by UVA in the lab school would be conducted with the oversight of the UVA Administration as delegated by the Board of Visitors.

5. Explain the decision-making processes the governing board will use to develop school policies.

   The governing board will develop school policies and procedures by the processes listed above.

6. Portray how the governing board will involve parents/guardians and community members in governing the school.

   The lab school will launch a Family/Student Advisory Council which will provide feedback to the governing board through their representative.

7. Admissions Policy (see 22.1-349.3 of the *Code of Virginia*.) Provide a description of the policies and the procedures for admitting students to the college partnership laboratory school, including specific details of the enrollment lottery plan including

management of the enrollment lottery waiting list, statutorily allowed preferences, a plan to develop clear procedures for withdrawals and transfers, as well as subsequent marketing strategies to reach all demographic groups residing in the Commonwealth.

All 7th, 8th, and eventually 6th grade students in the Charlottesville City School system will participate in the UVA Innovation Hub at Charlottesville Middle School. There will be an option for guardians to opt their child out of the research efforts associated with the UVA Innovation Hub. The lab school will make use of the existing out-of-district application process in place at CCS and modify it to support a lottery system. Lottery seats will be open on a space-available basis to any student who is deemed to reside within the Commonwealth.

V. ELEMENT 5 – Laboratory School Management Structure

The following components must be addressed:

1. A staffing chart for the school's first year and a staffing plan for the term of the contract which includes job titles and/or positions, SCED assignments if applicable to the position, and reporting relationships within the school.

Table 2: Lab School Staffing

Position	**Start Year**	**# of people**	**Reports to**	**Qualifications**
UVA Innovation Hub Director	Year 1	1	Governing Board	Master's Degree required; K-12 Administrative License and/or EdD preferred
UVA Innovation Hub Lab Manager	Year 1	1	UVA Innovation Hub Director	Bachelor's Degree and K-12 education required; CS education experience preferred
UVA Innovation Hub Research Scientist	Year 1	1	UVA Innovation Hub Director	PhD required; K-12 educational research preferred
UVA Innovation Specialists	Year 2 Year 3	1 1	UVA Innovation Hub Director	Bachelor's Degree and K-12 education required; CS education experience preferred

Interns	Year 2	5	UVA Innovation Hub Director	UVA Master of Teaching internship placements
Practicum placements	Year 2	15	UVA Innovation Hub Director	UVA undergraduate teacher candidates

UVA Innovation Hub Director Role and Responsibilities:

- Identify current needs of the lab school, supply information, make recommendations and develop strategies for implementing the priorities for the Governing Board.
- Manage the UVA Innovation Hub Lab Manager and UVA Innovation Hub Research Scientist.
- Co-design and implement the professional learning experiences.
- Build relationships with local community members and organizations for potential partnerships, sponsorships, or collaborations.
- Establish and manage partnerships toward the development, implementation, and sustainability of the lab school.
- Execute and manage contractual agreements associated with the lab school.
- Oversee the UVA Innovation Hub's budget and along with the governing board, ensure effective use of resources.
- Oversee Innovation Academy Fellowship program.
- Identify and pursue opportunities for grants, sponsorships, or donations to enhance lab capabilities.

UVA Innovation Hub Lab Manager Role and Responsibilities:

- Collaborate with CMS teachers and administrators to develop a curriculum that aligns with grade-level standards and encompasses innovative, student-driven projects.
- Regularly update the curriculum to incorporate new technologies, methodologies, and stakeholder feedback.
- Ensure the UVA Innovation Hub space is a safe, inclusive, and productive learning environment.
- Direct hands-on, project-based learning (PBL) experiences that leverage community-based resources.
- Support and facilitate students' work, encouraging critical thinking, creativity, and computational skills.
- Maintain an inventory of all lab equipment, software, and supplies.
- Ensure all technology is up-to-date, functional, and safe for student use.
- Coordinate with IT or external vendors for equipment repairs or updates.
- Mentor and guide teachers who are new to project-based, computationally-rich experiences in the classroom.
- Develop and deliver regular professional development sessions, introducing new tools, methodologies, or teaching strategies.

- Communicate regularly with parents and guardians about student progress, lab events, and any needs or concerns.
- Monitor and evaluate student progress through both formative and summative assessments.
- Update school administration regularly on lab activities, student achievements, and challenges.
- Organize and host events, showcases, or competitions to highlight student work and promote the lab's initiatives to the wider community.
- Implement and enforce safety protocols for all equipment and activities in the UVA Innovation Hub.
- Stay updated on district, state, and federal regulations relevant to technology education and ensure the lab's adherence.
- Solicit feedback from students, teachers, and other stakeholders to identify areas for improvement.
- Engage in professional growth opportunities, conferences, and networks to stay informed about best practices and emerging trends in technology education.
- Facilitate the integration of UVA EHD Master of Teaching candidates and undergraduate teacher candidates into the UVA Innovation Hub environment for their internship and practicum experiences.

UVA Innovation Specialist

- Work with the lab manager to develop a curriculum that aligns with grade-level standards and encompasses innovative, student-driven projects.
- Ensure the UVA Innovation Hub space is a safe, inclusive, and productive learning environment.
- Direct hands-on, project-based learning (PBL) experiences that leverage community-based resources.
- Support and facilitate students' work, encouraging critical thinking, creativity, and computational skills.
- Mentor and guide teachers who are new to project-based, computationally-rich experiences in the classroom.
- Deliver regular professional development sessions, introducing new tools, methodologies, or teaching strategies.
- Communicate regularly with parents and guardians about student progress, lab events, and any needs or concerns.
- Monitor and evaluate student progress through both formative and summative assessments.
- Implement and enforce safety protocols for all equipment and activities in the UVA Innovation Hub.
- Engage in professional growth opportunities, conferences, and networks to stay informed about best practices and emerging trends in technology education.

UVA Innovation Hub Research Scientist Role and Responsibilities:

- Do research in the UVA Innovation Hub.
- Organize research requests for the UVA Innovation Hub.
- Establish research protocols.
- Manage data.

- Share research results with the governing board.
- Publish research results in journals and at conferences.

2. Detailed plans for the recruiting and developing school leadership and staff including a timelines/calendar for recruiting, recruiting strategies, plan for recruiting and supporting a diverse staff, and the position responsible for college partnership laboratory school staff selection. Also include a plan for onboarding/orientation of new staff members and what entity is responsible.

   UVA EHD will advertise the UVA Innovation Hub Lab Manager, UVA Innovation Specialist, UVA Innovation Hub Research Scientist, and UVA Innovation Hub Director positions in UVA Workday. Onboarding of the positions will be customized to include components of onboarding for UVA as well as CCS to ensure that UVA policies are followed as well as to ensure that policies related to instruction and operation at CCS are adhered to at the lab school.

   UVA Human Resources will provide the planning, recruitment, development, growth, recognition, and workplace program and advisory services to help Lab School personnel achieve success in their work. UVA HR offers talent recruitment, talent management, and employee relations.

   - Talent Recruitment - We recruit talented personnel to the University of Virginia, build talent pipelines, and scale the workforce to match employer needs, with a consistent and positive employment experience across all employment types.
   - Talent Management - We strive to create exceptional employment experience for our employees at the University of Virginia.
   - Employee Relations - We aim to provide high levels of support to UVA employees, in part by conducting sound annual goal setting and performance reviews.

   UVA and EHD personnel will work with Lab School personnel to develop position narratives, support candidate screening, provide applicant tracking and reporting, facilitate candidate communications, advise best practices for reference checks, produce offer letters, and provide information about life and work in Charlottesville.

   UVA onboards new employees to promote effective learning that leads to greater employee motivation and satisfaction as employees feel valued and able to grow and develop throughout their careers. We will facilitate and lead engaging learning experiences; identify and prioritize organizational learning and development requirements; recommend University-wide, role-specific curricula programs and delivery approach; and design content and materials for employee development and education. Our experience suggests that the result of this on-boarding and development will be a more productive workforce that has tailored learning experience, shrinking skills gaps, and an ability to apply learning to achievement of professional goals and objectives.

A detailed description of intake, sourcing, screening, interviewing, candidate selection, job offer, onboarding, and feedback can be found at https://hr.virginia.edu/careers-uva/uva-hiring-process/academic-hiring.

3. Assurance that the applicant will meet the conditions of § 22.1-349.9 of the *Code of Virginia* which states that the college partnership laboratory school personnel will be employees of the Institute of Higher Education and/or the Eligible Entity and be granted the same employment benefits given to professional, licensed personnel in public schools in accordance with the agreement between the college partnership laboratory school and the Board.

   Lab School personnel hired by the University of Virginia will be employees of the University of Virginia and will be granted the same employment benefits given to other University of Virginia employees. Market analysis suggests compensation and benefits at UVA are among the very best in the region. As stated on the University's HR website, "In addition to health insurance, retirement plans, flexible spending accounts, and paid time off, UVA employees may take advantage of our Education Benefits program, which is designed to encourage career development and lifelong learning. We also offer a backup care benefit for child and elder care, talent development services, and wellness benefits to support the happiness and health of our employees and their families."

4. List the qualifications and appropriate licenses and endorsements that each position must have to perform the job function(s) for the college partnership laboratory school's leadership and proposed teachers and other staff. Provide information about what entity is responsible for submitting licensure requests to VDOE and ensuring staff maintain their license during their renewal cycle. If individuals have already been identified for specific positions, provide their names, qualifications and/or teaching license number as an Appendix – Laboratory School Teacher/Staff Information.

   UVA Innovation Hub Lab Manager skills and qualifications:
   - At least a Bachelor's degree required, in Education preferred.
   - Experience with designing and implementing project-based learning in middle school settings.
   - Experience with designing and delivering professional learning experiences for K-12 educators.
   - Project management experience.
   - Excellent oral and written communication skills.
   - Experience as a teacher leader.
   - Willingness and eagerness to learn and grow individually and as part of the lab school team.
   - Demonstrated maturity, wise decision-making, and professionalism.

   The most competitive candidates will also possess some of the following desired skills and qualifications:

- A computer science background at the undergraduate and/or graduate level.
- Middle school, middle school science or middle school CTE endorsement.
- Advanced degree in CS/STEM education or a related field.
- Experience integrating computer science in a K-8 school setting.

UVA Innovation Specialist skills and qualifications:

- At least a Bachelor's degree required, in Education preferred.
- Experience with designing and implementing project-based learning in middle school settings.
- Excellent oral and written communication skills.
- Experience as a teacher leader.
- Willingness and eagerness to learn and grow individually and as part of the lab school team.
- Demonstrated maturity, wise decision-making, and professionalism.

The most competitive candidates will also possess some of the following desired skills and qualifications:

- A computer science background at the undergraduate and/or graduate level.
- Experience delivering professional learning experiences for K-12 educators.
- Middle school, middle school science or middle school CTE endorsement.
- Advanced degree in CS/STEM education or a related field.
- Experience integrating computer science in a K-8 school setting.

Research Scientist qualifications

- Ph.D. degree in Education or a related field.
- Experience with implementing and researching project-based learning in middle school settings.
- Project management experience.
- Experience disseminating research in peer-reviewed journals and practitioner audiences.
- Excellent oral and written communication skills.

Lab School Director qualifications

- At least a Master's degree in Education.
- Experience integrating computer science in K-8 school settings.
- Excellent oral and written communication skills.
- Previous experience in leadership roles including management.
- Previous experience bringing collaborative efforts to fruition.
- Experience with program design and creation, management, and event coordination.
- Experience providing professional learning experiences around computer science integration with K-8 teachers.
- Willingness and eagerness to learn and grow individually and as part of the lab school team.
- Demonstrated maturity, wise decision-making, and professionalism.

5. Describe the plan to meet the conditions in § 22.1-349.9 of the *Code of Virginia*, which states that "teachers who work in a college partnership laboratory school shall hold a license issued by the Board or, in the case of an instructor in the Board-approved teacher education program of the institution of higher education, be eligible to hold a Virginia teaching license. Teachers working in a college partnership laboratory school shall be subject to the requirements of §§ 22.1-296.1, 22.1-296.2, and 22.1-296.4 that are applicable to teachers employed by a local school board."

   We will work together with the teacher education program and CCS to ensure the UVA Innovation Hub manager has the appropriate experiences and professional learning opportunities to work towards obtaining or be eligible to obtain a Virginia teaching license.

6. Describe the school's leadership and teacher employment policies by identifying which entity's employment policies pertain to which particular position and describe the process of notification to all school employees of the terms and conditions of employment. If possible, provide a sample of the human resource policy for the school that is consistent with state and federal law.

   Lab school personnel will be hired into Restricted University Staff positions at the University of Virginia as defined by policy HRM-021: Terms and Conditions of University Staff Employment. Lab school personnel will be aware and acknowledge their rights as a Restricted Employee at UVA, including that these positions have no guarantee of employment beyond their established end dates, and their re-employment is contingent on the need for services, the availability of funding and satisfactory performance. Employees in restricted positions funded from non-continuous sources have no guarantee of continued employment.

   As stated in HRM-021: The terms and conditions of University Staff employees are dependent on the category of University Staff employment, and whether the employee is full- or part-time, and whether the position is restricted, includes a probationary period, has a limited term appointment, or an individually negotiated contract. Eligibility for health care benefits, retirement plan options, leave accrual, access to the grievance procedure, and layoff and severance benefits are specific to the employee's category of staff employment. Changes to an employee's category of staff employment can result in changes to the employee's terms and conditions.

   All University Staff employees must competently perform their assigned duties in compliance with state law and applicable University policies, including avoiding and disclosing in a timely manner conflicts of interests and adhering to the University Code of Ethics.

   The University may, at any time, establish additional terms and conditions of employment for University Staff employees that are not in conflict with federal or state law.

HRM-014: Standards of Conduct for University Staff Employees and the UVA Faculty Handbook further outline HR policies for the lab school employees.

7. Describe the plan for annual performance evaluations, including who will be conducting the evaluations for each position and what evaluation standards will be used for each position. Such performance evaluation plans must be consistent with the policies of the institution of higher education.

   All staff will be evaluated annually. While official performance evaluations will be conducted in accordance with UVA HR policy, ongoing feedback will be part of the norm and culture of the lab school. Find a draft of the Lab School Evaluation framework in Appendix E.

8. A plan that addresses the qualifications of the teachers and administrators at the college partnership laboratory school, including compliance with state law and regulations regarding Board licenses and endorsements. (*See* § 22.1-349.9 of the *Code of Virginia*.)

   The lab school is committed to ensuring that all personnel working in the UVA Innovation Hub possess the qualifications and expertise to deliver and support exceptional learning experiences. The teachers who join the Innovation Academy Fellowship and the Lab Manager shall hold a license issued by the Board or be eligible to hold and be working toward a Virginia teaching license.

9. Provide an overview of the high quality professional development programs associated with the mission and proposed instructional program. Describe how faculty and staff will access the professional develop and if the school is providing professional development days, reimbursements for tuition, registration, travel, and substitutes, if needed. (*See* § 22.1-253.13:5 of the *Code of Virginia*.)

   To cultivate the transformative learning experiences envisioned by the lab school, exceptional teachers are essential to collaboratively design and guide these projects. The lab school will create an innovative professional learning environment that extends into the community and provides a model for pre-service and in-service teacher education. By engaging in this lab school professional development model, we aim to help existing teachers: (1) incorporate relevant and authentic classroom experiences for their students; (2) integrate computationally-rich activities that address VA CS SOLs and content standards; and (3) leverage and sustain student and community assets in their classrooms. This model supports the development of pre-service teachers by: (1) embedding them in rich professional learning experiences that are grounded in student and community contexts; (2) providing opportunities to learn and apply research-based, effective pedagogical strategies with novel, computationally-rich practices; and (3) providing explicit opportunities to co-develop classroom materials that privilege and sustain students' funds of knowledge.

Research-based tenets of effective PD (e.g., Desimone, 2011; Garet et al., 2001) will be used to anchor professional development efforts. Professional development activities will be content focused, centered on integrating computer science and data science content and pedagogy into core subject areas. Throughout active learning opportunities we will give teachers many hands-on experiences with unplugged, tangible, and computer-based CS. Coherence, or the fit to teachers' school context and beliefs will be achieved by close partnership with the district administrators and continuous feedback from teachers as well as state-level requirements. Professional development activities will be ongoing throughout the school year and the fellowship model will encourage the development of a community of practice.

The lab school will work to value and privilege the expertise and assets of current teachers while also providing space, time, and resources for teachers to be able to co-create innovative curricular experiences with their students. Students, teachers, teacher candidates, and community members will all have the opportunity to deepen their knowledge of young adolescent development, specific content area understanding including CS and skills, and research-based pedagogical practices. In this way, students have a voice in their school experience and work together with teachers, community members, and experts to create student-driven learning experiences.

The Curriculum Design Accelerator is a summer professional learning opportunity for UVA EHD teacher candidates and CMS teachers. The learning objectives for this experience include:

- Developing understanding and confidence in integrating computationally-rich activities in student-driven, project-based learning experiences.
- Developing understanding and being able to apply equitable teaching strategies that foster students' positive identity development and their sense of belonging in STEM fields, especially science and computer science.
- Developing understanding and being able to leverage community-based resources and assets with students to solve locally relevant problems.

The Lab School will also provide wrap-around professional learning experiences for teachers to support their development and use of interdisciplinary, project-based, and computationally-rich projects. Educational researchers at UVA will provide mentoring, formative feedback, and evaluation of the lab school facilitated through the UVA Innovation Hub Lab Manager.

The Innovation Academy Fellowship is a year-long commitment available to six CMS educators each year. The six educators will be recruited by CMS administration in collaboration with the governing board. Participation in the Innovation Academy Fellowship includes:

- A significant stipend.
- Their classes are regularly scheduled in the UVA Innovation Hub throughout the school year.
- Coaching and mentoring with the UVA Innovation Hub Lab Manager, the UVA Innovation Hub Director and EHD faculty.
- Support for designing and developing PBL.

- Substitute coverage provided by UVA Equity Center for additional professional learning opportunities such as conferences and externships.
- A focus on growing their PBL and STEM+CS competencies.

10. An explanation of any partnerships or contractual relationships central to the college partnership laboratory school's operations or mission, including information regarding any partnerships with school divisions to provide educational or ancillary services. Contractual relationships include procuring the services of an education management organization, food services, transportation, school health services, custodial services, and security services. (*See* § 22.1-349.3 C of the *Code of Virginia*.)

    For the lab school application, we drafted an initial Distribution of Responsibilities (Appendix B between the partners. If the UVA Charlottesville Middle School UVA Innovation Hub is granted lab school status, the UVA EHD, UVA Equity Center and CCS will collaborate and seek representation and counsel as appropriate to create a Memorandum of Understanding (MOU) formalizing the distribution of responsibilities and the terms and conditions of the partnership.

11. Information and materials indicating how parents/guardians, the community, and other stakeholders were involved in developing the application for the college partnership laboratory school. A description of how parental involvement and communication will be used to support the educational needs of the students, the school's mission and philosophy, and its educational focus.

    Engaging families and the community at large is a key component of this lab school. After the partnership between UVA EHD, CCS, and the UVA Equity Center was established, we held a planning grant kick-off meeting in April with community stakeholders to work on our priorities for student learning, professional learning, and community engagement. We engaged a variety of stakeholders including C4K, WillowTree, Boys and Girls Clubs of Central Virginia, STEAMKITX, UVA BME, School of Data Science, and Barron Associates as we initiated the CS Pathway through the Starr Hill Pathways program.

    We engaged the science teachers in the lab school through the Curriculum Design Academy over the summer. Since then we have joined PLC meetings to gather their input and continue to support their efforts to integrate CS into PBL. We provided regular updates on the lab school efforts through CCS School Board and PTO meetings. In January, we provided an interdisciplinary, computationally-rich model for PBL that resulted in students sharing their projects including Animal Adaptations: Biobots in 7th grade Life Science and Sound Machines in 8th grade Physical Science. We plan to engage more fully with parents/guardians and students through focus group sessions to gather feedback on the lab school plans. If the lab school is approved, we will establish an UVA Innovation Hub family/student advisory council that will provide input and feedback to the lab school governing board.

We have received letters of support (Appendix F) for the lab school plans from many of our community stakeholders and partners including:

- Dr. Royal Gurley, CCS Superintendent
- Dr. Jillian McGraw, UVA EHD Director of Teacher Education
- Dr. Ben Allen, The Equity Center Executive Director
- Tobias Dengel, WillowTree, a TELUS International Company, President
- Kala Somerville, C4K Executive Director
- Shannon Ferns, Boys and Girls Clubs of Central Virginia Director of Club Operations
- Dr. Briana Morrison, UVA CS Department Associate Professor and Director of the Computing Education Center
- Dr. Nancy Deutsch, UVA Youth-Nex Director
- Tracey Greene, Charlottesville Business Innovation Council Executive Director
- Lisa Larson-Torres, Charlottesville City Schools School Board Chair

12. Provide drafts of a *Student Code of Conduct*, student handbooks, and other governing policies that addresses student behavior, discipline, and participation in school activities. Include policies and procedures governing suspension and expulsion of students. The plan should identify the role of teachers and administrators in discipline and mentoring. The plan must also identify disciplinary policies for special education students. Also describe how a parent could appeal the decision of a school administrator through a grievance process. Provide any drafts as Appendix – Student Handbook.

    The student code of conduct will be the same as the existing student code of conduct at CCS.

13. A detailed school start-up plan that identifies major tasks, timelines, and responsible individuals for accomplishing each task noted in the start-up plan.

Table 3: Start-up Plan

Timeframe	**Task/Activity**	**Responsible Party**
November 2023	Submit lab school application	UVA and advisory board
December 2023-February 2024	Host family/student focus group sessions	UVA Innovation Hub Director
January 2024	Run Random Hacks of Kindness Jr. event	UVA Innovation Hub Director

March 2024	Standing Committee approves lab school	VDOE and advisory board
March-July 2024	Develop framework for PBL projects	UVA Innovation Hub Director
	Plan Curriculum Design Accelerator	UVA Innovation Hub Director
	Plan CS Pathway and recruit facilitators	UVA Innovation Hub Director
	Establish performance targets to measure student outcomes including engagement in science and PBL/CS skills	UVA Innovation Hub Director and CMS
	Establish performance targets to measure teacher outcomes including engagement in PD and PBL/CS skills	UVA Innovation Hub Director and CMS
	Recruit teachers for UVA Innovation Hub Fellowship	CMS
April 2024	VDOE approves lab school	VDOE and governing board
	Governing board forms	UVA
	Family/student advisory council forms	Governing board
	Advertise UVA Innovation Hub Lab Manager and Research Scientist positions	UVA
June 2024	Lab school contract in place	VDOE and UVA
July 2024	Hire UVA Innovation Hub Lab Manager and Research Scientist	UVA and governing board
	Run CS Pathway	UVA Innovation Hub Director
	Run Curriculum Design Accelerator	UVA Innovation Hub Director
	Engage design contractor for renovation of UVA Innovation Hub space	CMS and UVA Innovation Hub Director

	Governing board quarterly meeting	Governing board
August 2024	Year 1: Soft launch of UVA Innovation Hub with 7th grade science classrooms.	Governing board
	Support PBL for 7th graders.	UVA Innovation Hub Lab Manager and CMS
	All 7th grade student schedules represent time in the UVA Innovation Hub as outlined in the MOU.	CMS

14. A general description of any operational incentives/partnerships that the college partnership laboratory school intends to have with school divisions to enhance both the educational program of the college partnership laboratory school and the partnering school division(s).

    Given that we are working closely in collaboration with CCS, we believe the entire effort will enhance both the educational program of the UVA Innovation Hub and CCS. As previously mentioned, we will be providing physical upgrades to the Charlottesville Middle School classrooms as well as rich professional learning experiences for CCS teachers.

15. Describe how the college partnership laboratory school plans to adhere to the requirements of the health and safety laws and regulations of the federal and state governments. Address how the proposed college partnership laboratory school will meet the following requirements including the process to notify parents of health and safety situations
    - Fire & Safety Regulations
    - Severe Weather/Natural Disaster
    - Student Missing/Hiding/Runaway/Abduction
    - Terrorist/Hostage Situation
    - Possession of Weapons
    - Bomb Threats/Explosions
    - Food Inspections
    - Student Medical Issues/Medical Emergencies

    The UVA Innovation Hub will follow all current and existing CCS procedures to follow federal and state regulations and notification of parents for health and safety situations.

VI. ELEMENT 6 – Financial and Operations Information

The following components must be addressed:

1. A description of the college partnership laboratory school's financial plan and policies, including financial controls and audit requirements for the school in accordance with generally accepted accounting principles

   The provided financial plan outlines a five-year budget for a laboratory school, encompassing personnel, employee benefits, and non-personnel expenses. Here is a summarized breakdown:

   Personnel Budget (Yearly): Faculty and staff salaries have been increased by 4% annually to account for expected annual cost-of-living adjustments.

Role	Salary Bases - Y1
UVA Innovation Hub Director (full-time)	$93,600
Research Admin (5%)	$76,942
Research Admin (5%)	$78,753
UVA Innovation Hub Lab Manager (full-time)	$90,000
UVA Innovation Specialist (12 month)	$75,000
Graduate Research Scientist (full-time)	$75,000
Co-PI (13% of time)	$166,296
PI (1% time)	$466,336
Equity Center Director (5% of time)	$144,063

   Employee Benefits. The University of Virginia negotiates its fringe benefit rates with the U.S. Department of Health and Human Services. The most recently negotiated rate for faculty is 28.2% and 38.1% for staff personnel.

   Non-Personnel Budget. We are planning allocations to various programs and initiatives such as funding for Boys & Girls Clubs, C4K, summer Curriculum Design Accelerator, teacher incentives, Innovation Academy Fellowship, laptops, physical computing devices, consumables, travel to conferences, and professional learning. There is also a significant investment in capital expenditures of $700,000 (Year 1) to $800,000 (Year 2). A considerable portion of the budget is allocated to capital expenditures in the initial years, emphasizing infrastructure and facility development of the UVA Innovation Hub. $1.5M is budgeted as subaward to Charlottesville City Schools.

Total annual budgets are as high as $1,484,549 in the first year and $1,663,049 in the second year to approximately $1,000,000 in years three through five. The total budget over five years is approximately $6.35 million.

This summarized financial plan offers a comprehensive view of anticipated expenses, program allocations, and investment patterns over a five-year period for the lab school project.

UVA including EHD and the Equity Center have financial controls and audit requirements that they adhere to annually and on an ongoing basis. The same is true of CCS. Both parties will retain existing procedures when governing and operating the lab school. The Lab School's financial plan is described in Question 3, see below.

As stated on the UVA Audit website: "The Chief Audit Executive is empowered to conduct assurance services, special audit projects, reviews, or investigations at the request of the Board, Audit and Compliance Committee, President, University Counsel, EVP Provost, EVP Chief Operating Officer, EVP Health Affairs, or their designee, to assist management in meeting its objectives, promoting economy and efficiency in the administration of, or preventing and detecting fraud and abuse in its programs and operations. UVA Audit may determine compliance with policies, procedures, laws and regulations established by the university, the Commonwealth, the Federal Government and applicable external organizations; audit internal control systems and financial transactions of the university, including capital projects; and provide an evaluation of operational efficiency and effectiveness in accordance with the goals and policies established by the university, Commonwealth, and the Federal Government.

As stated in UVA Policy FIN-048: As an agency of the Commonwealth of Virginia, the primary GAAP guidance for the University is issued by the Governmental Accounting Standards Board (GASB). The University must provide financial reporting consistent with generally accepted accounting principles for higher education and hospitals, which may include other standards in addition to GASB.

Proper stewardship of University Funds is the responsibility of all University employees. University funds may only be used for official purchases in accordance with University policy FIN-038: Receiving Goods and Services and Timely Disbursements of University Funds. Items purchased with University funds are the property of the institution and must be cared for appropriately and in accordance with the aforementioned policy. Each University fund transaction must be processed promptly, accurately, and reported in the University's finance system.

2. Revenue projections for the college partnership laboratory school for Years One (1) through Five (5). Include detailed information for the following categories of potential revenue:
    - State ADM funds – Include the formula used for calculating allotments.
    - Local Per Pupil Funds – Include the formula used for calculating allotments.

- Federal Funds
- Grants
- Foundations*
- Private Funds*
- Other Funds *

*If you are depending on these sources of funding to balance your operating budget, provide documentation, such as signed statements from donors, foundations, etc., on the Availability of these funds.

We plan to use both startup and per pupil college partnership laboratory school funds to launch and sustain the school for the first 5 years. We will pursue additional grants and funding streams at the federal and local level to augment and sustain funding for the school beyond the college partnership laboratory school funds.

3. Budget expenditure projections for the college partnership laboratory school for Years One (1) through Five (5). Include detailed information for the following categories of potential expenditures or include other categories as needed:
    - Total Personnel (for total number of staff)
    - Employee Benefits Total
    - Staff Development Total
    - Materials & Supplies
    - Office Supplies
    - Instructional Supplies
    - Classroom, Computer and Other Equipment
    - Facilities (Insurance, Utilities, Phone/Internet, Rent, Construction, Maintenance and Repair, Technology Maintenance, Transportation, Fuel, Marketing)
    - Food/Cafeteria

    Include additional information that showcases all assumptions for your budgetary calculations. For example, the Year 1 may include 10 teachers, but the plan is to add 2 teachers each year, and the increase in Expenditure is seen in the budget. Explain below, in detail, the budget calculations for years budget for Years Two (2) through Five (5).

    Year One
    Year One will be the soft launch of the UVA Innovation Hub at Charlottesville Middle School serving 300 7th grade students. It includes an initial capital improvement project to renovate and update four science classrooms to host the UVA Innovation Hub (Appendix G). A design contractor will be engaged to adjust the current layout to better integrate innovation into the science/engineering classrooms, ensuring a fit that promotes safety and creativity. Renovations will include an update to the classroom footprints, tech updates to foster interactive and innovation learning, installation of sound boards, safety hoods, and white boards. The budget also includes the lab school Director, Lab Manager, Research Scientist and support personnel, professional learning

incentives for educators including the Innovation Academy Fellowship, and physical computing and consumables budget to support student projects.

Year Two
Year Two will see the hiring of an Innovation Specialist to support an additional 300 8th grade students for a total of 600 students being served by the UVA Innovation Hub. In addition, the budget includes the final capital improvement project to upgrade furniture to ergonomic designs to complement the innovative classroom settings. The rest of Year Two's budget mirrors Year One with cost--of-living increases for personnel.

Year Three
Year Three will see the hiring of a second Innovation Specialist to support an additional 300 6th grade students for a total of 900 students being served by the UVA Innovation Hub. The year of Year Three's budget will mirror Year Two's with cost-of-living increases for personnel.

Year Four
Year Four's budget will mirror Year Three's with cost-of-living increases for personnel.

Year Five
Year Five's budget will mirror Year Four's with cost-of-living increases for personnel.

Table 4: Lab School 5-Year Budget

Description	Year 1	Year 2	Year 3	Year 4	Year 5
Personnel Budget					
UVA Innovation Hub Director (full-time)	$93,600	$97,344	$101,238	$105,287	$109,499
Research Admin (10%)	$7,785	$8,096	$8,420	$8,756	$9,107
UVA Innovation Hub Lab Manager (full-time)	$90,000	$93,600	$97,344	$101,238	$105,287
Innovation Specialist (full-time)		$75,000	$78,000	$81,120	$84,3650
Innovation Specialist (full-time)			$75,000	$78,000	$81,120
Graduate Research Scientist (full-time)	$75,000	$78,000	$81,120	$84,365	$87,739
Co-PI (13% of time)	$21,618	$22,483	$23,383	$24,318	$25,291
PI (1% time)	$13,990	$14,550	$15,132	$15,737	$16,366
Equity Center Director (5% of time)	$7,203	$7,491	$7,791	$8,103	$8,427

Employee Benefits					
Fringe benefits (faculty – 28.2% & staff – 38.1%	$114,278	$147,424	$181,897	$189,174	$196,740
Non-personnel Budget					
Boys & Girls Clubs	$5,000	$5,000	$5,000	$5,000	$5,000
C4K	$5,000	$5,000	$5,000	$5,000	$5,000
PBLWorks (5 participants)	$15,000	$15,000	$15,000	$15,000	$15,000
Incentives – stipends for pre-service participating in summer Curriculum Design Accelerator	$5,000	$5,000	$5,000	$5,000	$5,000
Incentives –for pre or in-service teachers involved with running CS Pathway	$3,600	$3,600	$3,600	$3,600	$3,600
Incentives – gift cards for parent/student advisory council members	$3,000	$3,000	$3,000	$3,000	$3,000
Innovation Academy Fellowship	$120,000	$120,000	$120,000	$120,000	$120,000
30 Laptops	$45,000				
Laptop cart	$2,000				
Physical computing devices	$45,000	$45,000	$67,500	$67,500	$67,500
Consumables	$20,000	$20,000	$30,000	$30,000	$30,000
Travel to conferences	$10,880	$11,002	$11,128	$11,258	$11,392
Professional learning	$8,000	$8,000	$8,000	$8,000	$8,000
Subaward to CCS (Capital expenditures)	$700,000	$800,000			
Indirect Costs (F&A) 10% MTDC	$73,595	$78,459	$94,255	$96,946	$99,743
ANNUAL TOTAL	**$1,484,549**	**$1,663,049**	**$1,036,808**	**$1,036,808**	**$1,097,176**
Revenue Projections					
Start-Up Funding Requested	**-$702,500**	**-$800,000**	**$0**	**$0**	**$0**
Per Pupil Funding Requested	**-$782,049**	**-$863,049**	**-$1,036,808**	**-$1,066,402**	**-$1,097,176**
Total Revenue	**-$1,484,549**	**-$1,663,049**	**-$1,036,808**	**-$1,066,402**	**-$1,097,176**
Per Pupil Cost Estimates					

Number of Students Served	**300**	**600**	**900**	**900**	**900**
Est. Per Pupil Cost (Excluding Start-Up Funds)	**$2,607**	**$1,438**	**$1,152**	**$1,185**	**$1,219**

4. Evidence of anticipated fundraising contributions, if applicable.

   We do anticipate fundraising as identified in Sustainability Plan Overview, but at this time we do not have any contributions to report.

5. A description of the insurance coverage that the school will obtain. Types of insurance include general liability, health, and property.

   As the UVA Innovation Hub will be embedded within Charlottesville Middle School, students in and property of the lab school will be covered by CCS insurance. The UVA Innovation Hub personnel will be covered by UVA insurance.

6. A justification for each type of insurance coverage sought and evidence that the applicant has consulted with the affiliated public or private institution of higher education to ensure that the level of coverage is satisfactory.

   As stated in UVA Policy FIN-006: Insurance Coverage: The UVA Office of Property & Liability Risk Management (OPLRM) will administer the property and liability risk management programs for the University. This includes the procurement of insurance protection, managing internal self-insurance programs, participation in the state self-insurance plans, providing risk management advice, and administering claims associated with the University's operations. The insurance and self-insurance coverage includes general liability, directors and officers, errors and omissions, professional liability, property damage, crime, employee bond, equipment breakdown, watercraft, aircraft, automobile liability and physical damage, cyber risk, and other specialized insurance as may be necessary.

   As a state agency, the University is permitted to participate in risk management programs that are part of the State's Risk Management Plan. The University's OPLRM will procure insurance or develop self-insurance programs that are not provided by the State Plans.

   All University operations conducted on University property, in owned and leased buildings, or at sites located away from the University are covered for authorized University business. This coverage provides protection for acts of negligence for which the University and/or its employees and agents may be held legally liable. It should be noted, however, that there may be no coverage if it is determined that liability was incurred by reason of (a) acts of fraud or dishonesty by the Covered Party, (b) acts of intentional, malicious or willful and wanton misconduct by the Covered Party, or (c) criminal acts. Defense for claims, suits, actions or other proceedings covered by this

plan is provided under 2.2-507 et al of the Code. Additionally, claims, demands or other actions seeking relief or redress in any form other than monetary damages, including, but not limited to injunctive relief are not covered. Liability assumed under any written contract or agreement is also not covered.

7. A sound facilities plan, including backup or contingency plans. Facilities information includes (1) the provision of suitable instructional space; (2) provisions for library services; (3) provisions for the safe administration and storage of student records and medications; (4) information regarding compliance with building and fire codes and compliance with the federal Americans with Disabilities Act; (5) general information on emergency evacuation plans; (6) information regarding site location and preparation; (7) the structure of operation and maintenance services; and (8) financial arrangements for facilities, including any lease arrangements with school divisions or other entities and whether debt will be incurred.

   The facilities plan ensures that the UVA Innovation Hub at Charlottesville Middle School operates within a well-structured, safe, and compliant environment, conducive to the innovative and experiential learning it aims to provide.

Instructional Space:

- The Hub will utilize instructional spaces at Charlottesville Middle School, ensuring suitability for diverse learning activities. The existing infrastructure, detailed on the CMS facilities website, will be adapted to accommodate the specific needs of the Hub's innovative curriculum.

Library Services:

- Library resources will be provided in collaboration with the Charlottesville Middle School Library, as outlined on their website. Additionally, the Hub will integrate digital library services using Follett and Destiny platforms to enhance research and learning opportunities.

Administration and Storage of Records and Medications:

- The Hub will adhere to established procedures for the safe administration and storage of student records and medications, ensuring confidentiality and compliance with health and safety regulations.

Compliance with Codes and ADA:

- In partnership with the Charlottesville Fire Department and the City Maintenance and Facilities Development Departments, the Hub will maintain strict adherence to building and fire codes and the Americans with Disabilities Act (ADA). Regular inspections and facility evaluations will be conducted, overseen by Julia Green and the City Facilities Development team.

Emergency Evacuation Plans:

- The Hub will follow the School Crisis, Emergency Management, and Medical Response Plans linked to the Division Plan. Evacuation maps will be prominently displayed in each classroom, indicating primary and secondary routes.

Site Location and Preparation:

- The Hub's location and site preparation adhere to the standards outlined on the CCS facilities webpage and align with the comprehensive facilities review conducted annually.

Operation and Maintenance Services:

- The CCS Chief Operations Officer will oversee operations such as transportation, nutrition, safety, housekeeping, and facilities. Services such as transportation and facilities maintenance are contracted through the City Transit operation and City Public Works, respectively.

Financial Arrangements for Facilities:

- The Hub operates within facilities owned by the City of Charlottesville / Charlottesville Schools, negating the need for lease arrangements. Capital improvements and facility acquisitions are supported through bonds issued by the City, which maintains a AAA bond rating. Logistics for the capital improvements outlined in this application for the lab school will be detailed in the MOU between UVA and CCS.

8. A description of whether transportation services will be provided. If transportation is to be provided, indicate whether the school will contract for transportation with the local education agency or another entity. Indicate whether transportation will be provided to all students attending the school.

   CCS will continue to provide all transportation services for students.

9. A description of transportation services for students with disabilities. (Section 22.1-221 A of the *Code of Virginia* states that "[e]ach disabled child enrolled in and attending a special education program provided by the school division pursuant to any of the provisions of § 22.1-216 or § 22.1-218 shall be entitled to transportation to and from such school or class at no cost if such transportation is necessary to enable such child to obtain the benefit of educational programs and opportunities.")

   CCS will provide transportation for students with disabilities.

10. A description of food service operations and all other significant operational or ancillary services to be provided.

    CCS will continue to provide all food service operations.

VII. ELEMENT 7 – Lab School Closure Placement Plan

The following information must be provided:

1. Identification of a name or position of a member of the school's leadership who will serve as a single point of contact for all activities that may need to take place in order for the school to close, including but not limited to the transfer of students to another

school, the management of student records, and the settlement of financial obligations. Include contact's name, title, email address, and phone number.

The UVA Innovation Hub Director will serve as the single point of contact for all activities that may need to take place in order for the school to close.

2. A draft notification process for parents/guardians of students attending the school and teachers and administrators of the termination or revocation of the contract.

   If the UVA Innovation Hub is closed, we will provide a notification to the parents/guardians that their students will no longer be participating in the UVA Innovation Hub.

3. A draft notification process to parents or guardians of students attending the college partnership laboratory school of alternative public school placements within a set time period from the date of termination or revocation of the contract.

   Because the UVA Innovation Hub is embedded at CMS, there is no need for alternative public school placements.

4. A detailed plan for ensuring that student records are provided to the parent or guardian, or another school identified by the parent or guardian within a set time period. If the student transfers to another school division, provisions for the transfer of the student's record to the school division to which the student transfers upon the request of that school division. (*See* § 22.1-289 of the *Code of Virginia*).

   Because the UVA Innovation Hub is embedded at CMS, student records related to the lab school will already be at CMS.

5. A detailed placement plan for school employees that details the level of assistance to be provided within a set period of time from the termination or revocation of the contract.

   As stated earlier, the lab school employees will be hired into Restricted University Staff positions at UVA and will be made aware and acknowledge that their employment is contingent on the needs for the services, the availability of funding and satisfactory performance.

6. A close-out process plan related to the college partnership laboratory school financial obligations and audits, the termination of contracts and leases, and the sale and disposition of assets within a set period of time from the termination or revocation of the contract. The plan shall include the disposition of the schools' records and financial accounts upon closure.

Financial Obligations and Audits:

Financial Review and Obligations Assessment:

- Upon termination or revocation of the contract, an immediate comprehensive financial review will be conducted. All pending financial obligations, outstanding bills, and contractual commitments will be assessed.

Audit Preparation and Conduct:

- UVA audit services are described earlier in this document. Upon closure of the project, UVA would conduct a comprehensive review of all financial records, ensuring compliance with state, local, and university accounting standards. A report will be prepared and shared with relevant stakeholders for transparency and compliance purposes.

Settlement of Financial Obligations:

- Once the financial review is completed, a plan will be executed to settle all financial obligations, outstanding debts, and contractual liabilities within the stipulated time frame.

Termination of Contracts and Leases:

Identification and Notification:

- All personnel hired by UVA in support of the Lab School will be hired in a capacity that is contingent upon continued external funding. In the event that any contracts or leases were to be taken out in support of the Lab School (no contracts or leases are anticipated at this time), all existing contracts and leases associated with the school will be identified and reviewed for termination clauses. Notifications will be sent out to all parties involved in the contracts and leases regarding the closure of the school.

Sale and Disposition of Assets:

Asset Inventory and Evaluation:

- Fixed assets owned by CCS or owned by UVA will remain the property of the purchasing party and will remain subject to rules and regulations for tagging, tracking, and maintaining state property.

Disposition of Records and Financial Accounts:

Records Management:

- All student records will be managed and maintained by Charlottesville City Public Schools.
- All personnel records for UVA employees working in the Lab School will be managed and maintained by the University of Virginia.

This close-out plan will be executed within no more than one fiscal year after the closure of the Lab School, following the termination of the partnership. Parties will comply with legal and financial obligations, and responsible handling of assets, records, and financial accounts.

VIII. ELEMENT 8 – Other Assurances and Requirements

The following information should be provided:

1. A detailed description of the college partnership laboratory school's policies and procedures for compliance with the federal *Family Educational Rights and Privacy Act* and records retention schedules consistent with guidance issued by the Library of Virginia.

   As the UVA Innovation Hub will be embedded within Charlottesville Middle School, the lab school will follow CCS policies and procedures.

2. Evidence that the proposed college partnership laboratory school programs, services, and activities will operate in accordance with all applicable federal and state laws and regulations, including the Virginia Freedom of Information Act.

   Same as above.

3. A listing of all waivers to state regulations needed for the college partnership laboratory school at the time of its opening. This does not preclude a college partnership laboratory school from requesting additional waivers once the school is operational. (*See* §8VAC20-131 of the *Code of Virginia*.)

   Not applicable.

4. A detailed description of any collaborative partnerships that may be made with public school divisions to enhance opportunities for all Virginia students, from preschool to postsecondary. An educational program provided to students enrolled in a public school division pursuant to a collaborative partnership between the college partnership laboratory school and the public school division shall be considered to be the educational program of the public school division for purposes of the SOA. (*See* § 22.1-349.3 G of the *Code of Virginia*.)

   For the lab school application, we drafted an initial Distribution of Responsibilities (Appendix A) between the partners. If the UVA Innovation Hub is granted lab school status, the UVA EHD, UVA Equity Center and CCS will collaborate and seek representation and counsel as appropriate to create a Memorandum of Understanding (MOU) formalizing the distribution of responsibilities and the terms and conditions of the partnership.

5. A detailed description of all agreements that the applicant may need in the contract with the Board related to the release of the college partnership laboratory school from state regulations, consistent with the requirements in § 22.1-349.3 B of the *Code of Virginia*,

including the approval of an Individual School Accreditation Plan. Section 22.1-349.4 of the *Code of Virginia* states that "[i]f the college partnership laboratory school application proposes a program to increase the educational opportunities for at-risk students, the Board of Education may approve an Individual School Accreditation Plan for the evaluation of the performance of the school."

Not applicable.

6. A detailed description of how the applicant and members of the governing board will disclose any conflicts of interest, which would include a personal interest in any transactions involving the college partnership laboratory school, including information regarding the frequency with which such disclosures will be made. (*See* § 2.2-3114 of the *Code of Virginia*.)

   Before joining the Governing Board and annually from then on, we will ask board members to confirm they are in compliance 2.2-3114 of the Code of Virginia.

7. Conflict of interest disclosure(s) by the applicant and/or members of the governing board in the proposed school. This includes any relationships that parties may have with vendors performing services at the school.

   If the UVA Innovation Hub is granted lab school status, we will have the initial governing board members disclose conflicts of interest.

Part C: Assurances

Assurances in the *Code of Virginia*: The assurances in the *Code of Virginia* represent the policies and procedures that must be developed and addressed in the application by the college partnership laboratory school to carry out the provisions of the law. By signing and submitting this application for a college partnership laboratory school, the applicant expressly assures the Board of the following:

1. No tuition will be charged to students attending the college partnership laboratory school, except as described in subsection E of § 22.1-349.3 of the *Code of Virginia*.

2. The school will be nonreligious in its admission policies, employment practices, instruction, and all other operations.

3. The proposed college partnership laboratory school programs, services, and activities will operate in accordance with all applicable federal and state laws and regulations (including the federal *Americans with Disabilities Act*, the federal *Individuals with Disabilities Education Improvement Act*, Section 504 of the federal *Rehabilitation Act of 1973*, and the *Virginia Freedom of Information Act*) and constitutional provisions prohibiting discrimination on the basis of disability, race, creed, color, gender, national origin, religion, ancestry, or need for special education services.

4. The applicant will take all actions necessary to enter into a contract with the Board no later than nine (9) months prior to the opening date of the college partnership laboratory school.

5. The school leadership of the college partnership laboratory school will be retained on contract no later than six (6) months prior to the opening date of the school.

6. An assurance that the applicant will meet the condition in § 22.1-349.9 of the *Code of Virginia*, which state that "teachers who work in a college partnership laboratory school shall hold a license issued by the Board or, in the case of an instructor in the Board-approved teacher education program of the institution of higher education, be eligible to hold a Virginia teaching license. Teachers working in a college partnership laboratory school shall be subject to the requirements of §§ 22.1-296.1, 22.1-296.2, and 22.1-296.4 applicable to teachers employed by a local school board."

7. All initial requests for waivers from the Board will be made no later than six (6) months prior to the opening date of the school. (This does not preclude a college partnership laboratory school from working with the local school board to request additional waivers once the school is operational.)

8. The applicant must assure knowledge of the *Virginia State and Local Government Conflict of Interest Act* (§ 2.2-3100 et seq. of the *Code of Virginia*) and the *Virginia Public Procurement Act* (§ 2.2-4300 et seq. of the *Code of Virginia*).

Assurances approved by the Virginia Board of Education: By signing and submitting this application for a college partnership laboratory school, the applicant expressly assures the Board of the following:

1. If this application is approved, the applicant will take all actions necessary to enter into a contract with the Board not later than nine (9) months prior to the opening date of the college partnership laboratory school.

2. If the application is approved, the leadership of the college partnership laboratory school will be retained on contract no later than six (6) months prior to the opening date of the school.

3. All initial requests for waivers from the Board will be made by the local school board, on behalf of the applicant, no later than six (6) months prior to the opening date of the school. (This does not preclude a college partnership laboratory school from working with the Board to request additional waivers once the school is operational.)

4. The applicant assures knowledge of the *Virginia State and Local Government Conflict of Interest Act* (§ 2.2-3100 et seq. of the *Code of Virginia*) and the *Virginia Public Procurement Act* (§ 2.2-4300 et seq. of the *Code of Virginia*).

Pursuant to the requirements, I hereby certify that to the best of my knowledge, the information in this application is correct; the applicant has addressed all application elements that pertain to the proposed college partnership laboratory school; and that the applicant understands and will comply with the assurances listed above.

Name of Authorized Official: Catherine Thompson, CRA Title: Asst. Director of Research Administration – Pre-Award, UVA School of Education and Human Development

Signature of Authorized Official: Date: 11/8/2023

APPENDIX SECTION

Appendix A: References

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Appendix B: Lab School Distribution of Responsibilities Draft

The University of Virginia and Charlottesville City Schools understand the need to work collaboratively to achieve the mission and goals of the UVA Innovation Hub.

Charlottesville City Schools (CCS) responsibilities:

- Provide a safe and well-maintained space for the UVA Innovation Hub in Charlottesville Middle School (CMS).
- Collaborate with UVA Innovation Hub staff to integrate Virginia Standards of Learning into the curriculum.
- Facilitate interdisciplinary collaboration between UVA Innovation Hub programs and core curriculum subjects.
- Provide onboarding and ongoing support for the UVA Innovation Hub Lab Manager at CMS.
- Provide regular updates to the lab school Governing Board related to student outcomes, Lab Manager performance and any other lab school-related items.
- Ensure that all student schedules reflect their time in the UVA Innovation Hub as outlined in the lab school application.
- Support internships for UVA School of Education and Human Development (EHD) Master of Teaching candidates and practicum experiences for UVA EHD undergraduate teacher candidates.
- Provide a process for onboarding lab school volunteers.
- Work with UVA EHD to promote the lab school's initiatives, achievements, and success stories through various media outlets and academic platforms.
- Recruit educators to participate in Innovation Academy Fellowship.
- Recruit families and students to participate in the lab school Family/Student advisory council.

UVA School of Education and Human Development (EHD) responsibilities:

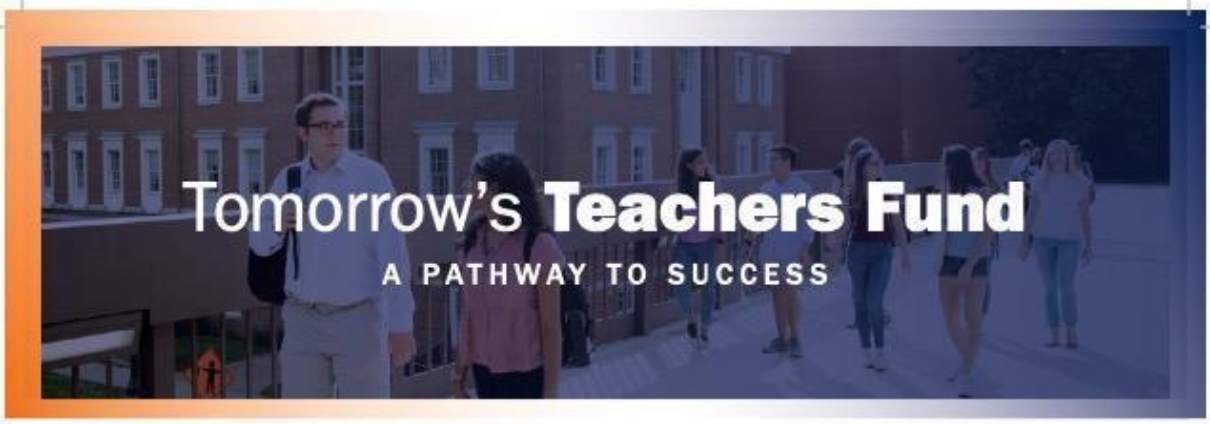
- Recruit, supervise, develop, and manage salary and benefit awards for lab school-related employees.
- Provide ongoing professional development (PD) support for CCS teachers in the form of the Curriculum Design Accelerator and the Innovation Academy Fellowship.
- Provide curriculum development support for the lab school.
- Periodically review and adapt the curriculum in response to changes in educational standards, technological advancements, and feedback from stakeholders.
- Establish and manage partnerships toward the development, implementation and sustainability of the lab school.
- Allocate funds for, and oversee the procurement of, essential CS/Science equipment for the lab school. Additionally, manage regular maintenance, repairs, and potential upgrades to ensure that all equipment remains functional and up-to-date.
- Work with the Equity Center to manage lab school volunteers and other potential community partnerships.
- Recruit and supervise Master of Teaching candidates in internships and undergraduate teacher candidates in practicum experiences in the lab school.
- Provide staffing for the Starr Hill CS Pathway.
- Facilitate family/student focus group sessions and lab school advisory council.
- Provide regular updates to the lab school Governing Board related to PD, research results, Lab Manager performance and any other lab school-related items.
- Coordinate all UVA-related research efforts in the lab school.

- Research the impact and effectiveness of the lab school on student and teacher outcomes.
- Work with CCS to promote the lab school's initiatives, achievements, and success stories through various media outlets and academic platforms.
- Annual review and update MOU with CCS under the guidance of the lab school Governing Board.

UVA Equity Center responsibilities:

- Recruit community partners to support lab school efforts by providing volunteers to be mentors, guest speakers and activity leaders, as well as providing opportunities like field trips, hackathons, externships.
- Maintain and support the CS Pathway through Starr Hill Pathways.
- Provide substitute teachers during the school year to support PD opportunities for teachers.
- Regularly review and update MOU with CCS under the guidance of the lab school Governing Board.

Appendix C: Tomorrow's Teachers Fund



The nationwide and statewide shortage of teachers has grown even greater since the pandemic. Teaching vacancies also have increased as teachers leave the workforce. This shortage of qualified teachers and the rise in teaching vacancies harm student learning, reduce teacher effectiveness, imperil the teaching profession, and threaten our nation's systems of free and universal education.

2021 Estimated **DEMAND**

+300,000 TEACHERS

2021 Estimated **SUPPLY**

~185,000

The number of **UNFILLED** education positions in Virginia have grown by nearly **62%** in the past 3 years (2018-2021)

GROUNDWORK FOR PREPARED TEACHERS

One of four key factors driving the current teacher shortage is a national decline in teacher preparation enrollments. Between 2009 and 2014, enrollments in traditional teacher preparation programs fell 35%. This corresponded with a 23% decrease in candidates completing teacher preparation programs during the same period.

UVA offers a high-quality teacher preparation program that prepares teachers to meet the needs of all learners in their classrooms. Graduates from UVA's distinguished teacher education program are consistently rated by employers as ready to meet the diverse needs of students. However, the cost of entry into the profession is a significant barrier for many prospective teachers, particularly teachers of color. To ensure affordability and accessibility, the University has created the Tomorrow's Teacher Fund.

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EDUCATION.VIRGINIA.EDU

A SOUND SOLUTION

Teacher preparation programs are essential to the success of Pre-K-12 students. Graduates from UVA's programs leave with a professional teaching license, verifying that they have met all competencies for licensure prior to entering the classroom. One alternative practice, such as provisional licensure for teachers, provides a short-term solution for schools and is an option for those who are unable to afford a teacher preparation program. However, it's imperative that we provide opportunities for teachers to receive high-quality preparation prior to entering the classroom. The prevalence of provisionally licensed teachers in a school division has been shown to have a negative association with student achievement. Also, beginning teachers without comprehensive preparation are two to three times more likely to leave the classroom after the first year when compared to those who have completed comprehensive preparation programs. High rates of teacher attrition have negative impacts on student learning outcomes.

TODAY'S OPPORTUNITY

The new Tomorrow's Teachers Fund will provide $10,000 per student per year to approximately 100 students in our Teacher Education program. Support covers half of the program cost for Virginia residents or a semester of tuition for non-Virginia residents.

The overall goal is to raise $6 million in current use funds, which will be offered to students upon acceptance to the program, starting in fall 2024. Ultimately, an endowment of $60 million will be established to support the program in perpetuity by providing up to $1.5 million annually for tuition assistance. Naming opportunities include naming the fund with a single $30 million gift or to name separate scholarships with multiple gifts ranging from $3 million to $10 million.

Help prepare future teachers to excel in their professions. Your gift to the Tomorrow's Teachers Fund will help us see teachers on the best path for tomorrow's classrooms.

HONOR *the* FUTURE

CONTACT

Mike Cashman, Executive Director, School of Education and Human Development Foundation
434-[illegible] mc2p@virginia.edu

Appendix D: Curriculum Design Accelerator

Curriculum Design Accelerator

Description

The goal of the Curriculum Design Accelerator is to support pre- and in-service teachers in designing and developing interdisciplinary, computationally-rich, project-based curriculum as a catalyst to engage students in personally meaningful learning experiences that deepen their content-area understanding. Participants will identify a vision for their projects, and together design and innovative school experiences that provide students agency and voice to pursue questions and problems of consequence to their lives.

Learning Objectives

We aim for participants to:

1. Develop understanding and confidence in integrating computationally-rich activities in student-driven, project-based learning experiences.
2. Develop understanding and be able to apply equitable teaching strategies that foster students' positive identity development and their sense of belonging in STEM fields, especially science and computer science.
3. Develop understanding and be able to leverage community-based resources and assets with students to solve locally relevant problems.

What does this have to do with the Buford Lab School?

Great question! Lab schools come together in partnership between an institution of higher education and a locality. VDOE is looking to fund lab schools that are designed to stimulate innovative programs, encourage performance-based education, and encourage greater collaboration. We are currently in a Planning Grant year for the Buford Lab School. That means we have established a partnership between UVA and CCS, we have laid out the rationale for having a lab school at Buford and identified objectives and milestones in order to submit a formal application. Two of the big milestones include designing and implementing a new pathway for the Starr Hill Pathways and the Curriculum Design Accelerator this

summer, so we can be in partnership with teachers and students about what the Buford Lab School should be.

Summer 2023 Accelerator Schedule

July 17 - 21 Outline

In the morning, 9am to 12:30pm, we will be with students in the Computer Science Starr Hill Pathway. This is an opportunity for you to see and engage with examples of project-based learning (PBL) that integrate computer science concepts, engage student interest, and connect with community partners.

In the afternoon, 1:00-3:00pm, we'll take a deeper dive into PBL and make plans for integrating computationally-rich activities in student-driven learning experiences for the upcoming school year.

Day 1 **July 17** **Design Lab** **Ridley 300**	Morning - Design Challenge: Prototype ● Designing Games for Learning: Programming Cells ● Explore CODAP **Afternoon - Why PBL?** ● What makes a good PBL? ● Engage in the OpenSciEd project How do living systems heal? Or Where does food come from? ● Curriculum integration Strategies ● Shared Goals for the year - what do you want to do/where do you want to be?

Day 2
 	
July 18
 	
WillowTree
1835 Broadway St
 	
C4K
945 2nd St SE
	Morning - Design Challenge: Test
	● Field trip to WillowTree
	● Students will have the opportunity to use their usability lab to test their game controller designs
	
	Afternoon - Unpacking the Design Challenge
	● Field trip to C4K
	● **Engaging community partners**
	  ○ Help them identify real-world opportunities for students
	  ○ Identify mentoring opportunities
	● **Building on student interest**
	  ○ Look at student interest data: 6th grade and 7th grade

Day 3
 	
July 19
 	
Design Lab
Ridley 300
	Morning - Creating poster boards
	● Engage with students about their work throughout the week
	
	Afternoon - Brainstorming Ideas
	● Examples of PBL
	  ○ Examples of PBL's for life science and physical science
	  ○ CCS PBL Unit Template

	● Ideate Project ideas (is it places where students have difficulty, places where content is ideal, revise inquiry project, etc.) ● **Tying to the VA Science SOLs and CS strands** ● Unpack PBLs for classroom with the curriculum framework, see what SOL's are addressed, process of findings SOLs to match
Day 4 **July 20** **Design Lab** **Ridley 300**	Morning - Explore robotics Afternoon - Design and develop PBL ● Workshop time
Day 5 **July 21** **Design Lab** **Ridley 300**	**Morning -** Design challenge: empathize **Afternoon - PBL Showcase:** ● **Pitch, Reflect, and Plan for school year**

Appendix E: Lab School Evaluation Framework Draft

Evaluation Governance

- Form an Oversight Committee consisting of UVA's School of Education representatives, Charlottesville Middle School (CMS) administration, and potentially external educational experts. This committee will ensure evaluations align with UVA's standards of academic excellence and CMS's educational objectives.

Conducting Evaluations

- Innovation Hub Director:
    - Conducted By: Oversight Committee, including a CMS administrative representative
    - Focus Areas: Leadership, strategic planning, stakeholder engagement (with CMS stakeholders), educational research, and collaboration efficacy between the lab school and CMS.
    - Formal Evaluations: Twice a year, mid-year and end-of-year, by the Oversight Committee with input from CMS.
    - Informal Check-Ins: Quarterly, to provide ongoing feedback and address any immediate concerns or adjustments.
- Innovation Hub Lab Manager:
    - Conducted By: Innovation Hub Director, with input from the Oversight Committee.
    - Focus Areas: Operational efficiency, staff development, resource management, program implementation, and their impact within CMS.
    - Formal Evaluations: Twice a year, conducted mid-year and end-of-year, to assess operational efficiency and program implementation effectiveness.
    - Informal Check-Ins: Quarterly, focusing on operational challenges and opportunities for improvement.
- Innovation Hub Specialists (2 Positions):
    - Conducted By: Innovation Hub Director with input from the Oversight Committee.
    - Focus Areas: Instructional quality, student engagement, curriculum development, community contribution, and program integration within CMS.
    - Formal Evaluations: Twice a year, focusing on instructional excellence, student engagement, and curriculum integration.
    - Informal Check-Ins: Monthly, with more frequent classroom observations and feedback sessions to support instructional improvement and professional growth.

Evaluation Criteria

- Standard Criteria: Dedication to UVA Innovation Hub mission, professional growth, ethical adherence, and fostering an inclusive, equitable learning environment.
- Role-Specific Criteria: Performance objectives tailored to each position, highlighting educational impact and operational effectiveness.

Evaluation Process

- Self-Assessment: Encourage staff to conduct self-evaluations to reflect on their objectives, achievements, and areas for improvement.
- Observation and Feedback: Implement classroom observations for specialists, operational reviews for managers, and leadership assessments for directors, followed by feedback sessions.
- Formal Evaluation Meetings: Schedule semi-annual or annual meetings to review performance data, feedback, and self-assessment outcomes.
- Development Planning: Identify professional development paths and set future goals.

Documentation and Compliance

- Record-Keeping: Securely maintain comprehensive records of evaluations, feedback, and development plans, accessible to UVA and CMS administration.
- Policy Alignment: Ensure the evaluation process adheres to UVA's employment and academic policies and local education authority regulations.

Feedback and Appeals

- Continuous Feedback: Establish an ongoing feedback system to promote constant improvement.
- Appeal Process: Create a fair appeal mechanism for evaluation outcomes consistent with UVA's dispute resolution policies.

Appendix F: Letters of Support

CHARLOTTESVILLE CITY SCHOOLS

Office of the Superintendent
1562 Dairy Road
Charlottesville, VA 22903
(434) 245-2400
Fax: (434) 245-2603
www.charlottesvilleschools.org

October 16, 2023

To the members of the College Partnership Laboratory Schools Standing Committee of the Virginia Board of Education:

This letter is a written statement of support for the proposed Charlottesville Middle School Innovation Hub in partnership with the University of Virginia (UVA) and Charlottesville City School.

As Superintendent of Charlottesville City Schools, I fully support this partnership and the application submitted by the University of Virginia School of Education and Human Development (UVA-SEHD). The Innovation Hub is a model for modern education, seamlessly integrating Project-Based Learning (PBL) with valuable community partnerships. Its guiding principles demonstrate a deep commitment to progressive learning, offering an interdisciplinary approach infused with project-based and computing-centric experiences. The hub's focus on prioritizing student voices and choices in their educational journey and its aspiration to strengthen community connections for authentic problem-solving, mentorship, and career exploration is commendable and forward-thinking.

Given the transformative potential of the Charlottesville Middle School Innovation Hub and its robust collaborative foundation, I am confident that this initiative will benefit Charlottesville and set an educational benchmark for others to emulate. Our school division has been closely involved in the planning process for the Lab School design and is deeply committed to this partnership with UVA. We aim to create a model that can inspire institutions across the Commonwealth. Please contact me directly if you have any questions.

Sincerely,

Royal A. Gurley, Jr., Ed.D.
Superintendent

Better Together

UNIVERSITY of VIRGINIA | SCHOOL of EDUCATION and HUMAN DEVELOPMENT

October 25, 2023

To the College Partnership Laboratory School Standing Committee:

On behalf of the Teacher Education program at the UVA School of Education and Human Development, I am pleased to support the Charlottesville Middle School Innovation Hub Lab School Proposal.

By drawing upon the expertise of experienced educators and community partners, our teacher education program prepares candidates to honor and grow the assets and resources that students bring to classrooms and schools. As described in the application, the lab school will expand on that mission by developing meaningful community connections that engage students, teachers, and families in real-world problem-solving, mentorship, and career exploration. The school will bring together pre-service and in-service teachers for professional development that will support the implementation of evidence-based practices. This school will also serve as a site for ongoing research and collaboration to inform scholarship in the field.

We are excited for the opportunity for our pre-service teachers to complete clinical hours within the Innovation Hub. This will enhance the robust clinical experience sequence in our program by providing additional STEM-focused learning opportunities to candidates across disciplines.

I am confident the Charlottesville Middle School Innovation Hub Lab School will have an immediate impact on our local community and provide excellent preparation for a new cadre of teachers who will work across the Commonwealth.

Sincerely,

Jillian McGraw, Ed.D.
Director of Teacher Education
University of Virginia

UNIVERSITY of VIRGINIA

KARSH INSTITUTE OF DEMOCRACY

October 25, 2023
Virginia Department of Education
P.O. Box 2120
Richmond, VA 23218

Dear College Partnership Laboratory Schools Standing Committee:

On behalf of the UVA Karsh Institute of Democracy Center for the Redress of Inequity through Community-Engaged Scholarship (the Equity Center), I am writing to extend my enthusiastic support for the proposed Charlottesville Middle School Innovation Hub. The UVA Equity Center's mission includes equipping students with skills to lead in building a just society – this proposed lab school provides the opportunity for the center to address goals such as strengthening its partnership with CCS and expanding its pipeline programs in K-12.

The Equity Center has been a key partner in the planning grant and development of the lab school proposal with a focus on building community connections. In my capacity as Equity Center Executive Director, I have been a member of the Lab School Advisory Board and will have a seat on the lab school's Governing Board. During the planning grant, we supported the development of the new Computer Science (CS) pathway which provided over 20 middle and high school students the opportunity to explore CS concepts through hands-on activities and to use their newfound knowledge and skills to solve a real-world problem through the design thinking process.

If awarded funding for a full lab school, the Equity Center will continue to support the Middle School Innovation Hub in meaningful ways. We will support professional learning opportunities during the school year for teachers by providing substitute teachers for lab school educators. Additionally, the Innovation Hub lab manager will work closely with Equity Center's Community Partnerships Program Manager to establish and strengthen community connections for students and teachers. These community connections will support student career explorations, real-world problem solving, mentorship opportunities for teachers and students.

Again, we offer our full support of this proposal and are eager to see the lasting impacts this programming will provide to Charlottesville youth.

Sincerely,

E. Ben Allen

Ben Allen
Executive Director
The Equity Center

THE EQUITY CENTER

The Center for the Redress of Inequity through Community-Engaged Scholarship
201 W. Main St. | Suite 3 | Charlottesville, VA 22902
P 434-924-2414 | virginiaequitycenter.org

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a TELUS International Company

October 24, 2023

To the Lab School Committee,

I am writing to express my support for the proposed Charlottesville Middle School Innovation Hub and the work of Charlottesville City Schools (CCS) and the School of Education and Human Development (SEHD) at the University of Virginia. This proposed lab school aims to support the development of a quality educator pipeline, provide high school students with robust, innovative learning experiences, and engage the community through business and non-profit partnerships. Its focus on computer and data science will meet critical workforce needs, helping to build a pool of employees eligible for in-demand industry roles.

As the President of a digital services company headquartered in Charlottesville, VA, I believe that this project will help ensure that Charlottesville benefits from meaningful workforce development for high-paying, future-oriented jobs for its residents. It will provide local students with the skills they need to succeed in the 21st century economy, and it will help to attract new businesses and jobs to our community. There is a regional need for building the workforce pool in the computer and data sciences, and providing opportunities for students to develop their job readiness through real world experiences, internships, and externships. The Innovation Hub will be a great asset for the city, its residents, private employers, and local schools.

Sincerely,

Tobias Dengel
President
WillowTree, a TELUS International Company

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945 2nd Street SE, Charlottesville, VA 22902
c4kclubhouse.org
info@c4kclubhouse.org
434-817-1121 | @c4kclubhouse

Dear College Partnership Laboratory School Standing Committee,

I am writing to support the UVA Charlottesville Middle School Innovation Hub lab school application. As the Executive Director of C4K, a STEM mentoring program for underrepresented youth, I am deeply impressed by the vision and goals of this project.

The Innovation Hub will provide a much-needed space for all Charlottesville Middle School students to learn new computer science (CS) and technology skills, and collaborate to solve real-world community-based problems through interdisciplinary projects and capstones. This approach is aligned with the latest research on best practices for teaching and learning STEM subjects, and it has the potential to make a significant impact on student outcomes.

I am particularly excited about the Innovation Hub's commitment to equity and inclusion. The Hub will be designed to meet the needs of all students, regardless of their background or prior experience with STEM. This is essential, as students from underrepresented groups are often underrepresented in STEM fields.

C4K has supported underrepresented youth through STEM mentoring for over 20 years, utilizing project-based learning. We have seen firsthand how this approach can impact students' lives. Our students develop the skills and confidence they need to succeed in STEM fields, a love of learning, and a sense of belonging to a community.

The UVA Charlottesville Middle School Innovation Hub is a natural extension of our work at C4K. We are excited to partner with UVA and Charlottesville City Schools to bring this innovative learning space to our community.

I urge you to approve the UVA Charlottesville Middle School Innovation Hub grant proposal. This project has the potential to make a real difference in the lives of students and the Charlottesville community as a whole.

Very truly yours,

Kala E. Somerville
Executive Director

BOYS & GIRLS CLUBS
OF CENTRAL VIRGINIA

Dear College Partnership Laboratory School Standing Committee,

As the Director of Club Operations for Youth Program Quality, I am writing to support the UVA Charlottesville Middle School Innovation Hub lab school application. The Lab School aligns with our Boys & Girls Clubs of Central Virginia mission to enable all young people, especially those who need us most, to reach their full potential as productive, caring, responsible citizens.

The Innovation Hub will provide an integral space for all Charlottesville Middle School students to learn new computer science, data science and technology skills, and collaborate to solve real-world community-based problems through interdisciplinary projects and capstones. This approach is aligned with the latest research on best practices for teaching and learning STEM subjects, and it has the potential to make a significant impact on student outcomes.

As a partner who shares a campus with the Charlottesville Middle School (currently Buford), Boys & Girls Clubs of Central Virginia is excited that the lab school is committed to transforming the school experience in a way that elevates the developmental needs of young adolescents: a sense of belonging and purpose, positive identity development, agency and leadership, positive social interactions and relationships, goal setting and achievement, flexible problem-solving and critical thinking, as well as opportunities for autonomy and self-direction, and supporting mental health.

Boys & Girls Clubs of Central Virginia highly values both the STEM components of the program that align with our STEM Specialist position as well as the community and positive social interaction components that will help support our Boys & Girls Clubs and Charlottesville Community as a whole.

The UVA Charlottesville Middle School Innovation Hub is a natural extension of our work at Boys & Girls Clubs of Central Virginia. We are excited to partner with UVA and Charlottesville City Schools to bring this innovative learning space to our community.

I urge you to approve the UVA Charlottesville Middle School Innovation Hub grant proposal. This project has the potential to make a real difference in the lives of students and the Charlottesville community.

Sincerely,

Shannon Ferns

Director of Club Operations for Youth Program Quality

UNIVERSITY of VIRGINIA | SCHOOL of ENGINEERING & APPLIED SCIENCE

Date: October 24, 2023

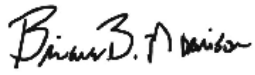
Dear College Partnership Laboratory School Standing Committee:
As the Director of the Center for Innovation in Computing Education and Outreach at the University of Virginia, I enthusiastically support the UVA Lab School Proposal. As a staunch supporter of Computing for All and a firm believer in providing students with meaningful, educational opportunities to learn how to use computing as a tool to solve real-world problems, the UVA Lab School promises to be a national leader in providing all students with this opportunity. As many other regions are struggling with how to incorporate computing into their K-12 students' academics, the UVA Lab School promises to be a transformative force in the field of education by harnessing the power of technology and computation.

The Charlottesville Middle School Innovation Hub's commitment to improving student outcomes through computing-rich, project-based learning is both visionary and essential for the ever-evolving demands of the modern world. In an age where technology is pervasive and rapidly advancing, it is imperative that we equip students with the knowledge and skills necessary to thrive in the digital landscape. The Innovation Hub will serve as a catalyst for students to gain a strong foundation in computer science and technology skills. By introducing them to computing early in their academic journey, we empower them to be not just consumers of technology but creators, innovators, and problem solvers. This proficiency in computing is a valuable asset in today's job market and opens doors to a myriad of opportunities.

One of the key strengths of the lab school is its dedication to incorporating these computing skills into real-world problem-solving. By engaging students in interdisciplinary projects and capstones, the Innovation Hub ensures that students don't learn in isolation. They will have the chance to apply their computing knowledge to address community-based challenges, thereby connecting what they learn in the classroom to real-life situations.
With the lab school's emphasis on computing, we have the potential to inspire the next generation of technology innovators, problem solvers, and leaders.

I wholeheartedly support the University of Virginia Lab School Proposal and, in particular, the computing opportunities it will afford to students. By embracing technology and computation as essential components of education, the Innovation Hub will make a profound impact on the lives of these students and set them on a path towards success in the digital age. I am excited to see the positive changes that will emerge from this collaboration and am committed to supporting this endeavor in any way possible.

Sincerely,



Briana B. Morrison, Ph.D.
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Rice Hall, Room 407 | 85 Engineer's Way | PO Box 400740 | Charlottesville, VA 22904-4740
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UNIVERSITY of VIRGINIA | SCHOOL of EDUCATION and HUMAN DEVELOPMENT
YOUTH-NEX

October 23, 2023

To Whom It May Concern:

On behalf of Youth-Nex, the University of Virginia Center to Promote Effective Youth Development and the Remaking Middle School initiative, I am writing to provide enthusiastic support for the the proposed Charlottesville Middle School Innovation Hub in partnership with Charlottesville City Schools (CCS) and the School of Education and Human Development (SEHD) at the University of Virginia.

Remaking Middle School (RMS) is a nationwide, multi-sector initiative aimed at transforming the learning and development experience for young adolescents. Led by developmental scientists at Youth-Nex, RMS is elevating the science of learning and development in adolescence, fostering innovation to redesign the middle grades, and facilitating idea sharing, collaboration, and promotion of the promise and opportunity of adolescence. RMS's knowledge building, programs, and research aim to have a major impact on the way we approach the young adolescent years in terms of developmentally-informed approaches, creative problem solving and design in educational programming, and sharing of best practices and innovations to scale.

RMS has multiple resources and ways of intersecting with schools to support teachers and school leaders in applying the science of adolescent development to better support students' learning and development in the middle grades and through the transition to high school. The RMS Design Lab engages educators in a multi-year learning and design experience in which school teams deepen their knowledge of young adolescent development, identify a vision for their middle school (the flip side of an "issue" that they want to address), and together design and pilot an innovation to make that vision a reality. In addition to the Design Lab, other resources available through RMS include a working paper series synthesizing existing knowledge and evidence on dimensions relevant to the task of optimizing young adolescent learning, the RMS Learning Series exploring how educators and other youth-serving professionals can translate the science of young adolescent development to practice, Design Team ideas and tools generated by researchers and practitioners, and the Lessons in Adolescence podcast offering actionable insights about young adolescent learning and development.

The Youth-Nex and RMS team will be eager to bring these resources and supports to the Charlottesville Middle School Innovation Hub project, alongside our full support in other ways deemed helpful. We are aligned to the lab school's vision to transform school experiences into student-driven, community- and design-based projects, and will be eager to champion the success of the lab school in its commitment to transforming the middle school experience. We believe the proposed work is not only critical to learning and growth for CCS schools and students, but more broadly, we believe this work has the opportunity to showcase learning and outcomes that could transform the middle grades across Virginia to ensure all students thrive and grow from their experience in the middle grades.

Sincerely,

Nancy Deutsch, PhD
Associate Dean for Faculty Affairs, University of Virginia School of Education & Human Development
Director, Youth-Nex: The UVA Center to Promote Effective Youth Development
Linda K. Bunker Professor of Education

International Technology and Engineering Educators Association
1908 Association Drive, Suite C, Reston, VA 20191
www.ITEEA.org | 703-860-2100 | Fax: 703-860-0353

October 11, 2023

On behalf of the International Technology and Engineering Education Association (ITEEA), I am writing in support of the Charlottesville Middle School Innovation Hub proposal. The International Technology and Engineering Educators Association (ITEEA) is the professional organization for technology, innovation, design, and engineering educators. With National Science Foundation support, ITEEA developed the Standards for Technological and Engineering Literacy (STEL).

ITEEA has a long history of collaboration with Charlottesville Middle School and the School of Education and Human Development at the University of Virginia. This includes collaboration on STEM academies that led to development of STEM laboratories such as the Make to Learn Linear Motor Lab and the Make to Learn Animation Machine Lab.

These laboratories were initially developed and piloted at Charlottesville Middle School with support from multiple National Science Foundation initiatives (NSF #1030865, 2010–2015; #151308, 2015-2019; 1842342, 2018-2022) secured by the School of Education and Human Development. These efforts include construction of a state-of-the art STEM innovation wing with two million dollars in funding from NSF, the Commonwealth of Virginia, and the City of Charlottesville. This effort was recognized with the Virginia School Boards Association *Gold Design Award* and a *Learning by Design Outstanding Project* award. NSF Assistant Director, Joan Ferrini-Mundi, who led the agency's Education and Human Resources directorate, commented at the time, "We like to see this kind of impact from a research project where NSF has made an investment."

ITEEA has also been pleased to be a partner in these endeavors. The ITEEA flagship *Engineering by Design* curriculum is taught by more than 5,000 K-12 engineering teachers. Consequently, the modules developed and piloted at Charlottesville Middle School are amplified many times, reaching thousands of students in other schools nationally through incorporation into this curriculum.

The proposed Charlottesville Middle School Innovation Hub builds upon this history of past innovation that has not only created opportunities for success in STEM fields for Charlottesville students but also for other students at the state and national level. We look forward to collaborating with the School of Education and Human Development and Charlottesville Middle School on the next chapter in this nationally recognized hub for STEM innovation.

x. Ryan S. Novitski

Ryan Novitski, ITEEA Director of STEM Learning
rnovitski@iteea.org

CHARLOTTESVILLE BUSINESS INNOVATION COUNCIL

October 27, 2023

To The College Partnership Laboratory School Standing Committee:

On behalf of my organization and its members, I am writing to express our full support for the UVA Charlottesville Middle School Innovation Hub, expanding on the work begun by The Buford Lab School. This groundbreaking initiative is strongly aligned with the Charlottesville Business Innovation Council's (CBIC) mission to cultivate a dynamic technology community and create opportunities for Charlottesville's innovators of all ages.

In recognition of the school lab's community partnership building efforts, CBIC selected Buford Lab School as a finalist for its Partnership award in May of 2023. This recognition is a testament to the hard work and dedication of the team in building meaningful community connections that engage students, teachers, and families in real-world problem-solving, mentorship, and career explorations.

As the region's leading technology council, CBIC supports the growth and success of technology-focused organizations. Through its collaborative partnerships, educational resources, and strategic relationships, CBIC enhances, publicizes, and champions technology initiatives that bolster economic and social vitality in our area. Expanding opportunities for STEM education and youth professional development is critical to this mission.

By educating and engaging *all* middle school students in the subject of computer science, UVA Charlottesville Middle School Innovation Hub increases academic and professional opportunities for emerging innovators and rising entrepreneurs. This aligns greatly with CBIC's deep desire to increase the pool of technology talent in our region.

With continued support and collaboration, I am confident that the UVA Charlottesville Middle School Innovation Hub will continue to make remarkable strides in improving student outcomes. This initiative is shaping the present of education and its future.

Sincerely,

Tracey

Tracey Greene
CBIC Executive Director

434.242.5886 P.O. Box 303 Charlottesville, Virginia 22902 www.CvilleInnovation.org

CHARLOTTESVILLE CITY SCHOOLS

Charlottesville City Schools • Office of the School Board
1562 Dairy Road • Charlottesville, VA 22903
Telephone (434) 245-2965 • Fax (434) 245-2603

January 29, 2024

Dear Committee Members,

The Charlottesville City School Board fully endorses this innovative partnership and the application submitted by the University of Virginia School of Education and Human Development (UVA-SEHD). The Innovation Hub represents a cutting-edge model for modern education, seamlessly integrating Project-Based Learning (PBL) with valuable community partnerships.

The guiding principles of the Innovation Hub reflect a deep commitment to progressive learning, employing an interdisciplinary approach that integrates project-based and computing-centric experiences. The hub's emphasis on prioritizing student voices and choices in their educational journey, along with its ambitious goals to strengthen community connections for authentic problem-solving, mentorship, and career exploration, are commendable and forward-thinking.

We believe that the Charlottesville Middle School Innovation Hub has transformative potential and, with its robust collaborative foundation, will bring substantial benefits to Charlottesville while setting an educational benchmark for others to emulate. Our school division, represented by our Superintendent, Dr. Royal A. Gurley, Jr., has been actively involved in the planning process for the Lab School design. We aspire to create a model that can serve as an inspiration for educational institutions across the Commonwealth.

Please feel free to contact Dr. Gurley directly should you have any questions or require further clarification. We appreciate your consideration and support for this exciting initiative.

Sincerely,

Lisa Larson-Torres

Charlottesville City School Board
Lisa Larson-Torres
School BoardChair

Appendix G: Capital Improvement Items

Year	Item	Quantity	Cost
1	Design Contractor	1 Contractor - Adjust the current layout to better integrate innovation into the science/engineering classroom, ensuring a fit that promotes safety and creativity.	$100,000
1	Classroom Footprint	Renovations and Updates - 4 science classrooms. Adjust the current layout to better integrate innovation into the science/engineering classroom, ensuring a fit that promotes safety and creativity.	$250,000
1	Sound Board	$50,000 4 science classrooms - Enhance acoustics for clearer lectures.	$200,000
1	Tech Updates	$20,000 4 science classrooms - Modern tools to foster interactive and innovative learning.	$120,000
1	White Boards	$5,000 4 science classroom - Upgrade to more accessible and user-friendly models.	$20,000
1	Safety hoods	$5,000 2 classroom - Safety hoods for experiments.	$10,000
2	Lab Furniture	$200,000 4 science classrooms - Ergonomic designs to complement the innovative classroom setting.	$800,000
Total			**$1,500,000**