

# **SUBMISSION FORM**

All submission forms must include the following information. Separate submission forms must be turned in for each eligible program. **Deadline: July 1, 2025.** Please include this submission form as the first page of your electronic entry. If you do not receive an email confirming receipt of your entry within 3 days of submission, please contact **Gage Harter**.

PROGRAM INFORMATION
County: Henrico County, Virginia
Program Title: Middle School Center for Innovation
Program Category: Health and Human Services
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# 1. Summary

Henrico County Public Schools' John Rolfe Middle School is home to the school division's first Center for Innovation, a forward-thinking initiative designed to prepare students for the challenges of a rapidly evolving world. The center uses cutting-edge technology, experiential learning and interdisciplinary approaches to empower students with 21st-century skills. Rooted in a culture of collaboration and creativity, the program integrates STEM — science, technology, engineering and mathematics — as well as humanities and real-world problem-solving, to foster critical thinking and innovation.

Through project-based learning, partnerships with local employers and community organizations and access to advanced resources, the Center for Innovation equips students to become adaptive, ethical and resourceful leaders. It emphasizes equity and inclusivity, ensuring that students from all backgrounds have opportunities to thrive and achieve excellence. By connecting academic rigor with hands-on experiences, the center transforms education into a dynamic platform for growth, curiosity and lifelong learning. This initiative not only prepares students for future academic and career success but also positions them as contributors to the community's progress and resilience.

#### 2. The Problem or Need for the Program

The concept for the Center for Innovation at John Rolfe Middle School arose from the demand to equip middle school students with 21st-century skills necessary for success in an evolving global landscape. Data suggests that middle school is where the engagement cliff for students begins. Students often lose focus and interest in school during their middle school years. While Henrico County Public Schools offers specialty centers at all high school settings, the lack of specialty opportunities at the middle school level was evident. Traditional educational models

often lacked the interdisciplinary and hands-on approaches required to foster creativity, critical thinking and problem-solving. With HCPS' commitment to equity and excellence, the center was designed to address gaps in access to advanced technology, experiential learning and real-world applications. By integrating STEM, humanities and community partnerships, the program provides students with a dynamic, inclusive environment that bridges academic theory and practical experience. The center meets the need for innovative education that prepares students to thrive academically, socially and professionally in an increasingly interconnected and fast-paced world.

# 3. Description of the Program

The Center for Innovation at John Rolfe Middle School is a cutting-edge educational program designed to prepare students for success in an increasingly complex and interconnected world. Focused on integrating STEM, humanities and business concepts, the center offers an interdisciplinary curriculum that emphasizes real-world problem-solving, critical thinking and creativity.

Housed in a modernized, collaborative learning environment, the center features redesigned classrooms with flexible seating, open spaces and "garage-style" doors that promote teamwork and adaptability. These spaces are equipped with advanced technology and resources, fostering an atmosphere of innovation and exploration.

The program engages students through project-based learning, encouraging them to tackle real-world challenges while developing essential skills such as communication, collaboration and ethical decision-making. Partnerships with local organizations and universities, including Virginia Commonwealth University's da Vinci Center for Innovation, further enhance the student experience by connecting academic concepts with practical applications.

With a focus on equity and inclusivity, the center ensures students of all backgrounds have access to these transformative opportunities, making it a model for the future of education.

Development of the Center for Innovation at John Rolfe Middle School was a 10-month long endeavor, culminating in its opening for the 2024-25 academic year.

The planning and collaboration phases began shortly before the announcement in November 2023, involving Henrico County Public Schools and Virginia Commonwealth University's da Vinci Center for Innovation.

The comprehensive planning process included designing an interdisciplinary curriculum, renovating facilities to support innovative learning environments and establishing partnerships to enhance educational opportunities. The meticulous planning and execution ensured that the center was well-prepared to offer a dynamic and engaging learning experience upon its launch.

The clientele for the Center are rising sixth grade students from middle schools in central and eastern Henrico County. A second center opening for the 2026-27 school year will serve students from Henrico County's remaining middle schools.

HCPS has played a vital role in launching this groundbreaking program, providing both financial support and hands-on involvement. Additional staff positions, including a new center director, were created to establish the innovative "school within a school." The school division's commitment extends beyond funding, as it has actively engaged with students through mentorship programs and STEM opportunities, fostering a dynamic and supportive relationship that has been instrumental to the program's success.

Partnerships have been a cornerstone of the success of the Center for Innovation, playing a pivotal role in enhancing its curriculum, resources and overall impact on students. By collaborating with key organizations, including Virginia Commonwealth University's da Vinci

Center for Innovation, the center connects students with opportunities that extend beyond the traditional classroom setting.

The partnership with VCU has provided students access to advanced facilities, such as STEM labs and innovation hubs, enabling them to explore real-world applications of their learning. This collaboration also brings university-level expertise to the middle school, inspiring students to consider higher education and career paths in STEM and business fields.

Additionally, local employers and community organizations have contributed through mentorship programs, hands-on projects and financial or material support. These partnerships help bridge the gap between academic learning and professional environments, giving students invaluable insights into the skills and mindsets needed for future success.

These collaborations have made the center a vibrant, resource-rich hub for innovation, preparing students to excel in an interconnected, evolving world.

# 4. Advancing Diversity, Equity and Inclusion

The Center for Innovation at John Rolfe Middle School advances equity, diversity and inclusion by providing all students with access to cutting-edge resources, technology and learning opportunities, regardless of their socioeconomic backgrounds. It promotes an inclusive environment by designing curricula that celebrate diverse perspectives and encourage collaboration among students from varied cultural, linguistic and ability-based backgrounds.

The center actively addresses opportunity gaps through targeted support, such as mentorship programs, differentiated instruction and partnerships with community organizations. By incorporating real-world problem-solving that reflects the needs and experiences of diverse communities, it ensures that every student feels valued and represented.

Through efforts to remove barriers and foster belonging, the Center empowers students to reach their potential while cultivating a culture of respect, understanding and shared success. Furthermore, the application process of the center is lottery-based, with no barriers except passing of the previous grade level; the process has no bias in place.

### 5. The Cost of the Program

The goal of the Center for Innovation was to embody and facilitate innovation in concept and practice. To support this vision, approximately \$500,000 was allocated to renovate a section of John Rolfe Middle School, creating a space designed to foster innovation and interdisciplinary learning. Upgraded lighting and expanded electrical capabilities were added throughout the area. Additionally, nonload-bearing walls were removed to merge classrooms, incorporating "garage-style" doors to encourage collaboration and seamlessly support the interdisciplinary approach. This redesign created a flexible, modern learning environment that reflects the core mission of the Center for Innovation.

A second Center for Innovation, scheduled to open during the 2026-27 school year at Quioccasin Middle School, will benefit from what has been learned during renovations at the John Rolfe center. Special emphasis is being placed on ensuring the proper design and implementation of the center within the new facility, prioritizing its integration in the overall vision for the school.

#### 6. The Results/Success of the Program

The Center for Innovation at John Rolfe Middle School, launched in the 2024-25 academic year, has achieved significant milestones in enhancing student engagement and educational outcomes. Developed in collaboration with the VCU da Vinci Center for Innovation, the Center

offers a dynamic curriculum that integrates business and STEM education, providing students with hands-on, project-based learning experiences.

#### **Enhanced curriculum and learning environment**

The center's unique approach combines English and social studies in a single class block, as well as math and science, allowing for deeper interdisciplinary learning. This structure promotes critical thinking, creativity and collaboration among students. Additionally, redesigned learning spaces with flexible seating and collaboration areas mirror modern workplaces, preparing students for future careers where adaptability and teamwork are essential.

# **Community and university partnerships**

A cornerstone of the center's success is its partnership with VCU's da Vinci Center for Innovation. This collaboration provides students with exposure to higher education environments and access to university resources. For instance, students have visited VCU's new STEM building and da Vinci Center, broadening their understanding of potential career paths and inspiring them to pursue further education in STEM fields.

#### Student engagement and skill development

The center emphasizes project-based learning, enabling students to apply theoretical knowledge to real-world problems. This method has increased student engagement and motivation, as students see the relevance of their studies to future careers. Students develop essential skills such as problem-solving, critical-thinking and effective communication, which are vital for success in the 21st-century workforce.

#### **Equity and accessibility**

By offering specialized programs within a public school setting, the center ensures that all students, regardless of socioeconomic background, have access to innovative educational opportunities. The lottery-based admission process promotes diversity and inclusion, fostering an environment where varied perspectives enhance the learning experience for all students.

#### Recognition and future expansion

The success of the Center for Innovation at John Rolfe Middle School has garnered attention within the educational community, positioning it as a model for integrating STEM and business education at the middle school level. Plans are underway to expand the model to Quioccasin Middle School, with a new Center for Innovation scheduled to open there in the 2026-27 school year, further extending these opportunities to more students across Henrico County.

The center has successfully redefined middle school education by integrating interdisciplinary curricula, fostering university partnerships, enhancing student engagement and promoting equity. Its achievements serve as a testament to the effectiveness of innovative educational models in preparing students for future academic and career success. Further justification for the success of this program is that 327 students applied for the 50 available slots for the 2025-26 school year. Additionally, multiple students chose the CFI center over our International Baccalaureate program and our Gifted Young Scholars Academy.

#### 7. Worthiness of Award

The Center for Innovation at John Rolfe Middle School exemplifies excellence in education through its transformative approach to learning. By integrating STEM, humanities and real-world problem-solving in an interdisciplinary curriculum, the center equips students with critical 21st-century skills such as collaboration, creativity and critical thinking.

Designed with equity and accessibility in mind, the center ensures that all students, regardless of background, have access to advanced resources and opportunities. Its partnership with VCU's da Vinci Center for Innovation enriches learning experiences and connects students to broader academic and professional networks.

The center also reimagines learning environments, with modern, flexible spaces fostering collaboration and innovation. Project-based learning initiatives have significantly boosted student engagement, demonstrating the center's impact on academic achievement and preparation for future success.

As a replicable model for innovative education, the center is expanding to Quioccasin Middle School, further solidifying its influence. For its commitment to equity, forward-thinking design and measurable success, the center is highly deserving of this recognition.

#### 8. Supplemental Materials

Center for Innovation at John Rolfe Middle School visits VCU





