



The Explore Program at Kammerer Middle School: Fostering Innovation and Community in Louisville, KY

"There is no ceiling to my kids' limits," states Victor Darrigrandi, Engineer & Design Teacher, of Kammerer Middle School's Explore Engineering Pathway.

Kammerer is the first middle school to receive the Model Academy designation from the National Career Academy Coalition (NCAC). At the heart of Kammerer's success is the innovative Explore Program, a vibrant hub of collaboration and discovery. This initiative, designed to expand the horizons of young learners, is more than a curriculum—it is a journey into creativity, critical thinking, and skill-building.

The 6th-grade Explore program at Kammerer provides a taste of three distinct fields or Pathways: Business and Communication, Healthcare Science, and Engineering and Design. This variety enables students to explore various fields, discover their ideal learning environment, and identify potential career paths that align with their strengths and preferences. Hands-on learning, community partnerships, and field trips are key components of Explore. After experiencing the different options in 6th grade, students select the pathway they'd like to follow for 7th and 8th grade. Students are never "stuck" in a chosen Pathway, but when given their first choice, there is seldom any movement between Pathways.

The alignment of Kammerer's Middle School Explore Pathways with Ballard High School's Academies benefits most Kammerer students, who will continue their education there, creating a cohesive educational journey from sixth through twelfth grade and a smooth transition from middle to high school. Kammerer principal Shannon Corrigan discussed Explore's effect on the students, "Kammerer's students are not merely passive recipients of information. They are creators, designers, and change-makers. I have always believed that when students have ownership of their learning and are given meaningful opportunities to solve real problems through design thinking, they rise to the occasion in powerful ways."

NCAC Reviewers noted, "It was evident that students are engaged in rigorous learning. Students report creating meaningful portfolios that reflect their learning in the pathway courses and core content. Students are excited to continue in the academy model in high school---even if they choose to switch pathways."

Project-based learning (PBL) is a key feature of the Explore Program. PBL shifts the emphasis from rote learning to active inquiry, thus fostering greater student relevance and motivation. Students tackle real-world problems through collaborative projects that integrate academic learning with practical application. This active learning method encourages critical thinking, teamwork, and student engagement.

PBL is on display as students complete projects centered on drone delivery. UPS is one of the major employers in the region, and students have the opportunity to visit the UPS drone delivery research center, see remote drone pilots in action, and learn about the future of autonomous delivery. In class, students learn how to fly drones and program them for autonomous flight. The classic egg drop project is then reimagined as students develop a payload system for medical samples, just as engineers in the real world have done.

For PBL to be effective, teachers must fully embrace and support this approach. It requires a mindset shift—from being the sole source of knowledge to becoming facilitators and guides in student-centered learning. Teachers need professional development, sufficient time to plan interdisciplinary projects, and support from school leadership to implement PBL effectively. Teachers who wish to be considered for Explore are fully aware of the emphasis on PBL and are willing to relinquish traditional teaching methods. Likewise, effective PBL implementation requires school leaders to actively support teachers with relevant professional development actively, offering practical strategies and collaborative opportunities. Kammerer’s leadership ensures that teachers have the necessary tools by providing teacher institutes during the summer and integrating learning opportunities throughout the school year. When teachers accept and invest in PBL, they help create a dynamic classroom environment where students take ownership of their learning and build essential 21st-century skills. At Kammerer, success becomes inevitable when students are given the tools to dream and the space to explore their ideas.

NCAC Reviewers Noted: “The academy coach does an excellent job recruiting, orienting, and working with volunteers/community partners. Teachers shared they have attended high-quality professional development that supports not only teaching but also how they support students.”

A notable outcome of the Explore program is the marked increase in Sense of Belonging scores, showing a more positive and inclusive environment where students feel accepted and supported. The Kentucky Comprehensive School Survey projects that the proportion of Kammerer Middle School students who feel a sense of belonging will increase from 67.9% to 81.48% in 2026. Belonging is so fundamental to human flourishing that it ranks third on Maslow’s hierarchy of needs, right after our essential physical needs and our needs for safety and security. Maslow’s research showed that individuals are often unable to pursue cognitive and aesthetic needs until they have satisfied their basic need for belonging. This is crucial to the well-being and academic success of middle school students. Studies suggest that feeling accepted, valued, and included in the school community has a positive influence on mental health, educational engagement, and overall development during this crucial stage of adolescence. Furthermore, an *intentional* investment of attention on the part of the adult can have a profoundly meaningful ripple effect on students.

NCAC Reviewers Noted: “Kammerer does an excellent job of prioritizing student voice. Students report that school administration and teachers care about them, their opinions, and their experiences at school.”

As an NCAC Model Academy, Explore at Kammerer offers an innovative and successful approach to those interested in creating middle school academies. Its emphasis on collaboration, creativity, and community engagement ensures that students are not just learners but *Explorers*, ready to navigate the next stage of their education with confidence and curiosity.
