



Virginia district enhances summer school with hands-on STEM program from the National Inventors Hall of Fame®

Lynchburg City Schools boosts student and teacher engagement with Invention Project®

Finding ways to make teaching and learning more fun and engaging is an ongoing challenge for many school districts. For one urban school system in Virginia, an innovative STEM program used for the first time in the district's 2023 summer camps is generating high levels of excitement among teachers, district leaders, and students alike because of its engaging, hands-on approach to learning.

Looking for new approaches

The Lynchburg City Schools enrolls approximately 8,000 students in grades K-12 and employs about 900 staff members, serving a diverse population in an urban setting.

Altra Witt has been the Coordinator of Extended Learning in the Office of Curriculum and Instruction since 2022, prior to which she was an elementary teacher for a decade. "Our educators work hard to continuously try new approaches to teaching and learning," she says. "We deal with many of the most common challenges in inner city schools, from teacher turnover, to lack of engagement, to post-pandemic learning loss."

Part of Witt's responsibilities include finding and implementing a variety of resources to address these issues, including summer programming. "For five weeks in the summer, we offer a dozen summer camps for different needs, some for remediation, some for grade-level academic enrichment, and some for high achieving students. We had close to 400 K-5 students participate this year, with about 40 to 50 teachers and staff involved."

Discovering an exciting resource

While looking for new resources to enhance this summer programming, Witt says the district's leaders were impressed with what they saw from the National Inventors Hall of Fame

(NIHF). "We first encountered the NIHF and their program Invention Project at a conference. We were blown away by what we saw, and we were excited to bring it to our students."

Invention Project provides educators with a choice of 32 uniquely themed modules of hands-on design challenges that encourage problem solving, risk-taking and exploration, inspired by world-changing inventors and inventions. Aligned with national and state education standards, the program can be customized to meet a district's unique needs, and all modules offer resources in Spanish.

"We purchased about 200 units of 12 different modules, and NIHF provided online professional development sessions for our teachers. Those sessions were fun for our teachers and got them excited to go forward."

Effective and engaging across student populations

"We used Invention Project in our K-5 summer camps with our gifted, high achieving students, but also with academically struggling students and with English language learners," Witt says. "Students can work alone or in small groups, so it can accommodate different learning styles. It truly is a unique program because all our students can engage with and benefit from the material."

Building on success

Witt says the district is looking to expand use of the program after this initial success. "We're looking forward to using it again next summer and we plan to include more students and spend more time each day using it. This coming school year, we plan to integrate Invention Project into our after-school programs."

"The summer provided the perfect opportunity for us to explore and try some new things, and I'm so glad we did."

To learn more about Invention Project, go to www.invent.org/educators/invention-project

