



Identity



STEM EQUITY THROUGH COMMUNITY-BASED MAKER LEARNING

A Partnership between KID Museum and Identity



THE MISSION

To close the STEM opportunity gap for Latino youth by integrating hands-on, experiential maker learning into trusted community spaces.



THE CHALLENGE

Latino youth often lack access to hands-on STEM experiences that build the agency and technical skills required for 21st-century careers. Without intentional intervention, these students remain underrepresented in the fastest-growing sectors of our economy.

PARTNERING FOR IMPACT

With generous support from the U.S. Department of Education, KID Museum and Identity. partnered to bridge the STEM opportunity gap for Latino youth in our local community. Unlike traditional "drop-in" or "one-off" programs, our partnership builds **long-term community capacity** to foster sustained engagement and powerful outcomes for Latino youth.



By integrating KID's evidence-based, hands-on STEM and maker curriculum into Identity's established, bilingual out-of-school time (OST) programs, this initiative ensured that Latino students developed the foundational skills essential for long-term academic and career success. In addition, Identity developed and implemented a series of engagement sessions for parents and caregivers to increase family awareness and build family support around the value of STEM education.



STRATEGIC APPROACH

Our jointly designed program focused on three pillars:

- **Curriculum:** We developed a bilingual, hands-on STEM curriculum specifically for 2nd and 3rd-grade Latino students at four Title I elementary schools in Montgomery County, MD (Whetstone, Harriet Tubman, Summit Hall, and Watkins Mill).
- **Capacity Building:** We leveraged the expertise of trusted bilingual youth development staff through intensive training and coaching. A key component of the partnership was to increase youth development facilitators' knowledge of STEM content, confidence in leading maker-based STEM learning experiences, and ability to cultivate durable skills and practices (perseverance, reflection, imagination, problem-solving, and critical thinking) in students. This empowered local facilitators to lead complex STEM experiences with confidence, resulting in sustainable community impact.
- **Multigenerational Engagement:** We implemented family engagement sessions that built family support for STEM education, recognizing that family awareness is a key driver of student success.

IMPACT AT A GLANCE

In 2025, the partnership reached 300 Latino youth at Title I schools across three terms. Outcomes from our evaluation demonstrate significant growth in both technical interest and "durable" life skills:



Metric	Outcome
STEM Interest	88.2% of students reported increased interest in STEM fields.
Perseverance	90.6% of students reported improved perseverance ("not giving up").
Problem Solving	90.6% of students felt more capable of solving complex problems.
Parental Support	100% of participating parents believe STEM is vital for their child's future.

KEY INSIGHTS

- **Scalability via Staff Empowerment:** By braiding together the experience of youth development and STEM learning experts, the model is more adaptable and responsive to the community's specific needs.
- **Building Student Agency:** The program successfully shifts the focus from "completing a project" to "developing agency," fostering critical thinking and reflection that are applicable to all academic subjects.
- **Holistic Impact:** The partnership enabled growth for youth as well as the adults in their lives. Local facilitators reported increased confidence in their capacity to lead high-quality STEM learning experiences, and parents reported greater understanding of the importance of STEM learning for their children's futures.

CONCLUSION



Closing the STEM opportunity gap requires collaboration on multiple levels. Youth development professionals who are grounded in the cultural context of their community bring critical expertise and relationship-building skills that are foundational to students' seeing themselves as STEM learners. They also are exceptionally well-positioned to build trust and engage families and caregivers, who are instrumental in nurturing youth identity and learning outcomes.

Accessible and adaptable programming that centers on advancing STEM engagement through a lens of creative problem solving and hands-on, maker experiences offers a powerful foundation. Meaningful partnerships across youth, families, and out of school time providers clearly move the needle – and show that, together, we can close the STEM opportunity gap and ensure a diversity of young people develop the skills and mindsets necessary to invent the future.





ABOUT IDENTITY

In pursuit of a society that nurtures all youth and families and is enriched by their contributions, Identity creates opportunities for youth, families and communities with the most need to realize their highest potential and thrive. At schools, in the community, and on playing fields, Identity teaches and models the social, emotional, academic, workforce and life skills they need.

ABOUT KID

KID Museum is an equity-focused education nonprofit that empowers the next generation of problem solvers and changemakers with the skills needed to thrive in the future. KID Museum has pioneered an innovative and proven model to support sustained STEM engagement for youth.

KID's approach is grounded in maker learning – hands-on, project-based learning experiences that incorporate tech, engineering, and creative problem-solving skills. Our model sustains engagement among youth of diverse backgrounds, building on our community's assets and unique perspectives. Deep community engagement and partnership are core strategies to ensure that KID activities are rooted in our learners' individual stories, interests, and perspectives.



KID-MUSEUM.ORG

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