

STEAM Education increases opportunities for African American children

Since March 2020, we have dealt with the instability of a COVID-19 environment requiring us as Americans to take historically unconventional methods to protect ourselves and others in our communities. We have corporatized our homes, stocked our inventory with hand sanitizers and soaps, and collected our coupons for the grocer. The new normal also involves face coverings, smaller public groupings, and creativity in digital spaces.

However, we cannot forget that life continues. And we must, as a people, position ourselves and our children to prepare for forthcoming career and educational opportunities. At the forefront of current news is the “Race for the Vaccine”, researchers, scientists, pharmaceutical companies, educational institutions, and public health organizations around the world are racing to create a cure for this global crisis.

African American students and professionals have a chance to improve the overall quality of life for one another by focusing on STEAM, an acronym for Science, Technology, Engineering, Arts, and Mathematics. STEAM careers are expanding. And we are in dire need of researchers, doctors, engineers, chemists, physicists, software programmers, and inventors to add diverse problem-solving perspectives to our global challenges.

Consider the fact that COVID-19 has ravaged the African American community and who better to assist in our long-term health than our own children. That is why we challenge you to pursue a STEAM education, jobs, internships, apprenticeships, and business ownership that includes our youth.

COVID-19 is a preview to potential challenges facing our global community and if we, as a nation, desire to lead the forefront of research, application, and mitigation of similar issues we must ensure our young people are prepared and at the center of these opportunities.

Seeing an increasing gap in African American student achievement, Ja-Mes Watson III and other community partners collaborated to further develop GatewayGIS, as a STEAM initiative that increases educational opportunities and workforce development for our children. Plans include programs for preschoolers to 12th graders.

For our young people to catch up with their peers in other communities that possess unlimited resources, we need innovative approaches to jumpstart much-needed education, career preparation, and entrepreneurship. It is imperative that we strive to do what world-renowned scientist and artist, Leonardo da Vinci instructed. “To develop a complete mind: Study the science of art; study the art of science. Learn how to see. Realize that everything connects to everything else.”

With key partners, such as Saint Louis Public Schools, Saint Louis University, University of Missouri-St. Louis, Harris-Stowe State University, Webster University, CEdge Software Consultants, Esri, the United States Geospatial Intelligence Foundation-St. Louis Area Working Group, and the St. Louis Development Corporation to leverage our mission, we hit the ground

running in May 2019.

We have committed ourselves to a five-year rollout plan. First, we started in the 2019/2020 School Year by exposing Clyde C. Miller Career Academy High School juniors and seniors to available highly challenging, STEAM fields by conducting seminars at The Boeing Company, Bayer/Monsanto, COLLAB in the Cortex Innovation District, T-REX, the Saint Louis Science Center and several local institutions and businesses.

In summer 2020, we launched the GatewayGIS Virtual Speakers Series, which featured conversations among students, educators, and community partners with nationally recognized leaders and STEAM experts, such as NASA's youngest satellite engineer Kenneth Harris II. Right now, St. Louis is receiving international attention unlike before due to projects such as the National Geospatial-Intelligence Agency West Headquarters, Square Inc., and Major League Soccer Stadium.

However, we are always cognizant of the lack of technology resources in our community that should support this high demand for STEAM education. So, we implore you to be creative, to collaborate, to share and to barter like our ancestors. Let us get engaged and actively support the development of our children for tomorrow's jobs by beginning now. And help GatewayGIS fulfill its mission: *Bridging the digital, geographic, cultural, racial, and economic divide*

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