



# Re-engineering the STEM Pipeline to Create a more Diverse Workforce

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Arthur Mitchell

Arthur Mitchell is the President of Catalysis Education Solutions LLC, an organization that works with K-12 institutions, institutes of higher education, and industry partners to impact teaching and learning systems. Catalysis guides the partner organizations through adopting and adapting to changes that otherwise might not reach their maximum effectiveness. He is also the Director of Curriculum and Instruction for School Improvement Partnership Inc and an instructor in the University of Pennsylvania Graduate School of Education. Over his career, he has worked in the most impoverished urban and the most affluent suburban districts in his region as a teacher and administrator. He has also held positions at the county and state level leading the work in curriculum, instruction, professional development, innovation, industry and higher education partnerships, and charter school growth. The majority of his efforts have been focused in Science, Math, Engineering, and Technology (STEM) education. The core of Arthur's work is centered on issues dealing with equity and access for underserved populations, especially in addressing the leaky pipeline to STEM careers for those students.



Cheryl Rush-Dix

As an educator with an Aerospace Engineering –Teaching – Administration career trajectory in roughly equal arcs, Cheryl Rush Dix is dedicated to establishing access and opportunity for STEM education. Cheryl led an urban district's STEM initiative, which notably accomplished shifting a struggling, 90% poverty, 90% minority school to 90% proficiency on the state science assessment. System-wide, her work includes establishing the Science1st Professional Learning and Materials Center, which provides comprehensive instructional materials support and teacher professional development to district schools and regional partners. Cheryl Rush Dix is the founder of Pathlight Associates, LLC, a Fulbright Research alumna (Finland 2015) and a Mid-Atlantic Alliance for Performance Excellence (MAAPE) Malcolm Baldrige Award Board Examiner. Her commitment to leveraging quality systems theory and practice as a means of fostering growth in programs, policies and institutional knowledge stems from her experience as an evaluator, researcher and administrator.