

STEM EDUCATION

The goal of science, technology, engineering and math (STEM) education is to prepare students for the 21st century workforce and post-secondary study.

Many students fail to enter higher education prepared to pursue STEM degrees due to inadequacies in their K-12 education (Equation, 2010) as many children matriculate to the fourth grade lacking key STEM skills and knowledge (Officers, 2009). To help overcome this barrier, many improvements in science and math education are needed. Examples include: well-trained teachers, availability of technological equipment, inclusion of stronger curricula that includes rigorous project based learning (Equation, 2010). In a recent report by the Department of Education, a clear disparity in educational outcomes among males ages 25-29 was evident: African American and Latino males had the lowest percentages of obtaining a bachelor's or higher degree (17% and 13%, respectively) compared to Asians and Whites (55% and 37%, respectively). ("Disparities in STEM Employment by Sex, Race, and Hispanic Origin: American Community Survey Report," n.d.):

STEM AND THE IMPORTANCE OF CULTURALLY RESPONSIVE TEACHING AND LEARNING

The key to our effectiveness is our 51 staff members, many of whom come to us as ex-

perienced educators and change agents—teachers, coaches, principals and district leaders—who have achieved extraordinary successes in their own classrooms, schools and districts.

PARTNERS AND STEM

A key component to Partners' STEM approach is to ensure STEM instruction is accessible with the goal of eliminating barriers for vulnerable children of color to fully realize their potential in the STEM disciplines. We provide both intensive and customized STEM support as we are focused on meeting the needs of the schools we serve. Our framework works within our current Theory of Impact but with a STEM focus; which includes implementation, building capacity, leading to breakthrough student achievement. We also support schools serving large numbers of African American, Latino and/or ELL students with STEM implementation e.g. full school redesign, grade specific programming or STEM focused summer school.



"Having Partners involved with the STEM curriculum at Dudley has been very helpful. With their help, we have been able to create a STEM committee, plan out various STEM activities, and invest in resources to help aid in the hands-on learning experience. Partners has definitely helped eliminate some of the stress that we would have without them, allowing us to accomplish even more in the classroom. I truly appreciate all that they have done in order to help us in creating a STEM-based curriculum at Dudley."

SHANNON YAROCH, 4TH GRADE TEACHER

WHO WE ARE:

Partners in School Innovation works hand in hand with teachers and leaders to strengthen teaching, learning and achievement in under-performing public schools and districts. Partners was founded in 1993 and our strategies have evolved over 20 years to fill a unique space in the education reform community, distinguished by the following qualities:

- **MULTI-YEAR PARTNERSHIPS:** We work side-by-side with our school and district colleagues over a 3-5 year period.
- **EXISTING HUMAN CAPITAL:** We focus on existing human capital to strengthen the capability of those teachers and leaders who are already in the system.
- **DATA-DRIVEN, RESULTS-ORIENTED, CONTINUOUS IMPROVEMENT:** We build the capacity of teachers and leaders to use data to set goals, plan, implement, assess, reflect and adjust in cycles of inquiry and continuous improvement.
- **SUSTAINABLE SYSTEMS CHANGE:** We build essential knowledge and skills at multiple levels to ensure improvement practices are aligned, embedded and sustained across the system.

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- 8 DISTRICTS
- 62 TOTAL SCHOOLS
- 1,878 TEACHERS & LEADERS
- 35,788 STUDENTS

WHAT WE DO:

- **COLLABORATE:** We work with school and district leaders to build a strong core instructional program, ensuring that all students learn at high levels.
- **COACH:** We create an integrated system for professional learning so that all teachers are able to deliver excellent instruction.
- **CONSULT:** We strengthen leaders' abilities to focus on student outcomes and align school resources, structures and ways of working to achieve their goals.

“Working with Partners’ staff and being a part of the STEM committee has been a great experience. Working with them has not only helped guide my teaching, but we have discussed and are on the track towards implementing more hands-on activities, integrating science interactive websites and bringing people from the community who have careers in the STEM field. Working with Partners has helped in providing students with opportunities so they may become career ready in STEM-related careers.”

JENNIFER GLABACH, 2ND GRADE TEACHER

“Given that school district transformation is a complex process, Partners is a value-add because my thinking is constantly pushed and the thought-partnership that I receive through regular collaborative opportunities helps me to focus on what matters most for kids.”

KIMBERLY PARKER DEVAULD
INTERIM SUPERINTENDENT, BATTLE CREEK
PUBLIC SCHOOLS