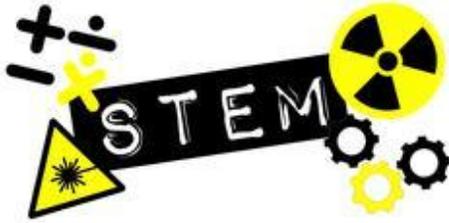


STEM – SCIENCE, TECHNOLOGY, ENGINEERING, MATH



Midland Public Schools' STEM Strategic Plan ...

Excellence in Action!

Midland Public Schools recognizes the need in the community, country and world for its students to have access to quality STEM learning opportunities throughout their K-12 learning experience. STEM education shapes the innovators, creators and designers of today and tomorrow.

Thanks to the passage of the bond by MPS voters in February 2015 to update/innovate our facilities and with the extremely generous combined support of over \$3 million in grants over the next three years by our local foundation partners--Rollin M. Gerstacker Foundation, The Herbert H. and Grace A. Dow Foundation, Charles J. Strosacker Foundation, and The Dow Chemical Foundation—the MPS STEM Strategic Plan is a major initiative for our District going forward.

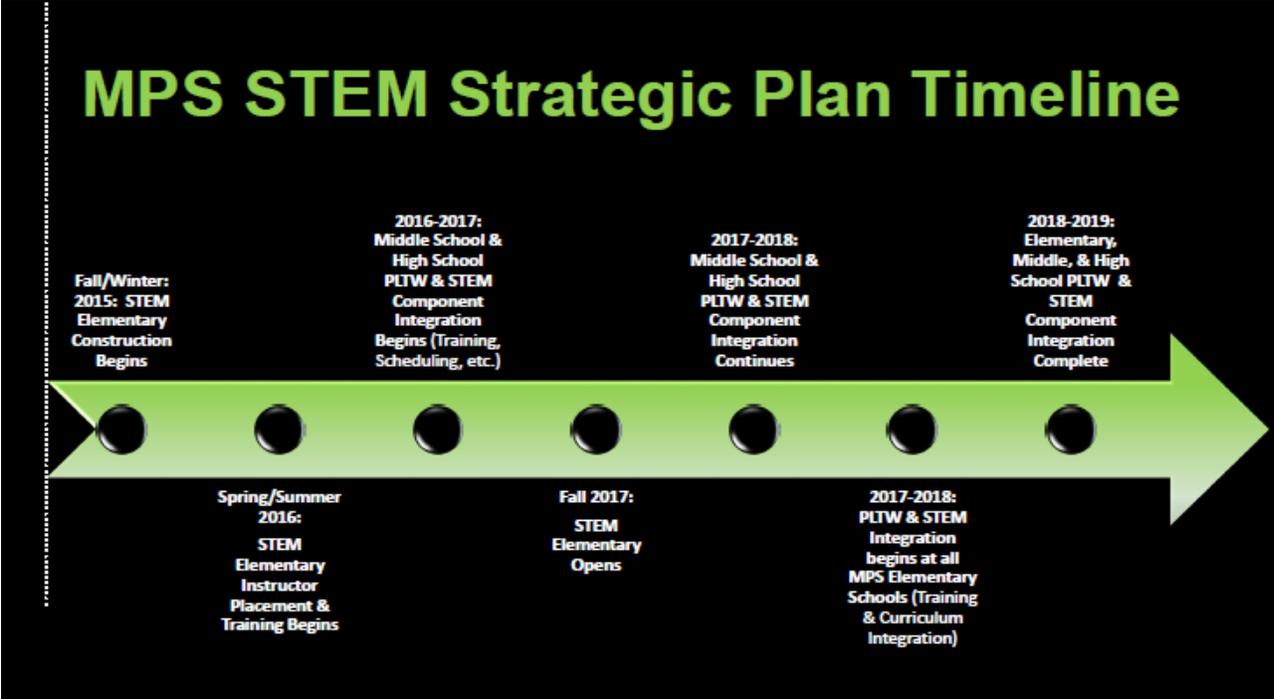
The National Math & Science Initiative states that over 50 percent of the fastest growing jobs in the U.S. are math, science or technology related with 15 out of 20 of the fastest growing careers requiring a background in math or science. MPS is currently doing a great job, but we feel through this exciting STEM initiative, we can do even more to give our students the tools required to be successful in the ever-changing, evolving 21st Century workplace in which they will find themselves competing for positions.

For the past several years, President Obama has been discussing the importance of STEM education in our country. As a matter of fact, according to a January 2012 article on www.usnews.com entitled, "Obama Pushes STEM in State of the Union" and subtitled "President puts STEM crisis front and center in State of the Union," even four years ago, President Obama recognized STEM education as a "crisis" in our country.

Here are just a few of the measurable outcomes for our students we expect as a result of the implementation of the MPS STEM Strategic Plan:

- Increase student interest in STEM subjects
- Improve performance on math and science assessments
- Increase enrollment in advanced science and mathematics courses
- Increase enrollment in STEM-related CTE (Career Technical Education) courses
- Increase college/post-secondary enrollment rates
- Increase enrollment in post-secondary STEM majors

Here is our STEM Strategic Plan Timeline. As you can see, the MPS STEM Strategic Plan implementation will be complete across the district with the 2018-19 school year.



An exciting component of this STEM Strategic Plan is the opening of the Central Park Elementary School—a state-of-the-art STEM elementary building--in the fall of 2017.



We have attached a number of construction photos as well as some drone video footage so you can see the exciting work currently happening at Central Park Elementary. We are also looking forward to working with the Midland Area Community Foundation on a new Central Park Elementary School Outdoor Learning Project Fund that is just getting under way. Watch for more information on this wonderful project!

As this STEM plan unfolds, we are looking forward to working with these STEM partners:

- Michigan State University STEM Center of Excellence located in Midland
- Saginaw Valley State University
- Project Lead the Way--one of the nation's leading providers of science, technology, engineering and math programs, to supply the K-12 curriculum

At a 2013 STEM education challenge hosted by the Lockheed Martin Corporation, Jeff Pridemore, Technical Operations & Applied Research Vice President said, "Our nation is facing a shortage of skilled STEM professionals. At Lockheed Martin, more than half of our employees are scientists and engineers. The ability to inspire youth to pursue technology and science careers goes to the heart of our ability to innovate and thrive as a company and as a nation."

When asked about the grant from The Dow Chemical Foundation for the MPS STEM Strategic Plan, Rob Vallentine, director of Global Citizenship and president of The Dow Chemical Company Foundation, stated, "One of Dow's long-time priorities has been to ensure a workforce that is ready to meet the challenges of the future. The company supports education programming worldwide and places a special emphasis on STEM in Midland and the Great Lakes Bay Region, where we have a vested interest in igniting a passion for science. This grant is a collaboration that we believe will have significant impact long into the future."

Midland Public Schools is committed to continuing our standards of *Excellence* into 21st Century learning initiatives! The MPS Stem Strategic Plan is an exciting initiative of our District's commitment to the community's scientific heritage—A City of Modern Explorers.

Thank you to our voters and local foundation partners for making this STEM Strategic Plan a reality for the future of MPS students!