

VALLEY INSIGHT
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Preparing Tippecanoe Valley Middle School Students for a High-tech Future!

Today's middle school students have four to seven years before they graduate and another two to four years of education beyond high school depending on their career choice. Thus, we are preparing students today for a career that they will enter in at most 11 years from now. That is precisely why choosing the rigorous curriculum provided by Project Lead the Way (PLTW) that will integrate STEM (Science, Technology, Engineering, and Math) is the best choice for Tippecanoe Valley Middle School (TVMS) and the Tippecanoe Valley School Corporation (TVSC).

Tippecanoe Valley Middle School (TVMS) applied for and was awarded a CPEG Northern Indiana PLTW School Grant in the amount of \$10,800 for the implementation of PLTW Gateway, a new and innovative curriculum focused on engineering and biomedical science at the middle school level. Starting in August of the 2015-2016 school year, TVMS will be offering two foundation courses - Design & Modeling and Automation & Robotics - that all students from grade 6 to 8 will take during the school year. Two specialized courses - Medical Detectives and Introduction to Computer Science - will be added the following school year. These courses will include the use of industry-leading technology and will replace the Synergistic Lab modules, which had been in use since the opening of TVMS in the mid-1990's. The grant, along with matching funds from the school corporation, will cover the school's participation fee, equipment and supplies, as well as the intensive training that the Engineering and Technology instructor will receive at the South Bend Career Center in July.

Adding the PLTW Gateway program will allow TVSC to vertically align its middle school STEM curriculum with the current high school curriculum with plans of implementing the elementary programs in the future. This will eventually give all TVSC students access to a high tech STEM program that fully encompasses grades K-12. TVSC works every day to provide its students with a world class education, and in that regard, the PLTW Gateway program will equip our middle school students with a real world education and prepare students to excel in STEM jobs. The PLTW Gateway curriculum will allow our middle school students to work collaboratively and develop and use critical thinking skills when solving problems that are presented in this new STEM curriculum.

The data collected by PLTW has shown that "students who have participated in PLTW courses are better prepared for post-secondary studies, and are more likely to consider careers as scientists, technology experts, engineers, mathematicians, healthcare providers, and researchers". It is important for all of our students to be able to work together to solve complex and challenging problems that they will face when they enter the workforce. If we can better prepare our students to answer the problems of tomorrow they will be more capable of competing for the jobs of tomorrow.

TVSC is just minutes from the many employers that are looking to hire its graduates. Most of the employers in the surrounding area rely on well-trained employees to remain competitive in the global market. The surrounding schools are relied on to produce talented and highly qualified individuals who can contribute to the economic success of their employer, which in turn leads to the economic prosperity of our community.