

SKILLED TRADES & STEM



INDIANA STATE STEM VISION 2025

In the fall of 2021, the Indiana Department of Education published STEM Vision 2025. The goal of this initiative is to provide "an education that includes solving hundreds of challenges over the course of the 13 years of schooling that lead to high school graduation – challenges that increase in difficulty as children age..."



MARTINSVILLE SCHOOLS TAKE CHARGE

In response to this initiative, our school system provided support for teacher leaders throughout the district to develop a collaborative K-12 initiative to address STEM needs within the district. This team designed a comprehensive three-year plan that included skilled trades programming.

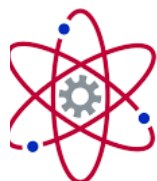
WHY PROJECT LEAD THE WAY?

PLTW is a nationally recognized STEM and project based curriculum offering programming from kindergarten through 12th grade. We expanded on PLTW curriculum already being offered in our schools.

The Innovation Center at Brooklyn STEM Academy hosts weekly Project Lead The Way JUMPSTART under the guidance of Sharon Goodin, STEM Coordinator. Project JUMPSTART allows all Martinsville K-4 students from every elementary school an opportunity to explore top-notch STEM curriculum in one of the District's newest facilities. Teachers report that the JUMPSTART program is creating real-world problem solving opportunities for students.



JUMPSTART K- 4 LAUNCHES AT THE INNOVATION CENTER



PROJECT LEAD THE WAY

PLTW

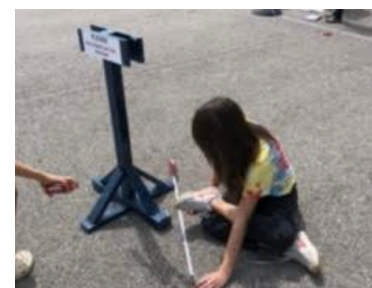


SKILLED TRADES & STEM

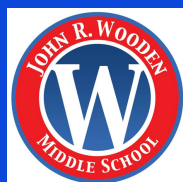


STEM EXPANSION AT BELL INTERMEDIATE

Bell Intermediate Academy added STEM classes for all 5th and 6th grade students this year. Mrs Lori Bowlen, BIA's STEM teacher, updates that she enjoys these classes and believes the students are more involved and engaged with the curriculum.



WOODEN STUDENTS SPRING INTO CONSTRUCTION TRADES



Martinsville High School is hosting classes this year in Introduction to Construction Trades and Introduction to Agriculture for John R Wooden students. 8th graders earn high school credit while being introduced to fundamental skills related to these skilled trade graduation pathways.

JRW Middle School has added Engineering Essentials this year, an introductory engineering PLTW class that earns students high school graduation credit and prepares them for the new PLTW Engineering curriculum now being offered at the high school.

These valuable classes are preparing 8th graders for Career and Technology Education coursework in high-need areas.

MHS SKILLED TRADES STUDENTS BUILD ON DEMAND JOB SKILLS

MARTINSVILLE SCHOOLS, FALL 2022



Mr Greg Weiss helps MHS Skilled Trades students learn first-person, hands-on skills that are directly aligned with high priority Indiana careers. Skills learned in machining, construction trades, automotive services and engineering align with a large portion of high-paying Hoosier jobs.

MHS values the relationships the school has built with CTE (Career Technology Education) industry experts. Our skilled trades classes prepare students for high quality internship placement with community partners.

MHS prepares students for the real world with industry-ready skills.



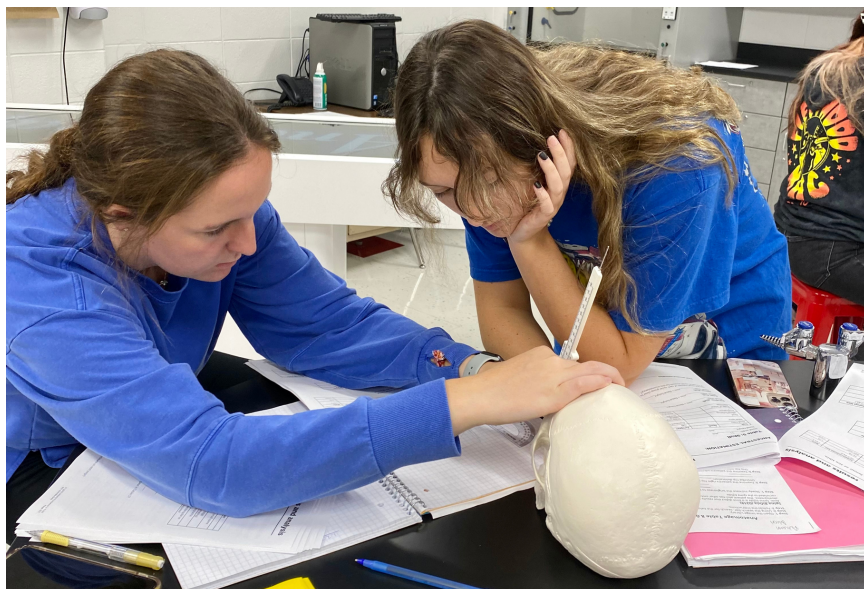
Learn about Indiana's plan
for Career Tech [here](#)



Martinsville Schools - investing in Industrial, Agricultural & Modern Sciences NOW and for future generations!



LIFE SCIENCES AT MHS GOING STRONG



Life science students in PLTW and AP classes implement experimental design processes, adhere to measurement standards, and apply modeling concepts. Immersive classroom experiences are essential in STEM.

MARTINSVILLE SCHOOLS STEM IMPLEMENTATION UPDATE

PHASE I - 22/23 SCHOOL YEAR

(all goals accomplished)

- 80 teachers trained in PLTW
- Annual K-4 Project JUMPSTART implemented at Brooklyn STEM Academy
- STEM Elective added at Bell Intermediate Academy
- Engineering Classes added at Wooden Middle
- Construction Trades classes added at Wooden Middle
- Agriculture classes added at Wooden Middle
- Engineering Curriculum updated at MHS
- Computer Science Classes expanded at MHS

PHASE II - 23/24 SCHOOL YEAR

(anticipated goals)

- Train teachers as needed
- Implement PLTW at all K-4 schools
- Implement PBL at BIA
- Expand Computer Science at Wooden
- Expand Engineering curriculum at MHS
- Expand Robotics at MHS

