The Akron STEM School Curriculum

The Akron STEM School is defined in part by its initials: science, technology, engineering and mathematics. However, at its heart, STEM education is about embracing a future that moves beyond 20th century learning.

This means building a learning environment that allows learners to think, invent, communicate, inquire and innovate freely. It means learning through problem solving. It means opening the connections of learning to all disciplines, so that the science of art or the history of engineering allow for a broader understanding.

Communication among learning coaches and integrating lessons in multiple classes are important ways for learners to comprehend difficult concepts. For example, when students in a mathematics class were having trouble with fractions, the gym learning coach developed a game where solving fraction problems was needed to win.

Core areas of study
- Science
- Mathematics
- Digital Literacy
- Engineering
- Language Arts
- Social Studies
- World Language
- Physical Education
- Health
- Orchestra and Band
- Choir
- Visual Art
- Entrepreneurship

Digital Literacy
With the goal of using computers to accomplish real-world tasks in a 21st century environment, learners begin by gaining computer skills in typing, designing, problem solving, documenting and research. From there, they learn web 2.0 technology, visual literacy, media literacy and the ability to create engaging digital presentations.

Chinese Language
Communication is key to success in the increasing global community. Starting in grade seven, learners study the Chinese language, which includes vocabulary and important phrases, as well as an introduction to Chinese culture, music and cuisine.

Engineering
Understanding the engineering design process is the goal for learners working with Lego NXT Mindstorm Robots. This course also covers basic computer programming in relation to robotic controls.