

From the Superintendent

We are more than half way through the 2014–2015 school year—and what a year it's been!

Our staff has been working hard to integrate problem-based learning (PBL) strategies into their classrooms, and embracing a STEM (Science, Technology, Engineering, and Math) mindset. In less than a year, we have been able to offer STEM-based curriculum through [Project Lead the Way](#) to **425 elementary students** with **17 teachers**, and **384 middle school students** with **two teachers**. We only see these numbers growing over the next few years.

We are excited that the construction of our new POWER Training Center is complete and many of our outdoor learning areas are available for use. Our POWER staff members have been working with teachers, principals, and the community to coordinate the use of the new indoor and outdoor learning spaces, and the equipment and other resources provided by our two [Straight A Fund](#) grants. These learning environments provide our students with hands-on experiences and support our STEM and PBL approach to learning. Later this spring, we look forward to hosting a series of open house events to show our parents and community members these incredible 21st century learning spaces. Read more about this work and open house events on the following pages.

Integrating technology into the classroom continues to be a top priority at each building this year. Since the fall, our staff has been working with Epiphany Management Group (EMG) and Matthew White, our onsite support, to provide professional development on how to integrate technology and problem-based learning into the classroom.

Mechatronics training for teachers will begin on March 11, 2015 and continue through the start of the 2015-2016 school year when a new course will be offered to Carrollton High School students called Machine Technology or MTEC. This course is aligned through CTE—Career Tech Education—in collaboration with Buckeye Career Center and with articulation agreements for college credit through Kent State University. MTEC will be held daily in the POWER Training Center beginning in August 2015.

Our work with the [Young Entrepreneurs Consortium \(YEC\)](#), part of our second Straight A grant, continues to move forward. The goal of this grant is to increase student achievement by building a robust education-to-employment model, impacting grades 6–14. Students will be exposed to an array of business and technical pathways, work-based learning experiences, and project-based learning that can prepare them to compete in the 21st century global economy. Through this grant, we have been able to purchase Mechatronics programming for fundamental machine and engineering learning.

The YEC program designed for Carrollton is a skill-based, hands-on, interactive learning system that promotes higher-level learning and will be known as the “Young Entrepreneurs Classroom” (playing on the original YEC acronym). This high-tech classroom will utilize equipment and software that is standard in today’s industries. It provides students not only the basic fundamentals of machine technology, but also the advanced knowledge and trouble-shooting skills required to have the competitive edge in today’s job market.

Using the Mechatronics principle, the Industrial Automation Program (IAP) courseware was developed and designed to address national and international skill sets. The IAP program is comprised of Industrial Training Centers (ITC). The lessons in each ITC offering are in a clearly defined format, which guides the student through challenging applications and projects. Science, technology, engineering, and math (STEM) subjects are integrated into each instructional unit. To learn more, [click here](#).

Lastly, thank you to all of the parents and guardians who completed our recent communications survey. Your feedback will help us to know how to best communicate and share important information with you and your families.

With a few months left in this school year, we look forward to warmer weather and enjoying all that our new outdoor learning spaces have to offer.

David Quattrochi, Superintendent
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Spreading the Word About Our Work

One way to expand our work and impact, is to share our story. Over the past few months, district leaders have had the opportunity to present at the following conferences and to connect and network with state and national education and industry experts.

61st Annual SRATE Conference, October 16-18, 2014, Isle of Palms, SC

The Southeast Regional Association of Teacher Educators ([SRATE](#)) is a regional professional organization affiliated with the Association of Teacher Educators (ATE). Its purpose is to improve teacher education, broadly conceived, in the Southeastern United States and directly or indirectly throughout the nation by its affiliation with the ATE. Our session, *POWER Innovation: Transforming a Culture*, focused on the opportunities that the rapid growth of the Utica Shale industry has presented our district, the community, and eastern Ohio region. Dr. Quattrochi and Mr. Robinson were also published in the Summer 2014 *SRATE Journal*. Read their article: [*POWER Innovation: Transforming a Culture*](#).

ShaleNET Workforce Forum, November 5-6, 2014, Washington, PA

The [2014 ShaleNET Workforce Forum](#) demonstrated essential learning features and initiatives from national and international speakers on current workforce needs, what the future may hold, and what this means to employers in the Marcellus and Utica Shale regions of Pennsylvania, West Virginia, and Ohio. Developing trends and new areas of focus were discussed along with implications for workforce and educational professionals. The Forum sessions were at maximum attendance in Washington. Carrollton leadership again, focused on the *POWER Innovation* presentation.

Ohio School Boards Association (OSBA) Conference, November 2014

Nearly 10,000 school board members, administrators, district staff, students and guests attended the November 2014 [Ohio School Boards Association](#) (OSBA) Capital Conference and Trade Show in Columbus. It is the second-largest education convention in the country. Our session, *Leveraging Energy and Ag Partnerships*, focused on the opportunities the rapid growth of the oil/gas industries have presented our district and community. The district was published in the August 2014 OSBA Journal, *Carrollton ESVD: Transforming Culture By Powering Innovation*. Read the [article](#) (page 26).

Straight A Day, February 2015

On February 5, Carrollton was one of 50 [Straight A Fund](#) grant recipients to showcase their work at the Straight A Fund Innovation Conference at the Ohio Statehouse in Columbus.

Carrollton teachers, students, and central office staff shared how grants funds helped to launch the POWER initiative and how the investment has helped the district to implement STEM education.

Our students proudly shared examples of their STEM-based projects, including robots, a diorama of their vision for the district's new campus, and explaining how they are involved in growing fruits and vegetables in onsite gardens.



To learn more about this event, read our recent blog post at <http://www.carrolltonpower.org/whatsnew/>.

The Latest News

Around the Training & Outdoor Learning Center

Our new POWER Training Center, greenhouse, and butterfly and rain gardens are complete, and our students were actively involved in helping prepare the grounds around the new Center. We had one Girl Scout troop help with landscaping, and had Carrollton High School FFA students assemble courtyard benches, landscaping carts, and other garden equipment. The POWER staff has also been busy preparing for the upcoming planting season. They have purchased seeds, soil, starts, and pots from grant funds to start an herb bed and "bramble bed." POWER coordinator, Amazing Amy, is working to select a location for these beds and working with teachers to plan STEM-based projects for students. From testing soil and sun exposure to determining the best site, students will play an active role in this work, which is designed to be a series of hands-on learning adventures.



Breakfast in the Garden & Plant Sale

As a way to promote wellness and integrate the use of our new greenhouse and raised beds with students, we will host a "Breakfast in the Garden" event at the end of April. This event will be geared toward 7th graders. Part of the event also includes a plant and hanging basket sale, designed to raise money for future projects. This STEM-based project integrates many subjects, including math from an economics perspective, language arts from a marketing perspective, and science from the planting perspective.

Aquaponics Project

Aquaponics is a system of aquaculture in which the waste produced by farmed fish or other aquatic animals supplies nutrients for plants grown hydroponically, which in turn purify the water. Students will be taking in an aquaponics project this spring to grow lettuce and basil in styrofoam flats that float in water.

Save the Dates

On **May 8-9, 2015** the district will host a community open house to showcase our new POWER Training & Outdoor Learning Center. All are welcome to attend! Stay tuned for more details.

Connect With Us

We are committed to keeping you up-to-date about this work and have created several new communications tools to share information, including a POWER website and this *POWER Notes* newsletter. Access the website at www.CarrolltonPOWER.org and follow district and superintendent news through Twitter at [@CEVSDWarriors](https://twitter.com/CEVSDWarriors) and [@DaveQuattro](https://twitter.com/DaveQuattro).



Coming soon... We are in the process of setting up district and school-based Facebook accounts. We know that many parents and community members are active on Facebook, and we think this will be a great tool to share important information and updates.