

OFFICE OF THE SUPERINTENDENT

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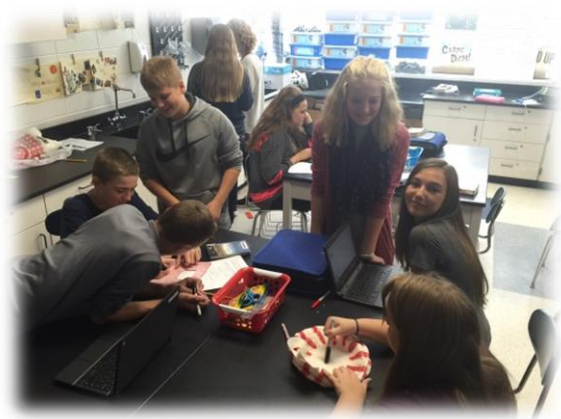
FROM THE SUPERINTENDENT'S DESK

**District S.T.E.M initiative: forging new opportunities for our learners
to ready them for the global workplace.**

S.T.E.M., or the study of Science, Technology, Engineering, and Math are not new subjects in school; however, the concerted, focused study and application of all of them together has been the trend in recent years.

I am so proud of our vision and support from our Board of Education at LPS to develop relevant, rigorous S.T.E.M.-related opportunities for our students. Last year, we initiated a K-12 S.T.E.M. team comprised of teachers, administrators, parents, and local business owners. The charge for this group was to develop a 3-5 year district S.T.E.M. plan, as well as brainstorm potential ways to connect with local industry. We are realizing the fruits of our labors this year.

One such idea generated from our collaborative meetings was the development of a Pilot S.T.E.M. class at our Middle School. Led by veteran science teacher, Kelly Shumway, the two-hour block class has explored some pretty cool topics of study, been involved in some high-level projects, and has allowed the students to be exposed to some new ways of thinking about S.T.E.M.-related jobs. Mrs. Shumway commented about making this relevant to students and “wanted students to be exposed to different careers and opportunities related to S.T.E.M.” The district couldn’t agree more. This exposure is critical and allows students to possibly embark on these courses of study in the future, even employment in a S.T.E.M. field (and potentially locally, to boot).



Students working on a STEM project in class.

Over the course of this year, the class has based work on the NextGen Science standards infused project-based learning and teacher-facilitated discussion. The students have used their skills in topics study such as Maglev track design, flight simulators, drones, computer coding/programming, CAD/CAM design, energy, global marketplace discussion, and the crown

jewel, competing (and doing very well, I might add) in the recent MDOT TRAC structural bridge design competition (Transportation And Civil Engineering). We have 11 teams moving forward to the next round of the tournament!

How important is a focused, coordinated S.T.E.M. initiative you ask? In a recent study conducted by the Manufacturing Institute, there were more than 600,000 unfilled S.T.E.M.-related jobs¹; and, these job pay very, very well. According to the study, many students are reluctant to pursue S.T.E.M.-related jobs, citing: a lack of knowledge of available S.T.E.M. employment, S.T.E.M. classes being too challenging, or not feeling prepared for the S.T.E.M. content¹. This is exactly why Lakewood Public Schools will continue to support these critical opportunities for our students and support our teachers as they develop this important coursework.



Morgan Stahl and Mrs. Shumway working together on a project.

When asked about how this class has benefited her, 8th grader Morgan Stahl comments, “I wasn’t a huge fan of public speaking and presenting information. But since being in this class, I actually enjoy it now. Teamwork [also] helps you with your social skills and understanding problems or a situation better.” The District plans to offer a similar experience next year at the middle school.

We currently are working on expanding S.T.E.M opportunities at all buildings, as well as developing our skilled-trade pathway. In the coming weeks, more information will be released about a unique, first-in-the-county opportunity for our students interested in pursuing a great career in the skilled-trades!



Students utilizing tech from an LEF grant.

To learn more about district opportunities, including our K-12 S.T.E.M. initiative, visit www.lakewoodps.org/.

¹ <https://www.usnews.com/opinion/articles/2012/06/15/stem-education-is-the-key-to-the-uss-economic-future>