

Plainville Citizen Op-Ed, December, 2015

Technology continues to play a vital role throughout Plainville Community Schools. Our collective focus on technology is articulated in the district's strategic plan and is evident in classrooms at every grade level. Using technology to enhance learning and teaching is at the forefront of this focus district-wide.

We must continue to prepare our students for a world that requires them to be able to use many forms of technology to access, understand, manage, interpret, evaluate, and create information. As we move forward in our exploration of ways to infuse technology and higher level thinking throughout our curriculum, we recently turned to an innovative program designed to build enthusiasm and interest in computer programming/coding.

Steve Jobs said, "Everybody in this country should learn to program a computer ... because it teaches you to think." The Hour of Code project is a global effort to bring computer science to schools around the world. During the month of December, and in conjunction with National Computer Science Week, held December 7-13, all Plainville students in kindergarten through fifth grade began to "code" – learning how to create text to operate computer functions. The game style format provided increased levels of complexity as the students honed computer programming skills, using grit, perseverance and collaboration with peers. Through this project, our district's youngest learners are able to develop key 21st century skills that begin to prepare them for careers that have not even been invented yet.

Research tells us that students who learn introductory computer science show improved math scores, yet 90% of K-12 schools in the U.S. do not teach

computer science. In many countries (including China, the United Kingdom and Australia), computer science is required. Interestingly, all students can learn the basics, starting in elementary school, but fewer than 10% of students (and just 4% of female students, 3% of students of color) take computer science classes. Our goal is to turn this statistic around, beginning with our youngest students and continuing throughout middle and high school.

A recent board of education presentation by Middle School of Plainville teacher, Kim Coyle, described ways that sixth grade students are using computer programming to design projects for 3-D printing. Plans are under way to expand the coding at MSP in eighth grade to continue interest in this potentially lucrative career and to build enthusiasm for the Plainville High School STEM (science, technology, engineering, and mathematics) programs -- including the robotics class.

These explorations into the power of coding/computer programming in the Plainville Community Schools are examples of our commitment to provide all students with a variety of career pathways as they move through our schools. We firmly believe in our vision to prepare students for success in a changing global society. The Hour of Code and other opportunities for our students to think and behave like computer programmers are one way that we are turning our vision into reality.