

New Opportunity Available in Southwest Wisconsin (Southwest Academy for 21st Century Skills)

Today's students will read 2,300 web pages and write more than 500 pages of e-mail this year. They will view 1,281 Facebook profiles. They will choose a college major that didn't exist 10 years ago, and will work in a career that doesn't exist today solving problems that we haven't yet heard of.

How prepared is your son or daughter to enter into this 21st Century work world?

Teachers and school districts in Southwest Wisconsin are quickly adapting classrooms and offerings to keep up to the rapidly changing area of technology. Four years ago, the Project Lead the Way (PLTW) Rural Initiative was formed. This group of five rural schools formed a consortium to bring PLTW to each of their districts. Project Lead the Way is a national curriculum for pre-engineering/technology that promotes Science, Technology, Engineering and Math (STEM) and was previously thought to be possible only in large districts due to cost, teacher training and available students. The PLTW Rural Initiative has found a cost effective way to join forces and offer PLTW in four small districts (Southwestern, Cuba City, Highland and Iowa-Grant) with a slightly larger district (Platteville) as the lead district.

This program is significant in that it brings rigor and relevance to rural Wisconsin in a way that was not possible prior to its formation. Without the consortium, it is highly unlikely that these small rural districts would be able to offer PLTW to their students. It allows students to be exposed to high skill, high wage, high demand jobs that advance student learning, while advancing the area and the state. With Greg Quam at Platteville High School leading the initiative, these dedicated Technology and Engineering Educators, Science and Math Instructors are "leading the way" in rural Wisconsin and beyond. It's a very replicable model for other rural schools, as it was accepted as a presentation at the National Tech Prep Conference in Dallas in 2007, at the New Wisconsin Promise Conference in January, 2008 and most recently, it received the "Stand Up For Rural Wisconsin" Award from the Department of Instruction in March, 2008.

With introductory offerings being firmly available in each of consortium districts, parents and students are beginning to ask "now what?" After completing the basics, some, but not all of the students taking PLTW want more. Of course, we all know that a class of eight or fewer students is not going to be fiscally possible in our districts. The solution is to join forces with Southwest Wisconsin Technical College (SWTC) to offer a capstone class for PLTW students. Scott Swan, Mechanical Design Instructor, will hold a class that will be offered for dual credit (students will receive credit from both their high school and technical college credit). Students will attend Engineering Design and Development (EDD), the capstone course for PLTW that leads a team of students, guided by community

mentors, to work together to research, design, and construct solutions to “real world” engineering problems. This class will follow the Youth Apprenticeship model and be offered one night per week at SWTC in Fennimore (or an alternate site). Enhanced delivery will also be implemented through online learning and SRTNC.

When students complete the class, they will have real world problem solving skills, a good understanding of exactly what engineering and technology careers entail and up to 12 college credits to take with them if they choose to go on to post-secondary training.

The key is to get students interested early. Do you have a 7th or 8th grader who is curious about how things work? Are they interested in science, engineering, technology or math?

Watch for the 4-H Gateway Academy to be held in June 22nd-25th and a second session offered June 29th- July 2nd at Platteville High School. Day camp participants will work together in a fun, exciting environment using leading-edge technologies to learn about robotics, aeronautics and computer design. They will also participate in a field trip to a local manufacturing company, learn about high school courses in engineering and work with other Iowa and Grant County youth on engineering and team building activities.

If you'd like more information before signing up, join us on April 30th at the Governor's Convention Center in Platteville for the first ever “STEMposium”. This informational symposium will highlight area employers and post-secondary educational institutions to highlight the many opportunities available in the world of science, technology, engineering and math.

If you have questions please feel free to contact Darla Burton at CESA #3 at 1-800-261-0000 X231 dburton@cesa3.k12.wi.us or Greg Quam, Platteville High School, 608-342-4024 quam@platteville.k12.wi.us or Julie Pluemer, SWTC, 608-822-2369 jpluemer@swtc.edu.