The Cutting Edge

Solving Real World Problems with Advanced Technology

Generating 3D Models of Cancer Tumors

EAST students at Hot Springs World Class High School recently created a method for generating 3D models of cancer tumors. Their project was inspired by a brain-related tumor diagnosis for a friend. Using a 3D printer and knowledge gained from many dedicated hours of surgical observation and interviews with cancer patients, the students created a way to produce 3D models of cancer tumors so that doctors can provide tangible models to patients. Click here to see a KATV 7 news story of this fascinating project.

Improving Makerspaces and STEM for Students
Smackover-Norphlet SD Receives Grants from Local Tech Companies

Smackover HS is improving its makerspace and Norphlet MS its STEM program with the assistance of grants from local tech companies. The grants, totaling $10,000 are from Lockheed Martin, Aerojet Rocketdyne and LANXESS.

Makerspaces provide hands-on, creative ways for students to design, experiment, build, and invent. They’re typically a mixture of science lab, wood shop, computer lab, and art room. A portion of the grant money will be used to purchase 3D printers to help students design with wood and plastic. The funding will also go toward material and supplies at the middle school for STEM classes. At Norphlet Middle School, students take two STEM classes each year.

Pulaski Co. Schools Exploring New Career Ed. Approach
Ford Next Generation Learning Initiative

The four Pulaski County school districts and the LR Regional Chamber of Commerce are joining with the Ford Motor Company to explore the possibility of a coordinated, community-connected, career-focused approach for the area high schools. This career academy model pairs traditional academics with 21st century, project-based learning and real world problem-solving. Similar innovative, multi-district models are currently in place across the country including Nashville, TN and Louisville, KY.

Bentonville High School Opens Innovation Hub
Work Space for Creative Projects

The Innovation Hub, opening this month at Bentonville HS, offers a place for students to design, build, create, tinker, and experiment. A wide variety of tools will be available for students such as 3-D printers, a sewing machine, scroll saw and an abundance of materials and supplies. The Hub is an example of a learning place commonly known as a "makerspace" which is used to support science, technology, engineering, the arts, and math.

ARTICLE SUBMISSIONS

If you have an innovative project in your schools you’d like to share for our newsletter, contact Mike Mertens, AAEA Assistant Director, at 501-372-1691 or at m.mertens@theaaea.org or Dr. Joe Rollins, President, at 479-409-7409 or joe@nwacouncil.org.
All-Region & All-State Coding Competition Announced
Governor’s Initiative Sponsored by Verizon

Check out Commissioner’s Memo COM-19-037 for information on the 2018-2019 computer coding competition. The all-region competition is on March 14 and the all-state competition is on May 4. The official rules of the competition are (here).

EVENTS

CTE Day at the Capitol
February is National Career & Technical Education Month

"CTE Day at the Capitol" is set for Tuesday, February 5 from 10:00 a.m. - 1:00 p.m. at the Arkansas State Capitol 2nd Floor Rotunda. Students, teachers, schools, and business partners will be there to show why career tech is such a powerful change agent for Arkansas.

“Securing Our Students’ Global Future through STEM”
2019 STEM Innovation Summit

The STEM Innovation Summit, scheduled for February 21-22 in Little Rock, will be an opportunity for all Arkansas Career and Technical administrators across the state to learn more about STEM education, explore practical aspects of leading a STEM program, and to network with fellow practitioners from across the state. Click (here) for additional information.

Rock City Hacks Hack-a-thon
Build - Collaborate - Network

Rock City Hacks is a FREE event sponsored by the University of Arkansas Systems Division of Agriculture and hosted by 4-H for high school students in grades 9-12. A hack-a-thon is an overnight competition where teams identify and solve problems using technology. The event revolves around using coding skills in building a finished product that could be shipped and distributed. Events like these are great networking and socializing opportunities as there will be games and workshops to help students get to know each other as well as meet others in the tech field. For additional information, click (here).