



Science Professional Development
Considering the New Science Georgia Standards of Excellence and Competency-Based Learning
Monday, October 10, 2016

Cross-Cutting Concepts: Putting the Pieces Together in the Science Classroom

Description: Crosscutting concepts are a component of three-dimensional science instruction and have application across all domains of science. As such, they are a way of linking the different domains of science. A Framework for K-12 Science Education emphasizes that these concepts need to be made explicit for students because they provide an organizational schema for interrelating knowledge from various science fields into a coherent and scientifically based view of the world. Participants will investigate ways to begin developing a classroom culture that incorporates cross-cutting concepts and science and engineering practices within content in preparation for the implementation of the new Science Georgia Standards of Excellence commencing the 2017-2018 academic year. Crosscutting concepts also support Henry County Science Competencies.

Audience: K-5 Science Teachers
Facilitator: Mrs. Katrina Springer, Griffin RESA
Location: Union Grove High School, Room 331
Times: 8:30, 10:15 and 1:00

Engaging Student Inquiry through Science, Technology, Engineering and Mathematics (STEM) Concepts

Description: Engaging Student Inquiry through the integration of Science, Technology, Engineering and Mathematics Concepts supports three-dimensional science instruction as outlined in the new Science Georgia Standards of Excellence and Henry County Schools Science Competencies. This session will provide STEM lab modeling, lesson planning assistance, and implementation of online resources for K-5 classroom teachers. Participating teachers will participate in STEM lab implementation of hands-on engaging lesson enhancers through the modeling of successful implementation strategies. Participating teachers will further interact with the demonstrations and work in whole /grade specific groups focusing on relevant Science Georgia Standards of Excellence, STEM curriculum and Henry County Elementary Science Competencies.

Audience: K-5 Science Teachers
Facilitator: Mr. Ronnie Thomas, Georgia Science & Robotics Academy
Location: Union Grove High School, Room 333
Times: 8:30 and 10:15

LaunchPad: Macmillan Learning Online Platform

Description: LaunchPad is an online tool ideal for teachers who want to integrate technology fully into their classrooms. This resource helps students achieve results and gain confidence in a place where they can read, study, practice and complete homework. Participants will be able to create online learning experiences that are truly personalized and continuously adaptive. This online resource supports Henry County School's tech-enabled tenant of Personalized Learning.

Audience: Advanced Placement Environmental Science Teachers
Facilitator: Ms. Tracy Wegleitner, Bedford, Freeman & Worth Publishing
Location: Union Grove High School, Computer Lab 123
Time: 8:30 – 10:30

Three Dimensional Instruction: A New Type of Teaching in the Science Classroom

Description: The integration of cross-cutting concepts and science and engineering practices within the content standards brings a significant shift in the level of rigor in the new Science Georgia Standards of Excellence. These new three-dimensional standards, built upon A Framework for K-12 Science Education, will require students to apply practices, crosscutting concepts, and core content to explain authentic phenomena and solve real-world problems. Participants will investigate ways to begin developing a classroom culture that focuses on students using the three dimensions of science to make sense of phenomena or find solutions to problems in preparation for implementation of the new Science Georgia Standards of Excellence commencing the 2017-2018 academic year. The three dimensions of science also support Henry County Science Competencies.

Audience: 6-12 Science Teachers
Facilitator: Mrs. Terri George, Educational Consultant
Location: Union Grove High School, Room 226
Times: 8:30, 10:15 and 1:00

Supporting High School Science via the Pearson Education Mastering Online Platform

Description: MyLab & Mastering is the world's leading collection of online homework, tutorial, and assessment products designed with a single purpose in mind: to improve the results of all higher education students, one student at a time. Participants will be able to create online learning experiences that are truly personalized and continuously adaptive. MyLab & Mastering reacts to how students are actually performing, offering data-driven guidance that helps them better absorb course material and understand difficult concepts. This online resource supports Henry County School's tech-enabled tenant of Personalized Learning. Participants will receive complementary access to the online teacher platform for their respective content area.

Audience: 9-12 Science Teachers
Facilitator: Ms. Mandy Harris, Pearson Education
Location: Union Grove High School, Computer Lab 122
Time: 10:15

Deconstructing Elements of Science Georgia Standards of Excellence and Performance Indicators of Science Competencies

Description: Learning targets are essential to effective teaching and learning. Students can't see, recognize, and understand what they need to learn until teachers translate the learning intention into developmentally appropriate, student-friendly, and culturally respectful language. Participants will deconstruct selected elements of the Science Georgia Standards of Excellence and Performance Indicators of Henry County Science Competencies, create and classify clear learning targets, and organize targets into logical progressions for learning.

Audience: 6-12 Science Teachers
Facilitator: Heather Toliver, Science Teacher on Special Assignment
Location: Union Grove High School, Room 335
Time: 1:00 – 4:00

Teachers interested in participating must register via PDEExpress by Wednesday, October 5, 2016.
All sessions are 90 minutes unless otherwise noted.