

Breakout Session SEVEN

Saturday, April 25 (3:30 PM – 4:45 PM)

S.T.E.A.M. Infusion

Science, Technology, Engineering, and Mathematics (STEAM) can become the mechanism for all other components of a school. This presentation outlines how separate or discrete courses can start a framework that allows STEAM and problem-solving to be embedded into the DNA of a school. The infusion of innovative thinking allows students to be prepared for a global marketplace and on the forefront of creative thinking.

No matter the size of the district, this presentation will outline how elementary school students become mechanical or environmental engineers, middle school students get their SWAG (students with ambitious goals) on, and high school students design apps and create models on their 3-D printer.

Join us for an interactive session where the specifics of Year 1 through Year 3 of implementation are outlined with a detailed scope of work and resources needed. Come ready for a hands-on experience and prepare to leave with a mind-on for an innovative STEAM Infusion approach.

Kim Morrison, Executive Director for Curriculum and Instruction

Mount Airy City Schools - Mount Airy, NC

Grade Level(s): K-12

Target Audience(s): Teachers, School Administrators, District Administrators

Theme(s): Science, Technology, Engineering, and Mathematics (STEM) or Science, Technology, Engineering, Arts, and Mathematics (STEAM)

Growing 21st Century Learners (Curriculum & Instruction)

LOCATION: 304

Partnerships and Practices: A Blueprint for Building School Leaders

This session will consist of a presentation of a successful blueprint used to develop a cohort of teachers who have recently assumed leadership positions in their school and district. In addition to reviewing the blueprint, the audience will also have the opportunity to hear the stories of four panelists, who are members of the cohort currently completing their second year of studying teacher professionalism, educational leadership, and NAESP Principal Standards. Each standard has a list of corresponding, relevant texts and suggested activities which provides real-time work experiences to enhance reflective practices and dialogue during monthly coaching sessions.

Karen Barnes, Principal

Sheila Luechtefeld, School-based Teacher Mentor

Kimberly Miller, Magnet Coordinator

Shantrez Taylor, Secondary Math Teacher

*Southwest Academy Magnet School for Science and Engineering
Baltimore County Public Schools - Baltimore, MD*

Grade Level(s): 6-12

Target Audience(s): Teachers, School Administrators, District Administrators

Theme(s): Leadership/Character Education

Leadership for New Schools (Leadership)

LOCATION: 301a

Breakout Session SEVEN

Saturday, April 25 (3:30 PM – 4:45 PM)

Creating Leaders in Technology

At Carroll Middle School, the magnet focus is Leadership in Technology. Core teachers at Carroll instruct the student-leaders daily through a period-long LEAD class built on Covey's 7 Habits of Highly Effective Teenagers. Through the lens of leadership, teachers instruct students on digital citizenship, technology-skill building and creating digital portfolios. Leadership skills such as etiquette, and college/career readiness are also taught through LEAD classes. At Carroll, the Leadership Theme is integrated through a school-wide, online "Lead Pacing Guide," which provides grade-specific content that is easily accessible and creates a uniform learning platform on each grade level.

Through the LEAD Pacing Guide, 6th grade students begin LEAD coursework by immersing themselves in learning, modeling, and implementing Covey's 7 Habits of Highly Effective Teens and Digital Citizenship lessons on a daily basis. This immersion continues and strengthens in 7th and 8th grade, where students enhance their digital citizenship skills, learn and practice etiquette skills, and begin working on their public speaking skills, in addition to a review of Covey's 7 Habits. From beginning middle school to exiting as upcoming freshmen, students at Carroll learn, model, and implement Leadership in Technology, thereby leaving the school as proficient 21st learners.

This presentation will share information about the LEAD class logistics, pacing guide and Covey lessons with participants. The presenters will also complete a sample LEAD lesson so participants can take away ideas for implementing leadership as part of their own magnet theme.

Katie Green, Teacher

Justin Keever, 7th Grade Social Studies Teacher

Carroll Leadership in Technology Magnet Middle School
Wake County Public School System - Raleigh, NC

Grade Level(s): 6-8

Target Audience(s): Teachers, School Administrators, District Administrators

Theme(s): Leadership/Character Education, Science, Technology, Engineering, and Mathematics (STEM) or Science, Technology, Engineering, Arts, and Mathematics (STEAM)

Growing 21st Century Learners (Curriculum & Instruction)

Considering Our Challenges (Magnet School Design, Sustainability)

LOCATION: 301b

Integrating the Arts into Curricula

Arts integration is an approach to teaching in which students construct and demonstrate understanding through an art form. This session will explore integrated arts instruction that incorporates visual arts and world languages. The session will also examine how to create a classroom atmosphere that fosters the seamless blending of content and skills between the art form and multiple other subjects.

Nicholas Millner, Visual Arts Teacher

Laura Summers, World Language Teacher - French

East Millbrook Magnet Middle School

Wake County Public School System - Raleigh, NC

Grade Level(s): 6-8

Target Audience(s): Teachers, School Administrators

Theme(s): Fine & Performing Arts, International Baccalaureate

Growing 21st Century Learners (Curriculum & Instruction)

LOCATION: 302b

Breakout Session SEVEN

Saturday, April 25 (3:30 PM – 4:45 PM)

Culturally-responsive teaching and learning: Making sure that students see themselves in the curriculum

As teachers, we must strive to make sure that our classrooms and our content are relevant to the lives of our students. This requires us to critically reflect on how our teaching can reference the perspectives and lived experiences of students and their families. How can we encourage the development of students' personal identities? How can we ensure that every student is valued and connected to our classroom content? We can help every student achieve greater with instruction that is culturally relevant!

Joanne Edwards, IB/Magnet Programs Coordinator - East Garner IB Magnet Middle School

Joshua Edwards, Teacher - Millbrook IB Magnet High School

Wake County Public School System - Raleigh, NC

Grade Level(s): 6-12

Target Audience(s): Teachers, School Administrators, ALL Groups

Growing 21st Century Learners (Curriculum & Instruction)

LOCATION: 302a

Courageous Character Education, the Breakthrough Magnet School, Way!

Breakthrough Magnet School's unique Character Education curriculum provides students with the key to academic and social emotional well being, using the acronym, B.R.I.C.K. Participants will gain access to the values and curriculum that promotes solution focused thinking through a breakdown to Breakthrough approach to challenges, which encourages individuals to take 100% Responsibility for their perception and corresponding actions. B.R.I.C.K also promotes understanding the power of the word through Integrity, taking a 'how can I help?' stance through Contribution, and maintaining a growth mindset through the ongoing expansion of Knowledge. Participants will learn approaches to the strategic use of school-wide community meetings, classroom lessons, small group topics, and individual student conversations. They will also see how school-wide systems can act together to ignite intrinsic motivation that results in independent and responsible self-actualized student leaders, living their best life.

Julie Goldstein, Principal

*Breakthrough Magnet School, South
Hartford Public Schools - Hartford, CT*

Grade Level(s): PreK-8

Target Audience(s): Teachers, Parents, School Administrators, District Administrators, ALL Groups

Theme(s): Leadership/Character Education

Leadership for New Schools (Leadership)

Growing 21st Century Learners (Curriculum & Instruction)

Your School Community (Community Relations)

LOCATION: 302c

Breakout Session SEVEN

Saturday, April 25 (3:30 PM – 4:45 PM)

Inquiry Based Learning with the Arts in Mind

The iSTEAM3D Instructional Model introduces a new approach to classroom instruction by engaging students in interdisciplinary approaches to learning and incorporating technology-integrated projects. This encourages a strong correlation between real-world applications and academic studies. This curriculum promotes inquiry based learning, infused with artful thinking, and is comprised of four layers: Red - Artful Thinking; Green - Classroom Instruction; Purple - Required Learning; and, Blue: iSTEAM3D Project Products. This presentation will examine how DeSoto Independent School District's iSTEAM3D magnet academies nurture collaboration, innovation, problem solving, and progressive thinking – with the arts in mind.

Josnae Love, iSteam Teacher

DeSoto East Middle School

DeSoto Independent School District - DeSoto, TX

Grade Level(s): 6-8

Target Audience(s): Teachers, Parents, School Administrators, District Administrators, ALL Groups

Theme(s): Science, Technology, Engineering, and Mathematics (STEM) or Science, Technology, Engineering, Arts, and Mathematics (STEAM)

Considering Our Challenges (Magnet School Design, Sustainability)

LOCATION: 305a

Fixing a Broken System: Reforming the No Child Left Behind Act to Improve Support for Magnet Schools

Since its inception in 2001, the No Child Left Behind Act (NCLB) has faced stiff criticism for its unrealistic expectations and unfunded mandates. Even though it has been due for revision for several years, our nation's political leaders have been unable to reach an agreement on how to fix it. This has left school leaders and educators in the untenable position of trying to operate under a broken system. Learn what is being done to update this law in Washington and how changes to NCLB will impact your magnet school or district.

John Laughner, Legislative and Communications Manager

Magnet Schools of America

Washington, DC

Grade Level(s): K-12

Target Audience(s): ALL Groups

Leadership for New Schools (Leadership)

Engage! Encouraging Parent-advocates (Advocacy, Engagement Strategies, Models for Parent Leadership)

Your School Community (Community Relations)

LOCATION: 305b

Breakout Session SEVEN

Saturday, April 25 (3:30 PM – 4:45 PM)

Math...Let's Talk About It!

"Can your students explain their problem solving thinking with evidence?" "Do your students feel comfortable critiquing the reasoning of their peers?" "Do you want to facilitate Math Discourse in your classroom that improves conceptual understanding while also supporting ELA standards?" Join this session to explore effective strategies for supporting math discourse with your students. Participants will learn about how to facilitate student construction of viable arguments as they problem solve in all math strands. In addition, participants will learn how to support students as they discuss and critique the problem solving reasoning of other students. Materials shared with participants will support effective implementation immediately upon return to your school and include effective multimedia tools. This session is targeted for teachers, administrators and/or parents who are interested in improving the use of 21st century thinking in mathematics.

Alison Milantoni, Teacher

Dee Skerry, 2nd Grade Teacher

Farmington Woods Elementary

Wake County Public School System - Cary, NC

Grade Level(s): K-5

Target Audience(s): Teachers, Parents, School Administrators

Growing 21st Century Learners (Curriculum & Instruction)

LOCATION: 306a

ROVs: Teaching Marine Science and Underwater Technology to Educators

This session is aimed at exciting teachers about the endless possibilities of science, technology, engineering, art, and math (STEAM) education in the classroom. The participants of this session will build a remotely-operated vehicle (ROV) from simple motors, basic wiring, and PVC pipes, and will test their design. In addition, there will be numerous hands-on activities including exploring buoyancy, basic engineering principles, basic circuitry, and oceanography. The session will also discuss how ROV technology can be intergrated into middle and high school curricula that are tied to state and national standards. Creating interest in and improving STEAM education through the use of marine technology are the principles of this session.

Joshua Danzy, Marine Robotics Teacher

Kathie Johnson, Magnet Lead Teacher

Mackenzie Richardson, Instructional Coach

Scotlandville Middle Magnet

East Baton Rouge Parish School System - Baton Rouge, LA

Grade Level(s): 6-12

Target Audience(s): Teachers, School Administrators, District Administrators

Theme(s): Science, Technology, Engineering, and Mathematics (STEM) or Science, Technology, Engineering, Arts, and Mathematics (STEAM)

Growing 21st Century Learners (Curriculum & Instruction)

LOCATION: 306b