

LEARNING INNOVATIONS BREAKOUT SESSION DETAILS

In addition to the presentations listed below, the breakout session schedule also offers the following opportunities at 10:15 a.m., 11:15 a.m., and 1 p.m.:

- Guided tour of the DI REACTOR, a multi-faceted makerspace environment
- Guided tour of the Blank_Lab, a 'black box' environment for investigating collaborative experiences that bridge the scope of augmented, virtual, and extended reality technologies
- Hands-on exploration in the Learning Innovations XR Playground, a pop-up space in the atrium offering opportunities to explore XR technologies and tools for innovating and making including Merge Cubes, Meta (Oculus) Quest 2, Vuzix Smartglasses, RayBan Stories, 360 Cameras (e.g., Insta360, Ricoh Theta + tripods/accessories), ClassVR and more. Presented by S3 Technologies and the EHHS Instructional Resource Center's Learning Innovations Lab

10:15 – 11 a.m.

XR in Action Jennings Showcase Presentation: XR-Math

Susan Hall, Media Specialist; Jessica Mitchell, Gifted Learning Coach; Julie Demangeont, 7th Grade Math Learning Coach; National Inventors Hall of Fame Middle School, Akron Public Schools; and, Sam Crews, OSLN Manager-Akron Hub, Akron Public Schools
Learn how XR technologies can amplify deep learning for math! Teachers and students from the National Inventors Hall of Fame STEM Middle School will provide demonstrations and hands-on opportunities with the XR tools they are using to support math learning including Merge Cubes, VIVE, Tilt Brush, Meta (Oculus) 2 and more! Eighth graders will share their experiences in experimenting with lesson design as they created and tested lessons to teach geometry to their sixth grade peers, who will reflect on their learning and participation in the lessons. The students will also share their experiences in using XR technologies within the context of a makerspace model in which they learned the curricular concepts in class and then applied that learning in a digital fabrication lab with XR technologies.

XR in Action Jennings Showcase Presentation: Using XR Technologies to Support Inquiry-based Learning in English Language Arts

Tiffany Yehle, Fourth Grade Teacher, Walls Elementary, Kent City Schools
Tiffany Yehle and her fourth graders will share how they used a variety of XR technologies to support literacy lessons surrounding extreme settings including Merge Cubes to help enhance and deepen students understanding of narrative writing.

XR in Action Jennings Showcase Presentation: Using XR Technologies to support PBL

Rachel Hughes, 9th/12th grade Engineering Instructor & Laura Sass, STEM Quality & Curriculum Administrator, Bio-Med Science Academy
Bio-Med Science Academy teachers and their students will share how they used 360 video to support their PBL unit focused on cross-curricular integration.

Engaging Students with XR to Prepare for the Future of Work

Becky Stanek & Dave Ternent, STEM Middle School Teachers, Stow-Munroe Falls City
As middle school STEM teachers, Dave Ternent & Becky Stanek have developed an innovative curriculum that prepares students for the future of work. They will share their strategies and classroom workflow for designing learning experiences that promote students as creators using tools such as Game Engines (Unity, Unreal, plus browser-based engines); 3D modeling with Onshape, SketchUp; Coding using Codecademy, CodeHS, freeCodeCamp; Robotics with Arduino, CoDrone; Graphic Design; Fashion Design; Photography; Interior Design; Videography.

Life After Google Expeditions

Alex Oris & Cathy Nicholson, Technology Integration Specialists, Cuyahoga Falls City Schools
From the beginning, we fell in love with Google Expeditions and the way we were able to take students on virtual field trips and bring abstract ideas and objects into the classroom. Now that we have the equipment, and Google has retired Expeditions, what do we do? In this session, we will share and discuss alternatives and other options to bring Augmented and Virtual Reality into your classroom.

11:15 a.m. – noon

It Takes a Virtual Village: XR Meets SEL Meets DEI - A Middle School's Journey

Dr. Gus Farmakidis, Library Media Specialist, Akron Public Schools
Join us as we take you on a journey where social-emotional learning meets Extended Reality (XR). You will leave energized and ready to transform your learning spaces into places where students are engaged and able to create XR as they master standards across the curriculum. This innovative and cutting-edge process has been 5 years in the making. What began as a desire to engage a refugee population of students experiencing cognitive lockdown has evolved into a movement designed to ensure equity and develop empathy across all subgroups, content areas, and grades using extended realities.

Strategies & Resources for Integrating Extended Reality Across the Curriculum

Andrew Robitaille, High School Library Media Specialist, Hudson City Schools
Extended Reality offers fascinating ways to make learning more participatory and engaging. This session will demonstrate ways that both teachers and students can consume and create 360° content. Strategies and pedagogies will be discussed, as well as resources to get you started on your XR pathway.

Amplifying Student Engagement & Learning with Google Arts & Culture and ThingLink

Matthew Mays, Educational Technology Consultant, Stark County Educational Service Center
With the rise of online learning and personal devices, the four walls of our common classrooms can no longer contain student excitement for learning. Break these boundaries of your physical classroom and activate prior experiences with an exploration of Google Arts and Culture. Take your students on virtual field trips far beyond Northeast Ohio as you explore the world's finest museums, parks, and experiences to unlock the secrets of world culture and history. Connecting to the world in interesting and unique ways offers students the chance to gain

understanding. To help amplify this connectivity and explore spatial relationships, attendees will learn how products like ThingLink can help link ideas, learning, and people.

Creating AR and VR Content with CoSpaces

Robert Lane, Owner & Technology Instructor, One Byte At a Time Educational Technology Services

Participants will learn ways to engage their students in deep learning by creating AR and VR content using CoSpaces in any subject area.

12:30 – 1 p.m. Virtual Networking in Topia <https://topia.io/xrineducation>

Engage with colleagues during a guided tour of the Topia spatial media platform & brainstorm ways for creating learning experiences in the metaverse

1 – 1:45 p.m.

XR in Action Jennings Showcase Presentation: Merging History with Virtual Reality

Annette Lang, STEM Integration Coach and Educator & Abby Packard, Grade 6 Social Studies Teacher, Bio-Med Science Academy

Come learn how 6th grade students learned about Ancient Rome and then shared their learning using CoSpaces to collaboratively create a 3D virtual reality cube. Students will share their final projects created with Merge Cubes.

Using 360 Media (video & photos) for Teaching Students and Reflecting on Practice

Dr. Karl Kosko, Associate Professor of Mathematics Education, Kent State University;

Jennifer Heisler, Graduate Assistant, Kent State University

Participants will be introduced to the potential of 360 technology for teaching and learning through guided opportunities in this session which include using example 360 media in ThingLink for science & math; going on a virtual field trip in YouTube VR (with headsets); and, observing a snippet of a classroom 360 video for reflecting on and/or observing practice. Additionally, participants will discuss best practices for facilitating student learning with 360 media and the potential for self or peer-observation with 360 video.

Augmented Reality for All!

Dr. Enrico Gandolfi, Assistant Professor & Program Coordinator for Educational Technology, Kent State University;

Dr. Robert Clements, Associate Professor, Biological Sciences, Kent State University

Elaine Dria, Academic Advisor & Mathematics Teacher, Our Lady of the Elms High School & Middle School

Olivia Wakeling, Director of Annual Giving, Our Lady of the Elms School

In this session we will introduce GLARE, an open-access augmented reality experience editor with which users can create their own augmented tours. Three applications of the GLARE platform will be presented: the May 4th Extended Reality Tour, the Smart Poetic Cities Tour with the Kent State Wick Poetry Center, and a student-led AR experience from Our Lady of the Elms School.

Designing Your School's XR Ecosystem: A Think-Tank Discussion

Facilitated by S3 Technologies

Join fellow conference attendees for a think-tank discussion facilitated by S3 Technologies to collaboratively develop an action plan for effectively integrating XR in your own educational setting.

Do the WRITE Thing—Apply for an EIG through the GAR Foundation

Lucille Esposito, Consulting EIG Program Manager for the GAR Foundation

Heidi Short, 5th Grade Science & Social Studies Teacher and Sarah Suboticki, Fourth Grade Teacher

DeWitt Elementary, Cuyahoga Falls City Schools

Securing external funding to support your dreams and goals for your students is not beyond reach! Lucille Esposito, Consulting EIG Program Manager for the GAR Foundation, will take you through the grant writing process and teachers Heidi Short and Sarah Suboticki will share their journey of pursuing an EIG grant to create a learning garden at their school. As a result of this working session, participants will leave having developed one “big idea” for potential funding along with a firm understanding of the grant proposal process and the necessary steps to ensure successful funding. Note: While only Summit County educators are eligible to apply for EIG funding, the process and strategies shared in this session are relevant to all educators interested in pursuing grant opportunities.

3 – 3:45 p.m.

XR in Action: Jennings XR Teacher Cohort Project Showcase

Join us in the DI Hub Atrium & Gallery (Level 2) to celebrate local teachers who participated in our 2021-22 Martha Holden Jennings Foundation grant: *Immersed in Deep Learning with XR*

Participating Teachers & Schools:

Kent City Schools

Terry Clutter, Library Media Specialist,
Stanton Middle School
Carla Geraghty, 6th Grade Social Studies
Teacher, Stanton Middle School
Christine Goff, 6th Grade English Language
Arts /Social Studies, Stanton Middle School
Marisa Hickman, 7th Grade Social Studies
Teacher, Stanton Middle School
Christi Bates, 5th Grade Teacher, Holden
Elementary
Janet Longanecker, 5th Grade Teacher,
Holden Elementary

Rootstown Middle School

Cassie Braden, 7th Grade Social Studies
Teacher
Hallie Obert, 8th Grade Math Pre-
Integrated/Integrated 1

Streetsboro City Schools

Gwen Collins, 5th Grade Teacher, Henry
Defer Intermediate School
Amanda Lauer, 6th Grade Science Teacher,
Streetsboro Middle School
Erica Marshall, 6th Grade Science Teacher,
Streetsboro Middle School
Dan Stitzel, District Technology Coach,
Streetsboro City Schools