### What To Do in a Maker Space: Robert **Morris University Teacher Education MakeSHOP**

Tues, May 16, 10:00am-2:00pm Hosted by: School of Education and Social Sciences

#### @ Robert Morris University

We invite teachers and education students to come learn how to integrate making into your lessons with easily accessible materials and how to organize materials for a project with our mobile maker spaces. We will also demonstrate projects using technologies from hand drills to 3D printers. See how making can facilitate deep learning while meeting state standards.

#### **AIU Storytime STEM-packs**

Fri, May 19, 8:30-10:30am Hosted by: Allegheny Intermediate Unit @transformED

Storytime STEM-packs™ are an educational innovation that enables adults to incorporate STEM concepts into children's storytime. A Storytime STEM-pack includes a popular children's book, materials needed for an engaging STEM activity, and a facilitator guide that makes connecting the story to the STEM activity easy. Join us to experience one of our Storytime STEM-packs for children PreK-2 with a mathematics/arts focus!

#### **Teacher's STEAM Night & Shopping!**

Fri, May 19, 4:30-6:30pm Hosted by: Science Tots, Inc. @The Galleria at Mt. Lebanon

Are you an early childhood or elementary school teacher? Join us for a fun STEAM activity, networking, & shopping!

### **Every Child Ready to Read & Cruise** into Kindergarten: Parent/Educator **PQAS Workshop**

Sat, May 20, 9:30-11:30am Hosted by: Carnegie Library of Pittsburgh - Main (Oakland)

Caregivers will learn why it's important for children to get ready to read starting at birth and will understand the essential role adults play in developing early literacy skills. Participants will also learn how to use the five early literacy practices (talking, singing, reading, writing, playing) to nurture early literacy skills.



### Arts in Education Professional **Development: Stop-motion Animation**

Sun, May 21, 1:00-4:00pm Hosted by: Pittsburgh Filmmakers / Pittsburgh Center for the Arts @Pittsburgh Center for the Arts School Learn about the fascinating and fun process of stop-motion animation, and discover how you can apply it in your classroom as well as your personal artistic work. Filmmakers Youth Media Manager Molly Duerig and participating educators will view and discuss a variety of animated works before diving into the hands-on activity using tablets and apps to create unique animations of our own.

### **PCA Arts in Education Professional** Development: Papermaking

Sun, May 21, 1:00-4:00pm Hosted by: Pittsburgh Filmmakers / Pittsburgh Center for the Arts @Pittsburgh Center for the Arts School This workshop with PF/PCA teaching artist Katy Dement will engage participants in a hands-on understanding of the importance and ease of recycling, the science of water and fibers, and the invention of paper! Educators will learn about processes to create sustainable materials for illustrating any subject matter, using printmaking and collage, accompanied by scientific investigations supported by grade level appropriate curriculum connections.



### **PCA Arts in Education Professional Development: Metalworking**

Sun, May 21, 1:00-4:00pm Hosted by: Pittsburgh Filmmakers / Pittsburgh Center for the Arts @Pittsburgh Center for the Arts School Learn how teachers and teaching artists can partner to encourage, educate, and inspire students through collaborative art making. Educators will work with PF/PCA teaching artist Lindsay Huff to create two wearable masterpieces that can be turned into necklaces or keychains. Learn about the science of metalsmithing while using hammers and anvils to create a letter stamped copper piece and learn about heat, fusion, and vitreous enamels using torches, kilns, and colorful glass powder on copper.

### **Pittsburgh Penguins Foundation STEAM Lending Library Training**

Tues, May 23, 8:30am-2:30pm Hosted by: Allegheny Intermediate Unit @transformED

Come learn and explore in this digital playground for teachers. Using a constructivist approach, participants explore various items from within the library holdings, including: Makey Makey, Hummingbird, Finch, Osmo, Beebot, Kindles, littleBits Class Kit, littleBits Gizmos & Gadgets, littleBits Smart Home, littleBits Arduino, SPECK, Robot Turtles, Puzzlets, and more!

### It Looks Like A Robot Drew That!

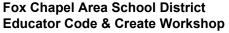
Fri, May 26, 8:30-11:30am Hosted by: Allegheny Intermediate Unit @transformED

Join us for this fast-paced professional development session as we have a bit of fun with Sphero robots, the Tynker app, and some paint. These little robots have amazing capabilities and can be controlled through block-based programming, allowing a teacher quick entry into the worlds of coding and robotics. We'll learn about the code, and about Sphero, and combine that with paint to create artwork made by the robots.

For a complete list of events throughout the region, including events that are happening in your school district, please visit: RemakeLearningDays.org.

## Maker

"Making" is about taking things apart and putting it back together. Tinker, build, and create with all kinds of materials. Try a 3D printer, take apart a toy to see what's inside and then rebuild it, or create a marshmallow tower!



Thurs, May 18, 8:30am-3:00pm Hosted by: Fox Chapel Area SD @ Kerr Elementary School

Learn the basics of block based coding (MIT's Scratch) and how to integrate coding into elementary and middle school maker-spaces using Makey Makey's, micro controllers, and other robotic components.

### **Designing Creative Spaces that Foster** Innovation & Collaboration

Thurs, May 18, 9:00am-3:00pm Hosted by: Allegheny Intermediate Unit @transformED

Have you ever thought about creating a space that allows your passion for creativity and innovation to grow? How about catapulting that thought to the next level and creating flexible learning spaces for all learners? Welcome to Human-Centered Design. During this session, we invite you into a process that ends with new solutions that are tailor made to with BoXZY suit their needs. In the afternoon, we will visit local maker space locations to see the end result put into action!

### Fab Lab Digital Fabrication for **Educators in the Classroom**

Fri, May 19, 8:00am-3:30pm Hosted by: Intermediate Unit 1 @IU1 Fab Lab

Digital Fabrication in the Classroom will give educators the opportunity to design, fabricate, and integrate a project made from multiple machines and software.

#### **UnConference: Maker Tots**

Sat, May 20, 8:00am-3:00pm Hosted by: Pittsburgh Association for the Education of Young Children (PAEYC) @University of Pittsburgh at Greensburg Can toddlers actually do circuitry? Why is "making" important for young children? If you've ever wondered about this, then come to UnConference: Maker Tots!The day begins with keynote speaker and maker teacher Maureen Frew and then, learn how local organizations incorporate STEAM and Maker learning into play by choosing two workshops.



### Maker Centered Learning in the Early Years: Agency Through Making in Early Childhood

Sat, May 20, 9:00-11:00am

Hosted by: Kerr Elementary School

In this hands-on workshop, we will explore how to use maker-centered learning in the early childhood classroom in order to create a culture of learning. Participants will use assorted open-ended materials as learners in order to explore Thinking Routines and documentation and then unpack how to use these concepts as facilitators of their own students'

### **Build a Board Workshop**

Sat, May 20, 9:00am-12:00pm Hosted by: Cornell Elementary

Join our 1st Grade team and build an interactive board! This board has been used to help reinforce content skills such as, vocabulary, phonics and math in learning centers. Teachers will learn how to assemble and program their board using Scratch.

### starts with the people you're designing for and Digital Fabrication for Education: Simplified

Sat, May 20, 9:00am-2:00pm Hosted by: BoXZY @Prototype PGH

Learn how to 3D print, laser engrave, and CNC mill with the BoXZY Team! This workshop will not only cover the basics of digital fabrication & 3D design, it will show you how to use these concepts to bring your students' creativity to life. And, you'll receive a list of resources to get your classroom started.

#### **Laser Cutting 101 for Teachers**

Sat, May 20, 11:00am-12:30pm Hosted by: Carnegie Science Center Fab Lab Learn to use the 40W laser at Fab Lab Carnegie Science Center to safely cut and etch your own designs! This introductory class is required in order to use the laser cutter during any Fab Lab Open

### 3D Printing 101 for Teachers

Sat, May 20, 1:00-2:30pm

Workshop (FLOW).

Hosted by: Carnegie Science Center Fab Lab Learn to design and print on Fab Lab's 3D printers and explore the technology of 3D printing using a 3D printing pen. This introductory class is required in order to use the 3D printer during Fab Lab Open Workshop (FLOW).

#### Vinyl Cutting 101 for Teachers

Sat, May 20, 3:00-4:30pm

Hosted by: Carnegie Science Center Fab Lab Learn to use the computer controlled vinyl cutter in Fab Lab Carnegie Science Center. This introductory class is required in order to use the vinyl cutter during Fab Lab Open Workshop (FLOW).

JOIN US May 15-26, 2017



Tues, May 23, 4:00-5:00pm Hosted by: Chartiers Valley SD @Chartiers Valley High School

Minecraft's unique sandbox design allows students to engineer working machines, create structures for 3D Printing, or design their own game for others to play! During this session, participants will be given concrete examples of how Minecraft can be used to encourage students to collaborate with each other to innovate and create new thinas.

### **Exploring and Shaping Future Educator Roles**

Wed, May 24, 1:00-3:00pm Hosted by: Intermediate Unit 1

As learning ecosystems expand and diversify over the next ten years, education stakeholders will need to consider what kinds of educator roles we need and want for future learning ecosystems and what those roles might mean for current teachers and administrators as well as for the preparation of future educators. Informed by KnowledgeWorks' ongoing exploration of the future of learning, this session invites participants to explore possible future-ready roles that promise to fit flexible and rigorous learning ecosystems.

### Maker Time @ Beaver Valley **Intermediate Unit**

Wed, May 24, 4:00-7:00pm Hosted by: Beaver Valley Intermediate Unit

Inviting teachers, administrators, parents and students to make a wearable electronics project! Join us for Maker time in our STEAM room. Space is limited due to the activity.

### Upper St. Clair High School's **Research & Innovation Hub**

Thurs, May 25, 9:00am-12:00pm Hosted by: Upper St. Clair SD @Upper St. Clair High School

The Innovation Hub is home to our MIT certified FabLab and SHOP@USC, a fully inclusive business where students in the Life Skills program and their regular education partners design, fabricate, market, and sell student-created products. Our session will offer educators in the region the opportunity to learn about how these programs serve students of all abilities. The unique intersection of STEAM offerings in our Innovation Hub (from digital arts to engineering to special education maker courses) creates a synergy that offers students a robust experience.

# Technology

Technology gives kids the chance to explore their digital world. Want to try coding? Build robots? Learn circuitry? Look for technology events that help you discover new things.



### Kerr Elementary Code.org Fundamentals Teacher Training & Certification

Tues, May 16, 8:30am-3:00pm Fox Chapel Area SD @Kerr Elementary School

Code.org developed elementary curriculum empowering K8 students to explore the limitless world of computing. Courses blend online, self-paced tutorials with "unplugged" activities that require no computer. We'll share printed and online curricula, class sets of supplies for unplugged activities (shipped to school) and full access to online, interactive courses.

### How Do You Know What They Know? Formative Assessment with Technology

Tues, May 16, 8:30-11:30am Hosted by: Allegheny Intermediate Unit @ transformED

In this session, you'll have an opportunity to try different web-based and tablet-enabled tools that can connect you directly with your students to use formative assessment in your classroom (and even outside of school).

### Digital Citizenship Strategies for K-12 Educators

Wed, May 17, 8:30-11:30am Hosted by: Common Sense Media @Allegheny Intermediate Unit transformED

Students have access to digital technologies at school and at home and schools are dealing with challenges such as cyberbullying, inappropriate sharing, plagiarism, and more. Learn how to teach students to think critically, behave safely, and participate responsibly in a digital world as access to digital technologies have created a rise in ethical and behavior challenges.

#### **Next Generation Digital Storytelling**

Wed, May 17, 10:30am-1:00pm Hosted by: Connellsville Area SD @Connellsville Area High School

Two interactive sessions will guide teachers on how to transform traditional storytelling into an exciting multimedia experience.

#### **Tinker Tech for Educators**

Fri, May 19, 8:00am-3:00pm Hosted by: Fort Cherry School District @ Fort Cherry School District

Tinker Tech is a one-day workshop for K-8 educators interested in learning more about the different technologies available for STEAM-related activities that can be integrated into any content area.

### Fox Chapel H.S. Code.org Fundamentals Teacher Training & Certification

Sat, May 20, 8:30am-3:00pm Hosted by: Fox Chapel Area SD @Fox Chapel Area High School

Code.org developed elementary curriculum empowering K8 students to explore the limitless world of computing. Courses blend online self-paced tutorials with "unplugged" activities that require no computer. We'll share printed and online curricula, class sets of supplies for unplugged activities and full access to online, interactive courses. Participants will understand and have open access to a vertically aligned computational thinking curriculum and will learn how to embed coding and computational thinking practices in math, computer science, library, ELA, and science classes.

### CODE: Debugging the Gender Gap Film Screening and Panel

Sat, May 20, 5:00pm-7:00pm

Hosted by: Allegheny Intermediate Unit and Prototype PGH

@Pittsburgh Filmmakers

Join us for a special screening of CODE:
Debugging the Gender Gap. CODE exposes the
dearth of American female and minority software
engineers and explores the reasons for this
gender gap. CODE raises the question: what
would society gain from having more women and
minorities that code?

### Montour School District - Digital Citizenship: A District Approach

Wed, May 24, 8:30-11:30am Hosted by: Common Sense Media @transformED West

Students have access to digital technologies at school and at home, and schools are dealing with ethical and behavioral challenges such as cyberbullying, inappropriate sharing, plagiarism, and more. Learn how to teach students to think critically, behave safely, and participate responsibly in a digital world as well as how Montour School District weaves digital citizenship into their curriculum to become a Common Sense Digital Citizenship Certified School.

### Virtual Reality for Social Studies Educators

Wed, May 24, 8:30am-3:30pm Hosted by: Allegheny Intermediate Unit @transformED

Virtual reality provides educators with exciting new opportunities to present material in an immersive fashion. Teachers will have the opportunity to experiment with integrating 360-degree videos and pictures into the curriculum, experience Google Earth with the HTC Vive, and lead virtual tours using Google Expeditions with inexpensive virtual reality headsets.

### Math Classroom of the Future (Happening Right Here, Right Now)

Wed, May 24, 9:30-11:30am Hosted by: Carnegie Learning

Join Urban Pathways Charter School and Carnegie Learning for a first–hand look at the power of artificial intelligence and cutting edge brain research for deeper learning. Witness a hands-on lab session with students using MATHia® Software, which collects and analyzes literally thousands of data points to give them exactly what they need, when they

### Entertainment Technology Center (ETC) Edtech Showcase & Celebration

Wed, May 24, 10:00am-2:00pm Hosted by: Entertainment Technology Center

Join us for an event focused on sharing all of the available educational applications and resources the ETC has to offer your learning environment! This unique-to-education ETC event will include demos and showcases of student work, a guided tour of our learning environment, and information on what ETC resources and opportunities are available to educators.

### Explore, Prepare and Connect with the Simcoach Skill Arcade

Wed, May 24, 4:00-6:00pm Hosted by: Simcoach Games

Join us as we open our doors to educators and students alike to share our workforce development games! Students ages 13+ are encouraged to join us and playtest some of our recently released workforce development games while educational providers can learn about the Simcoach Skill Arcade and how it can help their students explore, prepare and connect with job and training opportunities.

### **Healthy Technology Use For Kids**

Thurs, May 25, 6:00-7:00pm Hosted by: Chartiers Valley SD Audience: K-8 Parents/Educators

Search "kids technology addiction" and you will find hundreds of articles about the negative effects of video games, phones, and tablets on kids. The truth is many kids are using technology in an unhealthy way. Much of this has to do with the way devices are being used to create isolation. What is our role as parents/educators to combat this problem? In this session, different methods of using technology to create real human interaction and collaboration will be discussed, including: recognizing unhealthy use of technology, promoting healthy social development with technology, and using technology to create vs. consume. Recommended for K-8 parents/educators.

# **Outdoor Learning**

Outdoor Learning is about experiencing and learning about the natural world. How can we think about the environment, sustainability, and more by exploring our very own backyards?



#### **Outdoor Learning at Allegheny**

Tues, May 16, 4:00-5:00pm Hosted by: Pittsburgh Public Schools @ Pittsburgh Allegheny K-5

Through a STEAM mini grant, students have been equipped with magnifying glasses and microscopes, and they're exploring all aspects of what plants need to grow, the structures that support their growth, how they're harvested, and the impact that consuming them has on our lives and our planet. Join us to discuss this agriculture project as a possible project for your school!

### Open the Door to Outdoor Learning with Environmental Charter School Educators

Tues, May 16, 5:00-6:00pm

Hosted by: Environmental Charter School
Parents and teachers are encouraged to meet
ECS educators in the park to learn more about
how to get kids outside and engaged in nature.
Participants will be able to choose from a variety
of hands on-activities. Kids are welcome!

### Embracing Your Environment

Sat, May 20, 9:00am-12:00pm Hosted by: PAEYC and TekStart @Frick Environmental Center

Explore ways to create outdoor learning experiences and identify methods to engage children and families in environmental education! We will discuss strategies for leading a hike, park safety concerns, and how to take advantage of teachable moments.

## Science

Science is all about experimentation! Kids and adults can explore chemistry, biology, geography and more. How does our world work? What can we test and explore in the world around us?



### Biz-Ed Blitz: Connecting Classrooms to Careers

Tues, May 23, 6:00-8:00pm
Hosted by: ASSET STEM Education
@Arconic Corporate Center

ASSET STEM Education's Biz-Ed Blitz is an innovative speed-networking forum where business professionals and educators connect to discuss strategies and forge partnerships to advance real world learning. Join us for this interactive dialogue!

### **AIU Storytime STEM-packs**

Thurs, May 25, 8:30-10:30am

Hosted by: Allegheny Intermediate Unit
@transformED

Storytime STEM-packs™ are an educational innovation that enables adults to incorporate STEM concepts into children's storytime. A Storytime STEM-pack includes a popular children's book, materials needed for an engaging STEM activity, and a facilitator guide that makes connecting the story to the STEM activity easy. Join us to experience one of our Storytime STEM-packs for children K-3 with an engineering design focus!

### Future Thinking Lab: Climate & Urban Systems (Act 48 Workshop)

Thurs, May 25, 4:00-6:00pm Hosted by: Carnegie Museum of Natural History

This fun, friendly workshop for teachers explores how Pittsburgh is responding to climate change. Activities focus on the science of sustainable solutions and invite you to envision and build a future Pittsburgh. and how to take advantage of teachable moments.

# Youth Voice

Youth Voice is about youth leadership and amplifying youth voice. Youth have the ability to express themselves in so many ways such as: through audio, video, art, music, and more. Youth voice-related events highlight how youth express themselves in their own ways.



### IFL: Designing for Difference; Provoke Student Voice, Agency and Deeper Learning

Tues, May 16, 9:00am-12:00pm Hosted by: Institute for Learning @Hotel Monaco

Designing for difference begins with knowing each student well, understanding and honoring the varied experiences each student brings to the classroom. The 2017 IFL National Conference will engage participants in highly interactive design thinking activities to address questions about how to create powerful learning experiences for students.

### **Student Voice and Choice for Educators**

Tues, May 16, 9:00am-11:45am Hosted by: Allegheny Intermediate Unit @transformED

The event is targeted for K-12 Administrators and Educators who want to learn innovative ways to incorporate student voice and choice into their schools and existing curriculum. Student Voice is a critical element of promoting a positive school climate, where students take ownership of their learning experiences.



### **EdCampPGH**

Sat, May 20, 8:30am-3:30pm Hosted by: Holy Family Academy

EdCampPGH is an organic, participant-driven professional learning experience for educators. It embraces the belief that fellow educators can be some of the most valuable professional development resources for their colleagues. Our Ignite speaker will be Timothy Jones, one of the founders of the #HipHopEd movement and Director of Healthy Connections at Martha's Table in Baltimore.