



UnConference: Maker Tots - May 20, 2017, 8am-3pm
University of Pittsburgh at Greensburg, 150 Finoli, Greensburg, PA 15601

Can toddlers actually do circuitry? Why is “making” important for young children? Can STEAM learning actually happen through play? If you’ve ever wondered about this, then the **UnConference: Maker Tots** can answer these questions. Children love to learn and they love even more to learn through play. Making and STEAM learning are critical in teaching children curiosity, creativity, confidence and teamwork. It prepares our children for a future where half of the jobs don’t even exist yet!

As part of [Remake Learning Days](#), [PAEYC](#) and co-host [University of Pittsburgh at Greensburg](#) are proud to showcase UnConference: Maker Tots. You will interact with leading organizations at the forefront of creative learning specifically for young children. The day also features keynote speaker and maker teacher Maureen Frew from the [Avonworth School District](#). Then, learn how local organizations have incorporated STEAM and Maker learning into play by choosing two workshops presentations from the following organizations: University of Pittsburgh at Greensburg, WQED Multimedia and Avonworth Primary Center. The day closes with a round table discussion and reflections on how to continue innovative learning beyond the UnConference.

The workshops are developmentally appropriate practice for educators and caregivers working with children ages birth through age nine. However, many of the workshop offerings can also apply to students in grades kindergarten through fifth grade.

SCHEDULE for MAY 20

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| 8:00-8:30am | Registration |
| 8:30-10:00am | Welcome, Keynote |
| 10:00-10:15am | Break |
| 10:15-11:45am | Workshop #1 |
| 11:45-12:45pm | Lunch |
| 12:45-2:15pm | Workshop #2 |
| 2:15-2:30pm | Break |
| 2:30-3:00pm | Roundtable Discussion, Wrap-Up |

HOW TO REGISTER AND PROFESSIONAL DEVELOPMENT CREDIT

Qualifying educators will receive 5 PQAS/DHS credits or Act 48. To register for the UnConference: Maker Tots, please go to www.paeyc.org/unconference.

UnConference 2017: Maker Tots

WORKSHOP DESCRIPTIONS

Exploring Chemical Changes Using pH-Indicating Produce

Presented by: Dr. Laura Giovannelli, Assistant Professor of Natural Science and Chemistry at University of Pittsburgh at Greensburg

Change in color is one of the most exciting ways to observe chemical reactions. Many pigmented fruits and vegetables are useful as inexpensive and reliable pH indicators. In this session, we will explore kid-friendly methods for making these pH indicators and then use them to make an "acid-base rainbow" using common household objects. The indicators can then be used to sort and identify unknown substances. Variations on the activities will be provided to accommodate children of all ages and abilities, as well as related topics for further inquiry including reversible reactions and neutralization.

Exploring Engineering through Math

Presented by: Dr. Jeanne Burth, Director of Field Placement and Certification at University of Pittsburgh at Greensburg

The design process is defined as the engineer's approach to identifying and solving a problem. Young children are engineers in the sense that they modify the world to satisfy their own needs and wants. This break-out session will include engineering challenges for our littlest learners that will include skills in math as well as engineering. The engineering process will be accentuated in each of the challenges, including ASK, IMAGINE, PLAN, CREATE, and IMPROVE.

PBS Kids Scratch Jr.

Presented by: WQED Multimedia

PBS KIDS Scratch Jr. is a developmentally appropriate creative programming app for children ages five through eight featuring characters from PBS. Through this session, attendees will explore creative programming as an approach to the development of computational thinking skills that champions the process of young people engaging in the interest-driven imagining, designing, creating, and sharing of computational artifacts (PBS KIDS Scratch Jr. projects in this instance). Children can create their own interactive stories, games, and collages by snapping together colorful programming blocks to make their favorite characters move, jump, dance, and sing.

***Please note that, if you wish, you are welcome to bring your own tablet to this workshop. Before the workshop, please download the PBS KIDS Scratch Jr. app. We will also have tablets on hand for attendees.*

Full STEAM Ahead: Cool Tech Tools for Young Learners

Presented by: Erin Crawley, Avonworth School District

Want to bring your classroom into the 21st century in a developmentally-appropriate way? Join us and experiment with some of today's coolest, most creative, hands-on tech tools. Explore the many unique methods that you can use to introduce pre-coding skills to young children – even on a limited budget! Tools from Bee Bots, Puzzlets, Code.org, Circuit Blocks, and Hummingbird can show you how. Ready for an experience that sparks your imagination and brings technology into your classroom in a fun and easy way? Climb aboard...Full STEAM ahead!