

Session Title – Who is Invading Your Town? Combating Invasive Species Through Geomapping

Teacher Name - Mr. Gardener

Teacher's Title – 8th Grade Science Teacher

School – Haven Community School

Session Length – 60 minutes

Maximum Number of participants – n/a

Application/Tool – AltAir4

Expertise Level - Intermediate

Description - Participants will learn the basics of how to use the geomapping tool, AltAir4, which allows users to create interactive maps that can be filled with data, images, hyperlinks and more. To populate these maps with data around invasive species, students will learn how to identify and document information, then they can get outside and explore! AltAir4 can also be used to geomap local sites and landmarks, create memory maps, explore spatial literacy and delve into place-based learning.

Session Title – If You Think IT, You Can Make IT! Getting Started with 3D Design

Teacher Name - Mrs. Douglas

Teacher's Title – Technology Integrator

School – Derry Elementary School

Session Length – 60 minutes

Maximum Number of participants – n/a

Application/Tool - TurtleCAD

Expertise Level - Beginner

Description - It does not matter how old you are – 3D design and 3D printing are for you! Students at Derry Elementary have been developing projects of all sorts with their new 3D printers and they are excited to share with other schools. Some projects have included designing balloon-powered vehicles, geometric ornaments, board game pieces and everyone's favorite creating miniature boats for a competition during Derry Canal Days. We will share our ideas, our favorite templates from the Macroverse website and how to use the app TurtleCAD to do our 3D design work.

Session Title – Science Simulation Meets Digital Gamification

Teacher Name - Mr. Trenton

Teacher's Title – STEM Teacher

School – Castle Rock Middle School

Session Length – 90 minutes

Maximum Number of participants – n/a

Application/Tool - Koju

Expertise Level - Intermediate

Description - Imagine being able to combine the fun factor of worldbuilding games like Minecraft and Age of Empires and the challenge of board games like Risk and Pandemic into a game of your own? Imagine being able to make those games happen faster. Fast enough that you could play it in a class period. In Mr. Trenton’s STEM class, students are using Koju, a web-based gaming platform from Rapidgod Games to create exciting and engaging simulation games. Students have been able to demonstrate how dams impact fish populations in a river, how eliminating a predator impacts a food chain and how a disease like rabies can travel through an ecosystem. Student-generated simulations can lead them to their own unique data sets that they can graph and analyze.

Session Title – Exploring Amazing and Endless Possibilities with Mazery

Teacher Name - Mr. Sheldon and Ms. Wilkes

Teacher’s Title – 8th Grade English Teacher & Literacy Coach

School – Chamberlain Junior High School

Session Length – 60 minutes

Maximum Number of participants – n/a

Application/Tool - Mazery

Expertise Level - Intermediate

Description - Have you ever read a great story, but it didn’t end the way you wanted it to? Have you ever written a story, but could not decide which direction to take it? What if you could take several paths? Mazery is an interactive storytelling tool that brings computer science into the classroom in a mind-blowing way! By using key coding concepts like conditionals, algorithms and loops, users are able to create “Choose Your Own Adventure” type stories and push their creative thinking in new directions. Once students know how to use Mazery, they can easily apply it to other content areas. Show how a science experiment might unfold as different choices are made. Demonstrate how an interaction might unfold in a different language. Show the impacts of different health decisions.

Session Title – Podcasting 101

Teacher Name - Mr. Desjardin & Ms. Collins

Teacher’s Title – 7th Grade ELA Teacher & Librarian

School – Kennedy Junior High School

Session Length – 90 minutes

Maximum Number of participants – n/a

Application/Tool -

Expertise Level - Beginner

Description - Podcasting is great medium that relies on audio (voice, music and sound effects) to share information. In this session, we will explore how to go from “What is a podcast?” to “Check out my podcast!” If you are not familiar with fantastic podcasts, we will listen to a few excerpts and we promise you’ll leave wanting to hear more. Then we will explore the necessary gear, possible apps and solid strategies for creating an awesome podcast of your own. Turn a argumentative essay into an episode, make your own “This Day in History” episode, document a scientific exploration as an episode, review a book or movie, interview a person of interest and on and on.

Session Title – Tell Your Story Through Song

Teacher Name - Ms. Bracknell

Teacher’s Title – Music Teacher

School – Cleaves Mills Elementary School

Session Length – 60 minutes

Maximum Number of participants – n/a

Application/Tool – D-Zone

Expertise Level - Beginner

Description - Have you ever wanted to write a song, but are new to learning instruments? In Ms. Bracknell’s music class, students approach music in a new way using the app D-Zone. Students enter text and D-Zone uses AI (artificial intelligence) to build a song around the text depending on the style selected. This allows students to experiment with songwriting while they are developing their instrument skills. Write a jingle for a new product, present a famous speech in a new way, explain a science concept in a rap or even take the words of a dead poet and make it a song. Be creative and have fun with music in new and exciting ways.