Session Title

Creating Pixel Art with Google Sheets

Presenter Name

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Elevator Pitch

Pixel art is a form of digital art where images are designed with only pixels as building blocks. It is commonly seen with low-resolution graphics in video games and retro-style art. Normally, designing pixel art means using coding software and programming, but we can achieve high quality pixel art with only Google Sheets! This session will show you how!

Materials

Either a PC, Mac, or Chromebook can be used for this session. An iPad is possible to complete this session, but a keyboard is strongly recommended if a tablet is used. Access to Google Sheets, the ability to join a Zoom call, and access to YouTube are all required for this session.

<u>Access to Pixellt</u> (helpful but not required). Access to Code.org and accounts on Code.org (helpful but not required)

Overview

This session will start with understanding what pixels are and how images are rendered on computers. From there, we will look at how Google Sheets uses cells to simulate the pixels on a screen. Finally, students will learn about conditional formatting in Google Sheets to create their own images with their own colors. A template will be provided to students to begin creating their own pixel art following the same set of directions.

By the end of the session, students will have created their own pixel art images on a 20 x 20 grid, and they will be shown how to export these images to use whenever they want. We will also explore different ways to upgrade pixel art with more powerful technologies like AI and coding. All you need to participate is a Google Account, a device with Internet access, and a bunch of excitement!

Teacher Expectations

The teacher should make sure students have a Google account ready to go before this session. A template for the students to copy will be provided. From there, the teacher will simply be responsible to aid students on basic technological challenges and communicate more difficult questions to the session facilitator.