

Project Title: Tinkering with a Purpose

Overview

The topic of my professional development is exploring students' creativity using art and engineering. I chose this topic because many parents and educators are relying heavily on worksheets and lectures to deliver content to students during distance learning. Primary students learn predominantly through play, and it's important for them to be able to express their creativity while learning. I also chose this topic because many parents have predetermined ideas of what learning should look like, based on when they were in primary school. This often is based on outdated teaching practices. This professional development is designed to help parents understand the educational values found in art and tinkering.

Materials from Endeavor courses will be used to form the bulk of my presentation. I will discuss the importance creativity plays for the 21st century learner, and how creative play lends itself to engineering.

Audience

This professional development opportunity is designed for parents who are currently homeschooling due to the Covid-19 pandemic, and have limited knowledge of best teaching practices for primary grades. They are responsible for teaching all subjects to their K-2 students. Approximately ten students will benefit from their parents participating in this professional development.

Audience members will be recruited via social media and word of mouth. The professional development session will run for 45-60 minutes.

Learning Goals

The STEAM concepts addressed in this project will be engineering and art. The goal of this professional development is for parents to gain knowledge of designing interactive lessons that integrate multiple subject areas. Helping parents more away from the teaching in subject silos and reliance on worksheets to demonstrate understanding. The standards covered in this project are:

- NGSS 3-5-ETS1-2 Engineering Design: Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
- NCAAS Creating: conceiving and developing new artistic ideas and work.
- CCSS.MATH.PRACTICE.MP1 Make sense of problems and persevere in solving them.

Assessment

To assess this professional development's success, I will use surveys and interviews to demonstrate participant's learning. Participants will be asked to complete a pre- and post-survey. Then one week later, I will follow up with each participant and interview them on their progress with implementing creativity into their lessons, and provide additional support as needed.

The pre-survey will focus on participants' comfort level with lesson planning, knowledge of 21st century skills, and confidence with creating educational play opportunities. The post-survey will ask participants to rate their knowledge of 21st century skills and confidence with lesson planning, describe one activity they plan on incorporating creativity in, and rate the quality of the presentation.