

Passion Project: aka Genius Hour

Customizable Lesson Plan



Learning Format: Blended Learning

Course: Engineering | **Duration:** Variable

Lesson Overview

Engineering Expeditions inspire learners to explore engineering as a potential career pathway no matter their designated academy pathway. Learners use NAF Future Ready Passports to join the following expeditions:

- **Passport to Space**
- **Passport to Artificial Intelligence**
- **Passport to Eco-Tech**

The engineering expeditions translate to passion projects (aka Genius Hour) that focus on learner interest and enthusiasm about what real-world problem they want to solve. The Genius Hour concept started at Google, where engineers can spend 20% of their time working on any passion-driven project that they want. Google credits this unleashing of creativity for 50% of their product lines, such as Gmail and Google News. Author Daniel Pink, a best-selling author of books including *A Whole New Mind* and *Drive*, also detailed how companies successfully implemented Google-time projects.

Passion projects, particularly in STEM fields, enhance college applications by demonstrating content knowledge and transferable skills such as creativity, initiative, leadership, curiosity, and impact from a college admissions perspective.

Lesson Objectives

Learners will:

- Exercise voice and choice in their learning by embarking on a self-selected passion project to demonstrate content mastery and skills transfer with a tangible product.

Teacher Preparation

Familiarize yourself with the concepts of Passion Projects (aka Genius Hour) by reviewing:

- [Genius Hour](#)
- [How Genius Hour Helps Kids Connect What They're Learning in School to Their Future Goals](#)
- [How a Passion Project Can Help Your Child Get into their Dream College](#) (Share with parents)

A significant consideration is pairing learners with an industry mentor to support them through their engineering expedition. An excellent place to start is reaching out to the academy advisory board or a local postsecondary partner. The mentors' total time to work with the learners varies; however, it could be as little as an hour or two per month throughout the expedition.

Whole Group/Class

Icebreaker Discussion & Activity:

- Ask students if they ever heard about the Genius Hour at Google. Provide an overview of the concept and ask them how they would like to work at a place that allows their employees to spend 20% of their time working on their passion projects.

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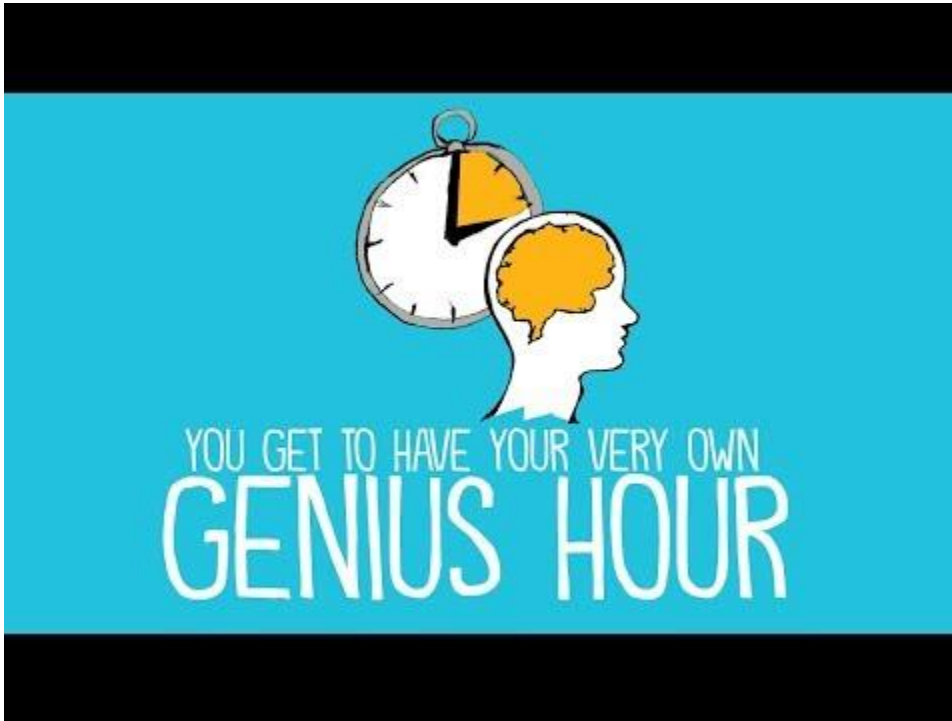


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- Play the Genius Hour video:



- Provide learners with the parameters for the Genius Hour/Passion Projects.

Learner Assignment

Instruct learners to:

- Download the **Staff Pick Resource**
- Read the articles posted in the **For Learner** Tab
- Select one of the Future Ready Passports for the expedition of their choice or choose another STEM pathway better aligned to their passion or interests.