

# **Computer Science Virtual Learning**

# PLTW Computer Science Principles

May 15, 2020



# Lesson: May 15, 2020 Rapid Research-Data Innovations

# **Learning Target:**

- Identify a suitable computing innovation for a research project.
- Identify reliable and authoritative sources of information about a computing innovation.
- Synthesize information taken from multiple online sources to create a cohesive description of a computing innovation.
- Explain how data drives a specific innovation, both in writing and visually.



# Introduction

## Watch this video about Data and Medicine





#### **Practice: Rapid Research - Data Innovations**

One of the things that many modern innovations have in common is their use of data (often Big Data, but not always). To explore how innovations use data more in depth you will be completing a rapid research project on a "data innovation" of your choosing.

Get excited! This is your opportunity to dig deeper into a computing topic that has piqued your interest over the entire course.

- What kinds of things are you interested in?
- How does computing affect them?
- How is data used to make innovations you're interested in actually work?



#### Day 1- Choose Innovation, Read, and Research

## **Review Activity Guide and Rubric:**

It is important to start with of reviewing the <u>one-pager template</u> and <u>rubric</u> found in the last page of the Activity Guide. Students may assume that more is required of them than is actually the case.

In particular, emphasize that they do not need to create their artifact themselves, but it must still meet the requirements of this project. The written component is quite short. There will probably only be space for 100-150 words per response.



## Day 1- Choose Innovation, Read, and Research

# **Choosing an Innovation:**

It is recommended that you place a time limit on this process (e.g. 20 minutes). Students should finish the first day without a topic in mind and ideally with some resources identified. Luckily, in choosing their topics, students will likely have begun to identify resources they can use in completing their project.



#### Day 1- Choose Innovation, Read, and Research

#### **Conducting Your Research:**

The <u>Activity Guide</u> is intended to serve primarily as a guide to students for identifying online sources of information. The skill students need to develop is identifying useful resources on their own and then synthesizing this information. The "Key Information to Find" highlights specific terminology from the AP College Board that students will benefit from having seen earlier in the course.



# Wrap up

#### Share

Write down any thoughts that you might have about this activity in your Computer Science notebook. Journaling is an important tool to use to reflect upon the things that we have done well and the things that we can do better in the future. We will continue working on this activity on Monday.