Science Project Videos Activity

This webpage has a sampling of science fair projects that received medals at the 2020 Virtual Minnesota Science & Engineering Fair. The Minnesota Academy of Science is making these project presentation videos available to local educators so that they may use them as a tool for teaching about STEM research and presentation.

Purpose:

It is our hope that these videos and the project ideas they contain will help to get students interested in conducting their own research and give them an understanding for how to get started doing so.

Things to Review Before Watching Videos:

- The difference between science projects and engineering/invention projects, which you can find more information on <u>HERE</u> or <u>HERE</u>
- Science project vocabulary, defining variables, and steps to the scientific method, which you can find <u>HERE</u> in the MAS science journal along with other resources and activities
- Science project categories
 - For middle school you can find a list <u>HERE</u> in the MAS science journal
 - For high school a more detailed list can be found HERE

Activities For Engaged Viewing:

- Ask students to pay attention to things like:
 - The layout and appearance of the project board. Remind students that they can pause the video if they need more time to take things in.
 - The way the student(s) talk about their project. Do they sound confident? Do they sound knowledgeable about the subject?
 - The types of graphs and charts chosen to display data.
 - How team members take time presenting.
- We have developed a student worksheet that can be filled out for each project example viewed. The worksheet can be found <u>HERE</u>
- You can have your students judge each project by using a score sheet that can be found <u>HERE</u>. This score sheet is reflective of the judging criteria at the MN State Science Fair.

For More Resources:

- You can view our <u>Getting Started With Science Fair</u> webpage that will give you helpful information.
- Middle School The <u>MAS Science Journal</u> is a step-by-step guide for developing a science project
- High School <u>Ken Mann's 5 Steps To Success</u> is a step-by-step guide for developing a science project
- MAS's Resource Page has more tools, resources, and activities to help educators enrich their STEM curriculum.



