

EXTENSION LESSON 8:

CREATING A DISPLAY



(Recommended for students competing in invention fairs.)

Invention Process Step: Communicating

Grade Level: 6-8

Base Time: 40 minutes

ESSENTIAL QUESTION

Why is displaying information important and how do inventors show off their work?

LESSON OVERVIEW

This lesson is an extension lesson to provide support for students who may present their invention project in competition. The activities included will guide students to create a display board to share their invention process in a visual medium. Displaying information is an important component in communicating ideas about an invention and how it solves a problem. To create an effective display, students must consider fonts, colors, placement of information and how to select the most critical information to show in the limited space available on the display.

NOTE: A tri-fold display is required for state/regional and national invention conventions. However, for classroom projects, educators may ask students to create a digital display presentation, using a platform such as PowerPoint, FlipGrid, or Google Slides.

*NOTE: This lesson may be completed in class or at home. If asking students to complete their preparation for competition at home, please be sure to clearly explain all rules, requirements, expectations and deadlines to students **and** families so that they are best set up for successful completion of the project.*

OBJECTIVE

Students will be able to:

- Inform an audience about their invention and their design process in a visual display.
- Summarize and prioritize the information about their invention project.
- Design a display board with optimal color combinations, fonts and sizes.
- Transfer their knowledge to real life and describe why it is important.

LESSON STANDARDS

Common Core ELA Standards:

- CCSS.ELA-LITERACY.W 6-8.7
- CCSS.ELA-LITERACY.SL 6-8.2
- CCSS.ELA-LITERACY.SL 6-8.5

MATERIALS

Resources for the Educator

- [Invention Convention Display Board Examples](#)
- Advertisements for Gallery Walk
- [YIP Display Board Rubric](#)

Materials for the Student

- YIP Inventor's Journal
- [Worksheet: Display Board Template](#) (included in Inventor's Journal)
- Tri-fold Display Board
- Markers/Crayons/Pencils
- Paper (Construction, Cardstock, Plain, etc.)
- Tape and/or Glue
- Other materials to create a display board as needed (photos, graphs, theme decorations, etc.)

NOTES FOR THE EDUCATOR

Educator may lead the following lesson plan with flexibility to adapt as needed to fit technology and class format.

This lesson will guide students in designing a display board to share their invention process and invention idea with others. A tri-fold display board is required for participation in state, regional and national invention conventions such as the Northern New England Invention Convention and the Invention Convention US Nationals. However, for classroom projects, educators may ask students to create a digital display presentation, using a platform such as PowerPoint, FlipGrid, or Google Slides.

Talk to students about invention convention competitions (refer to Extension Lesson 7). Explain that in addition to the work that they have completed in class through the YIP program, they must also prepare several more elements such as display board and an in-person presentation pitch (a video recording of the presentation is also required for state, regional and national competitions which may be done in class or at home.)

In order to compete in state/regional and national invention conventions students must have the following things for their project:

- Invention Prototype (working or non-working)
- Inventor's Journal
- Tri-fold Display Board
- Live Presentation
- Video Presentation

Students have already made a prototype and have their Inventor's Journals, however, they still need to make a display board and they also may need to refine and elaborate on their presentation to make it more detailed and suitable for competition (and for video-recording). The following activities will support them in their preparation.

You may change requirements as needed for the class. However, the following are required components for competition at the Northern New England Invention Convention and the Invention Convention US Nationals.

Display Board Requirements:

Display boards may be no more than 48 inches wide by 36 inches tall (when laid flat) and should not exceed a footprint of 30 inches wide when displayed on a tabletop.

Display boards must have the following information in one consolidated place

on the poster:

Student(s) Name(s)

Name of Invention

Student(s) Grade(s)

Student(s) School

School City, State

Statement of the problem

Explanation of the invention as a solution to the problem

Details of model construction

Diagrams of design

INSTRUCTION & ACTIVITIES

Educator Instruction:

Explain to students that they will be making a display board to go with their invention as a way to share their invention idea with an audience. Discuss the importance of successfully communicating about their project or invention to others. Tell students that they will use a tri-fold board to make their display.

Ask students what they think makes a good display? Explain that a display should be visually appealing: neat, easy to read, and may illustrate a theme related to the invention or problem it solves.

Activity: Advertisement Gallery Walk (8 minutes)

Create a gallery walk by placing various advertisements around the room (or just hold up an advertisement for the class). Ask the students to walk around and look at each ad. Then host a group discussion asking the following questions:

- How is the product displayed?
- What is interesting about this product? What do you notice?
- What is unappealing? Does it still make you notice it?
- What do you like or not like about the colors?
- If there are words, what do you notice about them?
- Do you want to buy this product?

Discuss use of colors (bright, bold, contrasting colors), logos and graphics (fun pictures!), as well as any words or language that is included. Space on an ad is small, so the company has to be sure that they are communicating only the most important information in a way that will capture the consumer's attention.

Show students some examples of Invention Convention displays (included in Educator resources). What do they like about the display? What would they change in the display?

Emphasize the purpose of a display and the important features.

Activity: Design a Display Board (20+ minutes)

If students completed a project as part of a team, the team should work together to make the display. You may wish to have students design their display board in class and then build it at home.

Ask students to complete the Display Board Template Worksheet included in Inventor's Journal. This worksheet will serve as an outline for their display board and will help them decide what information to include and where to place it on the display board.

Remind students that as they make their display, they should think about how to highlight their invention. Use bold colors to stand out, they may even want a design theme that goes with the topic of the invention. Use clear handwriting or print text from a computer and glue it to the board. Neatness is important.

NOTE: Students may handwrite or type the text for their display. If typing, they can print their pieces, cut them out and attach them to the board.

Activity: Build the Display Board

If time allows, students may build their display board in class, or you may ask them to build it at home. If building in class, you should provide markers, glue, construction paper and other supplies to help make a visually appealing display.

NOTE: Students may handwrite or type the text for their display. If typing, they can print their pieces, cut them out and attach them to the board.

Have students build their display board using their Display Board Template Worksheet as a guide. Remind students that as they make their display, they should think about how to highlight their invention. Use bold colors to stand out and use clear handwriting or print text from a computer and glue it to the board. Neatness is important.

IDEAS FOR VIRTUAL INSTRUCTION

Activity: Analyze an Advertisement

Ask students to look at an advertisement (you may provide in a slide or a link or ask them to find one at home in a magazine or to look at a cereal box). Have students comment about what they like and don't like about the ad/packaging and why. Be sure you ask them to think about the use of color, what information is shared and how? Students may submit their work using the platform of choice.

Activity: Design and Build a Display Board

Ask students to complete the Display Board Template Worksheet. Then have them build the display board using the template as a guide. Remind students that as they make their display, they should think about how to highlight their invention. Use bold colors to stand out, they may even want a design theme that goes with the topic of the invention. Use clear handwriting or print text from a computer and glue it to the board. Neatness is important.

NOTE: Students may handwrite or type the text for their display. If typing, they can print their pieces, cut them out and attach them to the board. Students may submit their work using the platform of choice.

CHECK FOR UNDERSTANDING

Educator may wish to do one of the following to check for understanding:

In a peer-share, ask students to summarize the importance of a visual display in communicating an idea.

TAKE HOME ASSIGNMENT

(OPTIONAL IF GIVING TAKE HOME WORK)

Have students build their display board using their Display Board Template Worksheet as a guide.

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