



The Bio/Diversity Project

Data Science Outreach Curriculum Fall 2025 Lesson 8: Poster Creation and Presentation

Grade Level: 8th

Time: 50 minutes

AZ Science Standards:

- 8.L2: Organisms require a supply of energy and materials for which they often depend on, or compete with, other organisms.
- 8.U2: The knowledge produced by science is used in engineering and technologies to solve problems and/or create products.

Student Facing Learning Objectives:

- I can review and refine all aspects of their green space design poster proposal.
- I can collaborate with team members to divide and delegate tasks in an efficient manner.

Guiding Questions:

- What is the importance of green spaces within urban settings?
- How does the strategic selection of plants within a green space address a specific environmental challenge?
- How might site features in a green space we used to propel an environmental goal?

Vocabulary:

- Green Space
- Legend
- Lux
- Site features

Materials:

- Teacher Example Poster
- Student Packets from Lesson 6 & 7
- [L8 Slides_Energy](#)
- [L8_Final Design Template](#)
- [L8 Lined Templates for Posters](#)
- [L8 Poster Template & Guide](#)



Lesson 8: Poster Creation and Presentation

Mini-Lesson (10 min)

Section Objective: Reorient students to the Green Space Design Challenge and its required poster components by generating a small discussion around the project's purpose, previously completed tasks, goals for today, and all required poster components.

Review Design Challenge & Poster Components (10 min):

- Pass back the Student Packets from Lesson 6 and Lesson 7.
- Project the Challenge Overview slide to students. Review with students the goal/objective of the challenge.
- Remind them that in previous classes they have
 - Chosen an area to design their green space
 - Selected plants that would survive
 - Drafted a design of their green space
 - Made sure their design fit your budget
- Emphasize what today's project objectives are:
 - Place all components of your design on a poster.
 - Present your green space design proposal to your peers.
- Distribute the [L8 Poster Template & Guide](#) and review with students all the required poster components.
- Explain to students that the **black print** on the guide describes the prompt or what information they must provide to meet that poster component criteria. The **blue print** tells students where they can find that poster component since most of the poster components students have previously drafted in the Lesson 6 & 7 packets.
- Tell students that some of these poster components might need to go on the back of their posters so they have enough space to fit everything.
- Lastly, you'll briefly remind students of the poster rubric that was part of their Lesson 6 packet. You don't need to review the rubric in depth, but perhaps read the descriptions in the "Excellent" category so they know what they should aim for. Though we will not be grading student posters, the rubric allows partner teachers to use the posters as an



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assignment grade should they wish.

- If students ask “Is this for a grade?”, I’d either tell them “yes” (if your partner teacher plans to grade it) or “I don’t know, it could be” so that students put in effort no matter what. I would avoid telling them it won’t be graded.

Work Time (30 minutes)

Section Objective: Students divide and delegate tasks in their groups so that they can create a group poster proposal with all the required poster components.

Student work time (30 min):

- Review with students the materials they’ll work with to complete their posters: glue sticks, colored pencils, markers, poster paper, scissors. For each of these items, set up a place in the classroom where students can borrow and return these materials.
- Distribute the poster papers to each team as well as the [L8_Lined Templates for Posters](#).
- Before releasing students for poster work time, remind them that this is their final day and final time to complete the posters so they must use their time wisely. These other final reminders are also helpful:
 - Divide the work tasks amongst team members so that you can finish in time!
 - If falling behind, don’t worry about completing the budget table.
 - Ask your teachers questions, we are here to help you!
 - Be prepared to explain your poster design at the end of class.
 - You got this! Use your time wisely :)
- Be very active during student work time. Walk around the room. Ask groups about their progress. If some students are sitting down doing nothing, ask them what they can work on to help their group. If groups don’t assign members tasks, then assign them a task yourself. Tell them you’ll be back in 5 minutes to see their progress.

****Note: If students need more time to complete their posters and are not ready to present by the end of class, then we’ve added a bonus Lesson 9 to this curriculum in which students conduct formal presentations of their project posters.***



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Wrap-Up (10 minutes)

Section Objective: Students share a brief presentation of their poster proposals and clean up.

Sharing poster proposals (10 min):

- Tell groups to pair up with a different design group.
- Each group will get 2 minutes to present the following:
 - ☐ Your design **Poster Title**
 - ☐ Your **Goal Statement & Community Impact Pitch**
 - ☐ Your **Data Visualization**, including WHY you chose the cell you did
 - ☐ Your **Design Drawing** - explain the legend, including the plants & site features
 - ☐ Your **Design Justification** - explain how your design fits your team's focus
- If there's time it might be helpful to briefly model this poster presentation with your own example poster. In your modeling, emphasize speaking clearly and loudly and having upright body posture. Also, remind students to be proud of their work. They've worked hard so presenting their proposals is where they get to celebrate all they've done.