



The Bio/Diversity Project

Data Science Outreach Curriculum Fall 2025 Lesson 9: Poster 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 explain how my design choices address and connect to an environmental focus.
- I can listen respectfully to peers and explain why I accept or reject a design proposal.

Guiding Questions:

- How does my green space design address my team's environmental focus?

Vocabulary:

- Voice projection
- Eye contact
- Constructive feedback

Materials:

- Teacher Example Poster
- [L9 Slides_Energy](#)
- [L9 Audience Participation Sheet](#)
- [L9 Presentation Prep Handout](#)



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Lesson 9: Poster Presentation

Mini-Lesson (15 min)

Section Objective: Students prepare to present their green space design proposals by brainstorming what good presenters do and dividing presentation speaking parts amongst their team members.

Presentation Tips (5 min):

- Present learning targets to students:
 - Students can explain how their design choices address and connect to an environmental focus.
 - Students can listen respectfully to peers and explain why they accept or reject a design proposal.
- Ask students: “What makes a presentation good? What do good presenters do? What do bad presenters do?”
- If students don’t have ideas, you might ask them guiding questions such as:
 - What do good presenters do with their eyes? Are they looking down? Are they reading the screen?
 - What do good presenters do with their voice?
 - What do good presenters do with their hands? Are they in their pockets? Do they fold their arms?
- Review with students “Tips for Presentation” slide:
 - Head up
 - Eyes up 👁️ - If it makes you uncomfortable to make eye-contact, then look at people’s foreheads
 - Hands by your side
 - Use hand gestures to point to poster 🖐️
 - Project your voice 🗣️
 - Talk slowly and clearly
 - Be proud of your work - smile 😊
- To be extra explicit, you might model for students what each of the above tips looks/sounds like. This is also an opportunity to be playful. You might purposefully model something poorly and ask students to correct you.

Introduce Presentation Guidelines (10 min):

- Distribute the [L9 Presentation Prep Handout](#)
- Review presentation guidelines with students:
 - Each presentation will be 5 minutes long, including time for questions at the end



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- Each person in your group must talk
 - Each presentation must cover:
 - Your design **Poster Title**
 - Your **Goal Statement & Community Impact Pitch** - try not to read from your poster
 - Your **Data Visualization**, including WHY you chose the cell you did
 - Your **Design Drawing** - explain your design, including the legend, plants, and site features
 - Your **Design Justification** - explain how your design fits your team's focus
 - Ask the audience if they have questions or comments at the end
 - As the teacher, I encourage you to model a mini presentation for your students in which you address all the above sections. You should do so using the model poster you created. Have it projected for students to see.
 - After you model, give students 5 minutes of prep time to:
 - Decide which team members will present which parts (Students will write this on their [L9 Presentation Prep Handout](#))
 - Decide which team members will hold the poster
 - Rehearse your part/section
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Work Time (35 minutes)

Section Objective: Teachers review expectations for audience members before student groups begin their presentations.

Review expectations for audience (5 min):

- Distribute the [L9 Audience Participation Sheet](#) to students (one to each student).
- Explain to students that as audience members, they have the responsibility of acting as Tucson's City Council. They will decide if the design proposal passes or not.
- Walk them through the sheet and tell them they must fill out a box for each presentation group answering whether or not they would vote to pass this design proposal AND why.
- Consider distributing candy to students who complete the entire sheet (1 box for each presentation group).



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- Ask students: What respectful audience members do? Collect some answers, then review the bullet points below:
 - Looking at presenters
 - Not having side conversations
 - Nodding to show understanding
 - Asking questions or making comments at end of presentation

Students present (30 min):

- Each group comes up to present one-by-one.
 - Start a timer for 5 minutes and be sure to give students cues when they have one minute left. Don't let teams go over 5 minutes or you might not get to all groups.
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Wrap-Up (5 minutes)

Objective: Clean up and collect materials before students are released.

- Thank students for sharing their time with you.