

Is it community science?

An interactive classroom activity exploring the boundaries and purpose of community science

This activity presents students with brief descriptions of a scenario and asks them to determine if it fits within the definition of community science. There are no right or wrong answers but discussing why they said yes, no, or maybe will help students think critically about the topic.

Setup

Discuss the following definition of community science with students:

Community science is the equitable collaboration between scientists and community members for the benefit of both science and communities. Community Science happens when communities and scientists do science together to advance community priorities. "Doing science" includes defining questions, designing protocols, collecting and analyzing data, and using scientific knowledge in decision-making.

Encourage students to compare this to the kinds of scientific research they have previously studied. How is it similar? How is it different?

Activity

Share each prompt one at a time with students. Ask them to vote on whether it is community science by saying yes, no, or maybe. Alternatively, you can ask students to give a thumbs up for yes, thumbs down for no, and a sideways thumb for maybe.

After all students have had the opportunity to vote ask someone who said yes to share why they said yes. Then ask someone with another opinion to share their thought process. If a student determines it is not community science, ask what could be changed to make it more in line with community science. Ensure students feel comfortable sharing their ideas and exploring potential contexts or perspectives that would alter outcomes.

Below are potential prompts for this activity. You can alter them to better fit with the themes of the course you are teaching and your objectives.

- Collecting data to verify a traditional way of knowing.
- Searching for studies or displaying the data that supports a community viewpoint.

- Understanding your audience so you can explain your science better.
- Collecting data in a neighborhood or region where there is no data because community members are concerned about that area.
- Recruiting a community to take measurements about noise.
- Working with a mayor so that the mayor can understand that science is the best way for her to set policy about carbon emissions.

Conclusion and Deeper Engagement

Ask students how they felt about the activity and their thoughts about community science. Are there topics that have been discussed in the classroom that would lend themselves to a community science project? Are there some priorities or issues in their own lives or related to the classroom that could be addressed with community science? What are some first steps that they could take to get such a project started?

Encourage students to read some case studies or watch videos about community science projects. Below are a few options but you may want to find examples that are relevant to student interests and/or the classroom subject(s).

- [Defining wellbeing one dimension at a time AGU's Thriving Earth Exchange facilitates a values-based approach to the San Juan Basin's threats and opportunities](#)
- [Creating clean air using passionfruit vines AGU's Thriving Earth Exchange helps the Watts neighborhood of Los Angeles understand the link between air quality and water management](#)
- [Fighting pollution by greening the community AGU's Thriving Earth Exchange helps the San Ysidro community sequester carbon emissions by enhancing a county park with more trees](#)
- [Empowering residents to take control in facing wildfire risk Building a proactive, informed, and prepared community was the goal for mitigating and reducing wildfire risk in Carmel Valley](#)
- [Creating an interactive tool to build awareness AGU's Thriving Earth Exchange maps the extent of the Tar Creek Superfund Site in Ottawa County, Oklahoma, to alert local authorities and residents of the risks of increased flooding](#)
- [Boosting resilience to mitigate climate change AGU's Thriving Earth Exchange helps Kentucky residents work toward hazard preparedness](#)
- [Community Science Spotlight: Corpus Christi – Reclaiming Soil, Reclaiming Community \(video\)](#)

Questions or Comments? Reach out to us at ThrivingEarthExchange@agu.org or learn more on our website ThrivingEarthExchange.com.