Citizen Science Challenge – Notes for Educators

Open the game <u>https://wordwall.net/play/59048/680/467</u> to see the complete educational material. Date: 2023-08-10

About the educational material

The educational material was created with the Erasmus+ project *Bridging Integrity in Higher Education, Business and Society* (BRIDGE, project no. 2020-1-SE01-KA203-077973) as a part of the project output 2 "Bridging academic and research integrity". The educational material, other project outputs, and more information on the project are available at https://www.academicintegrity.eu/wp/bridge/.

Use and adaptations of the educational material

Authors welcome adaptations of the material, especially translations! If you are interested in translating the material into your language, please contact us at bridgeinfo@academicintegrity.eu and we will provide you with source text. The Bridge project will then be happy to assist you with further sharing of your translation.



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Citation of the educational material

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Strategic Partnerships project the author. 2020-1-SE01-KA203-077973

The sole responsibility for this document lies with



Citizen Science Challenge

Basic information

- Target Audience: Master students, PhD students and supervisors.
- Study/Research Field: Citizen science ethics and research integrity.
- Length: 6 quiz rounds, each lasting 1 minute, plus 1 bonus round.

Purpose of the educational material

The "Citizen Science Challenge" quiz game aims to immerse students in the world of citizen science while testing their understanding of citizen science ethics. This interactive game is designed for high school and college students and encourages them to apply ethical principles in real-world research scenarios.

What is included in this educational material?

- Online quiz platform: "Citizen Science Challenge"
- Interactive features: 50:50 help, extra time, x2 bonus points
- Bonus round with opportunities for additional points or penalties
- Link to the "Guidelines for Research Ethics and Research Integrity in Citizen Science" article

How to use the educational material?

- Begin by discussing citizen science ethics with students. Introduce them to the "Guidelines for Research Ethics and Research Integrity in Citizen Science", encouraging them to explore its content before playing the game. The guidelines are available here: https://riojournal.com/article/97122/instance/8051553/
- Provide students with access to the "Citizen Science Challenge" quiz game. Explain the gameplay mechanics and the available interactive features.
- Explain the rules: Each round consists of a question related to citizen science ethics. Students have 1 minute to answer. They can use the 50:50 help to eliminate two incorrect options, extra time to extend their answering time, or the x2 bonus points to earn double points if confident. Emphasize the importance of both accuracy and speed.
- If students are playing in teams, facilitate a discussion after they finish the game to allow for collaborative decision-making and ethical reasoning.
- Discuss real-world examples where citizen science ethics are relevant. Encourage students to think about how they can apply ethical principles when participating in or conducting citizen science projects.
- Acknowledge the students or teams with the highest scores as a way to motivate healthy competition and engagement.

Correct answers:

You discover that one of your citizen science project participants is submitting false data. What is the most ethical course of action?

- Remove the participant's data from the research.



In citizen science projects, obtaining informed consent from participants is optional since they are volunteers.

- False

During a citizen science expedition, you encounter an endangered species. What should you do next to ensure ethical behavior?

- Report the sighting to the appropriate authorities without disturbing the species.

In citizen science projects, sharing participants' personal data with third parties, such as marketing companies, is acceptable if it helps raise additional funding for the research.

- False

You are collaborating with a group of citizen scientists from diverse cultural backgrounds. During a meeting, you notice that some participants are uncomfortable with a specific research approach. What should you do to address this ethical concern?

- Acknowledge the concern and encourage open discussions among all participants to understand their perspectives better.

When using data collected by citizen scientists, researchers are required to acknowledge the contributions of the participants in any publications or reports.

- True