Making Science Real and Relevant in the Writing Classroom: Citizen Science in First-Year Writing

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WHAT IS IT?

YOU SAID TO DO AN ABSTRACT
Introduction
Methods
Results
Discussion
The experiment
Methods
(The Popular Accommodation)

- Participate in Citizen Science
- Locate a recent scholarly article that intersects with that activity
- Rhetorically analyze a popular science publication
- Accommodate the scholarly article to a popular audience
Methods
(The Popular Accommodation)

- Apply scholarly evidence (logos) and personal experience (pathos/ethos) to persuade a target audience to participate in the Citizen Science activity.
- Rhetorically analyze the student’s own accommodation.
Low-Stakes Assignments

- Citizen Science: Citizen Science Challenge
- Accommodation: Fahnestock Chart and Discussion Questions
- Rhetorical Situation: Profile of a Popular Publication
- Persuasion: Elevator Pitch
Results

- Students participated in 18 different Citizen Science projects

- Most popular:
  - Globe at Night
  - Project Squirrel
  - Stall Catchers
  - Mars Mapper
  - iNaturalist
  - Sourdough for Science
Results

(Student Gains)

- Understanding of genre, rhetorical situation, persuasive strategies, and basic research
- Hands-on connection to local and global science initiatives
- Brings writing and its importance outside of the classroom and into actual scientific research
Results (Student Feedback)

“Tying in the citizen science project with the article we wrote really tied it together for me, and gave me more of a sense of purpose when wanting to write and talk about my article.” - Stall Catchers participant

“This process has been quite enjoyable. I never knew how easy it could be to contribute to science and for your contributions to be made while doing something you already love.” - Globe at Night participant

“I also enjoyed learning about what was being done to advance Alzheimer's research and work towards a cure because I lost a grandparent to Alzheimer's three years ago. Not only was it nice to learn about the research strategies, but it was nice to get to participate in the research myself because it helped me to feel like I was actually making a difference.” - Stall Catchers participant
Results
(Instructor Gains)

- Interdisciplinary collaboration
- Opportunities to connect with local and global research initiatives
- Facilitate further on-campus data collection
- Opportunities to present innovative pedagogical efforts at conferences
- Professional development workshop opportunities
Discussion
How do you teach the **Natural Sciences** in your classroom now?

How might **Citizen Science** be invited into that unit?
Acknowledgements

- SciStarter
- NCSU SciStarter
- NCSU Public Science
- NCSU Libraries Citizen Science
References

- “Citizen Science: Everybody Counts” TEDx Talk by Caren B. Cooper
- “Two Meanings of Citizen Science” by Caren B. Cooper and Bruce V. Lewenstein
- “Accommodating Science: The Rhetorical Life of Scientific Facts” by Jeanne Fahnestock