Citizen Science - Giving service and having fun!

Written by Jane Brandenberg of Presbyterian Ladies College, Perth



Number of lessons: Two

Year level(s): Year 7/8

Australian Curriculum content descriptions:

Technologies: Use project management processes when working individually and collaboratively to coordinate production of designed solutions (<u>ACTDEP039</u>) (http://docs.acara.edu.au/resources/Content_ for_Year_7_-_Learning_area_content_ descriptions.pdf)

Achievement standard:

Context

Teacher should complete some background research and develop an understanding of what is meant by 'Citizen Science'.

By completing this unit, students will also have an effective involvement in and understand what makes a collaborative and co-operative team. Students will research a variety of Citizen Science opportunities and develop a presentation as a group on one particular citizen science project.

Materials and equipment

- One to one digital devices
- Worksheet in digital format (see appendices)
- A world map on classroom wall

Safety Advice

Classroom activity. No safety issues.



Part 1

Objectives

- Understand what is meant by 'Citizen Science'.
- Research a variety of Citizen Science opportunities.
- Effective involvement in a collaborative and co-operative team.

Introduction (7 min)

- Students are shown "Citizen Science Kids" <u>http://www.abc.net.au/btn/story/s4678941.htm</u> (approx. 4 min)
- Discuss "What is Citizen Science?"

Explain today's task i.e. "today you are going to find out about the wide variety of Citizen Science opportunities that are available, and research and prepare a presentation".

Core

(15 minutes) Work in a group of three - You have 15 minutes for research to identify three super interesting Citizen Science opportunities that capture the enthusiasm of all members of your team.

- One must be local.
- One must be national (but not in your state)
- One must be international.

(Provide students with the links below to possible sites. They can also research more broadly) At the end of the 15-minute period - Your group is to get three small pieces of paper from your teacher.

- Write the name of each project on a separate piece of paper.
- Write the names of your group members onto each of the three pieces of paper.
- Fold up the pieces of paper and place these in 'the hat'.
- Your teacher is now going to draw one Citizen Science project for each group.
- No groups will prepare a presentation on the same topic

Teacher randomly chooses one of the three choices from "the hat".

Teacher explains presentation task (2 min)

(*30 min*) Students work in teams using Office 365 Power Point to create informative, interesting, three to five slide power-points to share your citizen science opportunity with the class. The group needs to provide the following for their Citizen Science opportunity:

- A title.
- A typical photo, photos or a video.
- An explanation as to why the Citizen Science opportunity appeals to your group.
- A description of the place/s you will be visiting.
- An explanation of the 'work' that you will do as a Citizen Scientist.





Lesson Plans

- An explanation as to why the 'work' is helpful.
- Any other points of interest: e.g. costs, necessary attributes of participants.
- Know where this is happening in the world

Presentations will be delivered in the next lesson (part 2).

Conclusion *(5 min)*

- Check level of progress.
- Have students allocate outstanding tasks between group members.

Teacher explains team work includes completing tasks out of classroom and returning to class with their contribution

Resources

Digital resources:

<u>Laptop, iPad.</u> <u>Internet access</u> <u>Collaborative platform such as Office 365 Power Point or Google Sheets</u>

Worksheets:

<u>Please find attached to the email.</u>

Useful links:

https://biocollect.ala.org.au/acsa#isCitizenScience%3Dtrue%26isWorldWide%3Dfalse%26max-%3D20%26sort%3DdateCreatedSort http://slav.global2.vic.edu.au/2017/12/12/citizen-science-involving-students-in-real-world-activities/#.W9m Y0zwfYI https://scistarter.com https://www.nationalgeographic.org/idea/citizen-science-projects/ https://earthwatch.org/expeditions/expedition-search https://s3.amazonaws.com/Earthwatch/A Files/Education/StudentChallenge/Student-Challenge-A4-2018-flyer.pdf https://www.fizzicseducation.com.au/Blog/x_post/Ideas-for-citizen-science-for-your-students-00115.html https://citizenscience.org.au https://australianmuseum.net.au/australian-museum-centre-for-citizen-science http://www.redmap.org.au https://www.discoverycircle.org.au http://www.climatewatch.org.au http://museum.wa.gov.au/museums/offsite/citizen-science-program https://www.riverguardians.com/projects https://bookings.conservationvolunteers.org/book/search/results?projectSearch_region 1=22&projectSearch requiredVacancies=1& ga=2.138606643.1253952975.1541079724-952414527.1541079724



Part 2

Objectives

- Understanding the breadth of Citizen Science opportunities and how these also provide an opportunity for travel
- Team work
- Delivery a quality presentation

Introduction (7 min)

Explain outline of today:

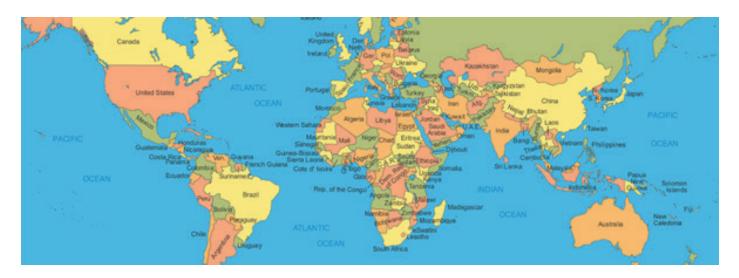
- Make a contribution towards a group presentation.
- Listen carefully to all other presentations.
- Write brief notes about each presentation.
- Consider if you would or wouldn't like to be involved in each of the Citizen Science opportunities.
- Identify characteristics of an interesting presentation.
- Identify characteristics of great group work.

Core

- Work in teams to finalise presentations (*10 minutes*)
- Presentations by 3-4 groups (*15 minutes*). You are to listen to each of the presentations. Give

each Citizen Science opportunity your personal emoji rating and complete the table (appendix 1)

- Class discussion re team work (*5 minutes*)
- What are the characteristics of an interesting presentation?
- What are the characteristics of great group work?
- Last three to four groups present (15 minutes)
- Mark destinations on world map on classroom wall (*2 minutes*)



BushBlitz

Lesson Plans

Bush Blitz TeachLive

Conclusion

Complete a mind map – what makes a good presentation (*7 minutes*) Complete team work evaluation (*6 minutes*) (appendix 2)

Resources

- Laptop, iPad.
- Internet access
- Collaborative platform such as Office 365 Power Point or Google Sheets



Appendix 1.

Group #	Citizen Science experience and brief explanation of the project.					
		82200				
	One aspect of the groups' presentation you felt was very good.	dentify one way that the group demonstrated team work.				

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Appendix 2

Team Work Evaluation

My name.			

Names of people in my team. _____

What did you do to help the team? _____

Classify the team work according to the following chart. Colour/tick the box of the appropriate number.

	not at all				E	Exceptional	
	0	1	2	3	4	5	
Were all members of my team always on task?							
Did our group work well as a team?							
Name of team member Level of contribution to the team.							
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What are the characteristics of a good team?