**SNC1W Resource Collection**

**Title:** Environmental Threats - Final Assessment

**Course Code:** SNC 1W

| **Topics** Project-based assessment: Environmental Threats Presentation | **Timing**  Preparation: 15 min  Activity: 3 class periods |
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**Curriculum Expectations**

* **A1.1** apply a scientific research process and associated skills to conduct investigations, making connections between their research and the scientific concepts they are learning
* **A2.3** analyse how the development and application of science is economically, culturally, and socially contextualized, by investigating real-world issues
* **A2.4** apply scientific literacy skills when investigating social and environmental issues that have personal, local, and/or global impacts
* **A2.5** analyse contributions to science by people from various communities, including communities in Canada

**Introduction**

* Students choose a partner and a topic related to Environmental Threats and create a 7-slide presentation including an APA citation page. They will present their findings to the class.
* Topics can be scaffolded for all learners as some of the topics have been discussed in the lead-up activities.
* Consider working in concert with a teacher librarian (if possible) to assist with APA citations and citing credible sources. If not possible, here is a [resource for citations](https://docs.google.com/document/d/1eTbkBXTwdxW91ZpR0ACE5dAcEr9GjRp4oD-ZSF3PQ7Y/edit).
* 3 class periods include 2 for research/practice and one for presentations.

**Learning Goals**

Through this task, students will:

* assess the impact that their chosen topic has on the biosphere and its connection to climate change.
* explain the impact on society, including who is most impacted by the topic they have chosen, both in Canada and the world, and argue why students should care about this topic.
* explain current actions by stakeholders, including governments, organizations and industries and decide if they are doing enough to solve the problems created.
* recommend actions that can be taken by individuals to minimize/mitigate any problems caused by their actions concerning the chosen topic.
* create an APA citation page and cite at least 3 credible sources to back up their opinions.

**Prior Knowledge**

Students may need to review the following concepts:

* Creating an APA bibliography
* Finding credible/reliable sources
* Presentation skills
* Terminology from the Biology unit including but not limited to:  
  Biosphere, Climate Change, Stakeholder

**Lesson Plan**

| **Description** | **Time** |
| --- | --- |
| Introduction | |
| Introduce the project using the *02 Project Outline - Environmental Threats* handout.  Review the evaluation criteria with students using the *04 Evaluation checklist - Environmental Threats Project*  Place students in groups of 2. If desired, you can scaffold the groups to pair learners or choose random groupings using an online [random grouping tool](https://wheelofnames.com/).  Either use a lottery system to choose issues OR a shared Google doc that students can make their choice in but you can assign choice of issues as well if desired. | 10 minutes |
| Content | |
| Provide 2-3 class periods for students to conduct research and build their presentation with their partner.  Review with students how to write an APA references page. Refer to the *03 Environmental Threats Project - APA Citations* as a guide.  Students should be working in a google slide deck that is shared with you as the teacher so that you can monitor their progress.  Each period, check-in with each group to provide a timeframe for the completion of the project. Assess the ongoing progress through the shared slide presentation to monitor progress and provide ongoing feedback.  **Day 1:** pick topics, create a shared presentation, begin research, complete Slide 1 & 2, keep track of sources for APA bibliography.  **Day 2/ Day 3**: Work on and complete individual slides, emphasize the OPINION aspect of slides 5 & 6, Practice presentation with your partner, polish, peer review | 2-3 class periods |
| Consolidation | |
| **Day 4 & 5:** Students present to class.  Note: 2 full-period presentation days are required depending on the size of the class.  **Reflection:** Ask students to reflect on which issues that they learned about (theirs or their peers) they could impact the most through their own personal actions. How could a student, through their education and future goals, affect real change (pathways - politics, community, small businesses, environmental initiatives, charities, etc)? |  |

| **Materials:**   * Computers/Tablets * Laptop/LCD Projector * Handouts: See Project Outline * Other: | **Transferable Skills**   * Critical thinking and problem solving * Innovation, creativity, and entrepreneurship * Self-directed learning * Collaboration * Communication * Global citizenship and sustainability * Digital literacy |
| --- | --- |
| **Instructional Strategies**   * Brainstorming * Think Pair Share * Demonstration * Group Work * Independent Work * Questioning * Class Discussion * Hands On Activity * Other: | **Assessment For/As/Of Learning**   * Conversation * Observation * Homework Check * Notebook Check * Participation * Peer Assessment * Self Assessment * Product * Other: |

**Assessment Resources**

* Refer to the *02 Project Outline - Environmental Threats* for expectations and *04 Evaluation checklist - Environmental Threats Project* for the evaluation criteria.

**Safety**

* none

**Equity and Diversity Concerns:**

* an expectation of the project is to identify different communities within Canada and the World that are impacted negatively by the environmental issues
* students are able to use their own lived experiences and research other lived experiences to empathize with members of the worlds various communities when assessing impacts of their chosen environmental issue

**Teaching Suggestions/Hints**

* See introduction in lesson plan above

**Next Steps/Extensions**

* Reflect as a class on all of the issues addressed. Discuss the which issues, based on the presentations, have the biggest impact on the local environment, marginalized communities, as well as the entire planet and various world populations
* Ask students to share as part of their reflection which issues they believe they can have the biggest impact on through personal actions. How could a student, through their education and future goals, affect real change (pathways - politics, community, small businesses, environmental initiatives, charities, etc)

**Additional Resources**

* [Climate Change](https://www.canada.ca/en/environment-climate-change/corporate/transparency/briefing/key-issues-climate-change.html)  
  To find information about environmental issues, use the following links: [Environmental Issues in Canada](https://thenarwhal.ca/topics/environmental-issues-canada/)
* [Biggest Climate Issues in Canada](https://www.worldatlas.com/articles/the-biggest-environmental-issues-in-canada.html) [20 Environmental Issues Our World is Facing Today](https://www.conserve-energy-future.com/15-current-environmental-problems.php) [The Biggest Problems of Our Lifetime](https://earth.org/the-biggest-environmental-problems-of-our-lifetime/).