

Population Contemplation

Subject: Geography

Rationale

The Australian Curriculum Geography comprises of three equally important elements that are crucial for global citizenship: exploring, understanding and analysing the world in which we live. The curriculum emphasises that Studies of Society and Environment learning during middle years is centred on students gaining understanding of the complex interactions and interdependence of people and their environments in local, global and regional settings. Geography programs are in many instances directly associated with sustainability and future environment education, making geography education a prominent aspect of educating for the 21st Century. Consequently, the absence of geography in primary school curricular would result in ill-informed and irresponsible citizens.

Unit Overview

The following activities guide students through the various domains of Bloom's taxonomy in order to develop higher-order thinking. Lessons progress from imparting general knowledge of the much debated population issue to the analysis and application level by making suggestions for the future. In this way learning advances from concrete to abstract as reflected in the Australian Curriculum. Consistent with the critical and creative thinking capability filtered across the Curriculum, learning in this unit encourages purposeful, productive and intentional thinking skills that contribute to a sustainable future.

GEOGRAPHY	Year 6
Unit Title:	Population Contemplation
Unit Objectives	Students research population trends and analyse the implications of population growth now and in the future.
Curriculum Objectives	<p>Geography Understanding</p> <ul style="list-style-type: none"> Differences in the economic, demographic and social characteristics between countries across the world (ACHGK032) <p>Geography Inquiry and Skills</p> <ul style="list-style-type: none"> Develop geographical questions to investigate and plan an inquiry (ACHGS040) Collect and record relevant geographical data and information (ACHGS041) Interpret geographical data and identify distributions, patterns, and relationships to draw conclusions (ACHGS044) Present findings and ideas in a range of communication forms (ACHGS045)
Cross Curriculum Links:	<ul style="list-style-type: none"> Numeracy: Interpret graphed information Cross-capabilities: sustainability Asia and Australia's engagement with China Critical and creative thinking ICT capabilities Literacy
Whole Unit Assessment	<p>Population Portfolio</p> <p>Each student will create a portfolio for this unit. Students will add to the portfolio the following tasks:</p> <ul style="list-style-type: none"> PCQ Chart Population Data (comparing countries) Reflecting on Research (written paragraph) Short Report (reflection on readings and research)

Lesson 1 – Discussing Population



Resource List

- World Population in 2050
<http://splash.abc.net.au/media/>
- PCQ chart Pros, Cons, Questions Chart (Appendix).
- Other: Electronic White Board

Lesson Sequence

1. Discuss key terminology and concepts (record and brainstorm on the EWB)
 - What is population?
 - What questions does population bring to your mind?
 - Have you heard about population issues in media? Discuss.
2. View YouTube clip: World Population 2050
 - Guided discussion to encourage critical responses from students
 - Extend students' understanding and encourage critical analysis of the population situation as presented in the video clip
 - Discuss
3. Complete PCQ (Pros, Cons, Questions) Chart
 - Students work in small groups, but complete their own PCQ chart. Encourage students to discuss the pros, cons, and questions within their groups.
4. Lesson Closure

Ask students to share aspects of their PCQ charts. Introduce students to the overall assessment task for this unit: A Population Portfolio. The PCQ chart should be added to the portfolio. Portfolio will be added to throughout the unit.

Lesson 2 – Population Data Collection Activity



Resource List

- Internet Access
- Laptops (for data collection and collaboration)
- Electronic White Board

Websites to assist students:

Australian Bureau of Statistics: <http://www.abs.gov.au/ausstats/abs@.nsf/>

World Population Statistics: <http://www.worldpopulationstatistics.com/>

Global Population Statistics: <http://www.geohive.com/cntry/brazil.aspx>

World-Ometers: <http://www.worldometers.info/>

Lesson Objective: This lesson gives students the opportunity to do individual and group research. Students explore and compare population statistics across several countries.

An attribute of high-quality learning is deep understanding. Deep understanding can be achieved by interaction with information and with peers. Recording and sharing the researched data is a means for developing knowledge and cognitive processing capacities, which is a result of the interactions within a learning activity.

Lesson Sequence

1. Review / refresh previous learning

- What is population control?
- What are some issues with over-population?

2. Present learning activity

Students choose five countries of their choice (must be different continents) and compare population figures. Provide students with website links (in resource list) to assist research processes. Students record data a table. Display the following on EWB for students:

- Choose five countries of similar size (each in a different continent)
- Research population statistics for each country
- Present your finding in a table (use Excel, Word, or graphed paper)
- Add your table to your Population Portfolio

Teacher's Role: Some students may require support or scaffold throughout this lesson. Create a small group with such students and work with them.

Lesson 3 – *Continued*: Population Data Collection Activity

Continuation from Lesson 2

- Discuss data findings
- Group into small groups (three is ideal). Discuss your findings with your peers
- After discussion, each student writes a paragraph which outlines the concerns and implications of the data research findings
- Add this to your Population Portfolio

Extension: Students can compare the current population figures with previous decades and record these in tables.

Lesson 4 – Further Investigations: Reading and Critical Response



- **Reading 1** – How Much Is Too Much? By Peter Meredith <http://www.australiangeographic.com.au>
- **Reading 2:** [Chinese Geography and Maps](#) (scroll down to population and agriculture)
- **Reading 3** - [Can Australia Save the World?](#)
- **Problem Map:** Appendix

Lesson Objective: The above readings encourage students to relate with the population issue in context of their environments. Readings are non-fiction, revealing relevant concern of current Australians. Encounters with resources, people, and daily experiences influence a child's understanding and concept formation. Presenting students with questions allows students to respond judiciously, consequently revealing sophisticated understanding that teachers may not have expected.

Lesson Sequence

1. Review and Introduction
 - Discuss the data collated in last lesson
 - What did we find?
 - What issues does this data raise for us?
 - What questions does the data raise?
2. Students choose one of the above readings and reflect on the implications associated with the scenarios. Students respond by:
 - Outlining the problem
 - Listing questions that arise from the scenario
 - Listing possible solutions for the problem
 - Suggestions and recommendation for population problems for the future
3. Students record this work in Report Format (see appendix) and submit with Population Portfolio

Extension: Read the other article and write a response to the following: How does food versus population differ between the China scenario and the Australia scenario?

Teacher Resources

Further information for the teachers:

- **National Geographic Education**
http://education.nationalgeographic.com.au/education/teaching-resources/?ar_a=1
- **Annenberg Learner – Teaching Geography**
<http://www.learner.org/workshops/geography/>

The above links provide further information and resources for both teachers and students. The National Geographic website allows for students to extend their learning. Teachers could allow students to formulate an extension question, which can then be researched further using the National Geographic website. The Annenberg Learner offers a variety of teaching resources, work sheets, and links that can assist teachers across a variety of SOSE learning areas.

APPENDIX 1**PCQ CHART** for use with Topic 1, Resource 1Retrieved from http://www.itcpublications.com/thinking_tool_tmplts_pcq

PCQ Topic: _____

Pros	Cons	Questions
		What if...? I wonder... It would be interesting to know...

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Lesson 4: Short Report Template

Report Name: *(Give your journal a title)*

Reporter's Name: *(Your name here)*

Date:

Article Name: *(Insert Name of the Article being analysed and the Author's name)*

The Problem

Read your chosen article and paraphrase or outline the issues presented in the article here.

Question arising from the Scenario

- Listing questions that arise from the scenario here
- Students may choose to present this problem-issues-considerations map (attached)

Solutions

- Listing possible solutions for the problem, then
- Include a full paragraph of why and how your solutions will solve the problems presented in the article

Considerations

- Suggestions and recommendation for population problems for the future

