

Environmental Systems and Societies Human Population Growth Project 2012

Purpose: to design and carry out an investigation using secondary data to answer an authentic question relating to human population growth.

Requirements:

- Research will be carried out by students individually.
- Experimental design must be authentic.
- All data must be selected, manipulated and processed by students independently
- Results must be based on quantitative data, but may also include qualitative data
- Students must create their own presentation format for the results.
- Turn in a written (typed, double spaced) report following IB guidelines, that can be assessed by all four internal assessment criteria. (It is recommended that students review criteria aspects before they begin.) Include a list of source references with the report. **Final Report Due Monday 2/6/11**
- Present a short summary of your investigation to the class

Methods:

In this investigation you will be collecting, reviewing, and analyzing secondary data. By definition, secondary data analysis uses data or information that was gathered by someone else or for some other purpose than what is currently being considered. In order to stay focused, your first step is to develop a statement of purpose and research question.

Step One

Based on what you have learned during this unit so far, generate 3 to 5 research questions related to human population growth that can be answered by collecting raw data. Be able to explain the rationale for any investigation you choose.

You may consider one, or a combination of the following approaches.

comparison study (between countries, regions etc.)
longitudinal study (change over time)
correlation study (cause and effect)

Turn in this list no later than Wednesday, February 1.

Step Two

Explore information sources to identify available data relating to your research questions. Decide which research question you will develop and investigate further. Select variables and develop a hypothesis.

Identify reliable information sources. Examples:

<http://www.countryreports.org/> (username: alaska; password: trial)

<http://earthtrends.wri.org/datatables/index.php?theme=4>

<http://www.prb.org/>

<http://www.unfpa.org/public/>

<http://www.who.int/en/>

<http://www.populationconnection.org>

<http://hdr.undp.org/en/statistics/>

Step Three

Collect data and organize for analysis and processing. Process data using appropriate mathematical and statistical manipulations. Determine a suitable format for presenting the data for your report.

Step Four

Review and analyze your results. Determine whether or not any additional data is needed to strengthen your conclusions before finalizing the report. Prepare the report and a summary to present to the class.