The United States vs. Canada: War at Last!

In AP Human Geography, the US and Canada are going to war!!!... over which country is richer. We’ll settle this fight by using STATISTICAL ANALYSIS! So not actual war. Just math.

In this unit, we will be discussing various methods of measuring development. All countries can be ranked from most developed to least on a spectrum. There are different statistics that can help us rank those countries as more developed or less developed. We will look at the definitions of those statistics, and then compare the United States and Canada’s statistics. At the end of the first section of our unit, we will decide whether Canada or the United States is more developed!

<table>
<thead>
<tr>
<th>Measure of Development</th>
<th>United States of America</th>
<th>Canada</th>
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<tbody>
<tr>
<td>GDP</td>
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<tr>
<td>GDP Per Capita</td>
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<tr>
<td>GDP Adjusted for Purchasing Power Parity</td>
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<tr>
<td>Internet Penetration</td>
<td></td>
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<tr>
<td>Energy Consumption Per Capita (most reliable)</td>
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<tr>
<td>Literacy Rates</td>
<td></td>
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<td>Access to Clean Water</td>
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<td>Infant Mortality</td>
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<td>Life Expectancy</td>
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<td>HPI</td>
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According to your aggregate measure of development, which country is more developed, the US or Canada? Why? Which statistics did you think had the most bearing on development?
Basic Ideas About Development

What are 1\textsuperscript{st} World Countries?

2\textsuperscript{nd} World?

3\textsuperscript{rd} World?

What are some countries wealth and some poor?

Some Ideas (the United Nations says all of these are wrong or not quite right)

<table>
<thead>
<tr>
<th>Idea</th>
<th>Notes</th>
<th>Disprove?</th>
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<tbody>
<tr>
<td>The Brandt Line</td>
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<tr>
<td></td>
<td>Poverty is a result of living in a tropical climate</td>
<td></td>
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<tr>
<td>No natural resources</td>
<td></td>
<td>Countries that have few resources that are wealthy?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Countries that have many resources but are poor?</td>
</tr>
<tr>
<td>Overpopulation</td>
<td>High population densities put pressure on the economy, leading to poverty</td>
<td></td>
</tr>
<tr>
<td>Former Colonial Status</td>
<td>Countries that were colonies have been terribly exploited and had their political systems destroyed so that development is impossible.</td>
<td>Settler Colonies:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non Settler Colonies:</td>
</tr>
</tbody>
</table>
So what actually causes a country to be developed?

What are the Millenium Development goals? Who made them? Are they successful?

What are the problems with many aid organizations and charities working in the third world? Think back to the NGO republic of Haiti!
Economic Measures of Development

1. GDP/GNI
   Definition

2. GDP Per Capita
   Definition

3. GDP Per Capita Adjusted for Purchasing Power Parity
   Definition

4. Internet Penetration – the percentage of people that have access to high speed internet at home.
   How is it possible that China has a low percentage of people on the internet but a greater amount of people with access to the internet than the United States?

5. Energy Consumption Per Capita: Definition?
   Label points A and B as
   Least Developed or More Developed
   Higher carbon emissions or Lower carbon emissions
   A                                 B

   Total Energy Consumption – why is this higher in China?
   CO2 Emissions – why is this higher in China?

6. Workforce Composition: Definition

   What patterns do you notice about workforce composition?
7. Percent of population undernourished: According to this, which is the most developed region?

The least?

The second least?

The third least?
Non Economic Measures of Development

1. Literacy Rates – Pay special attention to literacy rates in which population?

   Average for Developing? Developed? What are the economic benefits of education?

2. Public Services – What are the most important government services for establishing a healthy society?

   How do we measure whether a country has those services?
   Pick with your partner a developing country and a developed country. We will look up their statistics at this website.

   http://data.worldbank.org/indicator/SH.H2O.SAFE.ZS

   google search term: world bank improved water source

<table>
<thead>
<tr>
<th>Developing</th>
<th>Developed</th>
</tr>
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<tbody>
<tr>
<td>Country:</td>
<td>Country:</td>
</tr>
<tr>
<td>Percent with Access to Clean Water:</td>
<td>Percent With Access to Clean Water:</td>
</tr>
</tbody>
</table>

   Why is the problem of water especially acute in refugee camps?

3. Infant Mortality Rate
   Definition

   Why a good measure of development?
4. Life Expectancy
Pick with your partner a developing country and a developed country. We will look up their statistics at this website.
Google search term: infoplease life expectancy for countries

<table>
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<th>Developing Country: Life Expectancy</th>
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This also varies at the subnational scale, as do all measures of development, including GDP per capita, internet penetration, malnutrition, etc etc. Especially in developing countries, you will notice that all measures of development are higher in cities.

ESPN the article: What factors contribute to subnational differentiation in life expectancy?

<table>
<thead>
<tr>
<th>Economic</th>
<th>Social</th>
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<tr>
<td></td>
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<tr>
<td>Political</td>
<td>Environmental</td>
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Out of all of these measures of development, which is the best or most accurate measure? Why?

(CNN) Life expectancy at birth differs by as much as 20 years between the lowest and highest United States counties, according to new research published Monday in the medical journal JAMA Internal Medicine.

Dr. Christopher J.L. Murray, lead author of the study and director of the Institute for Health Metrics and Evaluation at the University of Washington, estimated life expectancy for each US county from 1980 through 2014. Murray and his colleagues analyzed county-level data and then applied a mathematical model to estimate the average length of lives.

Life expectancy at birth increased by 5.3 years for both men and women -- from 73.8 years to 79.1 years -- between 1980 and 2014, Murray and his colleagues wrote. During that time period,
men gained 6.7 years, from 70 years on average to 76.7 years, while women gained four years, from 77.5 years to 81.5 years.

But the numbers aren't the same everywhere. Looking at the finer details, Murray and his colleagues calculated a gap of 20.1 years between US counties with the lowest and highest life expectancies.

The counties with lowest life expectancy are located in South and North Dakota, while counties along the lower half of Mississippi, in eastern Kentucky, and southwestern West Virginia also showed lower life expectancies compared to the rest of the nation. The North and South Dakota counties include Native American reservations.

At the other extreme, residents of counties in central Colorado can expect to live longest, Murray and his colleagues said.

'Drastically different life expectancies'
While the study does not directly answer why we see low or high life expectancies in specific counties, it does look at what factors contribute to the overall gap between some counties, said Murray.

"We can see that many of the counties with very low life expectancies in the Dakotas, like Oglala Lakota County in South Dakota, overlap with large Native American reservations including the Pine Ridge and Rosebud reservations," said Murray.

Conversely, Summit County, Colorado, ranked as the county with highest life expectancy in 2014 at 86.8 years, is home to several ski resort towns.

"For both of these geographies, the drastically different life expectancies are likely the result of a combination of risk factors, socioeconomics, and access and quality of health care in those areas," said Murray.

Yet, socioeconomic factors are not everything, said Murray, explaining that "60% of the differences in life expectancy across counties can be explained by socioeconomic factors alone" yet that leaves a "substantial amount of unexplained differences."

"Behaviors like smoking and physical activity, along with risk factors like obesity and diabetes, are also very important," he said.

Still, almost all counties throughout the nation showed improvement over time, though the number of additional years varied across the nation. Counties in central Colorado, Alaska and along both coasts experienced larger increases than most other counties. Meanwhile some southern counties in states from Oklahoma to West Virginia experienced either no improvement or very little over time.

The most positive note is that, over the study period, all counties show declines in the risk of early death for children under the age of 5 years old, say the authors. And, nearly all counties (about 98%) show declines in the risk of early death for people between the ages of 5 and 25, as well as those between 45 and 85.

However, people between the ages of 25 and 45 show an increased risk of death in 11.5% of counties over the study period.
The study didn't evaluate what might drive changes in mortality risks for specific age groups, Murray said, but he speculates that the same general factors that impact life expectancy overall may drive differences for those ages 25 to 45.

What causes differences in life expectancy? The reasons for life span inequality have been explored in previous studies so the current study examined the extent to which just three factors contributed to lower or higher survival. The three factors are socioeconomic levels and race/ethnicity, behavioral and metabolic risk, and health care.

"Risk factors -- obesity, lack of exercise, smoking, hypertension, and diabetes -- explained 74% of the variation in longevity," said Murray. "Socioeconomic factors, a combination of poverty, income, education, unemployment, and race, were independently related to 60% of the inequality, and access to and quality of health care explained 27%.

The authors used new methodologies that are more precise than past models, but county level data are all subject to error, the authors note. If recent trends are allowed to continue, the differences in life expectancy across counties will increase, not decrease, the researchers add.
How to Solve Development

HIE

• How would improving access to healthcare improve the economy?

• How would improving access to infrastructure improve the economy?

• How would improving women's access to education improve the economy?

MICROFINANCE

• The ___________________ ____________ Founded: 1976 in Dhaka, Bangladesh by _____________________, who won the Nobel Prize for Peace.

• Banks in the traditional system have been reluctant to lend money to anyone unable to give some form or other of security. Grameen Bank, on the other hand, works on the assumption that even the poorest of the poor can manage their own financial affairs and development given suitable conditions. The instrument is microcredit:

• When Grameen Bank was awarded the Peace Prize in 2006, more than seven million borrowers had been granted such loans. The average amount borrowed was ______dollars. The repayment percentage was very high. Over _____ per cent of the loans went to women or groups of women. Experience showed that that ensured the best security for the bank and the greatest beneficial effect for the borrowers' families.

• How to ensure repayment? Loan only to _______. No collateral needed, only get __________________to vouch for you! But, if one woman doesn’t repay her loan, the five other women ____________________________!

• The women support each other and form a safety net to ensure success! If you have an unexpected cost, they can help you!
• What are some of the struggles faced by people living on a dollar a day? Think about the following:

1. The children’s health

2. The children’s education

3. Access to healthcare

4. Access to cash

5. Susceptibility to disaster (no safety net)

• What was the solution the young men found the most useful in resolving poverty?