
TITLE:

Linking Social Studies History and Geography with Mathematics

DIVISION:

Intermediate

STRAND:

History: Canada, 1890-1914: A Changing Society

GRADE 8: IMMIGRATION BAR GRAPH

These activities link History: Canada, 1890-1914: A Changing Society with data management expectations in math.

BIG IDEA

Social changes that occurred at this time have had a lasting impact on Canada.

Guiding Question(s)

- What role has diversity played in the development of Canada?

Framing Question(s)

- By constructing and analyzing bar graphs and line graphs for Canadian Immigration during the late 19th and early 20th Centuries ,what conclusions can be drawn about the nature of Canadian immigration during this time?
- Why were so many people willing to come to Canada during this time period?
- Why were certain ethnic groups entering Canada more than others?

Learning Goals

- I can make links between past and current practices to determine what has stayed the same and what has changed
- I can explain why something has changed or stayed the same in the natural environment and / or human society in a period of time

CONCEPTS OF DISCIPLINARY THINKING

Cause and Consequence:

This concept requires students to determine the factors that affected or led to something (e.g., an event, situation, action, interaction) as well as its impact/effects. Students develop an understanding of the complexity of causes and consequences, learning that something may be caused by more than one factor and may have many consequences, both intended and unintended.

Historical Significance

This concept requires students to determine the importance of something (e.g., an issue, event, development, person, place, interaction) in the past. Historical importance is determined generally by the impact of something on a group of people and whether its effects are long lasting. Students develop their understanding that something that is historically significant for one group may not be significant for another. Significance may also be determined by the relevance of something from the past, including how it connects to a current issue or event.

Social Studies Inquiry Process (Revised [2013] SSHG Curriculum page 23)

Inquiry Process:

The students will collect immigration data from Statistics Canada and other websites outlined below. They will then compare and contrast the graphs they build and the trends they discover. They will use the information they graph to help guide them in other inquiries to answer the three main framing questions of the lesson.

The Social Studies Inquiry Process Model can be viewed on page 23 of the 2013 Social Studies Curriculum that can be viewed through the link below.

<http://www.edu.gov.on.ca/eng/curriculum/elementary/sshg18curr2013.pdf>

The Spatial Skills: Using Maps, Globes, and Graphs (Ontario Curriculum pages 24-25)

Spatial Skill:

Students will develop bar graphs and/or line graphs by hand or by using computer applications and then will analyze their graphs to determine trends in the data.

PRIMARY ACTIVITY

Students will collect immigration data from Statistics Canada, build a series of graphs to display this data, determine trends in the data and use the data and other inquires to answer the following questions:

- What conclusions can be drawn about the nature of Canadian immigration during this time?
- Why were so many people willing to come to Canada during this time period?
- Why were certain ethnic groups entering Canada more than others?

The students will complete the following in this activity:

- Review a bar graph of Canadian Immigration from 2008 to 2010
- Review trends in the data, discuss why certain ethnic groups are coming to Canada at this point in time, and read and interpret the data and the graph so that the teacher knows where to provide support.
- Collect immigration data from the sources outlined below for Canadian Immigration
- Construct a bar graph of Canadian Immigration from 1890 to 1917 by hand or by using computer applications like Microsoft Excel
http://www65.statcan.gc.ca/acyb02/1937/acyb02_19370194001-eng.htmhttp://www65.statcan.gc.ca/acyb02/1937/acyb02_19370194001-eng.htm
- Construct a bar graph of Canadian Immigration by nationality from 1911 to 1917 http://www65.statcan.gc.ca/acyb02/1917/acyb02_19170113-eng.htm
- Develop a line graph of Oriental Immigration from 1906 to 1917
http://www65.statcan.gc.ca/acyb02/1947/acyb02_19470136011-eng.htmhttp://www65.statcan.gc.ca/acyb02/1947/acyb02_19470136011-eng.htm
- Analyze the graphs they created and look for trends
- Use the data and other inquires to answer the following questions:
 - What conclusions can be drawn about the nature of Canadian immigration during this time?
 - Why were so many people willing to come to Canada during this time period?
 - Why were certain ethnic groups entering Canada more than others?

DIFFERENTIATION SUGGESTIONS

Word prediction software could be provided to those students who need support with their writing when they answer the main questions of the activity. This could also be a group assignment.

EduGains outlines many effective ways to differentiate lessons, links to these

www.oessta-teachers.com



resources are provided below.

<http://www.edugains.ca/newsite/index.html>

EduGains – Differentiated Instruction - DI educators package – DI scrapbook:
<http://www.edugains.ca/newsite/di2/edupackages/2010educatorspackage.html>

TECHNOLOGY INTEGRATION OPPORTUNITIES

Bar graphs and line graphs can be easily generated through Microsoft Excel, Mac Numbers, or a variety of iPad applications. Students will also be using the Internet to collect the required information to graph from Statistics Canada and they will also use it to conduct further inquiries based upon the data they graph to help them answer the three main guiding questions of the activity.

ASSESSMENT

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Put up the bar graph on the link below for current Canadian immigration from Statistics Canada and ask the students what they can see. Where are the majority of new people to Canada coming from? Why might they be coming? Is this different from the past? This exercise will help determine the background knowledge students have of immigration to Canada, their ability to read a bar graph and their knowledge of when and why a bar graph is used to display certain types of data.

<http://www.cic.gc.ca/english/resources/statistics/facts2010/permanent/10.asp>
<http://www.cic.gc.ca/english/resources/statistics/facts2010/permanent/10.asp>

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This activity could be evaluated using anecdotal notes that track student progress. Teachers could also develop anchor charts with their students that outline how to construct the graphs, analyze trends in the graphs and their abilities to use the data they graphed and other inquiries to answer the three main questions of the activity.

Descriptive feedback is another assessment strategy teachers could use to provide students with the constructive criticism they need to improve their work.

Students will review the information posted on the anchor charts to track their own progress in relation to the assignment and determine their own next steps. They will also be expected to act upon any descriptive feedback that they have been given by their teacher to improve their work, work habits, or to help facilitate their completion of the activity.

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The ability to create the required graphs, determining trends in the data, and developing a plausible and reasonable action plan to reduce global infant mortality rates could be assessed using a rubric that could be teacher generated or teacher and student generated. A checklist would also be effective.

OVERALL EXPECTATIONS

Grade 8 History:

B3. Understanding Historical Context: describe various significant events, developments, and people in Canada between 1890 and 1914, and explain their impact (FOCUS ON: *Historical Significance; Cause and Consequence*)

Grade 8 Math – Data Management:

Overall Expectations #1: Collect and organize categorical, discrete, or continuous primary data and secondary data and display the data using charts and graphs, including frequency tables with intervals, histograms, and scatter plots

Overall Expectations #2: apply a variety of data management tools and strategies to make convincing arguments about data

SPECIFIC EXPECTATIONS

Grade 8 History:

B3.1 identify factors leading to some key events or developments that occurred in and/or affected Canada between 1890 and 1914 (*e.g., promoting Canada as a destination for immigrants, anti-Asian riots in Vancouver*), and explain the historical significance of some of these events for different individuals, groups, and/or communities *Sample question:* “What was the impact of Clifford Sifton’s approach to promoting Canada abroad? How did this approach change the face of the West?”

B3.3 identify key social and economic changes that occurred in and/or affected Canada during this period (*e.g.,; changes in the home countries of immigrants; the Immigration Act of 1910;*), and explain the impact of some of these changes on various individuals, groups, and/or communities

Grade 8 Math – Data Management
Collection and Organization:

#1 - read, interpret, and draw conclusions from primary data (e.g., survey results, measurements, observations) and from secondary data (e.g., election data or temperature data from the newspaper, data from the Internet about lifestyles), presented in charts, tables, and graphs (including frequency tables with intervals, histograms, and scatter plots)

#3 - collect and organize categorical, discrete, or continuous primary data and secondary data (e.g., electronic data from websites such as E-Stat or Census At Schools), and display the data in charts, tables, and graphs (including histograms and scatter plots) that have appropriate titles, labels (e.g., appropriate units marked on the axes), and scales (e.g., with appropriate increments) that suit the range and



distribution of the data, using a variety of tools (e.g., graph paper, spreadsheets, dynamic statistical software)

Data Relationships:

#5 - identify and describe trends, based on the rate of change of data from tables and graphs, using informal language (e.g., “The steep line going upward on this graph represents rapid growth. The steep line going downward on this other graph represents rapid decline.”)

6 - make inferences and convincing arguments that are based on the analysis of charts, tables, and graphs (Sample *problem*: Use data to make a convincing argument that the environment is becoming increasingly polluted.)

CITIZENSHIP EDUCATION FRAMEWORK

Identity:

- Identify and develop their sense of connectedness to local, national, and global communities

RESOURCES

- Immigration to Canada 1852 – 1936
http://www65.statcan.gc.ca/acyb02/1937/acyb02_19370194001-eng.htm
- Immigration to Canada from the UK, USA and other Nations 1908 – 1936
http://www65.statcan.gc.ca/acyb02/1937/acyb02_19370195002-eng.htm
- Immigrant Arrivals to Canada 1892 – 1946
http://www65.statcan.gc.ca/acyb02/1947/acyb02_19470130001-eng.htm
- Oriental Immigration to Canada 1906 - 1946
http://www65.statcan.gc.ca/acyb02/1947/acyb02_19470136011-eng.htm
- Arrivals at inland and ocean ports in Canada, by nationalities, fiscal years 1911 to 1917
http://www65.statcan.gc.ca/acyb02/1917/acyb02_19170113-eng.htm