Instructions to help you with your Culminating Project:

Handout for the Culminating project instructions:
MDM4U - Culminating project

Step 1: Brainstorm ideas for your topic:
Link: UNSDG Goals:
https://www.un.org/sustainabledevelopment/sustainable-development-goals/
Browse the infographics, facts, and figures, targets and connected links. This page will give you some ideas that might help you to choose your Critical question.

Step 2: Choosing a topic:

Your next goal is to choose a topic. Consider the following questions while choosing your topic. I am reattaching the ‘ Google doc’ for the guidelines on choosing the topic. **Post your Big Question in the ‘ Google classroom’ .**

- What are some of the biggest issues you see affecting your school, community, country and/or the world?
- Who do these issues affect, and how?
- What (if anything) is already being done to address them?
- What more needs to be done?
- What could inspire action to make a change?
- Who could be part of taking action and finding solutions?

https://docs.google.com/document/d/1pY9AQlROC6VyYCWYQTvYX-UtP0rH6nGpD3a58CMP9qM/edit#heading=h.p9c44smawvmh

Step:3:

Collect the articles to identify the issues related to your ‘ Big question’ :

Use ‘ Google Scholar’ and type in the topic you choose. Select at least two articles. Use that information to write the rationale for your project.

Step 4: data collection :
Link to ‘ StatCanada’ website where you find the collection of Data tables: (Choose ‘ tables’ on the top horizontal list.
Canada at a Glance, 2018

Video instructions to access ‘ Data’ from ‘Stat Canada’ website:
https://www.statcan.gc.ca/eng/sc/video/howto

• University of Michigan Library of Statistics
http://www.lib.umich.edu/govdocs/stats.html
• Nation Master www.nationmaster.com
• United Nations Population Fund
https://www.unfpa.org/data

More useful websites- if you are still looking for a database to get statistics :

• Gapminder website : https://www.gapminder.org/data/
• Culturegram: http://online.culturegrams.com/world/data_tables.php?bc=w
• Professional Sports sites (NHL.com, NFL.com, NBA.com, MLB.com, etc.)
• Statistics Canada: www.statcan.gc.ca

Add your list here or in the ‘ Google classroom’ to help your peers

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Step : 5 How to create a graph using ‘ Google sheets’
https://www.wikihow.com/Create-a-Graph-in-Google-Sheets

Notes: from text book
https://docs.google.com/viewer?a=v&pid=sites&srcid=ZHVyaGFtLmVkdS5vbi5jYXxiZW50b24tbWF0aGVtYXRpY3N8Z3g6MzcwOTk5NjRiNDRlMjJjNw

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6. How to calculate ‘ Mean, median, mode and Standard Deviation’
https://www.youtube.com/watch?v=2rEhWFhSqnI

Analysis:
These are the concepts related to Statistics. Learn these terms and try to find out as much as possible(Not all of them) from your data set. I will check for at least six of them.

1. **One variable:**
    - Mean

- Median
- Mode
- Standard Deviation
- Range

2. Two variable:

- Scatter Plot

  Many statistical issues deal with identifying the relationship between the two variables. For example, if one variable is hours spent studying and the second variable is marked on a test. A researcher could conduct an experiment to obtain data, then calculate one and two-variable statistics. With these

calculations, the researcher could then draw conclusions about the relationship between the variables.

To begin research, the researcher would develop a hypothesis about the two variables

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Sample student presentations from my class :

Sample Project 1

Sample Student's report