

Math 9 – Statistics Project

Curriculum Links:

Strand – Statistics and Probability

1. **Data Collection** – Describe the effect of each of the following on the collection of data.
 - bias
 - use of language
 - ethics
 - cost
 - time and timing
 - privacy
 - cultural sensitivity
 - ☐ I can describe the effect of various factors on data collection using examples and appropriate mathematical vocabulary.
2. **Samples** – Select and defend the choice of using either a population or a sample of a population to answer a question.
 - ☐ I can determine when using a population or a sample is more appropriate and defend the choice.
3. **Data Collection, Display, and Analysis** – Develop and implement a project plan for the collection, display, and analysis of data by:
 - ☐ I can formulate a question for investigation.
 - ☐ I can choose a data collection method that includes social considerations.
 - ☐ I can select a population or a sample.
 - ☐ I can collect data.
 - ☐ I can display collected data in an appropriate manner.
 - ☐ I can draw conclusions to answer questions.

Tips for Teachers:

Instructional Support:

What instructional support might students need in order to be successful with the task?

Teacher tips:

- Students should have encountered/mastered the first 2 outcomes in this strand (the effects of social considerations, sample vs. population) before beginning this performance task.
- Students need exposure to various methods of data collection that may produce different results.
- Use one of the authorized resources for case studies to identify and analyze potential problems related to bias, use of language, ethics, cost, time and timing, privacy, or cultural sensitivity.

Possible investigations:

- Arena timetabling.
- Use of electronics in the school.
- Raising the age for Learner's Driving Permits.
- Creating a new tax to pay for an new recreational facility.

Possible audiences:

- Recreational Board
- School Administration/Parent Council
- Motor Vehicle Branch
- City Council/MD Council

Possible ways to present conclusions and recommendations:

- Create a PowerPoint presentation.
- Create a poster presentation.
- Write an article in the newspaper or letter to the editor.
- Create an oral presentation.

To help students formulate a question for investigation :

- Brainstorm a list possible investigation questions.
- Identify social considerations (bias, use of language, etc.)