

Math 9 – Statistics Performance Task

Controversial issues emerge constantly in communities and schools. Before decisions can be made regarding the resolution of these issues, researchers often work through a data collection and analysis process. The purpose of the data collection is to obtain information necessary to make informed decisions that reflect the opinions of all stakeholders. This information needs to be sorted and analyzed before it can be used to make decisions.

In this project, you will be collecting and analyzing data regarding a relevant emerging issue in your school or community that is important to you. You will need to identify an issue, develop a plan to collect, display and analyze data, and create a presentation to share your conclusions and recommendations with the appropriate audience.

You will need to:

1. Develop a project plan:
 - ☐ Choose a relevant issue for investigation.
 - ☐ Formulate a question taking into account social considerations (bias, use of language, ethics, cost, time and timing, privacy, cultural sensitivity).
 - ☐ Identify the population and select an appropriate sample.
 - ☐ Choose a data collection method that takes into account social considerations.
2. Collect the data.
3. Display the collected data.
4. Analyze the data.
5. Draw conclusions and decide on a recommendation.
6. Create a presentation to report the results and make recommendations to the relevant audience.

Student Role:

Investigator

Audience:

Governing body that reflects the question being investigated.

Performance and/or Product:

A presentation sharing the conclusion and recommendations of the investigation question.

Context:

Identify an emerging issue in the school or community and formulate a question for investigation regarding the issue. Develop a project plan to collect, display and analyze data addressing the issue. Present your conclusions and recommendations to the relevant governing body.

	4 Excellent	3 Proficient	2 Adequate	1 Limited	Insufficient or Blank
Formulate a question for investigation.					No score is awarded because there is insufficient evidence of student performance based on the requirements of the assessment task.
Justify your data collection method and choice of sample or population.					
Collect data.	Design and Complete Checklist				
Display data.	See Checklist				
Analyze data and draw conclusions.					
Present and justify recommendations.					

Collect Data:

- Generate a checklist based on your project plan including timelines.

Display Data:

- ✓ Title
- ✓ Labels
- ✓ Legend (if appropriate)
- ✓ Appropriate Representation (ex. type of graph)
- ✓ Readable
 - Size
 - Color
 - Spacing
 - Organization
 - Font
 - Spelling

Math 9 - Stats Project

Self and Teacher Feedback Tool for Development of a Project Plan

The development of a project plan is one of the most crucial steps in the research process. It is often discovered too late that the data obtained is skewed or invalid because of poor sampling methods, question phrasing, or elicitation techniques. Data collection should be carried out in a structured, systematic and scientific way in order to eliminate the effects of bias.

Check in with your teacher for approval at the end of each step before moving on.

In my project plan, did I:	My Plan	Justify Your Choice	Teacher Feedback
choose an issue that is a relevant emerging issue in your school or community that is important to you for investigation			
identify the audience			
formulate a question taking into account social considerations			

• identify the population and select an appropriate sample			
• choose a method of sampling that takes into account social considerations			
• create your checklist for collecting your data			
• decide how you will sort and organize your data as you collect it			