

Poster Project – Unit 1

MAP4C

Your job is to make a survey with at least 10 questions. Your survey topic needs to be something related to school life at Rideau High School. Using the results from your survey you are going to make a poster whose purpose is to convince the administration to make some sort of change in the school. Your survey must include at least ONE OPEN questions which would have a numeric answer so that you can calculate the mean, median, mode, range, standard deviation, quartiles, and percentiles.

Eg. **Smoking Survey**

1. How many cigarettes do you smoke a day
 - 0-5 a day
 - 6-10 a day
 - More than 10
2. Don't you agree that the administration is too strict with smokers and they should be more lenient regarding where smokers can smoke.
 - Agree
 - Disagree
 - No opinion
3. How long do you spend smoking during the school day? _____

You could then use the results of the survey to make a poster that promotes the elimination of the non-smoking rule within 10 metres of the school.

To hand in:

1. Survey
2. Description of what type of sample was used
3. Explanation of where bias exists in your survey and why it is there
4. Poster to convince administration to make a change
5. By hand **and** with technology, calculate the mean, median, mode, range, standard deviation, quartiles, inter-quartile range
6. Analysis of your statistics
7. One statement involving percentiles that comes from your data

| | R (R2 or R1) | 1 | 2 | 3 | 4 |
|--------------------------------|--------------|--|---|---|---|
| Survey Questions | | The survey has 10 questions but some are off topic and do not seem to fit the purpose of the poster. | | | All 10 questions are clear and on topic with an end purpose in mind. |
| Explanation of bias | | Little or no use of bias in survey. Or bias exists but it not explained well. It is not connected to the end purpose of the poster. | | | Clearly explains the all forms of bias in the survey and surveying process and very clearly details how it is useful in promoting their cause |
| Sampling Technique Explanation | | Explanation of sampling technique is lacking detail. For example, student just indicates the technique used but not does not give explanation. | | | The sampling technique used is clear and a good explanation of what type of sample has been achieved in relation to the population as a whole is given. |
| Poster | | The Poster makes a statement but does little to connect the data from the survey to the statement being made | | | The poster has clear purpose and succeeds at promoting it cause. ALL useful and relevant data is included in the poster to strengthen its claim |
| Statistics by hand | | Several mistakes are made when calculating statistics by hand. All work is not shown. | | | All statistics are correct and steps are all clearly shown |
| Statistics with Technology | | Several mistakes are made when calculating statistics with technology. Statistics are not all labelled so it is unclear which stats go with which numbers. | | | All statistics are calculated using technology. They are labelled clearly and printed out and included. |
| Analysis | | Little analysis given to explain the significance of the various statistics. | | | An analysis of all statistics is offered which very clearly outlines the meaning behind each statistic. |
| Percentiles | | A statement is made which involves percentiles. However, an error exists which demonstrates an incomplete understanding of the concept of percentiles. | | | An interesting and insightful statement is made that uses percentiles. The calculations for the percentile work are clearly shown. |