Lesson 22: Presenting a Summary of a Statistical Project

A statistical study involves the following four-step investigative process:

Step 1: Pose a question that can be answered by data.

Step 2: Collect appropriate data.

Step 3: Summarize the data with graphs and numerical summaries.

Step 4: Answer the question posed in Step 1 using the numerical summaries and graphs.

Now it is your turn to be a researcher and to present your own statistical study. In Lesson 17, you posed a statistical question, proposed a plan to collect data to answer the question, and collected the data. In Lesson 21, you created a poster or an outline of a presentation that included the following: the statistical question, the plan you used to collect the data, graphs and numerical summaries of the data, and an answer to the statistical question based on your data. Use the following table to organize your presentation.

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| --- | --- |
| Points to consider: | Notes to include in your presentation: |
| 1. Describe your statistical question. |  |
| 1. Explain to your audience why you were interested in this question. |  |
| 1. Explain the plan you used to collect the data. |  |
| 1. Explain how you organized the data you collected. |  |
| 1. Explain the graphs you prepared for your presentation and why you made this graph. |  |
| 1. Explain what measure of center and what measure of variability you selected to summarize your study. Explain what you selected these values. |  |
| 1. Describe what you learned from the data. (Be sure to include an answer to the question from step (1) above.) |  |

Closing Exercise

After you have presented your study, consider what your next steps are by answering the following questions:

1. What questions still remain after you concluded your statistical study?
2. What statistical question would you like to answer next as a follow-up to this study?
3. How would you collect the data to answer the new question you posed in (2)?

Lesson Summary

Statistics is about using data to answer questions. The four steps used to carry out a statistical study include posing a question that can be answered by data, collecting appropriate data, summarizing the data with graphs and numerical summaries, and using the data, graphs, and summaries to answer the statistical question.