9.4 Evaluating Your Own Project

After completing your analysis and drawing a conclusion, you need to evaluate your investigation and the results. It is important that you look at the quality of your investigation and results. Otherwise, you may draw incorrect conclusions. For example, insufficient data may result in biased results. Flawed data collection techniques by the primary investigator may lead you to draw incorrect conclusions.

Your evaluation should include:

- reflection on your conclusion
- reflection on your investigation methodology
- reflection on what you learned from this project

Reflection on Your Conclusion

- Does the conclusion you reached support or refute your hypothesis?
- How strong is your evidence?
- Are there any limitations on your conclusion?
- In what ways could this conclusion be extended beyond the scope of your hypothesis?

Reflection on Your Investigation Methodology

- Were there any problems with data collection (sufficiency, availability, ease of access)?
- Why did you choose to organize the data the way you did?
- Are there other ways to organize the data? Why did you reject these methods?
- Were there any problems with the data analysis? How did you solve these?

- Was it necessary to revise/refine/redefine your problem as you progressed through your investigation? Outline what/when/why your problem was revised. Was it necessary to go back and collect more data to accurately judge your hypothesis?

- Did you examine your problem from various points of view (such as hypothesis testing, probability theory, or simulation)? If so, explain. If not, why not?

- Did you employ multiple tools from this course (one- or two-variable statistics, matrices, permutations, and so on)? If so, explain. If not, why not?

Reflection on Your Learning

- Do you feel that this project gave you a better understanding of how statisticians solve problems? Explain.

- Do you feel that this project gave you a better understanding of how the data-management tools from this course are used? Explain.

- If you were to do a similar project in the future, what would you do differently and why?

- Describe how you feel about this project. Did you enjoy it? Why or why not?

- Outline what you learned about presentations from this project.

Practise

1. Work alone or in a group to develop a rubric and weighting for scoring one of the other projects you completed in this course.

2. Prepare a "top ten" list of omissions from projects you have seen or completed in the past.

Moving Your Project Forward

Use the guidelines stated above to evaluate your culminating project.