Grant Proposal



**Context:** Scientists are constantly building on observations and data to generate new questions that they can test with scientific experiments. Often in science, as well as other disciplines, getting funding (money) for the next project involves writing a proposal for a grant. For this task, imagine that your research group is applying for a grant from the National Science Foundation (NSF) to continue studying something you noticed in your Ecocolumn. You will create a grant proposal and seek feedback from another research group before submitting your grant proposal to the NSF.

**Purpose:** To communicate findings from your ecological monitoring and to present a compelling case for your proposed study.

**Product:** Building off the work you have already done in this project, you will create a **Grant Proposal**. In your proposal, you will describe your Ecocolumn and the ecological monitoring data you have collected. You will also present a question that builds on your data and observations, and propose a follow-up controlled experiment.

**Your Grant Proposal will be 2–4 pages long (including images) and will need to have the following information:**

\_\_\_Brief description of your Ecocolumn

\_\_\_Brief description of the variables you monitored

\_\_\_Copies of your group’s TWO models pasted into the document

\_\_\_One or two images of your Ecocolumn pasted into the document

\_\_\_Graphs of your data and discussions of trends from your Ecocolumn monitoring

\_\_\_Description of your testable, refined follow-up question

\_\_\_Description of your follow-up study design

\_\_\_Your group’s hypothesis

\_\_\_What results you expect from your proposed study

\_\_\_What results would contradict your expectations

\_\_\_A brief closing

You can use the outline below as a scaffold as you write your Grant Proposal.

Introduction (2–3 paragraphs)

(Brief Description of your Ecocolumn, your monitoring project, and the variables you monitored; 2–3 paragraphs)

Models (paste diagrams and pictures into document)

(Your group’s two natural biogeochemical diagrams, pasted into this document and labeled. One or two pictures of your Ecocolumn taken during data collection, pasted into this document and labeled).

Data and Observations (1–2 paragraphs)

Graphs of your data and discussion of trends/events in the data. 1–2 paragraphs.

Study Proposal (4–5 paragraphs)

Your Testable Question and how it relates to your data and observations from ecological monitoring (1 paragraph). Your proposed study design (1–2 paragraphs). Your group’s hypothesis with explanation (1 paragraph). Your expected results, as well as results that would contradict your hypothesis (1 paragraph)

Closing (1 paragraph)

Emphasize what you hope we can learn from your proposed study. Thank the grant application committee for considering your proposal. Thank your school/teacher for funding the original Ecocolumn monitoring research.