Bio 192 General Tips

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Biology 192 focuses on writing in the sciences, and creating approachable, readable lab reports, so it’s important to learn some key aspects of what makes a successful piece of science writing.

**Keep it Simple**

It’s important to keep details about the experiment in your paper, but be sure to avoid adding in information that isn’t important. By taking out the “fluff” of your lab report, it helps the reader stay focused on what the lab was all about, rather than leading them astray with too many unimportant details.

**Keep it Precise**

Using ambiguous terms can be detrimental to your lab report. If your reader has to guess or assume something in your lab, then you haven’t been clear enough. For instance, if you were describing how to cook something to a friend, and used the language “set the oven for a high temperature and let the casserole bake for a while”, his or hers definition of “high temperature” and “for a while” might be vastly different than yours. Instead, if you said “set the oven for 350 degrees and let the casserole cook for 30-35 minutes”, your friend will be able to cook the casserole just as you would have.

**Use The Right Language**

One thing that can be tricky in science writing is trying to decide what tone and language should be used in the lab report. Keep in mind that in general, other people in the science will be reading your report, but that doesn’t mean you have to throw in lots of fancy words to make the lab you conducted “fancier” than it really was. Keep your language professional and clear, but don’t complicate your lab with complex words and definitions. Let your work speak for itself! On the other hand, don’t “dumb down” your writing, even if it’s well-intentioned. While it’s important to make sure a wide audience can understand and interpret your lab, you don’t want to come off as though you are talking down to your readers. Again, if you keep your tone professional and precise, you won’t need to worry about your reader understanding your writing.

**Use a Passive Voice**

Keeping a passive voice throughout a lab report is something a lot of students struggle with; after all, if I conducted the experiment, why shouldn’t I be able to use language such as I, me, and we? The main reason why lab reports do not contain active voice, or using first person pronouns, is that it draws attention away from the lab itself, and may be confusing to the reader. For instance, if you said “we collected ten bags of soil for our experiment”, you may be referring to you and your lab group, but the reader might feel as though you are including them in that group of people. This can be confusing and often distracting to the actual report of what happened during the experiment. Sometimes
passive voice can be considered “boring”, but use details and descriptions of your lab to keep the reader.
Avoid phrases like “I believe” or “I think” at all costs. A lab report should be free of all emotions, opinions, or biases. Treat a lab report like a recipe, you wouldn’t expect to see the chef’s thoughts or opinions about the dish in the recipe portion of their cookbook, so stay away from expressing your thoughts or opinions about the lab report and focus on the facts that the reader needs to know and understand. This keeps your lab objective and valid.

Know Your Limits

Nobody is expecting you to be a science genius by the end of your experiment, or the end of Biology 192 either. You might not know every important aspect and implication of your lab, and that’s okay. It’s important to avoid making drastic conclusions or assumptions in your lab report. You might note that you found a correlation between two or more things in your experiment, but keep in mind that many factors go into an experiment, and you don’t want to generalize your results. For instance, if noticed that every time you wore a red shirt to school, it started to rain, you could mention this weird phenomenon to your friends, but don’t assume that your shirts are magical and control the weather, either.