I**M**RaD: **M**ethods and Materials

How do I ensure that my Methods & Materials section explains the materials and process used in my experiment/research in such a way that another scientist or researcher could take the same actions and get the same results?

Check for: how, what, and why.

- ☐ How? How was your experiment/research conducted?
- ☐ What? What materials/subjects did you use? (Be specific!)
- ☐ Why? Why did you use *those methods*? (Think about your hypothesis.)

* Your why (including reasons and rationale) explains the significance of your specific actions in achieving your exact results.

While an experiment or study might not be unique, the way that *you executed it* likely is. Including the specifics of *your method* as well as *your rationale* for executing steps in that specific way (to attempt to prove *your hypothesis*) ensures that another scientist or researcher could do the same study, the same way, with the same results.

Strategies:

1. Close your eyes and reimagine yourself in the lab or the field. What steps did you take? What did you use to execute those?

   Talk yourself through the experiment/study and write/type as you talk.
   (You might even use a recording to pick out the most significant details or speech recognition software to get all of your ideas down.)

2. Now, read through a few instructions or a small section of your "Methods," and ask yourself, "Why did *I have to* do it *that way?*"*

   HELPFUL HINT Once the "how" and "what" are in place, it might be easier to insert in the "*why,*" or reason for your actions.

3. Alternately, for a drafted section, use the checklist above to highlight those components that are present and more clearly see what's missing. Did you include: how? what? why?

4. Lastly, use your rubric/journal's guidelines as a Proofreading Checklist, to ensure that your Methods section matches the expectations of your professor/course or field.