Directions

In this task, you will start your paper by writing a draft of your Introduction and your Methods Section.

**Duration: 2 hours**

**Grouping: Individual**

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* Devise a **research topic** that you would like to analyze using a sample

survey.

* Name and describe the **quantitative variable** you are investigating. It

must be quantitative *(see additional resource on quantitative variables)*

* State the **population** that you will apply your results to. Justify your

choice. You have to decide if your results generalize to all seniors at

your school, all seniors in high school, all

students aged 15-18, etc.

Introduction Section

### Keep your introduction interesting! This is the section of the paper that should communicate your interest in the variables and population that you will be studying. Your language does not need to be overly technical in this section, although you should be clear and precise. Your introduction should be between 1 and 3 paragraphs long.

* Establish the topic you are interested in learning about, and why.
* Define your question and the variable you will measure.
* Justify your choice of populations.
  + Why are you interested in these populations?
  + How do you know your samples will be able to generalize to these populations?

Methods Section

Your “Methods” section should be very specific and precise. You should include many details about your methodology and use mathematical vocabulary. The purpose of this section is for readers to verify if your conclusions are valid by evaluating the quality of your methodology. Other researchers should also be able to repeat the same process by reading this section. Your methods section should be between 3 and 4 paragraphs long.

* Discuss the **sampling method** that you will use to collect data in the field.
  + What kinds of bias might exist as you choose your sample, and what strategies will you use to minimize this bias? How will you build randomness into your method?
  + What factors make choosing a sample more difficult in the field than in a controlled environment like the classroom?
* Discuss the **sampling method** that you will use to collect data within the school.
  + How will you choose a sample that is representative of the population you want to study?
  + What kinds of bias might exist as you choose your sample, and what strategies will you use to minimize this bias? How will you build randomness into your method?
* Discuss the **data collection method** you will use in order to get the most accurate, least biased data possible.
  + If you are giving a survey, how will respondents complete the survey in order to minimize response and nonresponse bias? (on paper, by e-mail, in person, etc.)
  + If you are asking a question on a survey, how will you word your question to be as clear as possible and to minimize any wording bias?

