

The Proposal Power Point

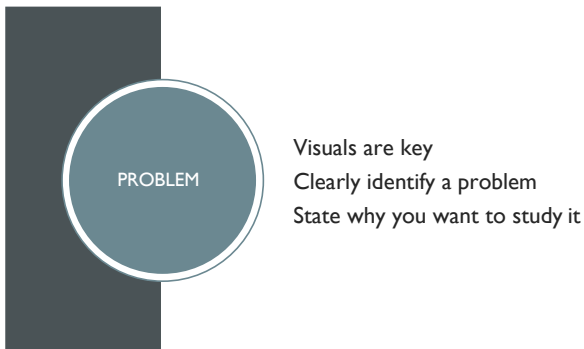
You have 10 minutes to present your proposed Research Project. Following this presentation, your teacher may allow 5 – 10 minutes for questions. Success hinges on your ability to be organized and to deliver a presentation that helps your audience understand your plan. Remember, your goal is to demonstrate your understanding of the topic, to state a viable Research Question (or Engineering Goal) and to outline an appropriate process for answering that question (or reaching the goal).

As you set up the presentation, try to keep the number of words per slide to a minimum (7 = maximum number!). The audience will be looking at YOU and listening to YOU. Think of the information on your slides as simply landmarks that help the listeners to better understand your message. Project proposals in science and engineering adhere to a common script, much like the written research proposal you have just completed.

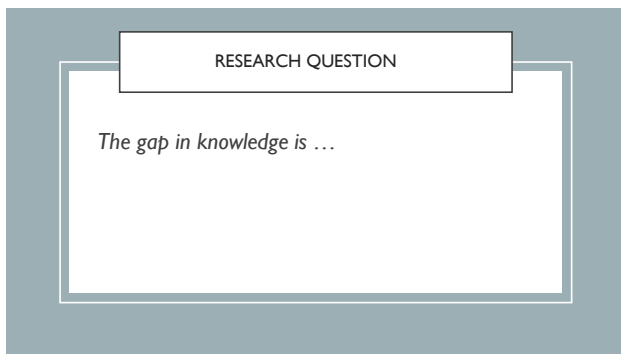
Title – The very first slide is used to display the title, your name, and the presentation date. The title should be concise, descriptive and informative.



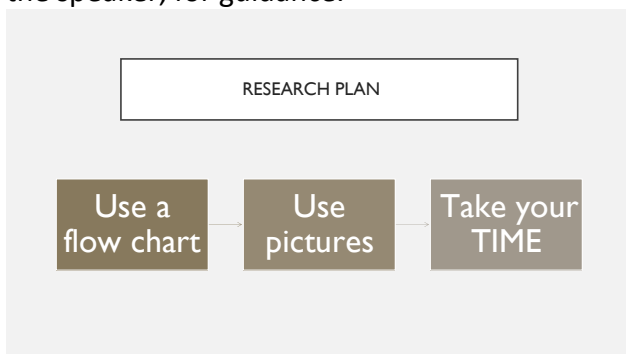
Problem & Rationale – You want your audience to be hooked. State the problem and explain why you are motivated to study it. Background research should be summarized; support every claim with evidence you have found in the literature. And briefly say how you will address the problem – you will elaborate on this in a few slides when describing the Research Plan.



Research Question or Engineering Goal – This is an ideal time to identify the “gap in knowledge” which you hope to address with your research. A clear, succinct statement of the question or goal sets the stage for the rest of your proposal talk. It should align with the gap in knowledge that you just identified.



Research Plan – Explain what you will do and what information you will need to collect to succeed. This part of the power point can be confusing for listeners. Put yourself in their shoes: for many, this is the first time they have thought about a project that you have been reflecting on for at least two months. You can help them by using flow charts and images. Take your time but be concise. Again, use as few words on the power point slides as possible. The audience will naturally be looking to you, the speaker, for guidance.



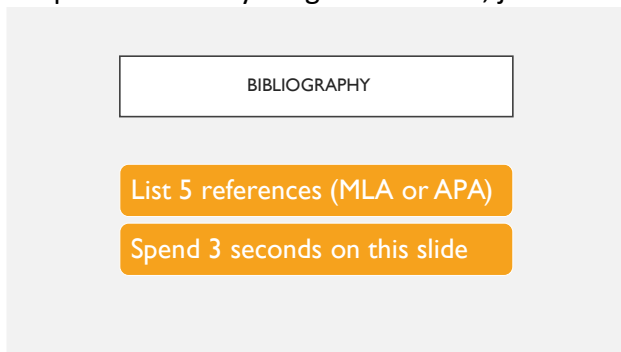
Data Analysis – Provide short identifier(s) for the method(s) you plan to use to analyze your data. Many statistical methods have generally accepted names; at this point, you just need to name the method(s) you intend to use. A strong proposal, however, will also include an example of how data will be collected prior to analysis. For example, you could include a table that shows how the data would be organized.



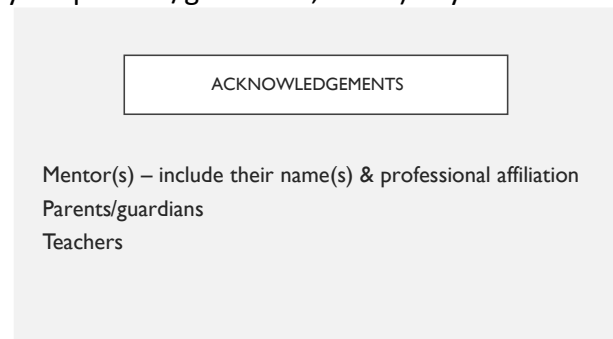
Risks & Safety – This is your opportunity to demonstrate that you have seriously considered safety measures that will need to be set in place. By identifying official approvals such as IRB's that you will need, you establish yourself as a thoughtful researcher.



Bibliography – On this slide, list your five best references. Use MLA or APA format. There is no need to speak about anything on this slide, just allow the audience to see that you have references.



Acknowledgements – This might be your most important slide. Here are the people that should appear and be thanked publicly: 1) your mentor – include their name(s) and professional affiliation, 2) your parents/guardians, and 3) any teacher who is taking time to view your presentation.



Appendices – You may want to add a few slides at the end that can be accessed easily when elaborating on questions the audience might pose after the presentation.

Teacher Notes:

As with the written proposal, the proposal power point is not a one-time effort. That is, any feedback and guidance students receive will be used later in the school year for the final project power point. Given that the same overall structure is suitable for the final project defense, students benefit a lot from putting effort into the proposal talk. It gives them an opportunity to see how everything will fit together into one storyline. Their full experience of writing and defending a proposal helps them considerably to organize and reflect on the work they will do.