GUIDELINES FOR EFFECTIVE THESIS WRITING

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Adapted from "The Grant Writer's Workshop"

Writing an introduction to your thesis

1. ***Introductory paragraph***
   Opening sentence
   Known
   Unknown
   Frame unknown as a problem

2. ***What, why and whom paragraph***
   Long-term goal
   Immediate objective, overall goal of your thesis
   Central hypothesis and how did you formulate it
   Rationale
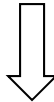
3. ***Specifics paragraph***
   List your specific objectives

4. ***Final paragraph***
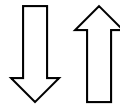   Innovation (if any)
   Expected outcomes
   General positive impact

PROBLEM STATEMENT

⇓

GAPS IN UNDERSTANDING

⇓ ⇑

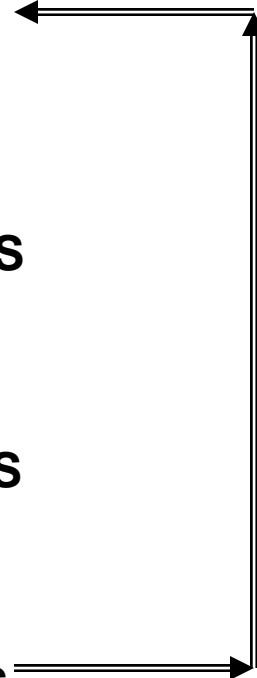**OBJECTIVE** ⟵

⇓

CENTRAL HYPOTHESIS

⇓

SPECIFIC OBJECTIVES

⇓

EXPECTED OUTCOMES ⟶

Tips On Writing The Literature Review

1. <u>Not</u> meant to be a comprehensive review of the entire field!
2. The purpose is to justify the need for what you propose in your thesis.

- Provide a _critical review_ of the relevant background and specifically identify the gaps in the knowledge base/need that you will address.
- Logically build a discussion towards what you expect your contribution (thesis) will address.
- Establish relevance of your thesis in advancing the knowledge in your field of research.
- Cite review articles in complete detail.

Summary: *It is meant to be literature review that is relevant to your proposed research topic!*

Tips On Writing The Research Methods Section

- *Provide complete details of reagents used, equipment used, include model number, vendor, address of the vendor.*
- *List out the experiments that you have undertaken.*
- *Write the experiment methodology in detail! Do not miss out times, pH and any other minute, but important details.*

Tips On Writing The Results Section

- *This is by far the toughest section to write.*
- *List out the tables and figures that best explain your work.*
- *Graphs should be uncomplicated, detailed and most of all presentable.*
- *Tables should be well laid out and unambiguous.*
- *Each figure or table should convey <u>only one theme</u> only.*
- *Avoid irrelevant information.*
- *Explain your figures and tables in scientific language, please do not expect faculty reviewers to make sense of your data.*
- *Figure legends must include methodology is cryptic detail, never discuss your data in legends!*

Tips On Writing The Discussion Section

- *This is <u>the most challenging section, yet</u> to be written.*
- *This is not a section where you simple rehash your results, you have done that already!*
- *Here you will demonstrate to your advisor and committee that you understand the problem, are on top of contemporary and archival research, and most of all that you can discuss the science behind your results. Your thought process <u>MUST</u> become obvious here!*
- *You will discuss your results here. What have you found out? How does that advance the knowledge in your area? Any exciting finding?*
- *Please highlight your contributions here.*
- *Generate enthusiasm about your work!*
- *Conclude on a positive note*

Tips On Writing The Conclusion Section

- *This is the easiest section to write.*
- *Provide conclusions about your observations.*
- *Provide a take home message*

Tips On Writing The Future Research Section

- *This is the section that I am waiting to read.*
- *Provide your thoughts on where we should go next based on your research observations.*
- *List shortcomings*

Thesis defense

- *Background*
- *Statement of problem.*
- *Formulation*
- *Key results*
- *Discussion*