

**Aim: SWBAT write a successful analysis
of lab reports.**

Do Now: What do we include in the analysis section
of a lab report.

https://docs.google.com/document/d/1aUDr7oAZ_LcUldUbiY7mHq92p3boS7ZEFYgS2clJv5E/edit?usp=sharing

<https://tinyurl.com/yanvg6f2>



Do not report what you “learned”: your data is not the results of a quiz!



Report whether you reached your experimental objective.

Discussion Section

- Gives meaning to the results, the “why”
- Places results in context of theory or conceptual framework
- Places results in context of previous research
- Assesses importance of findings
- Acknowledges limitations of methods
- Identifies new areas for exploration and/or ‘next steps’

Discussion Vs Results

- Results are the facts of the findings, unedited and unqualified
- Results are the presentation of the hard data (statistics, tables, figures)
- Discussion is about what the results mean
- Discussion is about the implications of the findings

Chart

Graphs

Structure of Discussion

- Main findings
- Interpretation of findings
- Interpretation compared to Thesis and intro
- What it Means
- Sources of error
- Future Study
- Limitations
- Summary

Main Findings

- Emphasis on “discussion”
- Summarize major findings
- Do not simply reiterate results
- Shift from numeric data to descriptive words
- Do not introduce additional or new results

Interpretation of findings

- What do the findings/results mean?
- Are the findings consistent with previous research or do they counter previous findings?
- Posit why this might be, particularly if your findings differ from others
- Do not restate content from Background
- Focus on points of comparison that bear on findings

What it means?

- What do the findings/results mean?
- Are the findings consistent with previous research or do they counter previous findings?
- Talk about why this might be, particularly if your findings differ from others
- Do not restate content from Background
- Focus on points of comparison that bear on findings

Sources of Error (2 sources)

- What was wrong with the experiment.
 - How were things that were supposed to be constants affected
 - Doing things wrong is not a source of error.
- How does this affect the data
- How can you change it.

Future Study

- Why can this experiment help our understanding of subject
- What can be next step of this experiment
- Where can this experiment be applied to everyday life.

Limitations of experimental design

- Be thoughtful and reasonable
- Acknowledge issues of scientific concern (Maybe running in place is not the same as running somewhere)
- Don't trash the validity of your study

Goal is to preempt the reviewer's criticism and to demonstrate your knowledge of the limitations and understanding of practical limits and judgment calls in research