

**HOW TO**

**REVIEW**

**A RESEARCH**

***PAPER.***

A PECHAKUCHA LECTURE · 20 SLIDES × 20 SECONDS

# READING

*is passive.*

**V S .**

# REVIEWING

*is active.*

# ***FOUR STEPS.***

**1. PREPARE**

**2. DECIDE**

**3. SKIM**

**4. DIG DEEP**

1.

**PREPARE.**

# USE A

# PENCIL.

***Underline. Circle. Argue in the margin.***

*Writing by hand improves comprehension.*

**2.**

**DECIDE.**

# THE ABSTRACT

*is the*

**TRAILER.**

*If the trailer doesn't hook you,*

*skip the film.*

***THREE CHOICES.***

**READ.**

**FILE.**

**SKIP.**

**3.**

**SKIM.**

# BUILD A

# MAP.

***Know the destination***

***before you start the journey.***

***CHECK CREDIBILITY.***

***WHO***

***WROTE THIS?***

*What might bias them — funder, employer, ideology?*

# ***WHERE?***

*Peer-reviewed journal? Or pay-to-publish?*

# ***WHEN?***

*Five years old? In a fast field, that's ancient.*

**4.**

**DIG**

**DEEP.**

# ***QUESTION***

# **ASSUMPTIONS.**

***Every study rests on assumptions.***

***Are theirs reasonable?***

# ***QUESTION***

# **METHODS.**

*Did they measure what they claim?*

*A control group? A baseline? Standard tests?*

# ***QUESTION***

# **THE STATS.**

***Significant  $\neq$  important.***

*A tiny effect can pass a p-value and still mean nothing.*

# ***QUESTION***

# **CONCLUSIONS.**

***Correlation is not causation —***

***the most-broken rule in science.***

### **Preparation**

- Quiet place.
- Pencil, paper, photocopy of article.

### **Deciding what to read**

- Read title, abstract.
- Read it, file it or skip it?

### **Read for breadth**

- What did they do?
- Skim introduction, headings, graphics, definitions, conclusions and bibliography.
- Consider the credibility.
- How useful is it?
- Decide whether to go on.

### **Read in depth**

- How did they do it?
- Challenge their arguments.
- Examine assumptions.
- Examine methods.
- Examine statistics.
- Examine reasoning and conclusions.
- How can I apply their approach to my work?

### **Take notes**

- Make notes as you read.
- Highlight major points.
- Note new terms and definitions.
- Summarize tables and graphs.
- Write a summary.

# PAPER WRITING CHECKLIST

AREA	CHECK
1. STORYLINE	Identify a specific, concise <b>complication</b> in the situation–complication–proposal.
2. ABSTRACT & INTRO	State the <b>main surprising finding</b> explicitly.
3. EVIDENCE IN ABSTRACT	Include strong <b>numbers</b> on data, workshops, and results.
4. ABSTRACT VISUAL	Make the abstract <b>simple enough to sketch</b> as a diagram.
5. TERMS & DEFINITIONS	Add a <b>Table of Terms</b> ; define each term in plain English.
6. TERMINOLOGY	Use <b>one term</b> per concept and <b>one unique letter</b> per variable.
7. CHOICES & ASSUMPTIONS	Explain key <b>choices</b> and state <b>assumptions</b> clearly.
8. CONTRIBUTIONS	End the introduction with <b>bullet contributions</b> linked to sections.
9. STRUCTURE	Keep <b>cross-references</b> consistent and consecutively numbered.
10. RESULTS	Group findings around <b>main takeaways</b> ; avoid a laundry list.
11. REQUIRED SECTIONS	Include " <b>AUTHOR POSITIONALITY STATEMENT</b> " and " <b>Ethical considerations</b> ".
12. FIGURES & TABLES	Use <b>self-contained captions</b> and make visuals explainable in plain language.
13. SKIMMABILITY	Ensure a skim reveals <b>purpose, structure, and contribution</b> .
14. LOGIC	Make conclusions clearly <b>follow from the evidence</b> .
15. STYLE & FORMATTING	Avoid overusing <b>bold/italics</b> ; avoid numbering a <b>single subsection</b> ; do not use <b>subsubsection</b> .
16. DISCUSSION & TYPOS	Compare with prior literature, and fix <b>e.g., i.e., and vs.</b> formatting.