

ALL How do we make progress?

NOTE: Please read the papers first and try to work out the answers to the questions. Then go to the supplemental slides and see how well you did.

⇒ Better empirical studies

- ↪ Answers an important question
- ↪ Establishes principles
- ↪ Enables generating and refining hypotheses
- ↪ Cost effective
- ↪ Repeatable

⇒ Credible interpretations

- ↪ Construct, internal, and external validity
- ↪ Test hypotheses
- ↪ Removal of alternative explanations
- ↪ Adequate precision
- ↪ Available to public

⇒ How would you evaluate these papers?

I Empirical Studies - SW Faults

- ⇒ What is the experimental context for this paper?
- ⇒ What were the limits on the SW faults study?
- ⇒ What were the research questions for phase 1 of the SW fault study?
- ⇒ What were the phase 1 results?

II Empirical Studies - Time Studies

- ⇒ What were the research questions for phase 2?
- ⇒ What does Chi-Square analysis provide? What were the results of the analysis?
- ⇒ What were the results of phase 2?
- ⇒ Given the structure of the following slide, how would you evaluate this paper?

III Empirical Studies - Time Studies

- ⇒ What is the research context for this paper?
- ⇒ What were the research questions for phase 1?
- ⇒ What was the experimental design?
- ⇒ What were the phase 1 results?

IV Empirical Studies - Time Studies

- ⇒ What were the research questions for phase 2?
- ⇒ What was the experimental design?
- ⇒ What were the phase 2 results? How were they the same as or different from phase 1?

V Empirical Studies - Time Studies

- ⇒ What were the research questions for phase 3?
- ⇒ What was the experimental design?
- ⇒ What were the phase 3 results? How were they the same as or different from phase 2? Phase 1?