

Literature and Data-Source Evaluation

g11_u09_w33

Purpose and boundary

Use original fictional source cards only. No web research, human-subject research, data collection, citation of real sources, or real-world decision is requested.

Targets: I can compare a source's method, evidence, and limits without ranking credibility by title alone.

Vocabulary: claim, method, source, sample, replication, conflict of interest. **Prerequisites:** evidence claims, uncertainty, data representation.

All source cards are fictional instructional records. They are not real citations or authority claims.

1. Distinguish a claim from evidence offered for that claim.

2. Why does a source title alone not establish evidence quality?

3. What does replication mean in a research-model context?

4. Card A lists 30 measurements, stated units, and uncertainty; Card B lists a conclusion only. Name one strength of A.

5. Name one limitation of Card A that still needs checking.

6. A card uses a sample of 3 cases to make a source-wide claim. Identify a representation limit.

7. Why can a large sample still be biased?

8. What is a conflict of interest in a source-evaluation model?

9. Why is a disclosed conflict not automatic proof of an invalid claim?

10. A card has a figure without axis units. What evidence question follows?

11. A source states a correlation. What causal question should a reader ask?

12. A source reports an average but no spread. What is missing?

13. A source uses a stated method at one temperature. Why is transfer to another condition limited?

14. Compare primary measurement description with a secondary summary in terms of traceability.

15. A source has precise arithmetic but an unclear sample frame. Explain the distinction.

16. Name one useful source feature beyond publication date.

17. State one supported and one unsupported conclusion from a fictional source card.

18. Explain why a missing limitation statement weakens a source interpretation.

19. Propose one evidence-check question for a fictional chemistry data claim.

20. Write a two-sentence bounded evaluation of a fictional source card.
