

Exercise walk-through

5.5

Synthesis: Literature

GAC Study and Communication Skills

Method — Key knowledge: compare outcomes before combining claims

A **synthesis** 综合分析 connects sources around a theme and explains meaningful differences. A list of summaries is a useful starting record, but it does not show how the sources relate. Compare participants, task, changed feature and outcome before claiming agreement.

Transfer 迁移 asks whether a finding applies in another setting. It needs a reason, not just a similar title. A **research gap** 研究空白 is a justified missing piece in the evidence you have searched. Three cards cannot establish that nobody anywhere has studied a topic. For a real proposal, verify real sources rather than citing invented teaching cards.

Method — Source A: proposal and task record

The fictional project will compare complete four-item paper sorting success under two label layouts among twenty-four willing classmates. Layout B changes spacing and alignment together; both conditions retain the same wording and task.

Three invented teaching cards are supplied. P: twelve adults made fewer location-choice errors with separated labels in one task; numerical totals and full methods are not supplied. Q: eight college volunteers preferred a more spacious layout; no accuracy task was measured. R: thirty-two students completed more software steps correctly with shorter wording; this was not a tray-label layout comparison. These are not real publications.

Method — Source B: draft and current evidence

The draft says, “All three studies prove our layout B will make every classmate accurate. Q confirms that spacious layouts improve accuracy. R tested the same visual change as B. No one worldwide has researched labels, so our work fills the global gap.” The team needs a short comparison organised around how instruction design may affect responses. It must explain differences, keep the proposed task uncompleted and identify what real sources and methods still need verification. No card gives a result for the team’s proposed layouts.

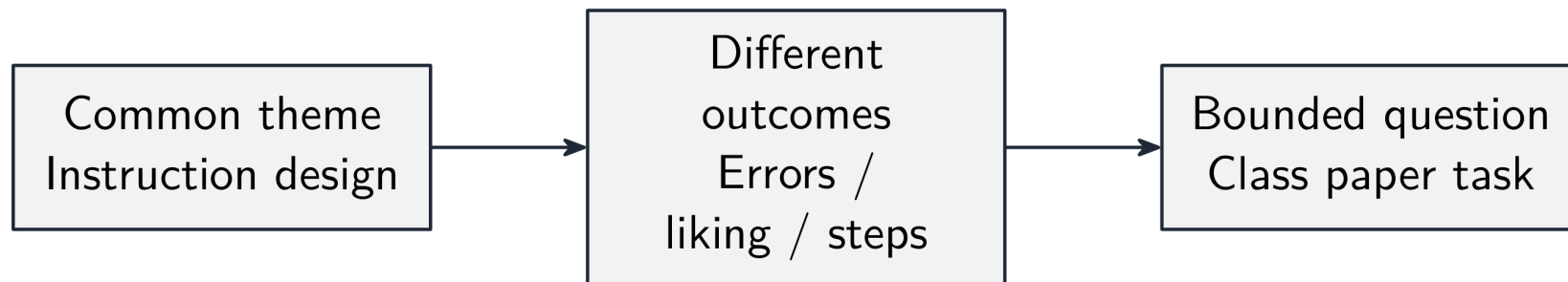
Method — Worked example: a common theme is not a common measurement

Known: all three cards concern instruction design, but their outcomes differ. Why compare outcomes first? Preference in Q cannot confirm accuracy in P or R. P is closer to layout but uses adults and a location-choice task; R changes wording in software, not spacing and alignment in tray labels.

A supported synthesis identifies the common theme, explains those limits and motivates a bounded classroom question. It does not announce that B wins. Record what was supplied, seek real sources and treat the proposed comparison as a question still requiring approval and collection.

Method — Worked example: a common theme is not a common measurement

Why compare outcomes first?



Exercises 2.1-2.3

2.1 Identify the outcome measured by P and the different outcome measured by Q. [2]

2.2 State the feature changed in R and why it is different from the proposed B layout.[2]

2.3 Give THREE relevant differences across the cards that a synthesis must retain. [3]

Exercises 2.1-2.3

2.1 Identify the outcome measured by P and the different outcome measured by Q. [2]

2.1 P: location-choice errors. Q: layout preference.

2.2 State the feature changed in R and why it is different from the proposed B layout.[2]

2.2 R changes software wording length; B changes spacing and alignment together, retaining wording.

2.3 Give THREE relevant differences across the cards that a synthesis must retain. [3]

2.3 Award B1 each for distinct comparisons of participants, tasks, features or outcomes, tied to the cards. For example adults versus college volunteers/students; location choice versus software steps; accuracy/errors versus preference. Do not count the same distinction twice.

Exercises 2.4·3.1

2.4 State a common theme, a limited question the cards can motivate and a required step before citing evidence in a real proposal. [3]

3.1 Evaluate THREE draft claims: “Q proves accuracy”; “R changed the same feature as B”; “These cards establish a worldwide research gap”. Give a correction and reason for each. [6]

Exercises 2.4-3.1

2.4 State a common theme, a limited question the cards can motivate and a required step before citing evidence in a real proposal. [3]

2.4 Instruction design may affect responses. Ask whether A/B differ in complete success on the bounded class paper task, without predicting a winner. Find/read/verify real sources and methods instead of citing invented cards.

3.1 Evaluate THREE draft claims: “Q proves accuracy”; “R changed the same feature as B”; “These cards establish a worldwide research gap”. Give a correction and reason for each. [6]

3.1 Award correction B1 and reason B1 per claim. Q measures preference, which does not measure task accuracy. R changes wording in software, whereas B changes spacing/alignment with wording held constant. State only the limits of the evidence inspected: three fictional cards are neither a comprehensive real search nor evidence about all research worldwide.

Exercise 3.2

3.2 Write a 100–130 word synthesis. Connect the common theme, compare each card with the proposed task, retain evidence limits and state a bounded next question and source-verification step. Do not present a main-study result. [8]

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3.2 Local analytic rubric, $8 \times B1$: common instruction-design theme; P outcome and transfer limit; Q preference/accuracy distinction; R wording/software distinction; proposed package and fixed wording; no winner or worldwide-gap claim; bounded next question and real-source verification; coherent truthful 100–130 word response. Example: “The three teaching cards suggest that instruction design may affect responses, but they measure different things. P reports fewer location-choice errors among twelve adults; its task and participants differ from our class paper sorting task. Q records eight college volunteers’ preference for a spacious layout, so it cannot confirm improved accuracy. R concerns shorter software wording and correct steps, whereas our layouts keep wording fixed and change spacing and alignment together. These fictional cards neither prove that B will win nor establish a worldwide research gap. They motivate a limited classroom question about complete sorting success. Before a real proposal uses published evidence, we must find and verify accessible real sources and record their methods and limits.”