

5.6 Make question, method, ethics and analysis agree

Name: _____ Class: _____ Date: _____ **Total: 24 marks**

KEY WORDS proposal 研究计划 • denominator 分母 • consent 知情同意

Objective

Make question, method, ethics and analysis agree. This is original GAC033-aligned practice, not an official assessment. All people, cards, records and instructions are fictional; no main study has been conducted.

1 Key knowledge and worked examples

■ Key knowledge: a proposal is an aligned plan

A **proposal** 研究计划 describes a study before it happens. Its question, task, scoring, analysis, ethics and schedule must agree. Editing the cover does not repair a mismatch between an accuracy question and a preference survey.

A **denominator** 分母 is the group total used in a rate. Report the actual submitted eligible task sheets for each condition and explain exclusions; do not silently replace these totals with recruitment targets. **Consent** 知情同意 requires clear information and a free choice to participate. Approval, storage arrangements and disposal must be confirmed before collection.

■ Source A: proposal and task record

The fictional proposal asks whether A or B leads to more completely correct four-item paper sorting sheets among twenty-four willing classmates. Shuffled slips allocate twelve planned places per layout. Each person sees one layout, the same wording, task choices, fixed key and two-minute limit, with no coaching. Any wrong or blank placement means zero complete successes.

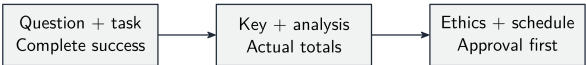
Recruitment targets are not results. The intended analysis records actual submitted eligible sheets and complete successes separately for A and B, with any exclusions explained. It compares each condition’s success count and rate. It must not claim that the local volunteer sample represents the whole school.

■ Source B: draft and current evidence

The current draft instead asks only which layout people like, collects names on a form headed “anonymous”, and promises deletion of any individual sheet after anonymous submission. It leaves storage access and disposal unconfirmed. Its timetable puts recruitment before teacher approval and includes a results paragraph announcing B as the winner.

The proposed repair is review and teacher approval, then a separate two-person procedure pilot, then any approved main task. Changed-instruction pilot sheets stay out of main data. Participants may stop or withhold a sheet; anonymous sheets cannot reliably be retrieved individually after submission. No approval, pilot or main task has occurred.

■ Worked example: trace the question through the whole proposal



Known: the question requires complete sorting success, but the draft collects preference. Why trace the sections together? The task must provide the outcome, the fixed key must define success, and the analysis must use actual group totals. A preference result cannot repair missing accuracy data.

Correct the task, remove names if retaining the anonymous design, state the withdrawal limit, and confirm storage and disposal. Move permission before recruitment and label all results as pending. Approval is a prerequisite; neither a neat proposal nor a peer review grants it.

2 Practice

2.1 State the primary outcome and the all-or-nothing scoring rule. [2]

2.2 Identify TWO missing confirmed data-handling arrangements. [2]

2.3 Explain THREE conflicts between the current draft and the intended proposal. [3]

2.4 State the correct approval/pilot/main sequence and TWO requirements for the planned comparison table. [3]

3 Exam-style questions

3.1 Evaluate THREE edits: “Keep the liking survey and change only the cover”; “Print twelve as each result denominator whatever is submitted”; “Say anonymous sheets can always be individually deleted”. Give a correction and reason for each. [6]

3.2 Write an 80–110 word proposal-repair note. Align question, task, scoring and analysis; correct ethics; retain pending approval and the pilot sequence; avoid results and school-wide claims. [8]

Solutions

2.1 Completely correct four-item paper sorting; all four correct within the task gives one success, any wrong/blank gives zero.

2.2 Who has storage access and the disposal arrangement/time. Do not invent a date or claim either is confirmed.

2.3 Award B1 each for three distinct conflicts: preference cannot answer accuracy; collecting names contradicts anonymous design; reliable individual deletion contradicts anonymous submission; recruitment before approval; announced result before collection. Tie each to its consequence.

2.4 Review/approval before separate procedure pilot and approved main task. Actual submitted eligible sheets for each layout; complete successes for each layout with exclusions explained, not invented totals.

3.1 Award correction B1 and reason B1 per edit. Use the specified sorting task: a cover cannot supply the required outcome. Use actual eligible group totals with exclusions explained: targets are not observed denominators. Explain stopping/withholding before submission and the inability to reliably identify an anonymous sheet later: a deletion promise needs a means of identification.

3.2 Local analytic rubric, $8 \times B1$: accuracy task replaces preference; fixed complete-success rule; actual group totals/successes and exclusions; no names with truthful withdrawal limit; storage/disposal pending; approval before separate pilot/main; no result or school-wide claim; coherent truthful 80–110 word response. Example: “We will replace the liking survey with the same four-item sorting task under layouts A and B. The fixed key will count one success only for a completely correct sheet. Analysis will use actual eligible submitted sheets and successes for each layout, explaining exclusions rather than treating twelve planned places as results. We will remove names, explain stopping and withholding before submission, and state the later anonymous retrieval limit. Storage access and disposal still need confirmation. Review and teacher approval must precede a separate pilot and any main task. No result exists, and class volunteers cannot represent the whole school.”