

3.3 Prototype evidence and a reasoned design revision

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

KEY WORDS prototype 原型 • usability test 可用性测试 • neutral prompt 中立提示
• version log 版本记录

Objective

Prototype evidence and a reasoned design revision. This is original GAC031-aligned practice, not an official assessment. All people, instructions and records are fictional.

1 Key knowledge and worked examples

■ Key knowledge: evidence before a claim

A **prototype** 原型 is an early version used to learn, not a finished service. A **usability test** 可用性测试 asks a person to attempt a relevant task and records what happens. A **neutral prompt** 中立提示 gives the goal without supplying the intended answer.

A **version log** 版本记录 retains the old design, the observed issue, the change, approval status and next check. A small prototype result may inform a revision without establishing a later trial’s numerical target or a cause of every difference.

■ Source A: task and starting record

The fictional brief requires readable destination words, routes that can be followed from the entrance, meanings that do not rely on colour alone, and librarian-approved positions that keep exits and safety information clear.

Option A is a single entrance map. Option B1 places an arrow at each decision point with a matching door label. Both use words and shapes. Twelve new volunteers try paper sketches, six for each option, with the same entrance and task prompt: “Please find a room where you can discuss work. Tell us what you would do next.” Each volunteer sees only one option. Four of six choose the correct route with A; five of six do so with B1. This is not the planned twenty-person, two-minute trial.

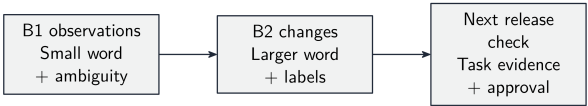
■ Source B: actions and current evidence

One B1 tester says the word “Discussion” is too small at the door. Another asks whether the quiet and discussion arrows share a route. The team checks the sketches, enlarges the door word and draws separate labelled directions in B2. B1 remains in the folder with the observations and change reasons.

Two other new volunteers try B2 on paper. Both choose the intended route. No timing was recorded for those two attempts, and no twenty-person B2 trial has been run. The

proposed wall positions and removable material have not yet received the librarian’s approval. A teammate proposes saying “Most people pick this arrow” to the next tester and printing the old B1 file because it looks tidy.

■ Worked example: connect the action to its evidence



Known: B1 had five correct routes in six attempts, but specific comments still identified reading and direction issues. The B2 changes answer those observations, rather than a vote for the prettier drawing. Two correct B2 routes support those two attempts; they do not establish sixteen of twenty timed successes.

Keep B1 and B2 clearly labelled. Ask a new user the same neutral task, record the route and what is hard to read, then seek approval for the selected version and positions before installation. Do not cue the route or print an obsolete file without a recorded decision.

2 Practice

2.1 State the correct-route results for A and B1, with their denominators. [2]

2.2 Match each of the TWO recorded B1 issues to its relevant B2 change. [2]

2.3 Identify THREE reasons why the two B2 successes do not establish the planned twenty-person, two-minute target. [3]

2.4 Give one reason to reject the suggested tester cue, one reason to retain B1 and one required action before installation. [3]

3 Exam-style questions

3.1 Evaluate THREE proposals: “Declare the original target met”; “Print B1 because it looks tidy”; “Use only blue and orange to separate destinations”. Explain a correction and a brief-based reason for each. [6]

3.2 Write an 80–110 word design note. Connect the two B1 issues to B2 changes, report the two-person check with its limits, and specify the version, permission and user-task checks still needed. Do not promise the target will be met. [8]

Solutions

2.1 A: four of six. B1: five of six. These are separate small groups, not twenty-person timed results.

2.2 Small “Discussion” word → enlarge the word. Apparent shared route → separate labelled directions.

2.3 Only two volunteers were checked; no two-minute timing was recorded for the B2 attempts; paper sketches are not an installed approved service. Accept distinct supported scope/condition limits; “the sample is small” repeats the first point.

2.4 The cue supplies the intended route and changes the neutral task. Retaining B1 makes the version changes and their evidence traceable. Obtain approval of the chosen positions/material before installing.

3.1 Award 2 per proposal: correction, reason. Run the specified timed twenty-person trial: neither small paper test establishes it. Select the recorded current version with reasons and approval: appearance alone does not address the observed B1 issues. Retain words and shapes: the brief requires meaning without colour alone.

3.2 Local analytic rubric, $8 \times$ B1: small-word issue/change; ambiguous-route issue/change; two-person paper outcome; twenty-person/timing limit retained; old version and reasons preserved; approval required; neutral next task and clear print version; coherent truthful 80–110 word note. Example: “The B1 test identified a small destination word and an unclear relationship between the two arrows. B2 enlarges “Discussion” and gives each destination a separate labelled direction. Two new volunteers chose the intended route with B2 on paper. That supports those attempts, but it does not establish the twenty-person target or a timed installed-service result. We have retained B1, its observations and the B2 change reasons. Before installation we need the librarian’s approval of positions and materials. We will use the same neutral visitor task, record routes and reading difficulties, and keep the selected file version clear before printing for the later trial.”