

This assessment report is based on assessments for 2023. It may not reflect achievement standards that have been updated.

2023 NCEA Assessment Report

Subject:	Digital Technologies (RAS)
Level:	Level 1
Achievement standard(s):	92006, 92007

General commentary

Standards 92006 and 92007 were in their second year of trialling in 2023. Version numbers will have changed since these papers were written.

Report on individual achievement standard(s)

Achievement standard 92006: Demonstrate understanding of usability in human-computer interfaces

Assessment

The full set of grades were awarded, with some very solid Excellence-level responses demonstrating candidates understood the usability heuristics or *mātāpono* Māori and could discuss and apply them fully.

Commentary

The assessment gave candidates multiple opportunities to identify usability heuristics. Those who incorrectly identified some heuristics in part (b) were still able to provide evidence when comparing interfaces or suggesting improvements.

Some candidates identified only one usability heuristic for each of the three activities selected in part (b), and weaker responses tended to refer to those heuristics throughout the submission. Incorrectly identifying a heuristic meant that candidates were unable to meet the Achieved requirement of correctly identifying three different heuristics.

The step up from Achieved to Merit required candidates to explain how the interface applied usability principles to improve usability. Many candidates stopped short of this, simply identifying heuristics without explaining how their application affected usability.

Candidates should be encouraged to evaluate effectiveness when comparing interfaces. In part (c), many candidates identified similarities and differences between interfaces but did not identify which interface addressed usability principles better.

Candidates should be encouraged to suggest multiple improvements and justify these by explaining how they would improve usability and what heuristics they would apply. A common mistake made in part (d) was that some candidates only suggested one improvement to each interface, despite the question asking for multiple. Candidates also commonly suggested improvements with no justification.

Grade awarding

Candidates who were awarded **Achievement** commonly:

- described the purpose of an interface they have studied
- identified and described at least one distinct usability heuristic or mātāpono Māori for each of the three activities
- illustrated their responses with at least one screenshot.

Candidates who were awarded **Achievement with Merit** commonly:

- clearly explained how the application of heuristics or use of mātāpono Māori improved the usability of the interface
- suggested improvements to interfaces but did not justify these by explaining how they could improve usability, or did not refer to heuristics in their explanation.

Candidates who were awarded **Achievement with Excellence** commonly:

- showed a comprehensive understanding of usability heuristics or mātāpono Māori
- identified multiple similarities and differences between the interfaces in terms of usability heuristics or mātāpono Māori
- indicated which interface applied usability heuristics or mātāpono Māori more effectively, and gave reasons supporting their evaluation
- suggested multiple improvements to each interface in terms of usability heuristics or use of mātāpono Māori
- justified improvements by explaining how they would enhance usability.

Candidates who were awarded **Not Achieved** commonly:

- misidentified usability heuristics or mātāpono Māori
 - described the interface activity but omitted references to usability heuristics or mātāpono Māori
 - did not identify more than three usability heuristics or mātāpono Māori
 - did not address numerous questions and left them unanswered.
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Achievement standard 92007: Design a digital technologies outcome

Commentary

The full set of grades were awarded, and those who gained Excellence provided a sound understanding of design and / or the design process.

Some candidates did not include an image of their final design. Successful candidates provided more than just sketches, moodboards, or wireframes.

Some progress answers, such as (vi), included actual code. Candidates should be reminded that the purpose of the standard is to design an outcome, not to create one.

Some candidate screenshots included too much written content. For example, lists of specifications, full feedback from stakeholders, colour theory, web conventions, and heuristics. Some included definitions of manaakitanga and kaitiakitanga, but these were irrelevant if the candidate did not refer to them in their response.

Some candidates demonstrated a lack of understanding of what the key requirements are, and provided responses which were either too generic or focused only on content. They did not include design requirements.

Grade awarding

Candidates who were awarded **Achievement** commonly:

- described the issue / opportunity they addressed
- identified key stakeholders and initial requirements
- included some screenshots of design ideas
- described how they applied the principles of manaakitanga and kaitiakitanga
- included screenshots of supporting evidence and made reference to them.

Candidates who were awarded **Achievement with Merit** commonly:

- provided supporting evidence
- demonstrated understanding of the design process
- included clear progress screenshots
- demonstrated, with examples, how information from research influenced design decisions
- explained how design elements and principles were applied in their design
- explained how feedback improved the design, with examples from before and after feedback.

Candidates who were awarded **Achievement with Excellence** commonly:

- demonstrated a clear understanding of the design process
- included supporting evidence
- explained how the final design addressed the initial issue / opportunity by discussing the potential users, key requirements, and usability principles.

Candidates who were awarded **Not Achieved** commonly:

- did not include a screenshot of their final design
- did not articulate an obvious need or opportunity

- did not list the key requirements, or did not display an understanding of the key requirements
 - lacked evidence regarding their design ideas or progress
 - struggled to comprehend or showcase the application of the principles of manaakitanga and kaitiakitanga in the design process
 - left some questions unanswered.
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