

Assessment Report

New Zealand Scholarship Technology 2024

Performance standard 93601

General commentary

Many candidates explored a number of contexts in detail and then selected one. Discussion of this decision-making process should form part of the report as it helps inform authenticity. Candidates should also investigate, and include considerations of, the intended physical and social environment before, during, and after development of the outcome.

Technological practice is not a theoretical exercise, all outcomes need to be tested in their intended environment to demonstrate their fitness for purpose in the broadest sense. It doesn't just refer to designing, trialling, and constructing an outcome, but is an iterative process involving problem solving. Candidates should interact with their stakeholders and / or end users, and reflect on their intended environment to make decisions and address the issue.

Group work is valid for certain technological projects and reflects what is often done in industry. If submitting a group project, each candidate must submit their contribution to the project as an individual report and clearly identify their part in the group process as their own work. For example, how they resolved the tasks in their group and how they worked to strengths in the group. Unique complexities that arise as a result of group work should be reflected in the individual reports.

Candidates should be aware that language that indicates contributions to group work needs to be clear. Some candidates intermittently used "we" and "I" in the same report, making assessor judgements of project ownership difficult.

Generally, good photographic evidence was provided. Candidates should consider annotation of the visual aids, particularly when explaining the complexities of the situation / problem. Short video clips of both testing the prototype and it functioning (less than three minutes) increase the candidates' ability to communicate the effectiveness of their prototype (what it does and how it works).

Some candidates provided links that did not work or were difficult to see in the text. If students want markers to access additional work, they should provide a QR code or upload a separate short video. Any additional work must be included in the maximum page number allowance.

If candidates presented evidence that followed guidelines for competitions, shows or other technology awards, or their Level 3 papers, their practice was often constrained by the specifications. Following the guidelines for other work did not always allow them the opportunity to demonstrate either scholarship or outstanding scholarship performance.

Candidates need to ensure that their report contains sufficient evidence reflecting all three strands of the curriculum. While some aspects may be more prominent, all must be soundly represented.

The maximum page count in 2024 was 60, and examiners only assessed the first 60 pages of any reports that were longer. It is essential that candidates comply with the maximum word count so all of their work is assessed. The maximum page count for 2025 can be found in the assessment specifications.

Report on performance standard

Candidates who were awarded **Outstanding Scholarship** commonly demonstrated:

Exceptional technological practice:

- integrated complex skills and knowledge effectively
- addressed authentic, relevant issues through meaningful contexts
- produced innovative, high-quality technological outcomes.

Insightful justifications and critical thinking:

- provided well-reasoned design and development decisions
- articulated independent, critical thinking about processes and outcomes
- met and exceeded the New Zealand Curriculum Level 8 expectations for skill synthesis and knowledge integration.

Stakeholder engagement and project management:

- engaged thoughtfully with stakeholders to refine their work
- managed projects independently with logical and adaptive progress
- maintained a clear focus on intended project purposes.

Contextual understanding and informed decision-making:

- demonstrated an in-depth understanding of wider relevant contexts
- applied contextual knowledge throughout the development process
- evaluated materials, processes, and components based on performance properties.

Research, learning, and knowledge integration:

- investigated relevant social and physical environments to inform decisions
- pursued new knowledge and adapted to challenges as projects evolved
- integrated prior learning and insights into practice.

Advanced functional modelling and refinement:

- utilised prototypes and simulations to test and refine technological solutions
- demonstrated ingenuity, optimisation, and a focus on fitness for purpose.

Creative and technically sound outcomes:

- delivered technically sound, creatively executed final solutions
- showcased elegance, synthesis, and mastery of technological practice
- ensured outcomes were fit for purpose in the broadest sense in the development of their prototypes.

Candidates who were awarded **Scholarship** commonly:

Context selection and exploration:

- selected and explored an authentic context with genuine complexities
- investigated real issues offering depth and scope for meaningful technological practice.

Analytical and reflective practice:

- conducted ongoing, in-depth analysis throughout the project
- reflected on knowledge gained from technological modelling to ensure fitness for purpose
- analysed both their own practice and the work of others to inform their development.

Knowledge synthesis and skills integration:

- synthesised in-depth knowledge and skills to achieve fit-for-purpose outcomes
- developed high-quality outcomes supported by clear visuals such as photographs, diagrams, or working links for example, QR codes or YouTube videos
- communicated how their outcomes fit into intended physical and social environments.

Project management and organisational skills:

- maintained project direction by aligning practice with the issue and brief
- demonstrated strong organisational skills, managing unforeseen challenges effectively
- adjusted and adapted their processes using iterative development methods.

Justification and decision-making:

- concisely justified their practice using clear reasoning linked to the issue and wider context
- provided evidence-based explanations for actions taken during the project.

Stakeholder engagement and feedback integration:

- obtained relevant stakeholder feedback in a timely manner
- Integrated insights from stakeholders and external knowledge to inform project decisions.

Candidates who were **not awarded Scholarship** commonly:

Context and issue exploration:

- did not sufficiently explore a real issue or context, limiting authentic technological practice
- chose predetermined contexts that hindered in-depth exploration.

Project scope and complexity:

- did not scope out the complexity of required skills early in the process, leading to unresolved outcomes
- focused too much on brief development, leaving insufficient time for prototype creation.

Justification and purpose:

- presented a running commentary of actions rather than explaining their purpose or justifying technological practice
- misinterpreted complexities as purely technical, neglecting broader contextual considerations.

Technological knowledge and curriculum alignment:

- presented work below Level 8 of the New Zealand Curriculum in technological practice and knowledge
- did not demonstrate adequate socio-cultural and physical understanding relevant to the context or issue.

Stakeholder engagement and feedback:

- failed to acquire essential, context-specific stakeholder feedback
- did not incorporate insights from others' knowledge, attitudes, or practices to inform project development.

Research and evidence presentation:

- included unnecessary or irrelevant research that was neither applied nor reflected upon
- submitted insufficient or incoherent evidence, making it difficult for examiners to evaluate their practice
- submitted other people's work as their own.

Teacher-guided limitations:

- submitted teacher-structured reports with excessive planning, limiting independent development and successful project completion.

Creativity and innovation:

- demonstrated limited creativity or innovation, even when producing technically sound outcomes
- produced work lacking originality due to insufficient exploration of alternative solutions.