

New Zealand Scholarship Digital Technologies Performance Standard

Outcome description

The student will use their knowledge of digital technology, including computational thinking, to develop, design, synthesise, integrate and critically reflect on digital technology solutions, to address problems.

Scholarship Performance Descriptor

The student will demonstrate aspects of high level:

- analysis and critical thinking
- integration, synthesis and application of highly developed knowledge, skills and understanding to complex situations
- logical development, precision and clarity of ideas.

Outstanding Performance Descriptor

In addition to the requirements for Scholarship, the student will also demonstrate, in a sustained manner, aspects of:

- perception and insight
- sophisticated integration and abstraction
- independent reflection and extrapolation
- convincing communication.

Explanatory Notes

1. This standard is derived from the Technology learning area of The New Zealand Curriculum (2018 update).
2. Subject specific definitions:
 - *Analysis and critical thinking* involve understanding the requirements, constraints and expected outcomes, decomposing complex problems and providing sophisticated solutions.
 - *Integration, synthesis and application of highly developed knowledge, skills and understanding to complex situations* involves identifying and addressing key aspects of a problem by producing efficient, elegant digital outcomes.
 - *Logical development, precision and clarity of ideas* involve solving problems by creating a solution which utilises clear and executable steps.
 - *Perception and insight* involve managing complexity by solving problems in generalised or unfamiliar situations.

- *Sophisticated integration and abstraction* involve designing solutions that are not only effective on a small scale but can also be scaled up to handle very large, complex systems.
 - *Independent reflection and extrapolation* involve reflecting on a digital outcome's functionality and efficiency by testing and documenting outcomes and insights, and then refining the solution.
 - *Convincing communication* involves clearly conveying a highly developed understanding of how the steps in the design of a solution address the details of a problem.
3. This performance standard should be read in conjunction with the Assessment Specifications for the standard, which can be accessed through the Subjects page found at www.nzqa.govt.nz/qualifications-standards/qualifications/ncea/subjects/.
 4. Assessment against this performance standard is administered under the Rules and Procedures for Secondary Schools, which can be found at [NZQA Assessment Rules](#).