

# **Assessment Specifications**

## **General** information

**Domain** Technology – General Education

Level 1

Mode of Assessment Submitted Report

For Year 2012 (updated March 2012)

Submission Date 7 November 2012

**Standards** 91048, 91049, 91050 91053, 91070, 91074

#### **Special notes**

For all standards, judgements will be qualitatively based on the evidence as a whole.

#### Format of the assessment

Candidates are required to submit a report.

Each standard will require a separate report.

A report is an organised collection of evidence that clearly demonstrates the candidate's understanding with reference to a specific standard.

The report may be generated following a common assessment guide or a modified assessment guide developed from a common assessment guide.

It is essential that candidate evidence is organised in a manner that allows a valid judgement to be made.

The report may be submitted as hard copy or digitally.

Reports of ten pages or less are recommended. Candidates submitting less than 10 pages will not be disadvantaged by the length of the submission. The submission must not exceed a maximum of 14 single-sided A4 pages. Only the first 14 pages will be marked.

Hard copy reports can be presented as up to a maximum size of A3. Any combination of paper sizes may be used.

Each report will be submitted in an individual folder supplied by NZQA. The folder will accommodate up to seven A3 sheets. The folder will be personalised with the candidate's NSN and the number of the standard entered. The assessment schedule and the authenticity form for the standard entered will be printed on the folder.

Hard copy reports must be securely stapled in the top left-hand corner. Digitally submitted reports must be securely contained in a protective CD cover. All candidate reports must have the candidate's NSN and standard number displayed on the disc surface or at the top right-hand corner of the hard copy. Hard copy cover sheets, further packaging, or folders are not required and will not be able to be sent with the submission.

## Material in the report

Work that cannot be read cannot be marked.

The material included should clearly communicate the candidate's understanding and could include material such as:

- annotated photographic evidence of a process, or processes, an outcome, or outcomes (including mock-ups and prototypes)
- annotated illustrations (e.g. computer graphics, design sketches, drawings, photographs, screenshots)
- annotated sheets from computer programs
- written descriptions, explanations, and discussions
- material from research sources
- any combination of the above.

Where evidence of a candidate's technological practice or outcome helps to demonstrate understanding, then evidence of the outcome or practice can be included. Evidence of the practice or the outcome in itself is not sufficient to demonstrate understanding.

## **Digital submissions**

The report may be submitted digitally.

Digital submissions must be presented as single documents recorded on a disc with either CD or DVD format.

The document contained on the disc must be in \*.ppt, \*.doc or \*.pdf file format. The Word document must be read-only.

Font size must be set at the **equivalent** of Arial 12.

Screen dumps and images must be sized so that they can be read by the marker.

The document may contain as many words, static images, and outputs from other applications as fit on the printable surface of 14 single-sided A4 pages.

A maximum of 1.5 minutes of audiovisual media may be embedded within the document. Where audiovisual material is embedded, the printable surface of the remainder of the report must not exceed 12 single-sided A4 pages.

The embedded audiovisual material must be accessible through Windows Media Player.

If the material is not legible, audible, or visible when opened within a PowerPoint 2003 Microsoft Office Word 2003, or Adobe Reader 8 application operating in a Windows environment, the evidence it might contain might not be accessible to markers. If material is not accessible to markers, it will not be marked.

It is the responsibility of the school to provide protective packaging for compact discs.

Schools are required to securely store a backup copy of all digital submissions.

Schools are required to virus-check digitally submitted material.

## **Authenticity**

The material submitted for assessment by the candidate must be the candidate's own. Evidence submitted for assessment must be such that the assessors can be confident that they are making a judgement about an individual candidate's understandings.

All information from sources other than the candidate's own work must be acknowledged at the place in the work that the information is used. It must be immediately apparent to the marker that the material is not the candidate's own.

Information from external sources can become authentic evidence of understanding only where the candidate does one or more of the following:

- interprets the information
- paraphrases the information
- uses the information
- relates the information
- comments meaningfully on the information.

Schools, with submitting candidates, are required to have in place a process to verify for each candidate that the material presented for external assessment is each candidate's own.

Teachers and candidates are required to complete and sign an authenticity form. A candidate's work that is submitted without a completed authenticity form will be marked, but the results will not be released until the authenticity form is completed.

Where markers doubt that the authenticity requirements have been met, the candidate work and the authenticity form will be forwarded for investigation as a potential breach of the rules.

## Specific information for individual external achievement standards

#### Standard 91048

Candidate reports can provide evidence relating to one or more technological outcomes. Evidence relating to outcomes is required only in as far as it supports demonstration of understanding of how technological modelling supports decision-making.

The outcome must be a technological outcome in the sense that it is an intervention by design. In demonstrating understanding of how technological modelling supports decision making, candidates need to demonstrate an understanding of the process of technological modelling that involves both functional modelling and prototyping. The report does not require the production of a prototype.

When considering risk, candidates can consider a wide range of potential risk types.

### Standard 91049

Candidates can consider the composition and structure of one or more materials.

Candidates can use evidence from one or more technological products when considering how materials enable them to function.

It is possible to consider an item as both a product and a material. For example, yarn is a technological product in that an intervention by design has been added to raw cotton. Yarn is also a material when one considers the process of weaving fabric.

Standard 91050

The subsystem must have an input, a transformation, and an output to be considered a system. The subsystem must be considered as a part of a larger system.

When demonstrating understanding of the role of subsystems in the larger system, the report needs to provide evidence of two or more subsystems. A report may focus on one subsystem and its relationships to other subsystems. A report may focus on describing several subsystems that are related.

Standard 91053

Reports will need to consider both subjective and objective considerations that determine quality of design. The balance between objective and subjective considerations reported on may vary considerably within the boundaries of demonstrating understanding of design elements.

Reports may consider specific context in the most inclusive possible sense. Contexts could include physical, social, historical, intellectual, or other possible types of context.

Standard 91070

The descriptions of key features of operating systems, common application software, file management procedures, and ethical issues must be sufficient so that the report on the whole demonstrates understanding of basic concepts of information management.

Candidate reports must be developed within a specific context. The context can be assigned as part of a course or negotiated with the candidate.

Standard 91074

The descriptions in the report must be sufficient so that the report on the whole demonstrates the candidates' understanding of the basic concepts from computer science: the concept of an algorithm; the concept of a programming language; and the concept of a user interface and its usability.

Candidate reports must be developed within a specific context. The context can be assigned as part of a course or negotiated with the candidate.