

NCEA Level 1 Assessment Specifications

General Information

Domain	Technology – General Education
Level	1
Mode of Assessment	Submitted Portfolio
For Year	2008
Submission Date	5 November 2008

This document contains the assessment specifications for achievement standards 90049 and 90051.

Specific Information

Format of assessment

Candidates are required to submit a portfolio of work that could include a variety of media in any format up to a maximum size of A2.

A portfolio is an organised collection of material that clearly communicates candidates' understanding of knowledge relevant to the achievement standard that is being assessed. Examples of this material could include such things as:

- research findings and their analysis
- photographic evidence of outcomes (such as mock-ups and prototypes that illustrate the knowledge that has underpinned the development of a technological outcome)
- knowledge of technological innovations and the two way interactions these have had with society
- graphical illustrations (eg computer graphics, design sketches and drawings, photographs, video clips)
- transcripts of audio conversations (not the audiotapes themselves)
- CD or other digital media
- visual diary.

The material submitted for assessment should be each candidate's own. It should clearly communicate the candidate's understanding in order to gain the level 1 technology external achievement standard entered. Candidates may present evidence of understanding knowledge that comes from one or more units of work.

Where candidates are submitting evidence for assessment against more than one external standard it would be beneficial if the evidence presented for each standard is clearly identified.

Where evidence of candidates' technological outcome helps to demonstrate understanding of knowledge, then evidence of the outcome should be included. This does not need to be the outcome itself but could be in the form of photographs/short video clips, which show the development of the outcome as well as the outcome itself.

The use of teacher-directed worksheets to record student evidence, while appropriate for teaching purposes, may constrain the candidate evidence submitted for external assessment. Evidence submitted for assessment should be such that the assessors can be confident that they are making a judgement about an individual candidate's understandings. Teachers need to be mindful of this when using such templates in technology units/programmes.

Information from sources other than their own such as; photocopied notes and teacher handouts, findings from other candidates and information from the Internet and/or texts, should have their source acknowledged within the submitted evidence presented for assessment.

Authenticity

Schools are required to verify 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 copy of this form can be found on the technology page of the NZQA website at www.nzqa.govt.nz/ncea/assessment/resources/technology/index.html

Specific Information for Individual External Achievement Standards

Achievement Standard Number	90049
Title	Demonstrate understanding of technological knowledge
Version	2
Number of Credits	4

Special notes

Evidence presented should be a collection of knowledge that candidates have accessed and applied in their technology programme. The evidence submitted should be generated from the undertaking of technological practice and will include knowledge drawn from the three stands of the technology curriculum (technological knowledge and understanding, technological capability, and technology and society).

This evidence should demonstrate that candidates have understandings of:

- relevant knowledge
- relevant legislation and regulations
- relevant codes of practice and codes of ethics and the constraints they impose.

Both conceptual (knowledge of and about technology) and procedural (knowledge about how to do or how to use) technological knowledge should be demonstrated in this evidence.

The evidence presented for this achievement standard may include such things as:

- portfolios documenting candidates technological practice
- draft books/journals

- photo evidence of mock ups
- photo evidence that shows the development of the outcome
- photo evidence (either as printouts or on CD) of final outcome
- evidence generated on computer technologies (eg computer simulations, web pages, databases, graphic images)
- video / transcript of audiotapes.

Some examples of the opportunities candidates have to access and demonstrate the use of technological knowledge can be found on the technology webpage of the NZQA website at www.nzqa.govt.nz/ncea/assessment/resources/technology/index.html

To gain achievement with excellence, a wide range of in-depth knowledge associated with a context/issue should have been considered in the development of the outcome. It is the accumulation of a wide range of in-depth knowledge associated with a context/issue, which allows candidates to make informed and justifiable decisions at an excellence level. For example, candidates demonstrating understandings of in-depth knowledge within their practice **could compare two or three materials**, the most suitable material being selected because of its properties, suitability for the identified application and/or location, as well as its ability to meet other key factors such as cost.

The evidence for this standard may come from a number of units undertaken throughout the programme or may be drawn from the same unit of work as that used to provide evidence for achievement standard 90051.

Achievement Standard Number	90051
Title	Describe the interactions between a technological innovation and society
Version	3
Number of Credits	4

Special notes

This achievement standard requires candidates to present evidence of understanding the key technological advance(s) underpinning an identified technological innovation, describing how societal factors have impacted on the innovation, and describing the impact of the innovation on society.

In 2008 there are no prescribed topics.

Evidence for this achievement standard can be presented embedded within a unit of work where the innovations studied are used to inform candidates' own technological practice, or it can be a separate assignment linked to candidates' technology programme – the focus is still on broadening candidates' understanding of a technological innovation linked to their programme of study.

Where candidates are providing evidence for this standard as a stand-alone, they should have an overview showing how the innovation studied links to the technology programme.

Candidates need to identify the technological advance(s) which has/have led to a technological innovation and describe the influence this innovation has had on society and how society has influenced the innovation.

To gain achievement with excellence, candidates need explain the technological advance underpinning the innovation. They are also required to analyse the two-way interaction between the ongoing development of the innovation and society and how that may determine the key events. Candidates need to show how these key events impact on the evolution of the innovation both to date and in likely future scenarios.