

DIGITAL TECHNOLOGIES

SUBJECT EXPERT GROUP RESPONSE TO FEEDBACK ON PHASE 1 MATERIALS

The Digital Technologies Subject Expert Group (SEG) would like to thank everyone who took the time to review the subject's draft subject content for the Review of Achievement Standards (RAS) project. We received 31 responses to the survey.

The feedback Digital Technologies received was generally positive. Some comments sought clarification of terms used in the Achievement Standards and unpacking, including kupu Māori. There was some uncertainty about the requirements for Standard AS 1.3 (*Demonstrate understanding of interface usability*). There was also some concern that specialised skills associated with particular domains, such as digital media, were not assessed.

Five themes were identified in the feedback.

Theme One

Need for further guidance around kupu Māori and how mātautanga Māori can be incorporated into teaching, learning, and assessment.

Response

Change two of the NCEA Change Package calls for mana ōrite mō te mātauranga Māori (parity of status for mātauranga Māori within NCEA). Realising this change means ensuring mātauranga Māori is equitably valued and resourced in NCEA by broadening access to mātauranga Māori pathways and increasing teacher capability in this regard. We have endeavoured to incorporate mātauranga Māori, te ao Māori, and te reo Māori appropriately into the new Digital Technologies content.

The subject content provides capability support in the following ways.

- Learning Matrices and Course Outlines illustrate how mātauranga Māori can be woven through teaching and learning.
- The Glossary will expand to include kupu Māori used on the NCEA.education website.
- Mātauranga Māori concepts (such as kaitiakitanga or manaakitanga) used in subject materials and Achievement Standards are explored within the text, the unpacking, or explanatory notes.
- Assessment resources, student exemplars, and Teaching and Learning Programmes developed through the pilot will further exemplify the integration of mātauranga Māori.

[A further response from the Ministry regarding PLD can be found here.](#)

Theme Two

The need for clarification or consistency around particular terminology

Response

The SEG recognises that some terminology used in the standards may require further clarification. Some of these, such as ‘testing’ and ‘tralling’, have been added to the explanatory notes and unpacking for the Achievement Standard where they occur.

Two terms that were mentioned in the feedback were ‘specifications’ and ‘requirements’. These terms have been used deliberately and are not interchangeable.

Theme Three

Uncertainty around AS 1.3 (Demonstrate understanding of usability in human-computer interfaces)

Response

The SEG understands that there is a current Achievement Standard that assesses human computer interaction. However, there are differences between this standard and AS 1.3. Firstly, the new standard has been designed to allow students to explore the concepts that surround interface usability in more depth and the higher credit value reflects this. Secondly, AS 1.3 allows students to consider usability principles beyond Nielsen’s usability heuristics. This includes using mātāpono Māori, or Māori principles, to evaluate the usability of a human-computer interface. In this way students will be encouraged to think widely about what usability means and how it can be judged.

Some of the concepts mentioned in explanatory notes for AS 1.3 are supported by existing resources such as the Computer Science Field Guide. The SEG has sought advice for the mātāpono Māori mentioned in the standard.

Theme Four

Concern about the timing of external assessment

Response

The Ministry and NZQA will be working together to ensure the timing of external assessments are set to avoid creating periods of unnecessary stress or workload issues for kaiako and ākonga. This will be tested in the piloting process and timing of some assessments may be adjusted where appropriate.

At Level 1, where one external is a Term 4 exam, the other external will use a different form of assessment AND will not be in the last half of Term 3. (This is to avoid creating a workload ‘bulge’ for students and teachers in late Term 3.)

Because students are likely to have several externals across different subjects falling around the same time, it is important that they can be conducted in timetabled class time. This will be factored into the design of external assessments.

Different significant learning is suitable to be sampled at different times of the year.

Where it is feasible, at Level 1 an internal and an external assessment should be planned for the first half of the year. (This is good for student morale and spreads student and teacher assessment load.)

For Digital Technologies, the SEG appreciates that student work on interface usability might inform their design thinking; in this way, it could be advantageous to assess AS 1.3 *Demonstrate understanding of usability in human-computer interfaces*) before AS 1.4 (*Design a Digital Technologies outcome*). However, we heard through feedback that there was a desire to swap the timing of these two assessments. This is something the SEG is open to and we will work with the Ministry of Education and NZQA regarding the timing of these two assessments.

Theme Five

Reduction in the amount of assessment related to technical skill

Response

The SEG agrees that technical skills are important to the study of Digital Technologies. However, not all learning needs to be assessed and the Review of Achievement Standards seeks to move the emphasis for NCEA from assessment to rich teaching and learning. This allows for local curriculum design and makes space for the subject to adapt to new and emerging Digital Technologies contexts. The SEG also notes that the adoption of the Digital Technologies curriculum for Years 1 – 10 will mean that future students will already have technical skills before they begin NCEA.