

Field Technology, and Māori

Review of *Digital Technologies* achievement standards

Domain	ID	Subject reference
Digital Technologies	AS91070	Digital Technologies 1.40
	AS91071	Digital Technologies 1.41
	AS91072	Digital Technologies 1.42
	AS91073	Digital Technologies 1.43
	AS91074	Digital Technologies 1.44
	AS91075	Digital Technologies 1.45
	AS91076	Digital Technologies 1.46
	AS91077	Digital Technologies 1.47
	AS91078	Digital Technologies 1.48
	AS91079	Digital Technologies 1.49
	AS91080	Digital Technologies 1.50
AS91081	Digital Technologies 1.51	

The Ministry of Education has reviewed the achievement standards listed above.

New Registration date **November 2017**

Date new versions published **November 2017**

Planned review date **December 2019**

Summary of review and consultation process

New *Digital Technologies* and *Hangarau* achievement standards were developed in response to the introduction of the new curriculum content for *Digital Technologies* and *Hangarau Matihiko*. The standards were released for consultation in May 2017 and feedback was gathered via an online form.

The standards were subsequently trialled in Term 3 of 2017 and the resulting feedback used to refine the final drafts.

Main changes resulting from introduction of new curriculum

- 11 new *Digital Technologies* achievement standards were developed which replaced 11 of the existing achievement standards for this learning area.
- One existing achievement standard was designated expiring without replacement.
- Two new standards were developed and listed under the *Hangarau* domain.

For a detailed description of the development of the *Digital Technologies* and *Hangarau* achievement standards, see the [Appendix](#) at the end of this report.

Impact of changes on [Exclusions List](#)

The exclusions listed below will apply.

For transition purposes, the following exclusions will apply for new achievement standards.

Achievement standard	Excluded against each of these standards
AS91879	AS91071
AS91880	AS91072
AS91880	AS91073
AS91881	AS91077
AS91881	AS91078
AS91881	AS91079
AS91882	AS91080
AS91882	AS91081
AS91883	AS91075
AS91883	AS91076
AS91885	AS91074

During the transition, it is strongly advised that **ALL** new Digital Technologies Achievement Standards be excluded against **ALL** current Digital Technologies Achievement Standards.

Detailed list of achievement standards – classification, title, level, and credits

The following summary shows the changes made to the standards as a result of the review. All changes are in **bold**. Where a new externally assessed, or a new version of an externally assessed achievement standard, is registered the following designation appears after the title [**Externally Assessed**].

Key to review category	
A	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
B	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
C	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

Externally assessed achievement standards categorised as category C or D expire at the end of	December 2017
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Internally assessed achievement standards categorised as category C expire at the end of	December 2018
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Engineering and Technology > Technology > Digital Technology

ID	Ref	Title	Level	Credit	Review Category
AS91070	1.40	Demonstrate understanding of basic concepts of information management [external]	1	3	D

ID	Ref	Title	Level	Credit	Review Category
AS91071	1.41	Implement basic procedures to produce a specified digital information outcome	1	4	C
AS91879	1.3	Develop a digital outcome to manage data	1	4	
AS91072	1.42	Demonstrate understanding of basic concepts of digital media	1	3	C
AS91073	1.43	Implement basic procedures to produce a specified digital media outcome	1	4	C
AS91880	1.4	Develop a digital media outcome	1	4	
AS91074	1.44	Demonstrate understanding of basic concepts from computer science [external]	1	3	C
AS91885	1.9	Demonstrate understanding of searching and sorting algorithms	1	3	
AS91075	1.45	Construct a plan for a basic computer program for a specified task	1	3	C
AS91076	1.46	Construct a basic computer program for a specified task	1	3	C
AS91883	1.7	Develop a computer program	1	4	
AS91077	1.47	Demonstrate understanding of basic concepts used in the design and construction of electronic environments	1	3	C
AS91078	1.48	Implement basic interfacing procedures in a specified electronic environment	1	3	C
AS91079	1.49	Implement basic techniques in constructing a specified electronic and embedded system	1	3	C
AS91881	1.5	Develop an electronics outcome	1	6	
AS91080	1.50	Demonstrate understanding of the common components of basic digital infrastructures	1	3	C
AS91081	1.51	Implement basic procedures for servicing a personal computer system	1	4	C
AS91882	1.6	Develop a computer system	1	4	
AS91877	1.1	Develop a proposal for a digital outcome	1	3	New
AS91878	1.2	Develop a design for a digital outcome	1	3	New
AS91884	1.8	Use basic iterative processes to develop a digital outcome	1	6	New
AS91886	1.10	Demonstrate understanding of human computer interaction [Externally Assessed]	1	3	New
AS91887	1.11	Demonstrate understanding of compression coding for a chosen media type [Externally Assessed]	1	3	New

Māori > Te Marautanga o Aotearoa > Hangarau

ID	Ref	Title	Level	Credit	Review Category
AS91888	1.12	Te whakaatu mōhiotanga ki te reo hangarau matihiko	1	3	New
AS91889	1.13	Te whakaahua i te pānga o tētahi otinga hangarau matihiko ki te ao Māori	1	4	New

Development of new *Digital Technologies* and *Hangarau* Level 1 Achievement Standards

Process of aligning standards with Te Marautanga o Aotearoa (TMOA)

The standards were developed by expert writers and practitioners who have deep knowledge of both the New Zealand Curriculum (NZC) and TMOA. The standards were developed from first principles and no re-alignment was required.

Addressing credit parity

The standards were developed by expert practitioners who understand the work required to demonstrate the learning for each standard and are familiar with expectations for other domains. The credit allocation was made in alignment with this.

What has changed (summary)

New *Digital Technologies* standards have been developed; some of these replace existing *Digital Technologies* achievement standards. Two brand new *Hangarau* standards have also been developed to reflect curriculum changes.

Standard development was driven by significant sector and expert feedback that the prior composition of the *Digital Technologies* achievement standards did not best credential the important learning derived from the new *Digital Technologies* and *Hangarau Matihiko* curriculum content. This militated in favour of a reconfiguration of the standards.

The reconfiguration was also required to ensure that the achievement standards were fit for purpose for use in Māori medium environments, which was better supported by standards which were usable across the traditional sub-areas of *Digital Technologies* (such as programming and electronics).