

Achievement Standard

Subject Reference	Digital Technologies and Hangarau Matihiko 1.8				
Title	Use basic iterative processes to develop a digital outcome				
Level	1	Credits	6	Assessment	Internal
Subfield	Technology				
Domain	Digital Technologies				
Status	Registered	Status date	23 November 2017		
Planned review date	31 December 2019	Date version published	23 November 2017		

This achievement standard requires using basic iterative processes to develop a digital outcome.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> Use basic iterative processes to develop a digital outcome. 	<ul style="list-style-type: none"> Use basic iterative processes to develop an informed digital outcome. 	<ul style="list-style-type: none"> Use basic iterative processes to develop a refined digital outcome.

Explanatory Notes

- This achievement standard is derived from Level 6 of the Technology learning area in *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007; and is related to the material in the *Teaching and Learning Guide for Technology*, Ministry of Education at <http://seniorsecondary.tki.org.nz>.

Further information can be found at <http://www.technology.tki.org.nz/>.

Appropriate reference information is available in *Safety and Technology Education: A Guidance Manual for New Zealand Schools*, Ministry of Education at <http://technology.tki.org.nz/Technology-in-the-NZC/Safety-in-Technology-Education-revised-2017>, and the Health and Safety at Work Act 2015.

This standard is also derived from *Te Marautanga o Aotearoa*. For details of *Te Marautanga o Aotearoa* outcomes to which this standard relates, see the [Papa Whakaako](#) for the relevant learning area.

- 2 *Use basic iterative processes to develop a digital outcome* involves:
- planning a digital outcome to address a problem, need, opportunity, or interest
 - managing the development by decomposing the digital outcome into smaller components
 - trialling components of the outcome in an iterative manner
 - testing that the digital outcome functions as intended
 - describing relevant implications.

Use basic iterative processes to develop an informed digital outcome involves:

- using information from testing and trialling to improve the outcome
- trialling multiple components and/or techniques and selecting the most suitable
- addressing relevant implications.

Use basic iterative processes to develop a refined digital outcome involves applying information from the planning, testing and trialling of components to develop a high-quality outcome.

- 3 Planning may be done in different ways and for various parts of the outcome depending on the nature of the outcome. Examples of planning include:
- using natural language descriptions
 - pseudocode to show algorithmic structure
 - sketches, wireframes or mockups of the outcome.
- 4 The problem, need, opportunity or interest may be given by the teacher, or identified by the student, a group of students or the class. The outcome that is developed by a student, class or group of students may be a complete outcome for a particular purpose, or a functioning component of a larger solution.
- 5 Examples of relevant implications include:
- social
 - cultural
 - legal
 - ethical
 - intellectual property
 - privacy
 - accessibility
 - usability
 - functionality
 - aesthetics
 - sustainability and future proofing
 - end-user considerations
 - health and safety.

- 6 A *digital outcome* is a product that is developed using a digital device/s.

- 7 Conditions of Assessment related to this achievement standard can be found at <http://ncea.tki.org.nz/Resources-for-Internally-Assessed-Achievement-Standards>.

Quality Assurance

- 1 Providers and Industry Training Organisations must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.
- 2 Organisations with consent to assess and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference

0233