Achievement Standard

Subject Reference	Digital Technologies and Hangarau Matihiko 2.2
Title	Apply conventions to develop a design for a digital technologies outcome

Level	2	**Credits**	3	**Assessment**	Internal

Subfield	Technology
Domain	Digital Technologies

Status	Registered	**Status date**	29 November 2018
Planned review date	31 December 2020	**Date version published**	29 November 2018

This achievement standard involves applying conventions to develop a design for a digital technologies outcome.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
● Apply conventions to develop a design for a digital technologies outcome.	● Apply conventions to develop an informed design for a digital technologies outcome.	● Apply conventions to develop a refined design for a digital technologies outcome.

Explanatory Notes

1   This achievement standard is derived from 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   *Apply conventions to develop a design for a digital technologies outcome* involves:
- describing the purpose of the outcome and the requirements of the end users
- investigating and applying relevant conventions
- generating and modelling a range of design ideas
- selecting a design for the purpose of the outcome and explaining the appropriateness of the design
- explaining relevant implications.

Apply conventions to develop an informed design for a digital technologies outcome involves:
- using feedback gained from modelling to improve the design
- explaining how the chosen design uses appropriate conventions
- addressing relevant implications and end-user considerations.

Apply conventions to develop a refined design for a digital technologies outcome involves:
- justifying how the chosen design addresses implications, end-user considerations, and uses appropriate conventions.

3   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.

4   Examples of *conventions* include:
- usability heuristics
- visual hierarchy
- film genre conventions
- relevant composition methods
- schematic diagram conventions
- system block diagrams
- circuit schematics with component symbols
- scale drawings of enclosures
- naming conventions and naming schemes
- object-relationship mapping and data modelling.

5   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