Achievement Standard

Subject Reference	Digital Technologies and Hangarau Matihiko 3.8
Title	Use complex processes to develop a digital technologies outcome

Level   3   **Credits**   6   **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 using complex processes to develop a digital technologies outcome.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
• Use complex processes to develop a digital technologies outcome.	• Use complex processes to develop an informed digital technologies outcome.	• Use complex processes to develop a refined 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   *Use complex processes to develop a digital technologies outcome* involves:
- using recognised and appropriate project management tools and techniques to plan the development of a digital technologies outcome
- decomposing the digital technologies outcome into smaller components
- trialling components of the outcome
- testing that the digital technologies outcome functions as intended
- addressing relevant implications.

Use complex processes to develop an informed digital technologies outcome involves:
- effectively using project management tools and techniques to manage development, feedback and/or collaborative processes
- effectively trialling multiple components and/or techniques
- effectively using information from testing and trialling to improve the functionality of the digital technologies outcome.

Use complex processes to develop a refined digital technologies outcome involves:
- synthesising information gained from the planning, testing and trialling of components
- discussing how this information led to the development of a high-quality digital technologies outcome.

3   Examples of *project management tools and techniques* include:
- Agile or waterfall techniques
- Kanban or scrum boards
- version control software
- collaboration tools
- managing assets.

4   Examples of *relevant implications* include:
- social
- cultural
- legal
- ethical
- intellectual property
- privacy
- accessibility
- usability
- functionality
- aesthetics
- sustainability and future proofing
- end-user requirements
- health and safety.

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