Achievement Standard

Subject Reference	Generic Technology 1.5				
Title	Demonstrate understanding of how technological modelling supports decision-making				
Level	1	**Credits**	4	**Assessment**	External
Subfield	Technology				
Domain	Generic Technology				
Status	Registered	**Status date**	20 January 2011		
Planned review date	31 December 2019	**Date version published**	17 November 2016		

This achievement standard involves demonstrating an understanding of how technological modelling supports decision-making.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
• Demonstrate understanding of how technological modelling supports decision-making.	• Demonstrate in-depth understanding of how technological modelling supports decision-making.	• Demonstrate comprehensive understanding of how technological modelling supports decision-making.

Explanatory Notes

1 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/Curriculum-support/Safety-and-Technology-Education, 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* achievement objectives to which this standard relates, see the Papa Whakaako for the relevant learning area.

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2 *Demonstrate understanding of how technological modelling supports decision-making* involves:

- identifying the technological modelling undertaken to develop and trial a technological outcome
- identifying evidence derived from technological modelling
- describing how the evidence gained informed decisions about 'what could happen' and 'what should happen' for the technological outcome.

Demonstrate in-depth understanding of how technological modelling supports decision-making involves:

- explaining the purpose of the technological modelling undertaken to develop and trial a technological outcome
- explaining why the evidence gained enabled decisions to be made about 'what could happen' and 'what should happen' for the technological outcome.

Demonstrate comprehensive understanding of how technological modelling supports decision-making involves:

- discussing how decisions made about a technological outcome considered 'what could happen' and 'what should happen'
- discussing how technological modelling identifies risk to support decision making.

3 *Technological modelling* refers to both functional modelling and prototyping.

4 Assessment Specifications for this achievement standard can be accessed through the Technology Resources page found at http://www.nzqa.govt.nz/qualifications-standards/qualifications/ncea/subjects/.

Replacement Information

This achievement standard and AS91049 replaced AS90050.

This achievement standard, AS91045, AS91047, and AS91049 replaced unit standard 13389.

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

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