

Achievement Standard

Subject Reference	Education for Sustainability 2.6		
Title	Work cooperatively to develop and present a strategy or design for sustainability in response to a future scenario		
Level	2	Credits	3
		Assessment	Internal
Subfield	Science		
Domain	Environmental Sustainability		
Status	Expiring	Status date	20 November 2014
This achievement standard is expiring. Assessment against the standard must take place before the expiry date set out below.			
Expiry date	31 December 2015	Date version published	20 November 2014

This achievement standard involves students working cooperatively to develop and present a strategy or design for sustainability in response to a future scenario.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> Work cooperatively to develop and present a strategy or design for sustainability in response to a given future scenario. 	<ul style="list-style-type: none"> Work cooperatively to develop in detail and present a strategy or design for sustainability in response to a given future scenario. 	<ul style="list-style-type: none"> Work cooperatively to develop in detail, present and critically evaluate a strategy or design for sustainability in response to a given future scenario.

Explanatory Notes

- This achievement standard is derived from the *Guidelines for Environmental Education in New Zealand Schools*, Learning Media, Ministry of Education, 1999.
- This achievement standard is based on Level 7 of the *New Zealand Curriculum Framework* including learning outcomes from the Science, Social Science, Health & Physical Education, Technology curriculum objectives.

- 3 *A sustainable future* requires the development of ways of thinking and acting to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. Sustainability includes, but is not limited to;
- maintenance of biodiversity, ecological processes and life support systems
 - an economy relative to its ecological life support system
 - a fair distribution of resources and opportunities
 - looking beyond direct consequences of activities to explore attitudes, values and moral issues that create particular views on the use of natural resources
 - personal and social responsibility.
- 4 *In detail* means that evidence is supplied that is sufficiently qualitative and/or quantitative to support the strategy or design.
Critically evaluate means the student is required to identify and discuss strengths, weaknesses, opportunities and threats associated with the design or strategy and establish criteria on which to make a judgement.
- 5 When developing strategies or designs, the students will consider the aspects of sustainability – environmental, social, economic, cultural, and/or Māori concepts. The expression of the Māori concepts will vary between hapū and between iwi. It is expected that the local Māori community be consulted on how these concepts will be expressed.
- 6 *A future scenario* is based around a prediction implied or referenced in such publications as *Millenium Ecosystem Assessment*, Washington, DC, Island Press, 2005; *Stern Review Report on the Economics of Climate Change*, Cambridge, Cambridge University Press, 2006; *Limits to Growth: The 30 year update*, Vermont, Chelsea Green Publishing, 2004; and *Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report: Climate Change 2007*, Geneva, IPCC Secretariat, 2007. Contexts could be peak oil, carbon footprint, ecological refugees, water scarcity, efficient energy sources, communications technology, natural cycle of resources. Resources should be provided for the students to ensure they are able to develop responses to the issues outlined in the given scenario though they are also expected to supplement the resources provided with their own research.
- 7 The ability to *work cooperatively* requires students to demonstrate skills in positive interdependence, face-to-face interaction, individual accountability and interpersonal skills.
- 8 It is expected that students will use a learning journal to show reflection on their contribution to the group activity by identifying their roles through written task descriptions and provision of a self-appraisal at the end of the activity. The teacher is required to observe and record some indicators/evidence of the level of participation and contribution by each student in a team.
- 9 Students will need to hand in their own design or strategy and, for achievement with excellence, a critical evaluation. Students will be expected to present their design or strategy as part of their group, to a nominated audience. This could be a live presentation such as seminar or the production of a video or DVD.

Replacement Information

This achievement standard has been replaced by AS91734.

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

0226