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Achievement Standard

Subject Reference Agricultural and Horticultural Science 1.2

Title Demonstrate practical skills used in agricultural or horticultural

production

Level 1 **Credits** 4 **Assessment** Internal

Subfield Science

Domain Agricultural and Horticultural Science

Status Registered Status date 17 December 2010

Planned review date 31 December 2019 Date version published 20 November 2014

This achievement standard involves the demonstration of practical skills associated with agricultural or horticultural production.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate practical skills used in agricultural or horticultural production.	Demonstrate practical skills used in agricultural or horticultural production with control.	Demonstrate practical skills used in agricultural or horticultural production proficiently.

Explanatory Notes

- This achievement standard is derived from *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, and based on the outcomes in the *Teaching and Learning Guide for Agricultural and Horticultural Science*, Ministry of Education, 2010 at http://seniorsecondary.tki.org.nz/.
- Where animals are involved, *practical skills* must comply with the Animal Welfare Act 1999, as outlined in *Caring for Animals: a Guide for Teachers, Early Childhood Educators, and Students*, Learning Media, Ministry of Education, 1999.
- 3 Demonstrate practical skills involves:
 - selection and use of appropriate equipment, materials and conditions when demonstrating the skill
 - carrying out skills in a safe manner
 - achieving the required outcome.

Demonstrate practical skills with control involves employment of a correct sequence of procedures that leads to effective use of equipment and materials.

Demonstrate practical skills proficiently involves fluent employment of a correct sequence of procedures that leads to effective and economical use of equipment and materials.

- 4 Practical skills could include but are not limited to: taking cuttings, pruning, cultivation, tool maintenance, tailing lambs, drenching sheep, moving a temporary electric fence, spraying weeds using a knapsack unit. Practical skills include aspects of a specific process eg the skill of pruning includes selection of equipment, cutting, and cleaning up.
- Appropriate equipment could include but is not limited to tools such as: spade, fork, trowel, secateurs, mower, shearing handpiece, elastrators, ear marker, wire strainer, ear muffs, visors.
- Appropriate materials could include but are not limited to: soil, potting mix, containers, sprays, seed, plants, fertilisers, animal remedies.
- 7 Appropriate conditions could include but are not limited to those affecting:
 - soils texture, structure, topography
 - plants nutrient deficiency, pest infection, stage of maturity
 - animals pregnancy, body condition, disease.
- 8 Fluent refers to the carrying out of a skill in a non-hesitant, confident manner and in a time-frame relevant to the skill.
- 9 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

- Providers and Industry Training Organisations must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.
- 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