



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

National Qualifications Framework Levels 1–3, 2004

Agricultural and Horticultural Science

National Moderator's Report

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General Guidance for Assessors of Achievement and Unit Standards

The purpose of external moderation is to provide reassurance that assessor judgements are at the national standard and are made on the basis of assessment materials that are fair and valid.

All assessment materials are expected to:

- give the student the opportunity to meet the requirements of the standard
- have an assessment schedule that gives evidence of appropriate student responses and clear judgements at all levels.

The Ministry of Education contracted subject experts to write assessment resources for achievement standards. These are not pre-moderated. The intention is that they are modified to suit teaching programmes and student needs. They do not provide 'rules' but suggest different ways of assessing to the nationally-registered standard.

General Overall Comment

Assessors should be aware of the latest registered versions of achievement standards and the official MOE exemplar material that accompanies each registered achievement standard. Levels 1 and 2 achievement standards have been revised. Assessment materials used in previous years may no longer meet the requirements of newly registered achievement standards. The only officially recognised MOE exemplar materials are those currently on the TKI website – some exemplar materials have been removed and if these continue to be used it is important to note that some require significant modification before being used again. Likewise, exemplar materials used during NCEA training were developed when achievement standards held draft status and it is highly likely that they are now deficient in several respects.

Assessors are advised to consult the NZQA website for the latest versions of the achievement standards and the TKI website for the most recently developed, or modified, exemplar materials.

Unit standards have not been altered.

Assessors have expressed concern that in some moderation reports comments have been made about the assessment of evidence not required by the standards. Other skills and knowledge may be assessed in an activity as well as those required by the standard. Candidates should be made aware of this, and judgement statements must not require students to be successful in skills/knowledge that are not a requirement of the standard.

Level 1

AS 90156 Carry out a practical agriculture or horticulture investigation with direction

This standard has been revised; it now has a single criteria, with greater emphasis being placed on scientific skills. Students are now required to identify both the dependent and independent variables at all levels of achievement and provide a range for the independent variable, for example it is no longer acceptable to investigate the effect of time on soaking seeds by selecting non-soaked and soaked for 24 hours. The expectation is that students will soak seeds over a range of time intervals. Likewise, investigations comparing 'with and without fertiliser' or 'with and without water' should be avoided.

The main determining factors at Merit level are the quality of the plan and the quality of data processing. Students who conduct multiple trials but then proceed to graph the results of all trials, not the averaged data, are not working at Merit level. A valid conclusion is now required at Merit level, while evidence of critical thinking is required for Excellence.

AS 90157 Demonstrate practical skills and knowledge in agriculture or horticulture production

This standard has been revised. The intent of the standard is to assess practical abilities. Most assessors are correctly adapting exemplar materials to suit local needs, but in some cases assessors require students to ‘explain’ why certain techniques or equipment are used. The standard does not require explanations at any level of achievement.

Assessors are reminded that a range of equipment, materials, plants/animals and conditions must be provided so that students can achieve at any level.

US 18984 Demonstrate knowledge of plants and plant production

This is a very popular unit standard with all assessors using material developed by science educators. The use of matching lists constitutes a form of ‘description’. The question relating to the glasshouse diagram requires attention in terms of intent and space for student responses. Some questions relating to management are outside the scope of the standard and could be removed. The schedule recognises that evidence from such questions is not required for achievement of the standard.

Level 2

AS 90450 Carry out a practical agricultural or horticultural investigation with supervision

This standard has been revised and is now one criterion. The intent of the standard is that students design their own investigation to extend over a period of time, unlike the Level 1 standard that could be carried out in a single class period. The expectation is that student plans will reveal differences in wording if a common task is set.

Revised versions of the original exemplars ‘*Growing Chickens*’ and ‘*Cuttings*’ will soon be available on the TKI website.

AS 90455 Describe how livestock behaviour impacts on productivity

This standard has been revised and is now one criterion. A new generic exemplar will soon be available on the TKI website. At Achievement and Merit levels, students are required to describe/explain how interactions between behaviour and management impact on productivity.

AS 90456 Examine and redesign landscape area(s)

This standard has been revised. Only a limited number of providers offered this standard in 2004. A new exemplar, ‘*Local Landscapes*’, will soon be available on the TKI website. Previous exemplar materials will require significant modification before being used again.

Level 3

AS 90649 Research the production and marketing of a locally produced primary product

At least two factors affecting supply and two factors affecting demand must be explained at all levels of achievement. Evidence from 2004 moderation indicates that many explanations accepted for all criteria were, at best, descriptions. It is essential, when explaining management practices used, that students establish linkages between the management practice and the product required by market opportunities. It was common for students to copy large extracts from sources of secondary data without providing evidence that they understood the concepts involved. Moderators expressed concerns over the awarding of Merit and Excellence to work that was only at Achievement level. Assessors are reminded that where oral evidence is sought to clarify deficiencies in written projects in a resubmission situation, then written evidence of such information must be provided for moderation purposes.

Assessment schedules should provide examples indicating depth of treatment required.

AS 90650 Investigate production and marketing of a nationally significant primary product

This standard bears no resemblance to the draft standard and so exemplar material provided in 2002 is inadequate, eg 'Surveys'. The intent of the standard is for students to investigate a product using at least three techniques; hopefully this will involve getting students out of the classroom and involve 'hands on' experience. Assessors are allowing students to use the research of magazines, books and the Internet as their **range** of information-gathering techniques. Explanatory Note lists 'researching secondary data (texts, Internet, etc)' as one possible technique. It is expected other information gathering techniques will involve the gathering of primary data.