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WRITING LEARNING OUTCOMES: STRUCTURE AND CONSIDERATIONS

This document provides guidance to tertiary education providers on the structure, key considerations and common mistakes to avoid when writing learning outcomes.

NZQCF Programme Approval, Recognition and Accreditation Rules 2022 and Microcredential Approval and Accreditation Rules 2022 establish the requirement that programmes of study and micro-credentials have a set of learning outcomes that demonstrate a coherent way to achieve the qualification or intended outcomes.

Similarly, the NZQCF Directory of Assessment and Skill Standards Listing and Operational Rules 2022 establish the requirement that Skill Standards have learning outcomes.

The New Zealand Qualification and Credential Framework (NZQCF) is based on outcomes described in terms of knowledge, skills, attributes, and application. The outcomes are defined at different hierarchies, depending on whether they are included in a qualification, e.g., Graduate Profile Outcomes (GPOs), programmes (POs), and component/skill standard /micro-credential learning outcomes (LOs).

GPOs

A graduate profile outcome statement comprehensively describes what a learner awarded a qualification must be able to collectively do, be and know.

POs

A programme outcome statement describes what the learner is expected to do, be able to demonstrate and know by the end of a programme. These statements are broad but still specific enough to reflect the conceptual knowledge and skills that are delivered through the components of the programme and align with the graduate profile outcome statements of the qualification.

LOs

A learning outcome statement describes the <u>specific</u> knowledge, skills, and understanding a learner will achieve after completing a learning process.

This document provides guidance on writing learning outcomes included in skill Standards, programmes and micro-credentials as component (course/module) learning outcomes.

STRUCTURE

The standard format of a learning outcome includes an active verb, content and context.

- * The active verb represents the performance a learner is expected to be able to demonstrate after engaging in the process of learning.
- * The content is the knowledge and/or skills to be demonstrated in the performance.
- * The context is the setting or conditions within which the performance is met.

Active verb	Content	Context
Evaluate	the implications of multiculturalism	in Aotearoa New Zealand's exercise industry

KEY CONSIDERATIONS

Learning outcome statements should be:

1. SMART

a. **S**pecific: unambiguous and address defined areas of competencies - short statements that enable learners to understand what knowledge or skills are gained.

Enduring knowledge, skills and applications that learners are expected to demonstrate as an outcome of their learning.

Including too many concepts will make the learning outcome long and confusing. They need to be at an appropriate level of generality to allow adaptability in the curriculum, instructional methodology, assessment and students' learning needs. Striking a balance is the key.

- b. Measurable: linked to observable or demonstrable knowledge, skills, and attributes. The active verb at the beginning of the learning outcome is integral in illustrating measurability and assessing ability.
- c. Achievable: written for a typical learner to establish a clear required performance expectation.
- d. *Relevant*: collectively unpack the requirements of the GPOs or the outcomes they contribute to.
- e. Time-bound: demonstrate achievement within a specific timeframe.

NZQA defines one credit as 10 notional learning hours; therefore, the knowledge and skills included in the learning outcomes imply a credit value, i.e., learning hours allocated to the proposed learning of knowledge and skills. Credit allocation for learning outcomes is generally written in whole numbers.

- 2. written as an active verb form.
- 3. manageable in terms of the number: no specific number of learning outcomes exists. However, too many learning outcomes would designate too much focus on small concepts and would be unmanageable in the assessment process.
- 4. written to enable the use of a diverse range of assessment methods. *Remember:* achievement of learning outcomes is measured through an assessment (test, exam, project, report).

MĀTAURANGA MĀORI

LEARNING OUTCOMES AND TE REO MĀORI

Learning outcomes may be written entirely in te reo Māori, or Māori concepts can be included in English sentences. The level descriptors are followed as per the NZQCF. However, some key aspects should be considered when writing LOs within te ao Māori contexts:

Content statements or notes may be required to guide the provider and developer.

Consider iwi/hapū and kaupapa contexts. Keep LOs broad unless written specifically for an iwi/hapū context. Specificity can be included in the teaching and learning process.

It is better to write LOs entirely in te reo Māori and include a translated version in English or vice versa; however, many LOs consist of an amalgamation of both te reo Māori and English.

Amalgamated sentences must be well written to ensure they follow a proper structure and the key considerations stated earlier.

Below is an example of an inadequately written LO:

* Use whakawhiti kōrero, whakarongo and other principles of communication to build relationships.

Below is a revised LO:

* Apply Māori approaches to communication through whakawhiti kōrero and whakarongo to build relationships

Including te reo Māori within English-based LOs must be done in a way that honours the subject matter expert's input and mātauranga while ensuring comprehension and clarity within an English-based sentence.

SKILL STANDARDS

When designing LOs, the intent of the Skill standard must be considered holistically. The learning outcome structure and key considerations stated above should be taken into account.

Skill Standards FAQ: https://www2.nzqa.govt.nz/assets/About-us/Consultations-and-reviews/Rules-2022/FAQs-External-Release-Oct-2022.pdf

LEARNING TAXONOMIES AND LIST OF USEFUL VERBS

In simple terms, taxonomies represent 'classifications'.

Learning taxonomies organise different stages of learning development, providing a practical framework for selecting the appropriateness of specific learning outcomes at different complexity levels.

Most widely known in Bloom's taxonomy, which has been revised and developed over time. The table below shows the taxonomy and useful verbs that can be used to design learning outcomes.

Types of cognitive learning	Verbs
Remembering (recalling, remembering and recognising knowledge)	state, identify, select, define, name, match, quote, cite, report, deliver, write, relate, perform, identify, indicate, list, recognise, select, state, illustrate
Comprehension (establishing meaning, making use of the facts or ideas through oral, visual and written messages)	associate, convert, compare, outline, translate, summarise, arrange, defend, discuss, describe, distinguish, estimate, explain, interpret, infer, demonstrate, report, restate, review
Applying (carrying out or using a procedure through executing and implementing)	apply, determine, illustrate, restructure, solve, develop, construct, demonstrate, interpret, investigate, modify, organise, classify, predict, prepare, produce, sketch, translate
Analysing (breaking into parts, determining how the parts relate to one another through differentiating, organising and attributing)	analyse, examine, differentiate, distinguish, categorise, summarise, research, categorise, compare, critique, select, debate, determine, probe, discriminate, experiment, identify, question, test

Evaluating (make judgements based on criteria and standards)	evaluate, assess, critique, conclude, criticise, judge, defend, validate, discriminate, estimate, contrast, revise, justify, interpret, measure
Creating (connecting elements to establish a coherent whole or reorganising into new ones through generating, planning, and producing)	assemble, compose, create, unify, formulate, design, integrate, propose, synthesise, adapt, rearrange, compile, construct, devise, explain, generate, plan, restructure, collate, systematise, propose, rearrange, reconstruct, systemise, relate, reorganise, revise

Table 1: Bloom's Taxonomy

Each verb has a specific meaning, which helps establish the learner's ability to know the prescribed knowledge and skills and clarifies the assessment design. Below are definitions of some commonly used verbs.

Oxford Online Dictionary definition	Verb
Give a detailed account of; mark out or draw	Describe
Make (an idea or situation) clear to someone by describing it in more detail or revealing relevant facts.	Explain
Establish or indicate who or what (someone or something) is	Identify
Examine (something) methodically and in detail, typically to explain and interpret it.	Analyse
Explain the meaning of (information or actions)	Interpret
Form an idea of the amount, number, or value of	Evaluate
Show or prove to be right or reasonable	Justify
Talk or write about (a topic) in detail, taking into account different issues or ideas.	Discuss
Understand fully; grasp the full implications of	Appreciate

Evaluate (a theory or practice) in a detailed and analytical way	Critique
Estimate, measure, or note the similarity or dissimilarity between	Compare
State or describe exactly the nature, scope, or meaning of	Define
Bring or put into operation or use	Apply
Advise or suggest (something) as a course of action	Recommend
Give the main features of a subject, leaving out minor details, and using logical arrangement	Outline

Table 2: definitions of commonly used verbs

COMMON MISTAKES TO AVOID

Unmeasurable verbs

Active verbs describe knowledge and skills that learners are expected to demonstrate and that are measurable through the assessments.

- * Learn about Jean Piaget's theory of cognitive development.
- * Understand Te Whare Tapa Wha.

In both the above examples, the active verb *learn* does not express a process of learning here and is missing the context.

- * Participate in group meetings to collaborate with other team members.
- * Demonstrate knowledge of different branding and marketing strategies.

Participate is an active verb. However, in the same manner, it only implies an action that does not explicitly result from the learning process.

Similarly, *Demonstrate knowledge of* as an active verb is vague and does not specify how the knowledge will be measured through the assessment. However, *Demonstrate* as a standalone verb can be used when the learning outcome requires the learner to undertake an application or practical-oriented assessment.

* Demonstrate ability to follow standard operating procedures when preparing dishes in a commercial kitchen.

Not all active verbs are suitable for describing learning outcomes, as not all active verbs can indicate an outcome or result that are measurable, e.g. undertake, conduct,

complete, know, understand, become aware of, appreciate, learn, become familiar with, think/comprehend.

Avoid verbs that are open to different interpretations of what actions they require.

Role of an active verb

The active verb alone does not determine the level of required cognition. The content and context of the learning outcome are equally essential; for example, with the active verb 'demonstrate' or 'apply', the content and context will show the level of advanced or specialised knowledge and skills.

* Demonstrate communication skills while assisting a client in a salon.

This learning outcome is at Level 2, whereas the below learning outcome uses the same verb but is at Level 5. Again, the content and context make the outcome appropriate for the required level of learning.

* Demonstrate communication, teamwork and interpersonal skills in implementing an IT solution to meet organisational requirements.

Example

* Calculate financial ratios to measure profitability, asset utilisation, working capital management, long-term financial stability, and financial markets.

This learning outcome is proposed as a Level 5 outcome. A restructured statement that more accurately reflects the intention and the level of the learning outcome could be:

* Apply financial analysis techniques to assess profitability, asset utilisation, working capital management, long-term financial stability, and financial markets for an organisation.

Another example

* Apply basic conflict resolution techniques to improve work relationships.

This learning outcome is proposed as a Level 3 outcome. The content and context show that it is appropriate for a Level 3 learning package.

* Apply conflict management techniques to optimise the management of the pediatric operating room.

The same verb is used; however, the content and context make the learning more appropriate for Level 7.

Unnecessary adverbs or modifiers

Learning outcomes should not include unnecessary adverbs or modifiers, making the learning outcomes challenging to measure.

* Accurately measure health-related parameters in healthy adult individuals.

- * <u>Correctly</u> perform and teach the major exercises and mobility techniques required for entry into the Strength and Conditioning profession.
- * Successfully communicate with clients about their needs.

Adding adverbs to learning outcomes means that additional clarification or definition of these adverbs is required before assessing the learning outcomes, e.g., in what sense is it (the action) accurate/correct/successful?

Multiple verbs

When writing learning outcomes with two or more active verbs, the semantic and logical relationships between the verbs are critical. Unless both actions are significant and work together, it is better to use only one verb. For instance,

* Plan and prepare a financial analysis report for an organisation applying ethics, professionalism and industry norms.

Rather than using *plan and prepare*, which have similar meanings, it might be better to replace them with *develop*.

* Conceptualise, plan, organise, design and independently conduct research to solve complex identified problems.

This example uses five verbs to lead the learning outcome statement, suggesting the following:

- Conceptualise research;
- Plan research:
- Organise research;
- Design research;
- Conduct research.

The four preceding actions are embedded in the last action, *conduct*, which, like *undertake*, is not a verb describing outcomes but a task. This statement requires a rewrite based on the component aim or skill standard purpose and content regarding assessment methods and tasks.

Using only one verb appropriate to the level, content and discipline is recommended.

Writing learning outcomes as assessment tasks

Learning outcomes indicate what learners can do with the knowledge and skills gained through the learning journey of a component. The achievement of the learning outcomes is judged through the successful completion of assessments. In some instances, assessment tasks are proposed as learning outcomes.

* At the successful completion of this course, students will be able to complete a small research project.

This is a task that does not indicate the knowledge, skills and application involved. This is an inappropriate learning outcome statement regarding format, active verb, content and context.

Another example:

- * The learners will be able to:
 - Implement a research proposal.
 - Undertake a comprehensive literature review within a chosen field of practice.
 - Gather, store and critically analyse data relevant to the research topic using appropriate and justifiable methods and tools.

The first statement in this example does not express a learning outcome but a task. In addition, the statement is missing the context; therefore, it is not entirely clear why or what the learner needs to learn to implement a research proposal.

Similarly, the verbs *undertake*, *gather* and *store* describe tasks instead of consequential learning outcomes. These three statements present a process of actions involved in a project rather than being an outcome of learning.

FURTHER READING GUIDE:

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