LEARNING AND ASSESSMENT

A GUIDE TO ASSESSMENT

FOR THE NATIONAL QUALIFICATIONS FRAMEWORK

NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

Introduction to 2001 edition

Learning and Assessment was first published in 1996. It has been in demand ever since and reprinted many times in its original format. The 2001 edition retains the text of the original. The photographs have been omitted to reduce costs and the original Foreward was no longer relevant.

We are delighted and a little surprised that there is sufficient demand for a reprint five years on. When we were researching for Learning and Assessment late in 1995 only 40,000 learners were being assessed for the Framework. There were 4,800 registered unit standards and 109 national qualifications. Only 414 providers were accredited and 16 ITOs were able to register workplace assessors. Sixty schools were trialling mathematics and geography standards.

There was little practice of any kind, let alone proven successful practice, on which to base advice to assessors. Our scenarios and case studies in computing, small business management, commercial fishing and economics reflected hope and expectation rather than experience.

There are now 626,000 learners registered on the Framework; about 200,000 of them were active in 2000. More than 770 National Certificates and National Diplomas are available and 15,800 unit standards cover virtually all areas of learning and industry. In 2002, students who would have been sitting School Certificate will become Framework learners through the National Certificate of Educational Achievement (NCEA).

Our 1996 publicity for Learning and Assessment said "the big change is how we think about evidence". (In fact the intended title was Considering the Evidence.) The term is now common usage among teachers and assessors and we have even heard learners talk about producing evidence for assessment.

In other words, the Framework is a successful working reality. Its impact has been acknowledged by politicians, employers, educators and researchers. If we were writing Learning and Assessment now the problem would be to adequately reflect the huge diversity of styles of learning and approaches to assessment the Framework has served and encouraged.

Learning and Assessment has its limitations. It will be (or should be) too basic for many involved in Framework assessment. But it is always good to get back to basic concepts occasionally. Learning and Assessment

is primarily for teachers and tutors within learning providers, not for workplace assessors. But much of the demand for the publication has come from industry assessors. It does not describe the subtleties of assessment, whether to assess at element or performance criteria level, for example.

However, we have not added or removed material. Feedback confirms that there is still a need for introductory guidance on how to use unit standards. In recent months we have often referred to Learning and Assessment to find the right way to explain something and have found that all definitions, comments and advice remain current.

We encourage readers to visit the NZQA website (www.nzqa.govt.nz) for more recent and complementary material. For example, we have published descriptions of the assessment of prior learning, best practice in assessment and moderation, and current approaches to moderation. The NCEA has been developed since Leaning and Assessment was written. A visit to the NCEA website (www.ncea.govt.nz) will show readers the extent to which assessment for NCEA is similar to assessment for the wider Framework.

As always, we welcome your comments and suggestions.

Bill Lennox

NZQA Communications

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About this guide

L EARNING AND ASSESSMENT is for tutors, teachers, trainers, lecturers and assessors in all educational institutions that are assessing for the National Qualifications Framework.

This guide tackles one aspect of the Qualifications Framework: the assessment process. It explores the basic thinking and principles underlying assessment for the Framework. You can see how to select appropriate assessment activities and consider how this kind of assessment impacts on learning programmes.

Learning and Assessment draws your attention to assessment evidence. When you assess you deal with evidence of a learner's performance. It is well known that the Qualifications Framework uses standards-based assessment. But first you have to collect the evidence. You are invited to step back and take a fresh look at the assessment process, how you collect evidence and how you evaluate evidence.

This guide has been arranged so that you can choose whether to start from the beginning and work through to the end or to focus on particular sections. To find your way, you can look at the chapter headings and the questions summarising each chapter.

Learning and Assessment is designed to be read in all educational institutions so its language is generalised. 'Learning programmes' are any planned chunks of learning that could include assessment against unit standards – courses, units of study, modules and the like, regardless of length or the number of learners involved. 'Learners' are the people who are being assessed – some of them will not be 'students' in the traditional sense. 'Assessment' generally means assessment for national qualifications. The guide is addressed to 'you' as the teacher or tutor or lecturer – where a generic term is needed, we refer to you as the 'assessor'.

A general guide like this can go only so far. As unit standards become available in your own field you will be able to apply the general approaches discussed in Learning and Assessment to unit standards that you will be working with. Examples used in this publication draw on the actual unit standards that were available at the time of publication. The Qualifications Authority welcomes your comments on this publication and thanks those who contributed to its development.

Contents

Key points

QUALIFICATIONS FRAMEWORK assessment
results describe what learners know,
understand and can do.

Evidence about a learner's abilities can
be collected in a variety of situations
and evaluated against standards.

1 Assessment for the Qualifications Framework

ASSESSMENT for the National Qualifications Framework is conducted by accredited organisations. The accredited organisation is responsible for awarding credit and communicating results to the NZQA. If you are a teacher, lecturer or tutor in an accredited teaching institution you are, in effect, a registered assessor. There are other ways to become registered as an assessor in the workplace.

■ What's new about this approach?

Because you are the assessor, you can integrate assessment with learning to suit particular aims, priorities and styles of learning. Learners can see what they are aiming at and receive immediate recognition when they have reached the national standard.

The Qualifications Framework removes many of the constraints and assumptions of previous assessment systems. Specific learning outcomes are assessed, not broad achievements over a whole course which are reflected in a single mark. Some performances will be assessed in summative tests but others can be observed during the course of work or learning. Some of the learning activities that your students will be involved in can produce evidence for assessment. Students should have more than one opportunity to show what they can achieve.

The form of standards-based assessment used in the Qualifications Framework provides a new way to evaluate student performance – against unit standards that represent nationally agreed levels of performance.

You can approach assessment afresh, asking *What do I need to assess?* and *What is the best way to assess it?* This chapter looks at what we actually do when we assess.

In this chapter:

What's new about this approach?

What about existing assessment practices?

What is evidence and how is it collected?

How is evidence evaluated?

What is good assessment?

Framework assessment is about levels of performance rather than coverage of a set course of work.

■ What about existing assessment practices?

The National Qualifications Framework is 'new' in the sense that it is a new 'package' of approaches to assessment and learning. As the discussion in the rest of this chapter shows, you already use many assessment and reporting techniques that fit with the Framework approach.

You will be able to use or adapt many of the tests, projects, assignments, examinations and other tasks that you currently set and mark. This will be straightforward if you have tailored the tests and other tasks so that they are appropriate to the particular knowledge and skills that your students are working on. If you are using a form of competency-based or achievement-based assessment the change process will be even simpler.

Your current tests and assignments are probably designed to produce a range of marks or grades. But in fact you are almost certainly marking against criteria.

The instructions that you give to students will often describe the sort of performance that will score high marks:

• *In this assignment you need to show that you can apply …*

The marking schedules used for tests and examinations will often specify (or at least imply) the criteria to be applied in judging student work:

• *In marking this question, reward answers that show that the candidate understands the principle of …*

You have compared each student's work with a desired attainable level of performance, even if you don't make that level explicit.

These are exactly the kinds of expectations that the Framework's unit standards specify. The difference is that unit standards make targets explicit and require learners to meet the standard in full before they get credit.

The purpose of most current assessment is to differentiate between students over a whole course of study. Because students have to be compared with each other, it has been necessary to test everyone under standardised conditions. Everybody sits the same test within the same time limits. Marks from a range of assessments are added together to indicate the relative success of each student. Results show to what extent students have succeeded or failed over the whole course. You are probably expected to 'spread' the marks.

The purpose of assessment for the Qualifications Framework is to ascertain whether or not students have achieved the level of performance required by the unit standard. Assessment can be kept close to learning so that students can continue to learn and be assessed as they move closer to that level of performance.

Student performances are to be compared with the criteria within the unit standard so it is acceptable for students to be assessed under different conditions. Even within the same class, different students could complete different tasks so long as each task is appropriate to the requirements of the unit standard.

Framework results describe the level of performance achieved in separate aspects of skills, knowledge and understanding. There is no credit for partial success or failure. There is no attempt to produce a single global result for a whole course of study.

In some respects your current practices will have to be adapted for Framework assessment. You ought to provide opportunities for students to try again, for example. But many of the actual assessment instruments that you use will still be appropriate. You can make two checks to ensure that your assessment tasks and marking schedules are valid in terms of unit standards:

- **Task or test design**. Does the task reflect the elements of the unit standard? If the task tests skills and knowledge that are not in the unit standard will this make it more difficult for the students to meet all of the unit standard's criteria? If the task does not cover the entire unit standard, how will you ensure coverage? You could expand the task or use further tasks.

- **Marking**. Are you assessing student work against the performance criteria in the unit standards? Does the task require learners to provide sufficient work to meet all criteria?

Remember that assessment for purposes other than credit on the Qualifications Framework is entirely up to your institution. Framework results could be aggregated to produce rankings or whole-course results if that is what your institution requires. Your marking could produce marks or grades for local reporting and for your own institution's awards.

Learners can persevere until they reach the standard rather than be satisfied with partial success.

All assessment involves the collection and evaluation of evidence.

■ What is evidence and how is it collected?

Whenever you assess you need to collect evidence – information or objects that establish what a learner knows or can do. Courts of law use the term evidence in the same way – a judgement is made on the basis of evidence.

Evidence for assessment takes many forms: a product (a set of accounts, a cake or a poem); an explanation (in a report, an essay or a talk); a performance (a song recital or a high jump). Answers to questions and solutions to problems are evidence. The best evidence is usually the most direct: if you want to know if someone knows how to conduct an experiment, get them to do it rather than just talk or write about it.

Written examinations and tests are sources of evidence – candidates are given a set time to provide written evidence about what they know or can do. This evidence provides information about a sample of a learner's abilities. There is an obvious limitation on the kind of evidence that can be collected from a written examination – products like art folios, computer programmes or chairs cannot be made; products like stories or house plans that are prepared under time constraints will not always do the learner justice; written answers about conducting a scientific experiment may tell you more about the learner's writing skills than their ability to perform those tasks. The need to limit time and access to resources means that written answers might provide evidence about writing skills or memory, rather than depth of knowledge or understanding.

Internal assessment as it operates in many institutions enables you to get evidence about a learner's abilities from a wider range of sources. Written tests are still used, but also research projects and live performances. Products can be fully developed before being submitted for assessment; performances can be under realistic conditions. A variety of written tasks can be administered at suitable times to test genuine understanding of a topic. Learners can be given time to redraft their writing and given access to reference books where appropriate.

In final examinations and in most internal assessment, learners have to live with the results from limited evidence, even when it's obvious that after a little more study they could have done better. Those who do not succeed or who receive mediocre results must do the whole course again or give up altogether.

The Qualifications Framework approach to evidence

- Evidence can come from a variety of sources, including examinations and tests.

- Much evidence can be collected along the way, not just in a final test.

- Normal learning activities can provide evidence for assessment.

- Assessment activities should be designed to produce direct and valid evidence.

- Assessment activities can be consistent with the style of learning.

- Learners can provide evidence of improved performance.

- More than one sample of evidence can be collected.

■ How is evidence evaluated?

Once we have collected evidence of a learner's abilities, we need to evaluate it. All judgements are made as a form of comparison – that joke was funnier than your last one; this car doesn't meet my requirements; this wine is cheaper than that wine. If we are to evaluate assessment evidence we need to know what we are comparing it with.

There are three approaches:

- Each learner's evidence is evaluated against their own previous achievements – this is self-referenced (or ipsative-referenced) assessment and is helpful to show how much progress students have made over time.

- Each learner's evidence is compared with a predetermined standard – this is criterion-referenced or standards-based assessment and is helpful in describing a student's abilities and providing clear learning targets.

- Each learner's evidence is compared with the achievements of others – this is norm-referenced assessment and is helpful to rank students or to sort them for selection.

Athletes evaluate performances using each of these approaches. Selectors of Olympic Games teams set qualifying standards for each event – a high jumper who has a successful leap above the qualifying height has been assessed in a standards-based way. When you hear that a swimmer was pleased to have achieved a 'personal best' (even if they didn't win) they

Learners provide evidence of their abilities and assessors evaluate that evidence.

are using self-referencing, indicating that they are improving. In the Olympic Games 100 metres medals are awarded on a norm-referenced basis – each competitor's performance is compared with the performances of the other competitors (especially the winner) regardless of the standard achieved or whether that was their personal best.

Results for current national awards and from most examinations used within teaching institutions in New Zealand are norm-referenced: candidates are compared with each other. Generally, full marks are given to the correct or what are deemed to be the best answers and all others are ranked below in terms of how they fail to measure up to that top performance. Many norm-referenced examinations and other current assessments actually use a form of standards-based assessment during the marking process – each candidate's work (the evidence) is compared with written criteria. Then these judgements are converted into marks or grades. It has been traditional to prefer results expressed as grades, rankings or percentage marks.

Some polytechnic courses have used a form of standards-based assessment for many years – this 'competency-based' approach has passed students only after they have met a single set of criteria. Recent internal assessment in secondary schools and for some tertiary qualifications has combined standards-based and norm-referenced assessment. This 'achievement-based' assessment evaluates evidence against a set of criteria and produces a form of ranking based on multiple standards. Final results in national awards continue to be norm-referenced – there is almost always an assumption, and often a requirement, that high marks can be gained by only a few.

The Qualifications Framework uses a form of standards-based assessment

- Evidence is evaluated against written criteria.

- The criteria are expressed in a format called unit standards.

- The criteria are interpreted with the aid of external moderation.

- Either the evidence meets the criteria in the unit standard or not.

- Everyone who reaches the standard gets the credit.

■ What is good assessment?

Assessment methods will be

- **appropriate** – a variety of assessment methods will be available to ensure that assessment is suited to the performance being assessed.

- **fair** – assessment methods will not disadvantage individuals or groups by hindering or limiting them in ways unrelated to the evidence sought.

- **integrated with work or learning** – evidence collection can be ongoing, linked with normal learning or work.

- **manageable** – the methods used will be straightforward, readily arranged and will not interfere unduly with learning.

Evidence will be

- **valid** – assessment will be fit for purpose, so that assessment focuses on the requirements specified in unit standards.

- **direct** – assessment activities will be as similar as possible to the conditions of actual performance.

- **authentic** – the assessor will be confident that the work being assessed is attributable to the person being assessed – outside assistance must not distort the assessment.

- **sufficient** – the evidence will establish with confidence that all criteria have been met and that performance to the required standard could be repeated with consistency.

Assessment will be

- **systematic** – planning and recording will be rigorous to ensure sufficiency and fairness in assessment.

- **open** – learners will understand the assessment process and the criteria to be applied, and can contribute to the planning and accumulation of evidence.

- **consistent** – given similar circumstances the assessor would make the same judgement again and the judgement will be similar to judgements that other assessors would make.

These concepts are discussed further in Appendix 1 and elsewhere in this book. Sufficiency is discussed in detail in Chapter 3.

LEARNING PROGRAMMES are designed to suit learners.

Suitable unit standards are selected to become assessment targets for qualifications.

Assessment can be integrated with learning.

External moderation helps to ensure that standards are interpreted consistently.

2   Learning Programmes and Unit Standards

ASSESSMENT ought to complement learning, not dominate it. Assessment for qualifications can provide students with goals and incentives – but it should also have a positive impact on the way in which students learn. Assessment for the National Qualifications Framework is provider-based largely so that assessment can be done in conjunction with learning – it can enhance learning rather than disrupt or constrain it.

The unit standard approach to qualifications gives institutions more programming flexibility than before. Unit standards are not intended to comprise the content or dictate the style of a learning programme – they simply provide a nationally consistent mechanism for assessing what is being learned.

Unit standards are explained in detail in Appendix 2.

■ What is a unit standard?

Unit standards are concerned with learning outcomes – they provide assessment targets and the criteria that each learner's performance can be evaluated against. Each unit standard describes a specific level of performance, and to earn credit for a unit standard on the Qualifications Framework learners must meet all criteria.

Unit standards have been developed by advisory groups representing educators, professional organisations and the relevant industries. These stakeholders ensure that unit standards reflect the best of current practice and a thorough understanding of the field.

In some unit standards the criteria are so clear and unambiguous that they can be interpreted consistently by all assessors. These have been called transparent standards.

However, most unit standards do not stand alone. The level of performance that is considered acceptable will be established only in practice, by consultation and agreement among assessors and moderators. These could be called agreed standards.

A process called external moderation is used to enable assessors to establish agreed standards and to check on assessors' judgements.

Moderation is discussed at the end of this chapter and in Appendix 3.

In this chapter:

What is a unit standard?

How do unit standards relate to learning programmes?

How much do I assess?

How are unit standards used?

What about qualifications?

What is moderation?

Programme design and unit standards

- Plan the learning programme to suit the learners, the available resources and selected qualifications and curriculum statements.
- Identify unit standards that should or could be used to assess learning outcomes of the programme.
- Modify the learning programme if necessary to accommodate selected unit standards.
- Map the unit standards against the programme to suit the way you prefer to organise learning.

A draft of a learning programme   Unit standards that might be relevant

The final learning programme   3 unit standards have been selected for all students   2 further unit standards are available
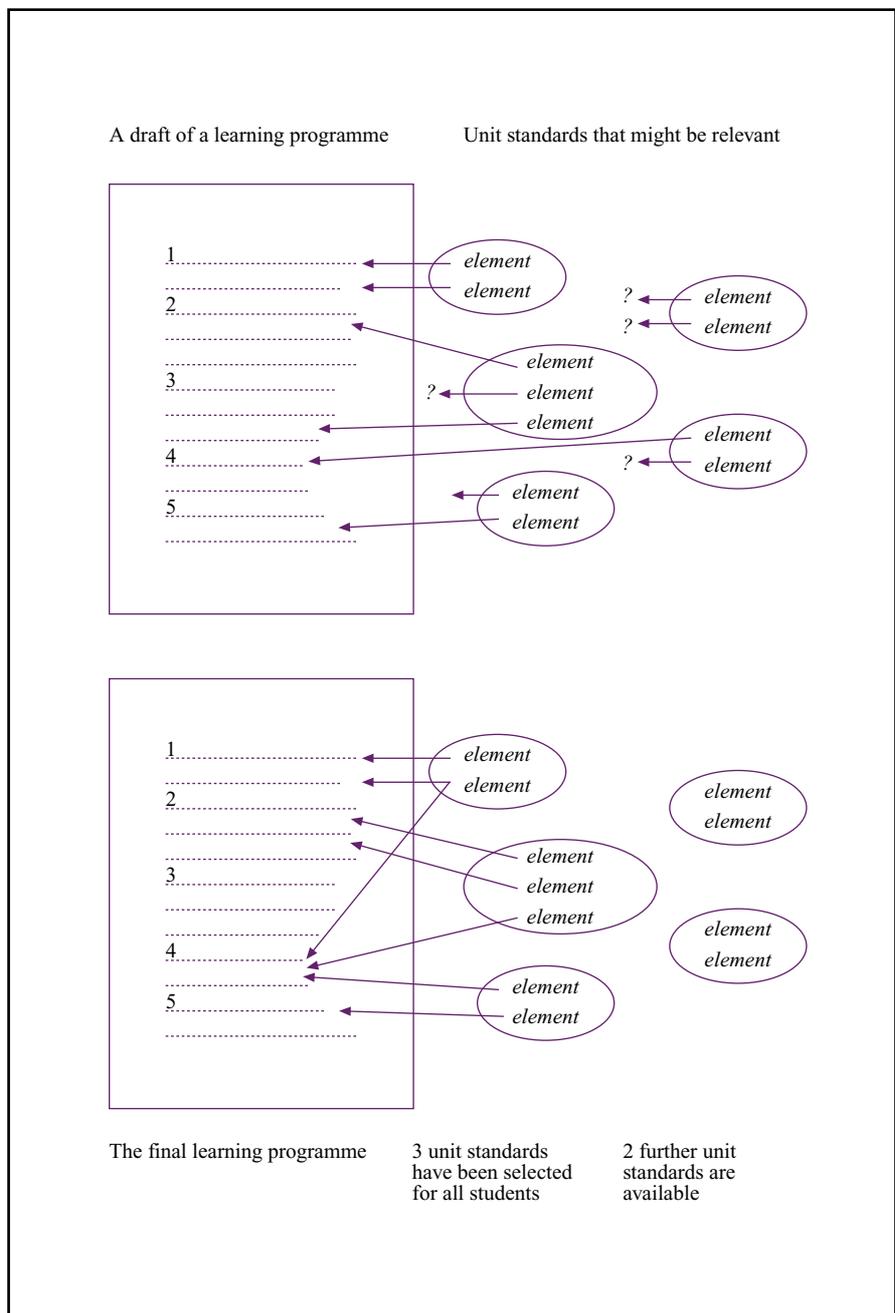
■ How do unit standards relate to learning programmes?

The Qualifications Framework does not place limits on the way in which unit standards can be combined within programmes. While many providers will continue to offer traditional subjects in one year or semester length programmes, many will choose to construct programmes to suit local needs.

Four factors can influence the design of an institution's learning programmes:

- the needs, interests and priorities of *the learners* – including their plans for work or further education
- the systems, expertise and resources that *the institution* prefers and can manage
- the requirements of any relevant *curriculum* statements or training schemes
- *assessment* for national qualifications.

In the past, assessment for external examinations and qualifications has often been a dominant factor in course design. The duration, content and assessment of courses have been shaped (and often distorted) by the requirements of national awards or external examinations. The unit standards approach minimises these constraints. Institutions and individual learners can control the extent to which assessment for national qualifications influences programme design.

It is best not to be rigid about the unit standards that will be used within a programme. A programme that could lead to three unit standards for one student or group of students might involve only two unit standards for other students – or four unit standards for fast or very able learners. Individual learners can target different unit standards within the same programme.

In fact there is no need for learners to work within a set programme. Assessment can be done within individual programmes or unrelated to any learning programme. The extent to which this is possible will depend on how flexible each institution can be in providing assessment opportunities.

■ How much do I assess?

Begin with the learning programme you have planned – the objectives, style and content of the programme come first. You can then decide what part Framework assessment will play in the programme. How many and which unit standards will be used?

It could be inappropriate to formally assess all of your programme's objectives. Of course, if your programme is designed around a qualification, curriculum statement or a training scheme the unit standards will suggest themselves – you might want to include as many unit standards as possible.

EXAMPLE

A media studies topic is developed around a local television series. It has four objectives: analysing visual images, understanding television as popular culture, using a video camera and taking part in debate about social issues. You have decided to use unit standards to assess only two of these objectives.

There are media studies unit standards that deal with

- close reading of visual images
- media representation of issues
- film and television genre
- the media as a business
- how audiences are targeted
- making your own video.

You decide that all students will aim at the first two of these unit standards.

Then you provide for individual progress by telling students about the four other unit standards that could be assessed within the topic. Students are told that it is up to them as individuals to provide suitable evidence if they want those extra unit standard credits. This provides a common core of work as well as extension for the keen and able.

Unit standards provide you with

- information about the evidence learners have to provide

- hints as to how you should collect that evidence

- criteria for evaluating the evidence you have collected.

■ How are unit standards used?

Unit standards are at the core of the Qualifications Framework's form of standards-based assessment because they make it clear exactly what is to be assessed. Standards-based assessment stresses validity – assessing what we set out to assess and not something else.

Each unit standard specifies what learners have to do to achieve the standard – so you can aim at assessment that is both thorough and valid. Learners must meet all criteria before they can receive credit.

You will need to collect sufficient evidence of each learner's achievements. You can continue to collect evidence as learners improve – until they reach the standard (or it is obvious they will not reach the standard in the time available within the learning programme).

However, if you demand performances other than the unit standard specifies the assessment could be invalid. For example, if a unit standard requires that a task be completed accurately but no time limit is specified, then time should not be a factor in assessment. If a unit standard is purely about carrying out a mathematical calculation, then the assessment task should not require learners to read complex written instructions. There will be other unit standards that assess this ability.

Planning is crucial. If you can integrate assessment into the learning process you will avoid over-assessment.

You will find that many of the activities that you have always thought of as learning activities will provide legitimate evidence that you can use towards credit. If students have reached the standard during an ongoing project, there might be no need to run a final test. The final test could well be a less valid way to assess than the project, but it might provide further evidence towards sufficiency and it could give you confidence about authenticity.

One assessment activity can provide evidence for a number of unit standards. For example, one research project could provide evidence of a learner's research skills, their ability to deliver a spoken presentation of the information and their ability to use computers to produce graphs – parts of three different unit standards.

These concepts are discussed in more detail in later chapters.

■ What about qualifications?

Many learning programmes will continue to be built around qualifications. In these cases the relevant unit standards will be obvious and might become the primary factor in programme design.

But Framework qualifications are expressed in terms of unit standards, not as courses. Learners accumulate unit standard credits towards qualifications. There are no nationally prescribed courses for Framework qualifications.

This means that institutions and individual learners can control the way in which programmes that lead to qualifications use unit standards.

Tertiary programmes in automotive engineering or banking might be built around unit standards from National Certificates, National Diplomas or National Degrees. But these programmes can be of varying length. Full- and part-time learners can be accommodated. Providers can mix unit standards in a variety of ways, and individual learners can work at different selections of unit standards that contribute to the qualification. When National Certificates are defined that secondary school students can work towards, schools will have the option of running programmes that target relevant qualifications.

Providers usually have control over exactly how they assess against unit standards even when they lead to vocational qualifications (although some industry training organisations specify assessment and moderation requirements for some unit standards).

The above comments will not apply to many provider degrees.

Information about particular qualifications is available from NZQA or from the relevant industry training organisation.

■ A provider in a commercial fishing region creates a programme that deals with water safety, biological science, maintaining diesel engines and commercial fishing – unit standards are available in all areas. This is a cohesive programme combining academic studies, vocational experience and recreation. It provides students with Framework credits towards a variety of national qualifications.

■ A New Zealand Studies programme integrates the study of New Zealand history, arts and geography. Unit standards are available in each of those areas – the unit standards are integrated to suit individualised learning activities. For example, a group of students decides to focus on natural landscapes of the South Island – in geography, Maori and European exploration, Maori mythology and in painting. Framework credits can contribute to a variety of later qualifications or they can simply recognise each student's achievements.

■ A tertiary provider runs programmes leading to the usual range of trades qualifications. The learners are future plumbers, hairdressers, outdoor pursuits guides, electricians and chefs. Many of them will establish their own businesses. So each programme co-ordinator is asked to build into the programme unit standards in small business management. The learning resources and assessment will be done in conjunction with the business studies faculty.

■ A half-yearly semester programme that deals with computing and keyboard skills awards unit standard credits at a variety of levels in computing and text processing. For individual learners these credits can lead to a national qualification in computing and/or contribute to a range of other qualifications that call for computing or keyboard skills.

■ A school decides to run a variety of whole-year courses in mathematics. Because of parental wishes it decides to run both banded and mixed-ability programmes. Unit standards are selected to suit the abilities and aspirations of the students in each class. (This school uses the label form 6 for classes working at about level 2.) For example, a very able form 6 class aims at a number of level 2 and 3 credits while another form 6 class aims at level 2 credits only. Mixed ability form 6 classes aim at an array of level 1 and 2 unit standards. The school requires each teacher to make some provision for individual progress beyond the unit standard objectives set for the whole class. So some form 6 students can get credit for level 3 unit standards.

■ Learners for whom English is a second language are in an integrated programme aimed at boosting their language skills and their social confidence. The programme blends English language development and experience in real life work situations with skills and knowledge that the learners have brought with them. As an incentive and to start learners towards National Certificates, unit standard credits will be available. All learners will be assessed against communications unit standards and some level 1 English unit standards. Some core generics and office systems unit standards will be used. In addition, each learner will use their existing expertise to work towards a variety of unit standards: first aid, hairdressing, horse-riding, recreation, cooking, woodworking, driving.

■ A tertiary programme in economics selects from economics unit standards that are available at levels 2 to 6 to accommodate students arriving from school or work with either no economics experience or substantial credits in economics. Students in the economics programme aim at a national qualification in economics or accumulate economics credits toward a broader business qualification.

An *Assessment Guide* contains guidance on how to assess against particular unit standards and examples of learner work that meet the standard.

■ What is moderation?

Moderation processes help to ensure consistency of judgements. Each advisory group agrees on a moderation plan to ensure that all assessors who assess against a particular unit standard are using comparable assessment methods and making similar and consistent judgements about learners' performances.

Every organisation that intends to award credit for a particular unit standard must be part of the moderation system for that unit standard. So a moderation system for a unit standard in design, for example, will apply to schools, polytechnics, private training establishments and workplace assessors.

For the more transparent standards, moderation will be relatively light: perhaps an occasional meeting of groups of assessors or an exchange of assessment materials (assessment tasks and examples of work produced by learners).

For less transparent unit standards, heavier moderation will be needed to enable assessors to agree on acceptable levels of performance. A battery of complementary moderation procedures will be used: perhaps a moderator will check proposed assessment activities, provide a common assessment task, check samples of learners' work and compile an assessment and moderation manual. A moderator's key role is to coordinate the national network of assessors to provide ongoing agreement about standards.

A national moderation system deals with accredited organisations – teaching institutions and other organisations that register assessors. Each organisation must have internal moderation procedures to ensure that consistent judgements are made by each of its assessors. Moderation for the National Qualifications Framework provides professional interaction and upskilling that will improve all learning and teaching.

See Appendix 3 for more information about moderation.

ASSESSMENT can take place at any time and in a variety of situations.

Evidence about a learner's abilities can be collected from specially created assessment tasks and from learning activities.

3   Sources of Evidence

ALL ASSESSMENT involves the collection and evaluation of evidence about a learner's performance. Traditionally most evidence has come from examinations, tests and other specially constructed assessment tasks. While these continue to provide valid evidence, the National Qualifications Framework enables you to consider a wider variety of evidence – any event or artefact that establishes the nature of a learner's skill, knowledge or understanding.

Products are the most obvious forms of evidence. Permanent products (like reports, accounts, a chair, drawings, essays and answers to test questions) can be collected. They can come from specially constructed tasks or accumulated over time as a portfolio. Less permanent products (food, a theatre performance, a negotiation) will be evaluated at the time but can be documented in various ways. You will be familiar and skilled with dealing with this kind of evidence in your own area.

In some unit standards, processes might be as important as products – the way in which a learner goes about a process can count as evidence. Observation by the assessor is the most direct way but process can also be shown in a test paper, reported by a witness, recorded on audio or video tape, by photographs, or as a collection of drafts of the final product. In some cases the learner's explanation of a process will suffice. Being able to consider this kind of evidence for national qualifications may be new to you.

■   Where can evidence come from?

Unit standards often suggest how to collect evidence. Some unit standards will call for a number of different kinds of evidence. The computing example in chapter 4 illustrates this.

It is helpful to think in terms of sources of evidence – occasions or activities that will give learners a chance to demonstrate their abilities. This section offers a way of thinking about sources of evidence.

What sources of evidence can you use? Because the Framework is standards-based and assessment is close to learning, you can consider evidence from a diverse range of sources. Some of the evidence will come from beyond the learning programme so you will not be able to observe it first hand.

In this chapter:

Where can evidence come from?

What about RPL?

Evidence of prior performance.

Evidence from learning activities.

Evidence from specially created assessment tasks.

Evidence of current external performance.

Considering diverse evidence.

Evidence for assessment can come from

- **Prior performance**. To recognise previous proven achievements outside formal learning.
- **Learning activities** that you have set up for students within a learning programme.
- **Specially created assessment tasks**. Most of these will be within learning programmes but need not be – learners can be assessed without enrolling for a formal programme.
- **Current external performance**. Performances that take place about the same time as the learning programme but that you will not be able to control or observe first hand. This will often be on-job experience.

In practice, you will combine evidence from many sources. For the purposes of this guide, each source of evidence is discussed separately below.

Regardless of its source all evidence must meet the same challenges

Does it comply with the principles of good assessment? Is it valid, authentic and sufficient? Are you confident that this is a typical performance?

Does the evidence satisfy all of the performance criteria specified in the unit standard?

You can and should get more evidence if you are in doubt. This further evidence can be in any form – a brief task, test or questioning – and need not be onerous for you or the learner.

■ What about RPL?

Framework assessment is about standards of performance achieved, not how learning occurred. There is no requirement for prior course attendance, work experience or time served. Learning that took place before the learner came anywhere near a Framework assessor can be recognised by the award of unit standard credits.

You will be familiar with the term RPL (recognition of prior learning). RPL deals with evidence of learning that occurred before the assessor became involved. It emerged as an alternative approach to assessment when assessment was dominated by final written examinations linked to a formal, institutional programme of learning. However, it is more accurate to talk about assessing prior learning.

The assessment of prior learning can refer to two different situations.

1   Prior learning with verifiable evidence of prior performance

An adult has been competent at something for years but has no qualification to recognise that competence. They have been employed by an advertising agency or working with a volunteer rescue organisation so they can prove that they are capable performers.

They can produce samples of their work, letters of validation from peers and supervisors, etc. There may be no need for formal assessment tasks. The samples of work and testimonials become evidence that can be evaluated against unit standards. The learner can show you evidence of prior performance.

This source of evidence is discussed later in this chapter.

2   Prior learning without verifiable evidence of prior performance

Learners arrive at your institution ready to enrol for a programme. They look at the work to be covered and realise that they can already perform some or all of it.

A computing student has been producing spreadsheets for her own purposes; an automotive engineering student claims to be able to adjust a clutch to perfection; a word processing student has been doing audio transcriptions to record his grandparents' life story. Other learners have read intensively about history or economics and have accumulated a depth of knowledge.

These learners have not been demonstrating their skills or knowledge within an established organisation so they will not be able to produce convincing evidence of their ability.

However, there may be no need for the learner to work through a course of study and undergo the planned assessment activities. You can assess that learner immediately and award unit standard credits. In the past providers called this 'challenge' assessment.

How will you deal with this 'immediate' assessment? As an assessor you will need to balance the demands of the unit standard and the learner's needs with what is manageable in practical terms.

You could use some of the assessment tasks that you have planned for assessment within the course. Or you could elicit evidence of their abilities by a brief task or questioning and decide that the requirements of the unit standards have been met and that credit can be granted. You might decide that further evidence is needed for sufficiency – or that the learner should complete the full programme after all. The learner should take some responsibility for producing evidence.

How some providers assess prior learning

Facilitators help learners to identify the parts of a programme in which they are already competent and arrange immediate assessment through the tutors running the programme.

In some cases students then attend only relevant parts of the course. In other cases they complete the remaining unit standards on individual programmes. The extent to which all of this is manageable will vary from provider to provider.

Your institution does not need special accreditation to award unit standard credits from RPL assessment.

It needs normal accreditation for the relevant unit standards.

■ Evidence of prior performance

How will you deal with evidence of prior performance? If you think in terms of collecting evidence, a learner's activities before you met them become just another source of evidence. That is why RPL is no longer treated as a special category of assessment but as a remote source of evidence and one that you had no control over.

In some respects this evidence of prior performance should be treated exactly as any other evidence – in other respects it needs to be treated differently.

Assembling evidence of prior performance

Your institution will need to make special arrangements to help learners assemble evidence of their prior performance. Learners often need support and guidance to understand qualifications and assessment, to see how their experiences relate to Framework qualifications, to plan their progress towards qualifications, to identify relevant unit standards and to assemble whatever evidence is needed – documentation, testimonials, products, certificates, etc.

The person who helps learners to do this preparation needs special skills and knowledge – but they probably do not do the assessing. They might be called an assessment facilitator. The actual assessment against the unit standards must be done by the specialist assessors who do other types of assessment – the subject experts.

Evaluating evidence of prior performance

As an assessor you should receive documentation about what the learner has achieved. You will probably be consulted in advance by the facilitator but your key role is to evaluate the evidence against the unit standards.

The evidence must relate to specific unit standards. Often the evidence will describe whole tasks and achievements that encompass outcomes from a number of unit standards. It remains your responsibility to ensure

that this evidence is valid, authentic and sufficient in relation to the unit standards – just as you would for any other kind of evidence.

For example, someone who has worked in marketing for many years has designed and established a marketing strategy for a product using a mix of promotions and direct marketing. This is presented as one piece of evidence of prior performance but it can contribute to three or four marketing unit standards. The assessor would have to look into each unit standard and into the information about the marketing strategy to be sure that all elements of the unit standards were covered.

There is no special external moderation procedure. Moderation helps you to evaluate evidence. You will be applying the same standards to prior evidence that you apply to more immediate evidence. So prior evidence is connected to moderation through the consistency of your own judgements.

If you are unconvinced about whether all requirements of the unit standard have been met you should seek further evidence. Often an interview with the learner will be sufficient. Ask them, for example, to explain how and why a product was designed in that way. You might need to set brief assessment tasks to give you the confidence that full requirements have been met and that the performance could be repeated with consistency.

After an assessment of prior performance

As the assessor you will have important information to feed back to the learner, the facilitator and whoever is advising the learner on their education and training plans.

You might have decided that part of a unit standard has been achieved and that further work and further assessment will be needed before credit can be awarded. If they are about to enrol in a programme at your institution, this information will be important as they plan their next step towards a qualification.

■ **Evidence from learning activities**

Evidence collected from actual performance is the most direct form of evidence. Just as workplace assessors can observe workers in the normal course of their work, you can observe learners as they learn. You have always done this, perhaps thinking of it as formative assessment. The Qualifications Framework allows you to use this evidence towards unit standards if it is appropriately evaluated and recorded.

There will be times when you can collect evidence even when you have not set a specific assessment task. A five minute in-class test, sets of exercises or brief samples of writing can provide valid evidence. Often a few minutes' observation of a learner's performance provides the most direct form of evidence.

The assessment facilitator helps the learner to assemble the evidence.

The subject expert assessor evaluates the evidence against unit standards.

Evidence that comes from the learning activities that you have set up within a learning programme is called naturally occurring or ongoing evidence.

Perhaps a formal assessment task will be needed only when ongoing evidence has been fragmentary – a final task can draw the parts together, demonstrating achievement based on a series of separate skills. Ongoing evidence then becomes important as supplementary evidence, especially in borderline cases.

Some unit standards will call for evidence that must be collected by simply observing the learner at work. In combination with more formal evidence, this can give you a full picture of the learner's abilities.

Often a product from the normal course of learning will constitute evidence. Exercises in a workbook and brief in-class tests can contribute to a portfolio of evidence. Projects and assignments that you have always set and marked are the most obvious sources of ongoing evidence.

The use of ongoing evidence questions some long held beliefs about assessment

Do we need to assess every learner in the same way? We don't when we teach them. Different learners could provide assessment evidence in different ways.

Ongoing evidence can indicate a learner's progress towards credit. If we can see from ongoing evidence that one learner clearly deserves credit, why should they mark time waiting to complete the same assessment task as the others? Should a student who is struggling undertake assessment when they know for sure that they will not succeed?

If a learner fails to achieve credit from a test, do they need to resit a whole test at a later date? A learner who has almost succeeded (is borderline for credit) could show from previous or later ongoing evidence that they can succeed at the tasks in question. A portfolio of informal ongoing evidence can tip the balance towards (or away from) sufficiency.

Naturally occurring or ongoing evidence – a closer look

Time for learning Learners need time to learn – to practise, experiment, make and correct mistakes, explore the topic. They should not feel that their every movement is being noted for assessment. But judicious use of ongoing evidence can minimise formal assessment and allow more time for learning. And learners have the advantage of knowing that achievements are being recognised.

Fairness Learners have a right to know how and when they will be assessed. But assessment need not be a one-off occasion – so learners need not feel threatened if they know that you are able to use ongoing evidence because it will not be their only chance to provide evidence.

Retention In many cases a learner will be competent immediately after instruction on a topic but not a week or two later – it depends on the nature of the achievement in question. You will need to take this into account when considering ongoing evidence. It is a matter of sufficiency, confidence and consistency – any evidence is sufficient only if you are confident that the performance could be repeated with consistency. Otherwise further evidence is needed – perhaps a brief summative test.

But we must not overdo this factor. We have to remember that traditional assessment methods have presumed that retention until the final test was sufficient. And that there can never be complete assurance that learners will continue to be competent.

Authenticity During the process of learning you cannot always be certain that each student's work is their own – in fact cooperative learning is often encouraged. Ongoing evidence can be used only if authenticity is assured. Techniques like milestone checks and submission of successive drafts can be helpful. Sometimes a discussion with the learner will reveal whether or not it is their own work. You are always entitled to seek further evidence.

Recording You will need to keep some record of ongoing evidence. But recording can become onerous and unmanageable if you try to make notes of all ongoing evidence. One of the best ways is to consider a learner's regular folder or workbook as a portfolio – you can simply initial work that is relevant and authentic and refer back to it later. Recording can be simplified if the learners are required to maintain their own records (verified by you) until whole elements or unit standards have been achieved.

These issues are dealt with in greater detail in other publications.

Ongoing evidence should be planned and must meet sufficiency requirements.

■ Evidence from specially created assessment tasks

You already use these types of specially created assessment occasions:

Questioning

Asking specific questions for oral or written answer. Questioning is often the best way to provide evidence about knowledge, understanding or ability to transfer a skill.

Questions are commonly answered in writing – unit standards will help you to focus the relevant knowledge or understanding and not be unduly influenced by writing skills. Time bounded questioning might be inappropriate – unless the unit standard mentions time limits.

Often brief oral questions can provide you with confidence about an otherwise borderline case (eg asking a mathematics student to explain their methods).

Simulated actual performance

Setting up occasions so that abilities can be demonstrated in realistic situations. A learner can take part in a project culminating in a realistic product or performance. An accounting task that requires a learner to create a complete balance sheet for a fictitious company is, if the conditions are realistic, a simulation. Speaking skills might be best assessed by simulating the conditions of a meeting. A task in a workshop could simulate workplace conditions.

Tests

Particular aspects of performance can be isolated and evidence collected under controlled conditions. Tests can tend to be artificial and can fragment learning assessment. But they can provide evidence to establish that a previous performance can be repeated, that a skill can be transferred, that other evidence is authentic or that a range of situations can be coped with.

Such a 'test' need not be written, will not always be time bounded and will often allow the learner to use resources such as dictionaries and computers.

For example, tests are commonly used to collect evidence about a learner's ability to solve a mathematical problem, produce a life drawing in art, or write a well structured paragraph.

■ Evidence of current external performance

Evidence can come from performances that take place about the same time as the learning programme but that you will not be able to control or observe first hand. This will often be planned on-job experience but some providers will be able to accept this kind of evidence in a less structured way. Remember that you, as the assessor within the accredited organisation, remain responsible for any decision to award credits.

Learners are enrolled in a learning programme you are running. You are

collecting evidence of their achievements from activities that you set and observe within the programme. But the learners are also doing things in the wider world that are related to their programme of study – they might be in part-time employment, working for voluntary organisations or doing freelance work. You can use this external evidence in assessing the learner if you are satisfied that it is authentic.

Some unit standards and qualifications will be planned deliberately to blend provider and on-job assessment. An industry training organisation's assessment procedures could prescribe a mixture of on-job and off-job assessment.

> For a Seafood unit standard, some of the training is done on-shore but the unit standard requires evidence of how learners perform when actually working on fishing boats. A log book is provided for the learner's supervisor to complete at sea and the on-shore assessor evaluates that as evidence. The assessor has a hand in how external evidence is collected even though they cannot be there when the learner is performing.

Other external evidence could be unplanned and unexpected. If a student simply brings to you a piece of work that they have completed in a part-time job and it relates to a relevant unit standard, you can consider it as evidence.

A marketing student could be working part-time for a marketing agency. A school student could be writing articles for a suburban newspaper. Another learner might volunteer help in a rest home or have a weekend job in a shop. Their performances in these activities could provide evidence towards achieving unit standards.

There is a third possibility: you could build into your assessment plan an option for learners to provide additional assessment evidence of their actual performance outside the programme.

You will probably be setting assignments that encourage learners to use material from their own life experiences. You will assess evidence from these assignments within the course. But if learners understand the requirements of a unit standard before they start working towards it they can take advantage of any potential for external evidence.

Evidence of external performance can supplement evidence you have observed first hand.

What strategies and issues should you bear in mind when considering a diverse array of evidence?

An automotive engineering student who works at the local garage on weekends could be doing the very things that you will be assessing within the learning programme. A learner in a course for receptionists could be answering telephones in their evening volunteer work. A journalism student could be having articles published that fulfil requirements of a unit standard. All could provide evidence towards unit standards.

As with all evidence, it is your responsibility to be sure of authenticity and coverage of the unit standard. In some cases the learner can be made responsible for proving that this is their own work and identifying the elements they claim to be fulfilling.

This external evidence could short-circuit your assessment plans and be disconcerting. But it could be more relevant and direct evidence than you will get from your planned assessments. It could enable the learner to proceed more rapidly. It could save some assessment time for you.

■ Considering diverse evidence

The use of diverse evidence will change the assessment culture in which you and your learners operate. You will be able to consider information about learners that previous forms of assessment have ruled out. You may have become accustomed to having control of all assessment – learners have produced evidence in response to tests, tasks and assignments that you designed. But considering a wider range of evidence can save you time and improve the quality of assessment.

If you collect evidence from normal learning activities, you can reduce the number of assessment tasks that you have to prepare and administer. If learners can refine their work as they improve, reassessment is taken care of.

At the opposite extreme, evidence that you have not observed first-hand and that you did not elicit can be more direct, valid and holistic than evidence that comes from specially constructed assessment tasks. It will often be produced in real life situations – in the workplace for example – where the learner has to combine a range of knowledge and skills into one competent performance. But you must be careful to ensure that it is authentically the work of the learner being assessed.

The advantage for learners is that they can move more efficiently through education and training. For some, attending courses has been a barrier to gaining qualifications, especially if they were obliged to work through material they were already familiar with.

Learners can be more active. They can initiate assessment evidence without waiting for a formal occasion. They can also be required to help establish the authenticity of that evidence.

Learners should have ample opportunity
to show what they can achieve.

Aspects of performance can be assessed
separately or in integrated assessment activities.

4 Developing Assessment Activities

THE TERM *assessment activities* refers to any occasions on which you collect and verify evidence about a learner's performance – examinations, written tests, projects, practical activities, ongoing observations. Many learning activities will provide assessment evidence even though they are not set up as assessment activities.

You can collect evidence in different ways – to suit different styles and contexts of teaching and learning and to suit the different combinations of unit standards being used. Your obligation is to assemble sufficient authentic evidence to meet the demands of the unit standard.

Sufficiency issues are discussed in Chapter 5.

You do not need a separate assessment activity for each performance criterion or unit standard. You will often integrate assessment, using one assessment activity to collect evidence towards two or three different unit standards. This guide uses the term 'integration' in two closely related senses: you can integrate unit standards with each other and you can integrate assessment with learning. In practice, the two are almost synonymous.

■ How do I choose activities that will provide appropriate assessment evidence?

There are three factors to consider as you plan assessment:

- The nature and objectives of the learning programme.
- The requirements of the unit standards.
- And perhaps the requirements of the moderation system.

Consider the learning programme

Assessment activities can be in harmony with the nature and objectives of the learning programme. Normal learning activities can provide evidence for assessment.

- Can you design assessment tasks that reflect and reinforce the way students have been learning?
- How much assessment evidence can you collect from the ongoing work that you will want students to do as they explore, discover, reinforce

In this chapter:

How do I choose activities that will provide appropriate assessment evidence?

Can we separate skills, knowledge and understanding?

How can I integrate assessment?

What about reassessment?

Creating an assessment plan.

How do I ensure that assessment is fair?

and practise their skills and knowledge? This ongoing evidence is discussed in Chapter 3.

• How can you involve the learner? With a full understanding of the requirements of unit standards, they can contribute to planning and be better equipped to prepare themselves for assessment.

> In the media studies topic in chapter 2, the local television series was chosen as the focus because it was a relevant and immediate context for the learning. The students studied and discussed a number of episodes. For assessment, each student selects a recent episode for close study and draws conclusions about the way issues are dealt with. The assessment activity grows out of the learning activities.

An appropriate assessment activity will be

• valid in terms of the requirements of the unit standards

• consistent with the learning activities learners have been involved in

• as direct as possible – reflecting actual performance

• as holistic as possible – involving integrated tasks

• manageable for both assessor and learner.

Consider the unit standards

Assessment activities must provide evidence that is relevant to the unit standards you are using. The elements and performance criteria explain what is needed for valid and direct assessment.

Evidence must relate to what the unit standard asks for and not something else. Evidence should come from activities that are as close as possible to the conditions of real performance.

> In the media studies example, the students will have to write or talk about the episode they have selected. They could talk about their conclusions as they point out what is happening on the television screen. The teacher and other students can question them about their ideas. They can be given the option of supplying additional written conclusions. This array of evidence will allow the teacher to assess their ideas about the subject, not how well they can write or speak.

Consider external moderation

To comply with moderation requirements you might have to develop assessment activities in particular ways. You might have to submit to the external moderator your planned assessment activity or you might need to tie in with a common assessment task. Some Industry Training Organisations require that unit standards in their areas be assessed in particular ways. The moderation action plan attached to the unit standards will explain any such requirement.

■ Can we separate skills, knowledge and understanding?

Some assessors prefer to develop assessment activities by distinguishing between skills, knowledge and understanding. Many don't, believing that this separation fragments learning and leads to overassessment. However it is helpful to be aware of this view of assessment. (Integrated assessment is discussed later in this chapter.)

The verbs in elements and performance criteria are a useful guide to the kind of evidence you will be looking for

- *produce* indicates that the learners will have to make or create something.
- *demonstrate* makes it obvious that the learners will have to show you that they can do something – a practical task or a chance for you to observe them in action.
- *identify* can indicate that a test of knowledge is needed.
- *analyse* indicates that the evidence will be a presentation of ideas and conclusions – probably written or spoken.

Evidence of skills or practical ability

Verbs like *perform* and *demonstrate* signal this kind of evidence.

This is *direct* evidence as you can actually observe the learner doing or producing something. The evidence can be recorded on audio or video tape, by photographs, as a portfolio of drafts of the final product or even reported by a reliable witness. Permanent products (like reports, accounts, models, drawings, essays) can be collected and perhaps accumulated over time as a portfolio. Less permanent products (food, a theatre performance, a hair style, a negotiation) will be evaluated at the time but their qualities can be noted briefly.

Problems to watch for: Can you provide the right equipment, time and resources? How can you manage the logistics of observing all students and ensuring that all work is authentic? Will the practical task provide all of the evidence that you will need? Will you therefore need supplementary evidence? Or is the task too demanding and beyond the level of the unit standard?

Evidence of relevant knowledge

The verbs *identify, define* (and sometimes *describe*) can signal this kind of evidence.

Some knowledge can be demonstrated by performance or product – a student might need particular knowledge about how copper behaves before they select copper as the appropriate material for a product. So the copper

product is evidence of both skill and knowledge. Otherwise, evidence of knowledge can be elicited in a variety of well known ways: by oral or written questioning, or by a form of demonstration or test. You might choose to use a combination of methods – have the student produce the copper product and then, to test their knowledge, have them explain why they had to use a particular process to make the item successfully.

Problems to watch for: Should you be assessing knowledge in a fragmented way or knowledge of whole chunks of interrelated material? Is the assessment task valid? That is, does it assess knowledge – or the ability to read, remember isolated facts, work at speed, etc? Are you assuming that knowledge also implies an ability to do, or to understand?

Evidence of understanding

The verbs *explain, analyse, investigate* and *explore* can signal this kind of evidence.

The temptation is to require extended writing – the traditional paragraph or essay – and this is sometimes appropriate. However, there are other ways. An oral presentation using visual aids can be revealing, especially if the assessor and other listeners can use follow-up questions to probe understanding. An evolving investigation or project can offer evidence at milestones along the way, rather than relying on a final presentation. In some areas role plays or visual displays are preferred, perhaps with follow-up explanations. Multi-media presentations are likely to become more common.

Unit standards will often link understanding with application. You should not hesitate to test understanding in action.

You should not hesitate to seek additional evidence – direct questioning of a student can often give you confidence in their understanding (or lack of it) when a more formal presentation leaves you in doubt. This informal extra evidence can often be in the student's interests and can help you to identify what to focus on.

Problems to watch for: The main risk is validity. Are you actually assessing communication skills rather than understanding? Does a flashy explanation disguise limited understanding? Do your presentation expectations prevent students from showing how well they understand a concept?

EXAMPLE

A computing unit standard requires students to **Produce and use computer spreadsheets using base functions**. A variety of assessment activities can be planned to collect evidence.
(An integrated approach to this unit standard is demonstrated on a later page.)

Element 1 looks for knowledge of aspects of spreadsheets.

A brief short-answer test can assess this knowledge. For greater flexibility some teachers have created banks of test items so that students can be assessed as they are ready. These make reassessment simple.

● **ELEMENT 1**

Demonstrate knowledge of the uses and features of spreadsheets.

The performance criteria require students to:

- **describe** the uses of spreadsheets
- **identify** their advantages
- **identify** cell types
- **name** examples of spreadsheet programmes.

A further performance criterion in Element 1 calls for students to:

- **demonstrate** methods of moving the cell cursor.

If students are working towards other computing unit standards at the same time, evidence for the other unit standards could be collected from these activities.

The learner can be observed at work – this can be done along with Element 2.

Element 2 describes processes that the students should be able to carry out.

The verbs describe actions that the students will complete at the keyboard. The most direct way is to observe each student actually carrying out these actions. Some teachers have developed a progressive task that requires each action to be done successfully – but many teachers prefer to actually walk around the room and observe each student. This is generally done as students are learning and practising.

● **ELEMENT 2**

Produce a simple spreadsheet file containing labels, values and mathematical formulae.

The performance criteria require students to:

- **load** and **quit** a program
- **enter, edit** and **calculate** data
- **use** the onscreen help facility
- **demonstrate** file management techniques and data integrity practices
- **preview** and **print** a file.

ELEMENT 3 ●

Manipulate data in a spreadsheet.

The performance criteria require students to:

- produce graphs
- apply 'What if?' exercises to a spreadsheet.

Element 3 calls for a product that puts all of the previous knowledge and skills together.

This is generally assessed within a set task, probably completed at one sitting. The evidence will be the printed graphs and spreadsheets.

■ How can I integrate assessment?

This is where you can reduce time spent on assessment and make assessment activities complement and reinforce learning. Careful planning can minimise assessment occasions and provide for a more holistic approach.

Think of assessment as you think of learning: if you want learners to successfully combine skills and knowledge, you should assess them in that way.

In the computing example above, the three assessment activities suggested (test, observation and task) do provide coverage of the outcomes. But should they have been assessed separately? Is an ability to preview and print a file of any use if it cannot be done in the context of a whole job? By observing the criteria of Element 2 and then having the learners do it again to produce the graphs, are we over assessing?

To develop an integrated assessment activity:

• identify what the unit standard requires from the learner

• devise one activity that requires a complete performance

• go back to the unit standard and check off the elements and performance criteria covered

• expand the activity if possible to cover more of the performance criteria

• decide how you can get evidence for the remaining performance criteria – look for ongoing evidence from earlier learning activities and then devise brief supplementary tasks if necessary.

Integrating more than one unit standard

Integrated assessment can go even further. Consider whether two or three unit standards can be combined with each other in both learning and assessment. Can you design a single learning or assessment activity that will provide assessment advice for more than one unit standard?

For example, you decide that students have to conduct research on a chosen topic, talk about the process they went through, and write a succinct report on their findings. From this one activity you can collect evidence towards three unit standards: a *research* unit standard, a *speaking* unit standard, and a *report writing* unit standard.

This is not really an 'assessment' activity – it is a holistic 'learning' activity. Students can show how well they can research, speak and write. It is an integrated and evolving activity that requires them to speak and write about what they know. If they do not meet the requirements of one of the unit standards they can repeat just that part of the activity.

An integrated approach to assessing the computing unit standard

Element 3 requires students to combine all of their knowledge and keyboard skills to 'manipulate data within a spreadsheet' and 'produce graphs'. This is the real life task that the learning prepared them for – so the assessment could reflect the holistic nature of that task.

Students can be required to produce graphs related to a real situation. They are given (or invent for themselves) a scenario and some data. They have to select an appropriate spreadsheet programme and justify their choice. Then they 'manipulate data within a spreadsheet' as required and produce the appropriate graphs. If the task is completed under secure conditions the teacher can be sure that each student has loaded and quit the programme, entered data and printed their own file.

This holistic task would obviously meet the requirements of Element 3 and in the process provide evidence for most of Elements 1 and 2. Very brief observations and oral questions can cover the other performance criteria. The task could even be expanded to meet some of the requirements of other unit standards.

The student succeeded in a realistic whole task – and the amount of assessment has been minimised.

Reassessment is simply the continued collection of further evidence.

■ What about reassessment?

If you are finding it difficult to imagine how you will provide for reassessment, you might have too narrow a view of how to collect evidence. *Refer to chapter 3 for a discussion of evidence collection.*

As evidence is collected, you can identify aspects of performance that are not up to standard and continue to collect evidence as the learner improves. In this sense, reassessment is simply the continued collection of further evidence in the normal way – suitable occasions are chosen or tasks created.

There are obvious limitations on how you and and your institution can arrange to continue to accept further evidence. You will become increasingly confident about this. Your institution will need to adopt a consistent policy on when you can refuse to accept further evidence.

A useful technique is to encourage individual learners to take responsibility for providing further evidence.

Many institutions include opportunities for further evidence in programme planning. You will find that some skills and concepts are covered more than once within a programme – reassessment opportunities will arise naturally as learners work through the programme. Further evidence about specific knowledge may be more difficult as you move from one topic to the next.

Where ongoing learning provides evidence, you continue to observe progress and note when the standard is achieved. Of course there are some dangers:

- You should take care that positive evidence is not collected piecemeal when an integrated performance is required.
- Evidence of failure to meet the standard also can be significant – this is sometimes called negative evidence. It does not cancel out positive evidence but it can indicate inconsistency and you might need further evidence for full confidence.

Where evidence has been collected from a specially created assessment task, another task may be needed. If the aspect of performance to be reassessed is inextricably linked with other aspects, a full assessment task (or a large part of it) should be repeated. Otherwise, briefer, more specific tasks can be created.

Creating an assessment plan

Once you have identified suitable opportunities during the learning programme when you can collect evidence, draw up an assessment plan. This should record when and how you plan to collect evidence and the methods that you plan to use to do this – it should also allow for reassessment/further evidence and potential for individual variations.

- Plan your learning programme to suit your students, your resources, and selected qualifications and/or curriculum statements.

- Identify unit standards that are consistent with the content and objectives of the programme.

- Modify your learning programme if necessary to accommodate selected unit standards.

- Sketch out the learning activities you will use to suit the aims and style of the learning programme.

- Look into the unit standards for evidence requirements and implied sources of evidence.

- Identify evidence opportunities – see how much of the required evidence can come from the learning activities you have planned.

- Match this evidence with the requirements of unit standards – what other evidence do you need?

- Fine tune some of the learning activities and/or plan assessment tasks that will provide evidence at the appropriate points in the learning programme.

- Consider how external moderation requirements impact on your plans and make adjustments as necessary.

- Consider how further evidence (reassessment) opportunities can be provided.

- Consider how individuals could progress at different rates – aiming at fewer or more unit standards.

- Design the details of learning activities and assessment tasks so that they provide suitable evidence and meet criteria for good assessment.

- Plan how you will record progress towards credit as evidence is accumulated.

If learners fully understand the process, they can volunteer evidence of their abilities.

■ How do I ensure that assessment is fair?

You will be familiar with notions of fairness in traditional forms of assessment. However, the use of explicit standards and ongoing evidence collection put fairness in a different light.

Validity and fairness

Validity is one of the keys to fairness. Genuinely valid assessment should be fair assessment.

The unit standards make it obvious what is to be assessed – if students understand what they have to achieve and if they are assessed only against the requirements of unit standards (and not against other factors) then assessment is likely to be fair.

For example, if extended writing is not a requirement of the unit standard, a student who understands a concept but writes very slowly should be able to find a variety of ways to explain the concept. A valid assessment would concentrate on the concept, not on the writing or the time taken to explain it.

If only speaking skills are being assessed, it will be invalid and unfair if you are influenced by the speaker's knowledge of the topic they are speaking about. Assessment will be fairer and more valid if you allow each learner to speak on a topic they are familiar with – or provide the same information to all.

On the other hand, rules of validity can seem harsh on those who might have received special conditions in the past. If a text processing unit standard requires that text is entered within given time limits, a disabled learner should not be given an extension of time. The assessment would not be valid in terms of the unit standard.

If a text processing unit standard mentions accuracy but no time limits, then a disabled learner is entitled to extended time to achieve that accuracy – otherwise the assessment is not valid.

Similarly, a learner who is ill or absent at the time of assessment will probably not be entitled to an aegrotat (estimated) assessment – the assessor has to have convincing evidence of competence before the credit can be awarded. In fact, aegrotat assessment will probably never apply.

Reassessment and fairness

One-chance assessment is not appropriate in this kind of assessment. Students are being assessed against the written standard, not again each other or against a set task. So there is every justification for giving learners further chance to show what they can achieve.

In the past, when one-chance assessment was the norm, it was considered unfair to allow a student to have a second try at a test or hand in an improved essay or bake another cake. When only a limited number could 'pass' or where students were compared with each other, it would have been seen as unfair on the other students.

Fair assessment becomes a matter of giving every learner ample opportunity to provide evidence about what they can achieve – especially if they do not succeed the first time but improve later. Each learner should be given the same opportunities to provide further evidence. If this means having access to resources, then you will need to make equitable provision. You could make it the learner's responsibility to provide the evidence – if you guarantee to accept the evidence they offer – then many of these aspects of fairness are eased.

To make assessment fair

- make sure it is valid – assessing what the unit standards specify and not something else.
- make sure there are equal opportunities to provide further evidence.
- make sure it is open – so that all learners know what is required for credit.

Learners can be assessed against the same criteria in a variety of ways, but each learner must be treated fairly.

- Performance should not be constrained by unfamiliar language or conditions, obscure instructions or poorly expressed instructions.
- Performances should not be undermined by lack of resources. For example, it could be appropriate for notes, texts or manuals to be available.
- Assessment should be free from bias arising from gender, cultural and ethnic factors. Your own behaviour can be critical in this sense.
- All learners should have equal access to resources, advice and equipment.
- There should be access to internal appeal procedures.

EVIDENCE is evaluated against the criteria in the unit standards.

All requirements must be met.

When there is sufficient evidence, credit can be awarded.

5   Evaluating the Evidence

YOU HAVE ACCUMULATED evidence and now have to judge it. Whenever you consider a piece of evidence, there are five key questions.

The first two questions consider whether the evidence should be taken into account at all. Is this evidence worth considering?

The next three questions enable you to decide whether the learner meets the requirements of the relevant unit standard. Does this evidence contribute to credit?

■ Is the evidence worth considering?

1   Is the evidence authentic?

Are you confident that the learner was genuinely responsible for the evidence presented? This can be an important question when the learner works in a team or is not observed by you throughout the activity. You need to be convinced that the evidence represents the individual's own contribution to the task in hand. Otherwise you are entitled to seek further evidence.

2   Is the evidence valid?

Is the evidence relevant to the elements you are assessing? Did your planning produce the sort of evidence you hoped for? Did it turn out that learners were hampered by lack of resources? Did they have time to finish the task?

If you decide that the evidence is both authentic and valid …

■ Does the evidence indicate that the standard has been achieved?

3   Does the evidence meet the performance criteria?

You must use the published performance criteria as the benchmark when judging whether the evidence meets the required standard. Are all the performance criteria covered to the required standard? Moderation support material will help by providing benchmark examples with which you can compare your learner's work.

In this chapter:

Is the evidence worth considering?

Does the evidence indicate that the standard has been achieved?

Following up the decision.

How do I decide that I have sufficient evidence?

Sufficiency – some issues.

These steps will also enable you to review the assessment activities.

4   Is the evidence consistent?

You need to be sure that the evidence is typical of the learner's usual performance and that given the right conditions they could repeat it. If you decide that the learner is performing to the defined standard you are declaring that they have reached the stage where they can perform consistently.

5   Is the evidence sufficient?

Is there enough evidence to give you confidence that the learner has met all requirements?

Consider

*   How long after the performance has been learned and practised should evidence be collected?

*   Should the skill or knowledge be demonstrated more than once for you to be confident?

*   Do the skills or knowledge have to be demonstrated in different contexts? The range statement in the unit standard will help you here.

*   Do you have 'negative' evidence – evidence that the learner cannot perform to the required standard? If so, does this cast doubts on the other evidence? What is the learner's typical performance?

*   Has the evidence been collected piecemeal? Should you get the learner to complete a coherent performance just to be sure?

Sufficiency is discussed in more detail below.

Subject specific *Assessment Guides* discuss sufficiency in relation to particular unit standards.

■   Following up the decision

If you judge that the evidence does meet these requirements, record that fact for future reference and complete any necessary documentation for crediting the unit standard. Notify the learner.

If the evidence does not yet meet the requirements, discuss the reasons for your judgement with the learner and look at what the learner will need to do about it. They may have misunderstood some of the requirements; in this case you need to plan opportunities to collect further evidence of the learner's performance. They may need more practice and experience before they are ready to be assessed. Their assessment may need to be postponed for a while for the element(s) in question.

It is important to stress that the learner has not yet 'failed' – you simply do not yet have enough evidence to award credit. However, it may be that they are aiming at an inappropriate unit standard or that your course will end before they reach the standard. The learner might need guidance on alternative pathways.

If you are unsure about the criteria for evaluating evidence even after studying the unit standards, look to the assessment support materials being developed by the Qualifications Authority, industry training organisations, whakaruruhau and national standards bodies.

■ How do I decide that I have sufficient evidence?

How many times does a learner have to demonstrate competence? What about negative evidence, where a learner succeeds on some occasions and fails on others? How long after learning new knowledge or skills should evidence be collected? Is it realistic to assess for all performance criteria and all items in a range statement, or can competence be inferred? These are all questions of sufficiency.

Most of the doubts that assessors face in deciding on credit are related to sufficiency.

Two key strategies:

- Planning is one of the keys to coping with sufficiency. An integrated mixture of ongoing evidence and summative assessment tasks will pre-empt many problems. Teachers should plan to provide learners with ample opportunity to demonstrate what they can do. Learners should be able to volunteer evidence. A tight assessment plan that relies on only formal tests for evidence will probably generate sufficiency problems.

- The moderation system is crucial in questions of sufficiency. The process of agreeing on standards includes agreeing on questions of sufficiency. Professional judgements made about particular unit standards by assessors and disseminated through the moderation network will be more useful than general advice about sufficiency.

Assessment results simply report that at the time the assessment took place the learner could perform to the specified standard and can be expected to repeat the performance. Whether they will repeat that performance on all occasions in the future is beyond the assessor's powers of prediction. There is a difference between 'can do' and 'will do'.

■ Sufficiency — some issues

How many times does a learner have to demonstrate the required standard?

This will vary for different unit standards. Where isolated skills are being assessed two or three demonstrations might be needed — probably in different contexts. An ability to solve an equation might be assessed more than once at intervals after initial learning and in relation to one or two applications. For a more holistic ability, a single demonstration could be sufficient. Perhaps one essay, well constructed and presented, is sufficient proof that a learner can write a well constructed essay. Assessors have to be confident that, given suitable conditions, the learner could repeat the performance to the same standard. Suitable conditions could include a

brief time to revise, practise or consult resources. *Assessment Guides will often provide specific guidance.*

What about negative evidence, where a learner succeeds on some occasions and fails on others?

Inconsistent performance by a learner can pose problems. Negative evidence – signs that a learner clearly cannot do something – must not be merely weighed against positive evidence. Stipulating a number of times that a performance must be completed sounds helpful but it can lead to bad assessment – assessors should not simply add up the successes and ignore the failures. Look at where the evidence came from. Was it an inconsistent performance or an unsuitable task? You will probably know which assessment occasions you have most confidence in.

How long after learning new knowledge or skills should evidence be collected?

For specific cases there is likely to be an optimum length of time after which it can be assumed learners have retained knowledge or skills. A mathematical process might be understood a few days after it was taught but a sterner test might come two or three weeks later. However, after six months, time for revision would be expected. Perhaps the process should be performed two or three times over a few weeks. Ability to speak clearly and fluently to a group might need only one demonstration and the duration after learning might not be so critical. It should be remembered that most abilities will fade if they are not put into practice.

Learners develop abilities gradually and there will be a grey area before consistently competent performance can be assured. This is where low-key, ongoing observations in naturally occurring settings can be valuable; you can generally see a learner's abilities develop and collect formal evidence when performances have become consistent. Often so-called negative evidence is evidence that has been collected too soon in the learning process.

Can a performance that exceeds the standard make up for a performance that doesn't quite meet the standard?

This is known as compensation and should not occur. It has been identified by researchers in England as one of the dangers – without being conscious of it, assessors often allow less than adequate performances on one element when a learner has performed very well on other elements. Learners have to meet all requirements of all elements for credit.

This is related to integrated assessment. You are encouraged to integrate elements to avoid fragmentation and to assess learners on whole performances. Learners should undertake full and meaningful tasks. But somewhere within that integrated performance you must be able to see that each learner has met each performance criterion.

Is it realistic to assess for all performance criteria and all items in a range statement?

There must be evidence that all performance criteria have been met. Where there is a range statement, the evidence must cover all items in the range. That is not to say that there has to be a separate assessment activity for each performance criterion or range item – one source of evidence can provide evidence for a number of criteria and range items. If assessment is well planned, an assessment task can be slightly enlarged or supplemented to provide maximum evidence.

For example, a range statement says that the learner has to be able to cook a turkey and a duck: the task could be to cook a turkey and to provide an explanation of how the process would differ for a duck. Some supplementary evidence will be less direct than might be preferred but, combined with more direct performance evidence, it can be valid. It also makes assessment manageable and avoids over-assessment.

What about inference? Where two processes are very similar or there are many items in a range statement, is it legitimate to infer competence in one skill from performance in another?

Inference works from available evidence. An assessor may decide that two skills are so closely related that the ability to perform one is legitimate evidence of an ability to perform the other. If a mathematics student knows how to find the intercept of straight lines does this mean that they can find the intercepts for curves?

Inferred evidence is likely to be less direct and it could be wise to elicit a little supplementary evidence. Or perhaps the quantity of evidence needed for the second skill could be reduced as a result of inference. The mathematics assessor might want two or three examples of straight line intercepts but then only one for curves.

In a sense, inference is not a special issue – either the evidence is there in some form within a performance or not. If not, then supplementary evidence is needed.

Specific questions about coverage of items in a range statement should be addressed by subject experts through the moderation system and agreed procedures recorded in assessment manuals.

Retain copies of your borderline judgements for future reference.

If assessment is burdensome, the unit standard itself may be at fault. Give the advisory group your comments on unit standards.

Unit standards provide a variety of learning targets.

Within the bounds of what is manageable, learners can be assessed at different times, in different ways and at levels to suit their abilities.

6 Assessment and the Learner

THE QUALIFICATIONS FRAMEWORK allows learning and assessment to be flexible and easily adapted to the needs of the individual learner. Targets are explicit and assessment tasks give learners a chance to show what they can achieve. Assessment for qualifications need not occur just once a year or once a semester. Instead, evidence can accumulate from ongoing observations of normal activities and assessment tasks plugged into the learning process.

Learning can more easily be integrated across the curriculum with teachers and students able to bring together a variety of unit standards to assess a particular module or programme. For example, film-making involves some understanding of the scientific properties of light; statistics are important in many areas of study from geography to the media; keyboard skills and basic computer studies are part of so many jobs from engineering to journalism.

There will of course be practical limitations on this. Institutions have limited time, staffing and resources. Course structures, student numbers and timetables will limit the flexibility that teachers have to fulfil these ideals.

In this chapter:

What is the learner's role in the planning?

Some case studies.

■ What is the learner's role in the planning?

The individual learner's place in the planning becomes especially important. What options/decisions do they have? How can they vary the assessment plan to gain more or fewer or different credits? How can they play a role in proactively presenting evidence and establishing authenticity? And how can they do something about it if they have not met the standard at the appropriate time in the course?

Learners should be aware of all details of the assessment plan including where, when and how assessment will occur, the nature of the evidence to be collected and the criteria against which that evidence will be judged. They should know about unit standards and understand how the unit standards fit into their course of study. If several unit standards have been integrated within a topic of study they should understand this. If evidence is to be collected at different stages of the courses they should be aware.

When learners have achieved credit, they should know immediately. If they have not achieved credit, they should know the areas of deficiency.

Learners could be encouraged to be active in providing evidence – this will entail presenting relevant evidence and finding ways to show that it is authentic. They can help design assessment activities. They should be aware of the important notion of sufficiency – so that they will accept the need for further evidence and accept that different learners might need to offer evidence in different ways.

Very able or fast learners, in particular, can be extended and motivated by targeting additional unit standards. You will be able to manage this more readily if you make those learners responsible for planning appropriate assessment activities.

■ Some case studies

The following case studies illustrate some of the enhanced flexibility offered by the Qualifications Framework. Note that in these case studies a 'module' is a section of the course and nothing to do with unit standard divisions. The teachers have planned programmes, dividing them into a number of modules and making one or two unit standards available in each module. They have also provided for faster students to do related work towards credit in additional unit standards. It has been assumed that the institutions have provided facilitators to enable learners to be assessed for their existing knowledge, skills and understanding.

Sharon

Sharon is working on a Geography module in which she will study population movement within her city. The module can lead to credits for two unit standards: one in statistics and one in demographics.

An activity is set by the teacher after some introductory whole-class lessons. Each learner will collect data on the previous addresses of people in their own suburb, analyse the data and present the findings in graphical form. This integrates the two unit standards but enables learners to get credit in one or the other if the whole project is not completed to standard.

Sharon has to take a fortnight's leave in the middle of this module but her teacher reminds her that if she has trouble collecting her own data she can use simulated data to do some of the analysis and the presentation. She would then be eligible for the statistics credits but not the demographics credits.

Sharon starts the data collection and consults her teacher at the agreed milestone points. This ensures that the data and initial analysis are her own work and that she is progressing well. Because of her planned leave Sharon is determined to get the demographics unit standard completed before even worrying about the statistics. She does this without any problem. The teacher is satisfied that her first submission meets the performance criteria.

Sharon has not fully understood the statistics so has to do some study and seek extra help. She falls behind the rest of the class and then takes her leave. When she returns the class is about to start on the next module. Sharon decides to forgo the credits that will come from that next module so that she can complete requirements for the statistics unit standard. She works on the statistics and produces the graphs, missing the introductory lessons on the next module.

The teacher doubts that she really understood the methods used to produce the graphs. He questions Sharon and decides that she does not have sufficient evidence to award the statistics credit. He asks Sharon to do some more reading and to produce another graph based on simulated data that he supplies. Sharon does this and earns the credit.

By now the rest of the class is well into the next module. Sharon spends the next few days hearing and reading about the content of the module she has missed so that she is ready to rejoin the class for the following module.

Sharon has earned 7 credits from this section of the course – 4 for the demographics unit standard and 3 for the statistics unit standard. Most others in the class have 10 credits – the demographics and statistics credits plus 3 credits for the urban planning unit standard that Sharon missed.

Arnold

Arnold is a first year business studies student at a polytechnic. The qualification he is after has a core of compulsory unit standards in the areas of accounting, computing, marketing and communications. Arnold has already completed at school all of the required computing standards, two of the accounting standards, three of the communications standards, but none of the marketing standards.

He does not need to do the compulsory computing unit standards again so instead he goes on to an advanced level standard dealing with the Internet. He enrols in the full course in marketing and the relevant parts of the communications and accounting courses.

That leaves him with time to tackle a cluster of unit standards related to a key interest he had at school – art and design. He can earn credits towards another qualification.

Appendix 1
The qualities of good assessment

Appropriate methods

The unit standards explain what is to be assessed, usually leaving the context to the provider. A genuine evidence-collection approach to assessment means that assessors can use sources of evidence that are fit for purpose. For example, if the focus is research then actual research can be done and assessed. If knowledge is involved it can be assessed in theory or in a practical application. Time constraints need not be imposed; reading and writing need not dominate assessment. Assessment can be more accurate and more rigorous.

Authentic evidence

The assessor must be confident that evidence is attributable to the person being assessed, that outside assistance is not distorting the assessment. Where you have not been able to observe a product being produced, techniques should be developed to check on authenticity. A simple way is to set milestone points for the learner to show how the work is progressing; brief oral questions about a finished product can often establish authenticity; early drafts of written work can be submitted with the final draft to show progress and establish authenticity. Parts of an activity should be repeated. Where assessment is ongoing, an individual's contribution to a joint group project must be assessed and you will have to refrain from advice and guidance.

Consistent judgements

You should be sure that, given similar circumstances, you would make the same judgement again. The unit standards and the moderation system will help you to make similar judgements to those made by other assessors.

A simple way to enhance consistency would be for every assessor to use the same assessment task every time. However this can interfere with the learning process and lead to indirect and inappropriate assessment. It is better to be rigorous about validity – ensure that assessment addresses the requirements of unit standards. In judging evidence you need to be confident that a particular performance is typical of that learner. If not, further evidence is needed to establish sufficiency.

This appendix explains the concepts and terminology that are needed to discuss good assessment practices in the National Qualifications Framework

Direct evidence

Evidence will be as direct as practicable, collected from activities that are as similar as possible to the conditions of actual performance. If a learner actually does something in realistic conditions, that is generally better than having them write about it.

Directness can be seen as a spectrum: from direct observation of a learner actually performing in a real life situation (eg actually cooking a meal in a restaurant or carrying out an experiment in a working laboratory) to indirect reports from third parties about how well a performance was carried out (eg a reference from a previous employer).

Fair methods

The best way to ensure that assessment is fair is to ensure that assessment is valid and that all learners have equal access to reassessment.

Assessment methods should not disadvantage particular learners by hindering or assisting in ways unrelated to the evidence sought. Assessment should not be affected by issues to do with race, gender, age, disability or social background. People from non-English speaking backgrounds or with low literacy skills should not be disadvantaged where language is not critical to the ability being assessed.

Assessment is more likely to be fair if all procedures are open and well understood by learners, if there are opportunities for reassessment and if there are simple procedures for consultation and appeal. Because assessment can be ongoing and integrated with learning, there should be fewer problems with fairness than in one-off assessments.

Fairness is discussed in detail in Chapter 4.

Integrated with learning

Often the most valid and direct evidence is collected when assessment is integrated with work, training or learning. Evidence collection can be ongoing, linked with the normal course of learning or work. Tests, examinations and other assessment tasks can be specially tailored and fitted to the programme at available points. Evidence from beyond the learning programme should be welcomed.

This approach to assessment should enable you to assess in ways that contribute to effective learning. Evidence can be collected as and when it is convenient within the learning programme. Assessment that takes place along with learning can reinforce and provide a focus for learning.

Assessment that is planned to link with work, training or learning programmes need not focus on one unit standard at a time. Unit standards can be integrated with each other – there are no limitations on the ways in which you can dismantle and recombine unit standards. One assessment

activity can provide evidence for a number of unit standards, or elements from different unit standards.

Manageable

The methods used to collect evidence should be straightforward, readily arranged by assessors and not interfere unduly with learning or work. Although the National Qualifications Framework emphasises the variety of assessment methods that can be used to produce valid evidence, assessment will not be successful if you and the learners set up assessments that are cumbersome, time consuming and unnecessarily intrusive.

Open

Learners must understand the assessment process and the criteria to be applied. They can contribute to planning, ensure that they are getting the most out of the system and establish that their work is authentic. Ideally learners will present themselves for assessment when they feel confident of success – and your assessment load is minimised.

Sufficient evidence

The quality and quantity of evidence will establish with confidence that performance criteria have been met and that performance to the required standard could be repeated with consistency. Most concerns about standards-based assessment come down to sufficiency.

Chapter 5 deals with this in some detail.

Systematic

Careful planning is the key to manageable quality assessment. If you decide in advance where evidence will come from, likely sources of supplementary evidence and how to store and record evidence, then this form of assessment should not become a burden. The use of portfolios of evidence and making learners responsible for aspects of the process can keep recording to a minimum.

Valid evidence

Standards-based assessment stresses validity – assessing what we set out to assess and not something else.

Assessment methods should be chosen so that they will provide evidence that is fit for purpose, so that assessment focuses on the requirements specified in unit standards and not other factors. Time constraints and modes of presentation can reduce the validity of evidence. A learner's ability to write about their research, work at pace or recall information might not reflect their ability to actually do the research. Unit standards are written to make the focus of assessment clear.

Appendix 1

LEARNING AND ASSESSMENT

Appendix 2
How do you read a unit standard?

The TITLE of a unit standard identifies a coherent area of knowledge, understanding or skills

GEOGRAPHY Carry out geographic inquiry with direction

TEXT PROCESSING Use keyboarding skills to enter text

The title is expanded in the PURPOSE statement which establishes what the unit standard is about and its context.

GEOGRAPHY

People credited with this unit standard are able to carry out geographic inquiry, including fieldwork, to gain an understanding of the geographic environment. The outcomes described in this unit standard are intended for those studying geography for the first time and complement other unit standards in this domain at Level 1 and lead to the Level 2 unit standard "Plan and carry out a geographic inquiry with guidance".

SPECIAL NOTES allow for further expansion or clarification.

In the geography example, the special notes relate the standard to the syllabus, describe how much supervisor direction is appropriate, and give settings for inquiries, examples of geographic ideas and definitions.

The ELEMENTS which follow are the specific learning outcomes.

The first element of the geography example is:

Collect and record information as directed.

An element of the text processing standard is:

Apply correct keyboarding techniques and ergonomic practices to avoid overuse injuries.

The best way to understand unit standards is to look at some of the unit standards in your own field.

This section offers a generalised look at what you will find in a unit standard.

Often a RANGE statement is included to give boundaries or context or guiding examples in order to minimise variations of interpretation.

For example, a geography unit standard gives a definitive list:

> *Element: Process and present information with direction.*
>
> *Range: Two of the following: map, graph, written text, model, calculations, other audio and/or visual techniques as described in G6, Skills in Geography, Forms 5 to 7.*

Each element has a number of PERFORMANCE CRITERIA.

These enable you to judge whether a learner's performance is sufficient for credit. They are written in the passive voice, a stylistic device that can take some getting used to. The performance criteria suggest the evidence required to establish that the learner has achieved that particular element, and often imply the most appropriate method for collecting that evidence.

Take that text processing element about techniques and ergonomic practices. Its first performance criterion states

> *Correct positioning of fingers, wrists, forearms and back, in relationship to the size, slope and type of keyboard being used, is applied.*

Evidence for this can come only from direct observation of the learner at work.

Whereas this next performance criterion requires scrutiny of a product:

> *Keyboard output produced is consistent with instructions and information provided.*

In the geography example the learner could make a written or spoken presentation:

> *The evaluation of the process used in the inquiry identifies factors which affect the validity of the conclusions.*

The LEVEL indicates the level of difficulty.

The Qualifications Framework consists of eight levels. Advisory groups decide the level for each unit standard. The Qualifications Authority has a series of generalised level descriptors for unit standards. For example, level 2 leads to semi-skilled occupations, level 5 to advanced craft or technical occupations, level 7 to academic, professional or managerial occupations.

Where there are official curriculum statements for schools, general education unit standards are derived from Curriculum Framework levels 6, 7 and 8. (Note that there are two different systems of levels for the qualifications and curriculum Frameworks.)

The CREDIT indicates how long it would take a 'typical' learner to complete the unit standard.

One credit equates to about 10 hours of work (inside and outside the classroom). It is an agreed value only and not a time limit for the performance to be achieved. For providers, what has been a year-long course in one subject has been equated to about 24 credits - but individual learners will be able to earn any number of credits within a learning programme.

FINAL DATE FOR COMMENT relates to the expiry date of the standard.

Unit standards are registered on the framework for two years and are reviewed after that time. Feedback from the users is essential to ensure the Framework operates as effectively as possible.

ENTRY INFORMATION specifies the background the learner needs before undertaking the unit standard.

Most general education standards have no pre-requisites and assume the teacher and learner have chosen appropriate standards at appropriate levels.

The ACCREDITATION OPTION is determined by the advisory group at the time of writing the unit standard.

It shows what a provider must do to be officially recognised by the Qualifications Authority as having the capability to assess against particular unit standards - and to award credit on the Framework.

The MODERATION OPTION explains the kind of moderation that users of the unit standard must comply with.

The Moderation Action Plan that accompanies each unit standard explains the moderation requirements in greater detail.

Appendix 3
External moderation

External moderation is a process that helps to ensure consistency of judgements. The judgements made by assessors in different providers must be comparable. Individual providers who do not meet this requirement are identified and measures taken to ensure that their judgements come within acceptable tolerances. The internal moderation systems that each provider must have for accreditation help ensure consistency among assessors within each institution.

Each advisory group draws up a moderation plan for the unit standards it has developed. Moderation can take a number of forms – every measure that contributes to consistency among providers can be seen as part of an overall moderation strategy. Moderation can occur at three stages: before, during and after assessment.

Pre-assessment moderation techniques begin with assessor training, the production of assessment guides and general advice on developing appropriate assessment tasks. These are really just aspects of professional development and that is appropriate - quality assessment calls for professional expertise. Other pre-assessment techniques include the checking of assessment plans, tasks and schedules and the production of workbooks, checklists and exemplars.

For many learning areas there will be an assessment guide: collections of assessment and moderation advice such as examples of student work, examples of effective assessment activities and advice on sufficiency. Retaining and sharing benchmark samples of student work is a valuable way of establishing consistency. These manuals will address individual unit standards and will be in a form that can be updated, perhaps by moderators.

While assessments are taking place, moderation techniques can include various forms of common assessment activities, task banks, cluster meetings or exchange of views by other means, and external moderator visits.

At the end of learning programmes, moderation can include verification of judgements by forwarding samples of student work to moderators, prescribed assessment tasks for monitoring, moderator visits and other reviews of results.