CHAPTER 2: VISUALISING COMPETENCE

A key step in the assessment planning process involves developing a picture of competence. This is a description of how a unit or cluster of units of competency can be applied within a work context. It is presented in the language of the candidate and/or the workplace to make the notion of competence accessible.

Candidates need real life examples in order to understand why they need to perform in particular ways … it is important to integrate competencies into typical work functions. This provides tangible performance goals that candidates can relate to.

This section describes a number of materials that help assessors to visualise competence. It explains how the following pieces of information may be combined to develop an integrated picture of competence:

- the assessment pathway
- the unit of competency
- workplace or industry information
- the descriptor of the qualification provided in the AQF
- the dimensions of competency
- the key competencies.

The assessment pathway

In order to develop a picture of competence, the assessor must find out what the candidate and the workplace hope to gain from the assessment process.

For the candidate, assessment may lead to a qualification, a promotion or new learning opportunities. For the workplace, it might lead to a change in the workplace culture, to a new management or learning system, or to new products or processes.
It is very important that assessors understand what the candidate and the workplace are looking for from the assessment process. This is critical information which will influence the way the assessment process is conducted, how the evidence is collected and the amount of risk control required within the process.

---

*It is critical to find out what the organisation really wants to do with the assessment information. It is important to work with the organisation to help it build pathways from the assessment process.*

---

**The unit of competency**

The competency standards in a Training Package describe work outcomes. Each unit of competency describes a specific work activity, the conditions under which it is conducted and the evidence that may be gathered in order to determine whether the activity is being performed in a competent manner. By examining different aspects of the unit of competency, assessors are able to gain answers to the following questions:

- What is the work activity?
- What does the work activity involve?
- What skills are needed to perform the work activity?
- What level of skill is needed?
- What are the conditions under which this work activity may be conducted?
- What evidence is needed to prove that a person is competent?
- What knowledge and skills are needed to perform the work activity?
- What generic work skills are needed?
- Where should evidence be gathered?
- What resources are required to gather the evidence?

Figure 3 identifies where the information needed to answer each of these questions is located in a unit of competency. This is illustrated by highlighting the relevant sections of the Unit of Competency PMLDATA300A *Process and record data* from the Laboratory Operations Training Package.
### Figure 3: Where to find information in a unit of competency

<table>
<thead>
<tr>
<th>What do you need to know about the work activity?</th>
<th>Where is the information found?</th>
<th>What does the unit of competency tell you?</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the work activity?</td>
<td>Unit title</td>
<td>Process and record data</td>
</tr>
<tr>
<td>What does the work activity involve?</td>
<td>Description</td>
<td>This unit of competency covers the ability to record and store data, perform basic laboratory computations and accurately present and interpret information in tables and graphs.</td>
</tr>
</tbody>
</table>
| What skills are needed to perform the work activity? | Elements                        | In this unit there are five key skills to perform:  
- record and store data  
- perform laboratory computations  
- present data in tables, charts and graphs  
- interpret data in tables, charts and graphs  
- keep accurate records and maintain their confidentiality. |
| What level of skill is needed?                  | Performance criteria            | For each skill there are specified performance criteria. For example, the element “Record and store data” has five performance criteria:  
- Code and transcribe data as directed  
- Record data in accordance with document traceability requirements  
- Enter data into laboratory information system or record sheets as directed  
- Rectify errors in data using enterprise procedures  
- Store and retrieve data using appropriate files and/or application software. |
| What are the conditions under which this work activity may be conducted? | Range statement                | The variables to be considered in assessing this unit include:  
- recording data in a range of worksheets, spreadsheets, databases and/or management systems  
- presenting data in a range of forms  
- computations may be performed with or without a calculator  
- records could include information from a range of resources  
- reference material can be accessed from a variety of sources. |
| What evidence is needed to prove that a person is competent? | Critical aspects of competency  | Competency must be demonstrated in the ability to process and record data in accordance with workplace procedures. The assessor should check to ensure the candidate is able to:  
- code, record and check the data  
- use a simple spreadsheet or database program to store and retrieve data  
- calculate scientific quantities and present accurate results in the required format  
- recognise anomalies and trends in data  
- maintain confidentiality of data  
- keep records up-to-date and secure. |
| What knowledge and skills are needed to perform this work activity? | Underpinning skills and knowledge | The knowledge required is:  
- ability to code, enter, store, retrieve and communicate data  
- ability to verify data and rectify mistakes  
- ability to maintain and file records  
- ability to remember scientific and technical terminology. |
What do you need to know about the work activity?

Where is the information found?

What does the unit of competency tell you?

The skills required include the:

- ability to calculate mathematic quantities
- ability to calculate scientific quantities
- ability to use scientific notations
- ability to use significant figures
- ability to calculate and interpret absolute and percentage uncertainties
- ability to transpose and evaluate formulae
- ability to prepare and interpret trends in various forms of data
- ability to prepare and interpret process control charts.

What generic work skills are needed?

Key competencies: Performance of this task requires all key competencies at performance level I.

Where should evidence of competency be gathered?

Context for assessment: This unit of competency is to be assessed in the workplace or simulated workplace environment.

What resources are required to gather the evidence?

Resource requirements: The resources required to gather evidence for assessment in this unit of competency include:

- data sets and records
- computer and relevant software or laboratory information system
- relevant workplace procedures.

Many work activities are not adequately described in a single unit of competency. More often than not, real work activities draw on competencies from a number of units at once. As illustrated in the following example, the preparation of a fish stock involves combining aspects of a number of units of competency from the Hospitality Training Package.

An example of clustering units of competency

In the assessment process for the Certificate III in Hospitality (Commercial Cookery), candidates provide evidence for a number of units of competency in one activity. For example, when making a fish stock they draw on the following competencies:

- THHICOR03A Follow health, safety and security procedures
- THHCOO01A Develop and update hospitality industry knowledge
- THHICOR03A Follow workplace hygiene procedures
- THHBCAO1A Organise and prepare food
- THHBAO04A Clean and maintain premises
- THHBC01A Use basic methods of cookery
- THHBC11A Implement food safety procedures
- THHICOR01A Work with colleagues and customers
- THHICOR02A Work in a socially diverse environment.

An assessor may use one assessment activity, involving observation and questioning, to gather evidence for these units of competency.
Sometimes a unit of competency may include more than one job function and will therefore need to be broken into more than one assessment process. For example, a unit of competency may include two separate functions, such as UTWNW180A Monitor and operate water supply and distribution systems from the Water Industry Training Package. In some workplaces, the work activities described in this unit are carried out by two different people or done as two separate work functions (for example, taking and testing water samples and operating the equipment to regulate the flow accordingly). Therefore it may not be appropriate to assess the two activities within the one assessment process.

Assessment should be determined by the logical organisation of work, not by the way Training Packages are written. Therefore the process of gathering evidence can apply to part of a unit, a whole unit, a cluster of units or an entire qualification. It all depends on the workplace, the logic of learning and the needs of the participants.
Workplace or industry information

The units of competency provide a focus for the picture of competence. However, units are not stand-alone documents and they only make sense when combined with workplace information.

Therefore assessors need to view the unit of competency in relation to workplace-specific information, such as:

- job descriptions
- gap analysis information
- workplace policies and procedures
- standard operating procedures.

An understanding of competence can only be developed when the unit of competency is applied in a particular situation. Workplace information provides the procedures and policies as well as the standards for how the work should be completed. For example, the workplace information might specify the speed, the number, the time and the quality measures.

An assessor working in the light manufacturing industry explained that competence is composed of layers. The candidate needs to present quality evidence which shows:

- the ability to carry out an activity safely
- the ability to carry out an activity to the specifications outlined in the Standard Operating Procedures and/or job description
- the ability to carry out an activity to the skill benchmarks outlined in units of competency.

For example, when assessing a candidate’s competency in using a metal cutting machine, the evidence first needs to demonstrate that the candidate has created a safe environment and can act appropriately if something goes wrong. The evidence needs to show the application of the Standard Operating Procedures for using the machines and that the candidate can organise all of the materials and can work to the quality specifications of the company. A check of the underpinning skills and knowledge and the other components of the unit of competency should confirm that the candidate has the full dimensions of competency.
A leading car manufacturer uses units of competency to explain work functions. The first step in implementing a Training Package qualification is to define the work functions. The work functions are then mapped against the units of competency to choose those which are relevant to the company. The starting point is not the Training Package; the starting point is the work.

Relating workplace information to the unit of competency is relatively straightforward in workplace assessment situations where the in-house assessors have ready access to, and an understanding of, the relevant processes, procedures and performance standards.

For assessors in external settings it is more difficult. Here are two examples of how external assessors have approached this task.

**An assessor in an Adult Community Education (ACE) provider always investigates the culture and procedures in a workplace before planning the assessment process. He usually goes into the workplace and asks these questions:**

- What are the safety policies?
- What mechanisms are in place to maintain safety standards?
- What performance management systems are in place?
- How do training and assessment figure within the general human resources strategy?
- What is the attitude of management to training and assessment?
- What is the tone of the workplace, for example, what expectations are there in terms of dress, social activity and breaks?
- What are the hours of work?
- What are the work cycles, for example, when are the busiest periods?
- What are the specific policies and procedures in terms of the units of competency in question?
- How is work organised?
- How do the work functions relate to the units of competency?

**A private RTO was contracted to carry out assessments within a large company in the financial sector.**

The assessors moved into the company for one month before the assessments were due to start in order to get a good sense of the culture and practice of the organisation. They used this time to plan the assessments and the assessment schedule and to make the units of competency meaningful for the workplace.
It is not always possible to carry out this in-depth research, particularly when candidates are in off-the-job situations and come from a range of workplace settings. In this situation the assessor can:

- ask about the candidate’s workplace in an interview
- compare candidate workplaces as part of a classroom activity
- ask the candidate to complete a survey or questionnaire
- access enterprise newsletters and other materials
- have the candidate customise a unit of competency using workplace information as shown in Figure 4.

In Figure 4, the candidate has taken the Unit of Competency BSXFM1304A Participate in, lead and facilitate workteams from the Frontline Management Competency Standards and written in the information specific to his workplace, Deluxe Plastics. Nothing has been deleted from the unit of competency, however, words and phrases have been added to give the unit more meaning. This technique, which is called ‘overwriting the unit of competency’ is used in helping candidates understand a unit of competency.
Figure 4: Overwriting a unit of competency

<table>
<thead>
<tr>
<th>Unit: BSXFMI304A Participate in, lead and facilitate work teams</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Descriptor</strong></td>
</tr>
<tr>
<td>Frontline managers have a key role in leading, participating in, facilitating and empowering work teams/groups within the context of the organisation. They play a prominent part in motivating, mentoring, coaching and developing team members, and in achieving team cohesion.</td>
</tr>
<tr>
<td><strong>Element</strong></td>
</tr>
<tr>
<td>4.1 Participate in team planning</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**AQF descriptor**

Units of competency are written to reflect work activities within an industry across a number of enterprise settings. They are then organised into levels of work, which are represented by different qualifications within the AQF. Each qualification within the AQF has a descriptor. These descriptors provide important information on the characteristics of the work that people who hold specific qualifications should be able to perform, including:

- the breadth and depth of knowledge
- the breadth and depth of skill
- problem solving capabilities
- information processing capabilities
- the operational environment in which the work is performed
- the level of discretion or judgment in the work
- responsibility for own work
- responsibility for the work of others.
The matrix in Figure 5 compares the nature of work that should be able to be performed by people with Certificate I, II and III qualifications.

**Figure 5: AQF Certificate I, II and III descriptors**

<table>
<thead>
<tr>
<th>Qualification characteristics</th>
<th>Certificate I</th>
<th>Certificate II</th>
<th>Certificate III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>As needed for defined range of activities</td>
<td>Basic operational, applied to varied activities</td>
<td>Technical depth/breadth, some theory; able to transfer to new environments</td>
</tr>
<tr>
<td>Skills</td>
<td>Basic use of tools/equipment</td>
<td>Defined range of practical skills</td>
<td>Broad, well developed, able to select, adapt and transfer skills to new activities</td>
</tr>
<tr>
<td>Problem solving</td>
<td>Solutions are pre-ordained by others</td>
<td>Apply known solutions to predictable problems</td>
<td>Provides technical advice to solve problem in known routines</td>
</tr>
<tr>
<td>Information processing</td>
<td>Receive and recall</td>
<td>Assess and record</td>
<td>Interpret</td>
</tr>
<tr>
<td>capabilities</td>
<td>Scope of activities</td>
<td>Routine tasks</td>
<td>Known routines and functions, some non-routine</td>
</tr>
<tr>
<td>Operational environment</td>
<td>Narrow, pre-defined, includes pre-vocational/induction</td>
<td>Defined range of contexts</td>
<td>Variety of contexts within known operational environment</td>
</tr>
<tr>
<td>Discretion/ judgement</td>
<td>Activities are directed</td>
<td>Limited choice and complexity of actions/options</td>
<td>More extensive choice and complexity of options/activities</td>
</tr>
<tr>
<td>Self responsibility/</td>
<td>For own work and quality input to team</td>
<td>For own work and quality outcomes</td>
<td>For own work, quality outcomes and time management</td>
</tr>
<tr>
<td>accountability</td>
<td>Nil</td>
<td>For own input into team outcomes</td>
<td>Limited responsibility for others – coordinate team</td>
</tr>
</tbody>
</table>

Individual units of competency may be part of more than one qualification outcome. Where a unit of competency occurs in more than one AQF qualification, it should be assessed at the lowest qualification that it occurs in the industry qualifications framework.
The dimensions of competency

People are considered to be competent when they are able to apply their knowledge and skills to successfully complete work activities in a range of situations and environments, in accordance with the standard of performance expected in the workplace.

This view of competency:

- emphasises outcomes
- focuses on what is expected of an employee in the workplace
- highlights the application of skills and knowledge to workplace tasks
- incorporates the ability to transfer and apply skills and knowledge to new situations and environments
- focuses on what people are able to do and the ability to do this in a range of contexts.

Competency involves successful work performance. It is usually seen to comprise four dimensions:

- task skills – undertaking a specific workplace task(s)
- task management skills – managing a number of different tasks to complete a whole work activity
- contingency management skills – responding to problems and irregularities when undertaking a work activity, such as:
  - breakdowns
  - changes in routine
  - unexpected or atypical results or outcomes
  - difficult or dissatisfied clients
- job/role environment skills – dealing with the responsibilities and expectations of the work environment when undertaking a work activity, such as:
  - working with others
  - interacting with clients and suppliers
  - complying with standard operating procedures
  - observing enterprise policy and procedures.
**How to use the dimensions for visualising competency**

When developing a picture of competency, the assessor should read the relevant unit of competency, including the elements and performance criteria, range statement and evidence guide, and answer the following questions:

- What are the task skills associated with this work activity?
- What are the task management skills associated with this work activity?
- What are the contingency management skills associated with this work activity?
- What are the job role/environment skills associated with this work activity?

While task skills are usually clearly documented in units of competency, there are many units where the other dimensions of competency must be inferred. Even though the task management, contingency management and job/role environment skills involved in a work activity may not be directly described in the unit of competency, they must be taken into account when assessing the candidate.

The following example, which is adapted from a publication developed by Manufacturing Learning Australia titled *Assessment Solutions*, illustrates how the four dimensions of competency may be identified in a unit. In this example, Figure 6 is an extract from the Unit of Competency PMLTEST300A *Perform basic tests* and Figure 7 outlines how the four dimensions of competency are incorporated in the unit.
Figure 6: Extract from Unit of Competency PMLTEST300A Perform basic tests

Description
This unit of competency covers the ability to perform basic tests and/or procedures using standard methods.

<table>
<thead>
<tr>
<th>Elements</th>
<th>Performance criteria</th>
</tr>
</thead>
</table>
| 1. Receive, label and store samples for testing | 1.1 Label laboratory samples to ensure information is transcribed accurately and legibly  
1.2 Register samples into laboratory system  
1.3 Record sample testing requirements  
1.4 Maintain sample integrity and eliminate cross-contamination |
| 2. Prepare sample | 2.1 Identify materials to be tested, appropriate standard method and safety requirements  
2.2 Use personal protective equipment as specified for standard method and material to be tested  
2.3 Record sample description, compare with specification, record and report discrepancies  
2.4 Prepare sample in accordance with appropriate standard methods |
| 3 Perform tests on samples | 3.1 Check calibration status of equipment and calibrate if applicable  
3.2 Perform sequence of tests to be performed as per standard method  
3.3 Identify, prepare and weigh or measure sample and standards to be tested  
3.4 Set up test reagents or equipment/instrumentation as per standard method  
3.5 Conduct tests in accordance with enterprise procedures  
3.6 Record results in accordance with enterprise procedures  
3.7 Identify and report out of specification or atypical results promptly to appropriate personnel  
3.8 Clean and care for test equipment  
3.9 Store unused reagents as required by relevant regulations and codes  
3.10 Dispose of wastes in accordance with safety, enterprise and environmental requirements |
Figure 7: Identifying the four dimensions of competency in the Unit of Competency

*PMLTEST300A Perform basic tests*

<table>
<thead>
<tr>
<th>Task skills</th>
<th>Task management skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>This requires performance of the task[s] to the required standard as described in the unit of competency and expected in the workplace.</td>
<td>Captures the skills used as people plan and integrate a number of potentially different tasks to achieve a complete work outcome.</td>
</tr>
<tr>
<td>Assessor needs to collect evidence that the candidate can do the individual actions as well as the whole task.</td>
<td>Candidates should provide evidence that they can work efficiently to meet deadlines, handle a sequence of interrelated tasks and progress smoothly between tasks.</td>
</tr>
</tbody>
</table>

**PMLTEST300A - task skills involve the performance of basic tests to the required standard.**

**PMLTEST300A - task management skills include:**
- arranging the sequence of work efficiently, eg moving through Elements 1 – 3
- carrying out tasks simultaneously, eg preparing additional samples (Element 2) while tests are running (Element 3).

<table>
<thead>
<tr>
<th>Contingency management skills</th>
<th>Job/role environment skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The requirement to respond to irregularities and breakdowns in routines.</td>
<td>The requirement to deal with the responsibilities and expectations of the work environment.</td>
</tr>
<tr>
<td>Candidates should show evidence of dealing with contingencies, eg breakdowns, irregularities, imperfections or the unknown.</td>
<td>The capacity to work with others and adapt to different situations is central to successful performance.</td>
</tr>
</tbody>
</table>

**PMLTEST300A - assessor may use questions such as:**
- What if the sample label is incomplete?
- What if the results you obtain are outside the acceptable range?
- What if equipment is not calibrated correctly?

<table>
<thead>
<tr>
<th>In the workplace, can the candidate perform the work and answer questions with confidence?</th>
<th>Assessors may use questions such as:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMLTEST300A - candidates are to follow instructions (Elements 1 – 3) and communicate with others (Performance Criteria 1.1, 2.3, 3.6).</td>
<td>- Does the candidate comply with workplace procedures and standard methods in performing the task?</td>
</tr>
<tr>
<td></td>
<td>- Does the candidate communicate effectively with others?</td>
</tr>
<tr>
<td></td>
<td>- Does the candidate observe enterprise and regulatory requirements?</td>
</tr>
</tbody>
</table>

(Adapted from Manufacturing Learning Australia – *Assessment Solutions*, ANTA, 2000)
The key competencies

What are the key competencies?

A number of processes learnt throughout work and life are required in all jobs. They are fundamental processes and are transferable to other work functions. These are called the key competencies and cover the following aspects of work:

- collecting, analysing and organising ideas
- communicating ideas and information
- planning and organising activities
- working with others and in teams
- using mathematical ideas and techniques
- solving problems
- using technology.

Virtually all units of competency indicate the key competencies that are required to perform the work activity described in the unit. It is recognised that, as work activities become more complex, people require more sophisticated generic skills. For that reason the key competencies are described at three performance levels. As indicated in Figure 8, performance level 1 is the level of generic skills needed to perform the task, whereas performance level 3 involves the ability to evaluate and redesign tasks. It is critical that assessors take both the key competencies and the performance level into account when developing the picture of competence.
### Figure 8: Key competencies and levels

<table>
<thead>
<tr>
<th>Key competency</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collecting, analysing and organising ideas</td>
<td>Access and record from a single source</td>
<td>Access, select and record from more than one source</td>
<td>Access, evaluate and organise from a range of sources</td>
</tr>
<tr>
<td>Communicating ideas and information</td>
<td>Simple activities in a familiar setting</td>
<td>Complex communication within a particular context</td>
<td>Complex communication in a variety of settings</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Under supervision</td>
<td>With guidance</td>
<td>Independently initiate and evaluate complex activity</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Familiar activities</td>
<td>Help formulate and achieve goals</td>
<td>Collaborate in complex activities</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Simple tasks</td>
<td>Select appropriate tasks</td>
<td>Evaluate ideas and techniques and adapt as appropriate</td>
</tr>
<tr>
<td>Using technology</td>
<td>Reproduce or present basic product or service</td>
<td>Construct, organise or operate products or services</td>
<td>Design or tailor products or services</td>
</tr>
</tbody>
</table>

Many units of competency now include more guidance on the application of the key competencies. For example, Figure 9 demonstrates how the key competencies may be applied within the Unit of Competency RUH301DB Prepare plant displays from the Horticulture Training Package. Descriptions of the key competencies are included as Appendix A.
Figure 9: Key competencies

<table>
<thead>
<tr>
<th>Unit title: RUH301DB Prepare plant displays</th>
</tr>
</thead>
<tbody>
<tr>
<td>What processes should be applied to this unit of competency?</td>
</tr>
<tr>
<td>The questions below highlight how these processes are applied in this unit of competency. Following each question, a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How can communication of ideas and information (1) be applied?</th>
<th>By discussing with the client, supervisor or colleagues the display, design and selection of plants.</th>
</tr>
</thead>
<tbody>
<tr>
<td>How can information be collected, analysed and organised (1)?</td>
<td>Preparing the display plan according to enterprise guidelines will require information to be gathered and the display organised accordingly.</td>
</tr>
<tr>
<td>How are activities planned and organised (1)?</td>
<td>Developing the display requires planning, selection, placing plants and observing safety precautions to be coordinated and organised.</td>
</tr>
<tr>
<td>How can team work (1) be applied?</td>
<td>Discussing the design process with supervisor or colleagues will require team work.</td>
</tr>
<tr>
<td>How can the use of mathematical ideas and techniques (1) be applied?</td>
<td>When the plants are fertilised and watered, and when measuring light, air and humidity, some basic mathematical techniques could be applied.</td>
</tr>
<tr>
<td>How can problem solving skills (1) be applied?</td>
<td>During the design, selection and placement of plants in the display, problems may arise requiring innovative solutions.</td>
</tr>
<tr>
<td>How can the use of technology (1) be applied?</td>
<td>Technology may be required to access information about the plants.</td>
</tr>
</tbody>
</table>
**Visualising competence**

The final picture of competency is developed by bringing together all of the pieces of information discussed in this section. These are:

- the unit of competency
- the dimensions of competency
- the key competencies
- the AQF descriptor
- information on the workplace.

This may involve the assessor asking questions such as:

- How would competent workers perform the task represented by this unit or cluster of units of competency?
- How would they apply their knowledge?
- What level of performance would be expected?
- What would they do if something went wrong?
- How would they handle multiple tasks or pressures?
- What would the product or service look like?
- How would they transfer their skills to other contexts?
- How would they apply generic skills, such as:
  - communication?
  - planning and organising?
  - organising information?
  - problem solving?
  - numeracy?
  - team work?
  - technology?
- What would a competent person not do?

Assessors can use this information to document the picture of competency. This can be done in a number of ways. One approach, as indicated in Figure 10, involves writing a description of competency in case study form.
A laboratory assistant in a materials testing laboratory was performing routine tensile tests on samples of vinyl sheet. The assistant converted the readings from the machine to appropriate units using a simple calculation and recorded them in the logbook for that test method. After comparing these test results with previous results for the same type of vinyl material, the assistant found that the tensile strength was within the required range. However, it was at the lower rather than the upper end of the range as in previous testing.

The assistant discussed the results with the laboratory supervisor. The calibration file for that machine showed that it had been calibrated four months previously and had not needed adjustment. Test results for the same period showed that the machine was giving lower than normal tensile strength readings for the few higher strength materials tested over the last two months. The assistant did some more checks and confirmed this trend. The machine was re-calibrated by the instrument company and the frequency of internal calibration checks by the laboratory assistant was increased.

This problem would not have been detected or corrected as quickly without the assistant's competent recording and retrieval of test results and calibration information, and initiative.

An alternative approach, as shown in Figure 11, involves listing the key characteristics of competent and not yet competent performance.
Figure 11: Competency profile: BSZ407A Deliver training sessions and BSZ404A Train small groups

<table>
<thead>
<tr>
<th>A competent person can:</th>
<th>A person who is not yet competent may:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan training programs based on:</td>
<td>Plan training programs that are not based on an analysis of training needs or a set of standards.</td>
</tr>
<tr>
<td>• a set of standards</td>
<td>Deliver training using a limited range of delivery methods and learning materials which may not:</td>
</tr>
<tr>
<td>• identified training needs</td>
<td>• take into account student or trainer needs or availability of resources</td>
</tr>
<tr>
<td>Deliver training:</td>
<td>• provide opportunities for skills development through practice</td>
</tr>
<tr>
<td>• using a range of appropriate delivery methods and learning materials which will facilitate learning</td>
<td>• inform students about the purpose of the training or assessment</td>
</tr>
<tr>
<td>• actively involving participants in the session</td>
<td>• give students feedback on progress.</td>
</tr>
<tr>
<td>• providing opportunities for practice in skills development</td>
<td>Obtain feedback from learners but not use it to improve the program or to recommend changes to program developers.</td>
</tr>
<tr>
<td>• taking into consideration the characteristics of learners, particularly language and literacy needs</td>
<td>Engage in limited self-evaluation but not use it to improve planning or delivery.</td>
</tr>
<tr>
<td>• informing learners about the nature of the training and assessment</td>
<td></td>
</tr>
<tr>
<td>• providing constructive feedback to learners about progress toward competence.</td>
<td></td>
</tr>
</tbody>
</table>

Use feedback from learners, other stakeholders and self-evaluation to improve delivery.

Once the picture of competency is prepared it can be used to:

- describe the qualities of competent performance
- identify evidence of competent performance
- select ways of gathering evidence.