Unit	1056
Title	Describe Competency Based Training and Assessment
Document type	Learning Resource



In consultation with industry subject matter experts, the BC Forest Safety Council (BCFSC) facilitated the production of this material.

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### **Unit Introduction**

By the end of this unit you will be able to demonstrate knowledge of:

- Competency Based Systems
- Elements and Dimension of Competency
- Evidence, Rules of Evidence & Principles of Assessment
- Assessment
- Ethics

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# **Section 1056-1: Elements and Dimensions of Competency**

#### What you will learn in this section

By the end of this section you will be able to demonstrate knowledge of the following key points:

- 1.1 Advantages of competency-based systems
- 1.2 Components of a Unit of Competency
- 1.3 Frameworks and their application in assessment
- 1.4 Holistic assessment and its application

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## Key Point 1.1: Advantages of Competency-Based Systems

Assessment can be described as the act of making a judgment about something or someone. In competency-based training and assessment, we can add "the act of making a judgment about something or someone based on evidence directly related to outcomes that reflect a competency required to perform effectively in the workplace".

The competency-based training and assessment process recognizes outcomes, not the path taken to achieve those outcomes. Competency is defined in part as "the ability to do an activity multiple times in a variety of contexts to a standard defined by industry". While competency does not have a time component, it is recognized that competency is achieved over time and the amount of time required for a person to become competent varies from individual to individual. Competent workers are both safe and productive.

A competency-based training and assessment process is not designed to fail candidates. It is designed to verify that the candidates have the necessary underpinning knowledge, skills, and attributes, demonstrated through evidence, to perform the routine tasks required in the workplace in a safe and effective manner.

Evidence underpins the competency training and assessment model. While the system allows for flexibility in terms of training, and assessment models, the evidence requirements to demonstrate competency in terms of outcomes remains the same.

Competency training and assessment models do not deal with abstract concepts. They focus on the skills, knowledge, and attributes required for a worker to be competent in the work environment. For example, a competency-based system would not focus on a worker's understanding of the "history of the telephone", but rather on the ability to "operate the telephone", as this is a workplace skill.

From an assessment perspective, a competency-based system:

- Makes competency meaningful to workers by relating the Units of Competency to workplace activities, procedures, and requirements including regulations where applicable
- Actively involves the Assessor, the worker, and the workplace
- Clearly identifies the evidence that the worker needs to present to prove competency
- Incorporates clear, objective, and efficient methods for collecting evidence

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- Provides clear standards and procedures for making an assessment decision
- Leads to recognition of skills which may include a Certificate of Qualification.
- Gives constructive feedback, recognition for competency achieved, and advice regarding gap training
- Allows for transferability and mobility between occupations and sectors
- Incorporates procedures for quality assurance including efficient record keeping systems
- Has a Recognition of Current Competence process
- Is criterion referenced
- Is fair and flexible

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### Key Point 1.2: Unit of Competency

Units of Competency are statements, developed and approved by industry, that describe, in terms of outcomes, effective performance in the workplace. A group of related units for an occupation or cluster of occupations is referred to as a unit standard, library, or package. Units of Competency are used as the basis for developing both training and assessment tools. There are a variety of formats used as templates for Units of Competency, yet the list of components below is common:

- Unit title
- Unit description
- Levels or occupations
- Pre-requisites
- Elements of competency
- Competency outcomes
- Range statements
- Knowledge to be assessed
- Skills to be assessed
- Evidence requirements

The Unit of Competency related to this module will be used as an example.

#### Unit title

The unit title is a broad description of the unit, and is reflective of the content and workplace outcome it represents.

Unit	1056
Title	Describe Competency Based Training and Assessment
Document type	Unit of Competency

#### **Unit description**

The unit descriptor is an expansion on the information in the unit title. It provides a clear and accurate description of the purpose and intent of the unit. Any reciprocal recognition relationships with other units of competency can also be included. A unit descriptor may also include what is not in the unit if it is found within another unit.

Description	This unit is about:
	Competency Based Systems;
	Elements and Dimensions of Competency;

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- Evidence, Rules of Evidence, Principles of Assessment;
- Assessment; and
- Ethics.

#### Levels or occupations

Levels or occupations define the level within an occupation where there are progressive Units of Competency. Where no levels exist, this section defines which occupations the unit is relevant to.

Occupations	This unit is a component of the following occupations:
	Assessor
	Trainer (optional)

#### **Prerequisites**

Units that must be completed before beginning the unit are listed in this section.

Prerequisite(s)	This unit has the following prerequisites:
	Certificate of Qualification or occupationally competent in area of training or assessment.

#### **Elements of competency**

Elements of competency are the basic building blocks of a Unit of Competency that describe the key activities or clusters of the work covered by the unit.

#### **Performance outcomes**

Performance outcomes (Competence Outcomes) are the part of a competency standard that specify the required level of performance (in terms of activities, standards and outcomes) that needs to be achieved in order to be deemed competent. This can be skills, knowledge, or attributes.

Element of Competence	Competence Outcomes
Competency Based     Systems	Demonstrate knowledge of advantages of competency- based systems.
	1.2. Demonstrate knowledge of the <i>components of a unit of competency</i> .
	Components of a unit of competency must include:

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Element of Competence	Competence Outcomes
	Title, description, elements of competence, competence outcomes, summary of knowledge, summary of skills, evidence to be assessed.
	Demonstrate knowledge of frameworks and their application in relation to assessment.
	Demonstrate knowledge of holistic assessment and its application in relation to units of competency and frameworks.

#### Range statements

Range statements refer to the work context and inform the parameters of the performance outcome. An appropriate range of industry-relevant products, organizational options, processes, or technology-specific information is included in the range statement. The words 'must' and 'may' for range statements can be found in their own section or attached to the competency outcomes. Range statements inform the content of the learning resources and the assessment strategy.

Competency Based     Systems	1.1. Demonstrate knowledge of the <i>components of a unit of competency</i> .
	Components of a unit of competency must include:
	<ul> <li>Title, description, elements of competence, competence outcomes, summary of knowledge, summary of skills, evidence to be assessed.</li> </ul>

#### Knowledge to be assessed

This section lists all underpinning knowledge at a high level required to successfully demonstrate the competency outcomes of the unit. This list is not exhaustive but must include any knowledge required to meet the competency outcomes of the unit.

#### Skills to be assessed

This section lists all skills required at a high level to successfully demonstrate the competency outcomes of the unit. This list is not exhaustive but must include any skills required to meet the competency outcomes of the unit.

Summary of Knowledge to be Assessed For this unit, a competent worker must understand:

- Competency based systems (training and assessment
- Components of a Unit of Competency

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	Frameworks
	Holistic Assessment
	Elements of competency
	Dimensions of competency
	Types of evidence
	Rules of evidence
	Principles of assessment
	Reasonable adjustment and accommodation
	Assessment tools and processes
	• Ethics
	Formative and summative assessment
	Norm and criterion referenced assessment
Summary of	For this unit a competent worker must be able to:
Skills to be Assessed	This is a knowledge only unit.

#### **Training and Assessment Guide**

Evidence to be assessed documents the types of proof that must be on record or is available to support meeting the minimum requirements for demonstrating competency. The focus is on evidence demonstrated multiple times in a variety of contexts. This section also states who can sign off on evidence as being authentic and valid. Critical evidence is listed in this section.

General Information	Competence outcomes requiring "knowledge of" can be assessed through competency conversations or written assessment. Evidence must be on record of competence achieved.  • Training modules are available for this unit.  • Competency conversations are available for this unit.
Evidence to be Assessed	Minimum evidence requirements for this unit must include:
Evidence Sign Off	Evidence must be signed off by designated:  • Trainer

- Assessor
- Supervisor.

Final evidence sign-off for Certificates of Qualification is the responsibility of the **Quality Assurance – Internal and External Verifiers**, a function of the relevant administrator.



#### **REMEMBER!**

The competence or performance outcomes found in the Units of Competency define the skills, knowledge and attributes related to the occupation.

Below is a sample of the same completed Unit of Competency.

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Document type	Unit of Competency

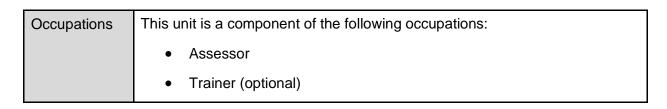
Description	This unit is about:		
	Competency Based Systems		
	Elements and Dimensions of Competency		
	Evidence, Rules of Evidence, Principles of Assessment		
	Assessment, and		
	• Ethics		

Regulatory Requirements	It is always the responsibility of any person using these materials to inform him/herself about the Occupational Health and Safety Regulations related to the work being conducted. A full list of OHSR related to this unit can be found in the relevant package.
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# Prerequisite(s) This unit has the following prerequisites: • Certificate of Qualification and/or occupationally competent in area of training or assessment



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Element of Competence		Competence Outcomes		
2.	2. Competency Based Systems		Demonstrate knowledge of advantages of competency-based systems.	
		2.2.	Demonstrate knowledge of the <i>components of a unit of competency</i> .	
			Components of a unit of competency must include:	
			<ul> <li>Title, description, elements of competence, competence outcomes, summary of knowledge, summary of skills, evidence to be assessed.</li> </ul>	
		2.3.	Demonstrate knowledge of frameworks and their application in relation to assessment.	
		2.4.	Demonstrate knowledge of holistic assessment and its application in relation to units of competency and frameworks.	
3.	. Elements and Dimensions of		Demonstrate knowledge of the <i>elements of competency</i> and their role in determining competence.	
	Competence		Elements of competency must include:	
			Skills, knowledge, attributes.	
		3.2.	Demonstrate knowledge of the <i>dimensions of</i> competency and their role in the workplace.	
			Dimensions of competency must include:	
			<ul> <li>Task skills, task management skills, contingency skills, and job role/environment skills.</li> </ul>	
4.	Evidence, Rules of Evidence, Principles of Assessment	4.1.	Demonstrate knowledge of <i>types of evidence</i> and collection methods and why multiple types of evidence are critical to determining competence.	
			Types of evidence must include:	
			Direct, indirect, third party.	
		4.2.	Demonstrate knowledge of the <i>rules of evidence</i> used in a competency-based system.	
			Rules of evidence must include:	
			Valid, sufficient, current, authentic.	

Element of Competence	Competence Outcomes	
	4.3.	Demonstrate knowledge of the <i>principles of assessment</i> used in a competency-based system.
		Principles of assessment must include:
		Valid, reliable, flexible, fair.
5. Assessment	5.1.	Demonstrate knowledge and application of assessment tools in accordance with the competency-based assessment model.
	5.2.	Demonstrate knowledge of assessor roles and responsibilities related to assessment.
	5.3.	Demonstrate knowledge and application of reasonable adjustment in the assessment context.
	5.4.	Demonstrate knowledge of norm and criterion referenced assessment.
	5.5.	Demonstrate knowledge of formative and summative assessment.
6. Ethics	6.1.	Demonstrate knowledge of ethical responsibilities to be an assessor.

#### **Summary of Knowledge and Skills**

Cummary of Allowicago and Civino			
	For this unit a competent worker must understand:		
	<ul> <li>Competency based systems</li> </ul>		
	<ul> <li>Components of a Unit of Competency</li> </ul>		
	<ul> <li>Frameworks</li> </ul>		
	Holistic assessment		
	Elements of competency		
Summary of Knowledge	Dimensions of competency		
to be Assessed	Types of evidence		
	Rules of evidence		
	Principles of assessment		
	Reasonable adjustment and accommodation		
	<ul> <li>Assessment tools and processes</li> </ul>		
	• Ethics		
	Formative and summative assessment		
	Norm and criterion referenced assessment.		
Summary of Skills to be	For this unit a competent worker must be able to:		
Assessed	This is a knowledge only unit.		
	Ç ,		

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#### **Training and Assessment Guide**

General Information	Competency outcomes requiring "knowledge of" can be assessed through competency conversations or written assessment. Evidence must be on record of competence achieved.  • Training modules are available for this unit  • Competency conversations are available for this unit		
Evidence to be Assessed	Minimum evidence requirements for this unit must include:              Completion of training module and formative assessments              Completion of competency conversation where applicable		
Evidence Sign Off	Evidence must be signed off by designated:		

### Key Point 1.3: Frameworks and their Application

A qualification framework is made up of Units of Competency across multiple related occupations. Frameworks are designed to support mobility and transferability between occupations and sectors. A qualification framework can be across related industries or sectors and in many countries, tie all vocational occupations together.

Within a framework, Units of Competency are packaged in meaningful workplace combinations that reflect complete job roles or activities in the workplace called packages. Packages are designed to meet the needs of small, medium, and large organizations.

Packages of units within a framework clearly identify what is required to be competent in a job function and include any necessary information to assist the learner in understanding the occupation.

This may include, but is not limited to, the occupational description, regulatory requirements, entrance, qualification and maintenance requirements, and Units of Competency related to that package.

For example, a learner has achieved six units required to achieve the outcomes of the baker package. After working as a baker for two years, the learner has the opportunity to become a chef.

The learner reviews the chef package and is pleased to find out that the six units the learner has achieved as a baker are fully transferable to the chef package and the learner only has to achieve the 12 additional units to receive qualification.



#### REMEMBER!

The outcomes of the entire Unit of Competency must be met before it can be transferred to another package or occupation.

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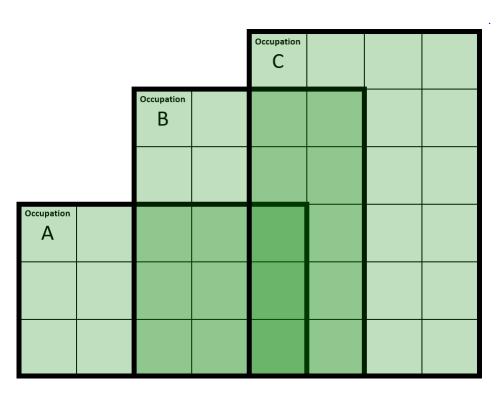


Figure 1: Units of competency across multiple related occupations

### Key Point 1.4: Holistic Assessment

Holistic assessment refers to assessing the parts or whole of multiple units within a package at the same time. This 'big picture' approach is both cost and time efficient and should be used wherever possible.

For example, a unit on **Basic Rigging** may be assessed on its own, but would be holistically assessed with units that are a practical demonstration of a workplace activity where rigging is a component of doing the job. It is often the occupational skills that are holistically assessed with workplace units of competency.

Figure 2 below, reflects the overlap that units of competency may have.



Figure 2: Overlapping competency

# Section 1056-2: Elements and Dimension of Competency

What you will learn in this section

By the end of this section you will be able to demonstrate knowledge of the following key points:

- 2.1 Elements of Competency
- 2.2 Dimensions of Competency

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# Key Point 2.1: Elements of Competency

Competency has three broad elements:

- Skills
- Knowledge
- Attributes

All occupations require the three elements as part of competency. Depending on the occupation, the circles will increase or decrease in size and importance, but all occupations have an element of all three. Competency is the point where skills, knowledge, and attributes meet.



Figure 3: Elements of Competency

An example would be where a customer service agent may find that attributes are the most important part of the job. On the other hand, a laboratory assistant would require strong underpinning knowledge and skills to do the job competently with less focus on attributes. In either case, both would need a measure of attributes to do their job successfully.

Effective work performance requires skills, to function in the workplace and the knowledge and attributes to apply those skills in routine and non-routine situations. These are both observable and non-observable.

In the workplace process, industry often requests that: "Give me a person with the right attributes and I will teach the skills and knowledge".

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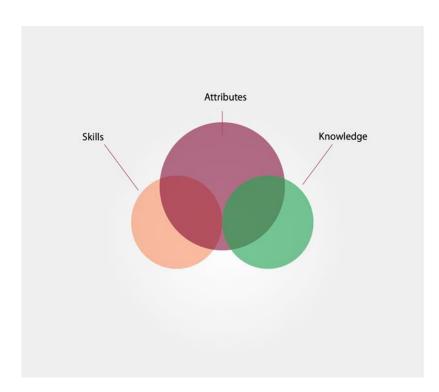


Figure 4: Customer Service Agent

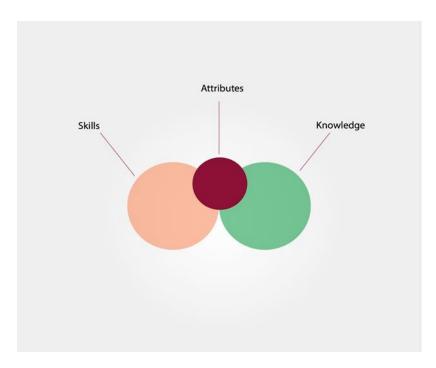


Figure 5: Lab Assistant

The three competency elements are defined as follows:

- Skills A developed skill that is observable
- Knowledge What a person needs to understand to be able to do the job successfully
- **Attributes** A quality needed to do a job well. This includes attitude, being fit for work, etc.

#### **Learning Point**



John is an excellent mechanic. He can fix anything that is brought into the shop, but the owner can't let him speak with customers as he always has a scowl on his face and his attitude turns customers away.

Is John competent at his job from the owner's perspective? Why are attributes so important in the workplace setting?

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# Key Point 2.2: Dimensions of Competency

In addition to the three elements listed above, competency has further dimensions. These dimensions are both observable and non-observable, but critical to effective performance in the workplace. Dimensions of competency are often not explicitly stated in the Units of Competency but an Assessor or Trainer must ensure that they have been considered when making a judgment of competency.

The four dimensions of competency are:

- Task skills
- Task management skills
- Contingency management skills
- Job/role environment skills

Dimension	Description of Dimension		
Task skills	Ability to do a specific workplace activity		
Task management skills	Ability to manage a number of different tasks in a logical way to complete a whole work activity		
Contingency management skills	Ability to respond to problems and irregularities when undertaking a work activity including:  • Breakdowns  • Changes in routine  • Unexpected or abnormal results or outcomes  • Difficult coworkers or customers		
Job/role environment skills	Ability to deal with the responsibilities and expectations of the workplace when undertaking work activities including:  • Following company policies and procedures  • Following regulations (where applicable)  • Interactions with clients and coworkers  • Working with others		

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#### **Learning Point**



A pilot is friendly with the passengers and has a knack for putting them at ease. The pilot can competently operate the aircraft and understands the capabilities of the plane. An emergency arises and the engine catches fire. Unable to cope, the pilot freezes and cannot operate the aircraft.

Is the pilot competent? What important dimension of competency has the pilot failed to demonstrate?

### Section 1056-3: Evidence and Assessment

#### What you will learn in this section

By the end of this section, you will be able to demonstrate knowledge of the following key points:

- 3.1 Types of Evidence
- 3.2 Rules of Evidence
- 3.3 Principles of Assessment

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### Key Point 3.1: Types of Evidence

Quality evidence is the cornerstone of any competency-based training and assessment system. Evidence is the body of fact that demonstrates something to be true. The more types of evidence gathered, or the more types of assessment tools used to gather the evidence the better-rounded view of competency is demonstrated.

Each assessment tool and evidence collection method will have its strengths and weaknesses. It is important that a range of assessment tools are used and multiple types of evidence are gathered that support the standards or industry guidelines including regulatory, workplace, and other requirements. An Assessor should not only focus on the quantity of evidence, but focus on the quality of evidence and ensure that it is mapped to the relevant standards.

#### Types of evidence

There are three basic evidence types that can be used to support a decision of competency. They are:

- Direct evidence
- Indirect evidence
- Third party

#### **Direct evidence**

Direct evidence is the strongest type of evidence as it is directly observed. It reflects the candidate's own work and is related to workplace job requirements.

#### Indirect evidence

Indirect evidence can be equally as strong as direct evidence if it can be proved that it is the candidate's work. Examples of indirect evidence are projects, videos, and simulations.

#### Third party

Third party evidence is often related to the person's attributes but can also include experience. The critical piece with indirect evidence is to ensure that it maps back to the standard. Third party evidence on its own is rarely sufficient.

Common examples of third-party evidence include the following:

- · Reference letters
- Certificates

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#### Reports or diaries

Direct evidence is the strongest type and third-party evidence usually relates to attributes.

#### **Learning Point**



A candidate seeking his/her faller certification presents a letter to his/her Assessor from one of the most respected Fallers in the industry. The letter states that the candidate is competent and has excellent attributes for the job and would be a great person to hire.

What type of evidence has been presented? Does it meet the requirements of the rules of evidence? What weight would the Assessor be able to give to the letter in terms of determining competency?

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### Key Point 3.2: Rules of Evidence

Direct, indirect, and third-party evidence must meet the rules of evidence. Rules of evidence support collection of evidence to support competency. Where a Unit of Competency is the benchmark, evidence must support the performance outcomes, knowledge and skills to be assessed, and any evidence requirements listed in the assessment guide.

#### Valid

Evidence must show a clear relationship back to the relevant Unit of Competency and reflect the elements and in some cases some of the four dimensions of competency. It is possible to have a large body of evidence but not the relevant kind.

#### Current

Experience plays an important part in competency but the candidate must be able to demonstrate competency in the current work environment. Professional judgement must be employed in determining which, if any, demonstration of competency must be demonstrated as being current. A general example of where currency is important is in the IT sector and other rapidly changing technology environments.

#### **Authentic**

Evidence must be the candidate's own work. Direct, indirect, and third party evidence must all be verified as authentic. Direct evidence is the easiest type of evidence to authenticate.

#### Sufficient

Evidence must cover the full range of performance identified in the Unit of Competency and show competency over a period of time and in different contexts. Sufficient evidence covers the elements and dimensions of competency and all aspects of work performance. Where listed, evidence must show critical competencies multiple times in a variety of contexts. Often multiple types of evidence are required to demonstrate sufficiency.

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#### **REMEMBER!**

The more types of evidence gathered and the more types of assessment tools used, the better the picture of the candidate's competency can be showcased.

All evidence must meet the rules of evidence to be considered against the outcomes in the relevant Units of Competency.

### Key Point 3.3: Principles of Assessment

It is vitally important that the principles of assessment are followed when conducting assessments. Like the rules of evidence, the principles of assessment provide a framework in which to conduct assessments.

The principles of assessment state that the assessment must be:

- Valid
- Reliable
- Flexible
- Fair

#### Valid

Evidence supports the assessment decision and covers the outcomes of the Unit of Competency. This means that an assessment process is only related to the benchmark.

#### Reliable

The assessment outcome would be the same for candidates no matter which Assessor is conducting the assessment. As competency-based systems are criterion-based, the outcome should be the same regardless of the location, time, or Assessor conducting the assessment.

#### **Flexible**

The assessment process is flexible for both the candidate and Assessor while requiring the same standards are met. The Assessor needs to make every effort to accommodate the candidate including evenings or weekends if no other option is available. Flexibility should not be confused with reasonable adjustment.

#### **Fair**

The assessment process does not disadvantage a candidate or group of candidates. Every Assessor has some bias towards the candidate or process that may hinder the outcome. For example the Assessor may think that the candidate is too young to be competent, and may, unaware to him/her, let this bias cloud the assessment process.

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#### **Learning Point**



An Assessor is assessing the skills of a candidate. Within minutes, the candidate is able to diagnose the problem set out for the assessment and the Assessor decides to use the remaining time to see how in depth the candidate's knowledge and skills are.

Is the Assessor following the principles of assessment? If not, what principle of assessment has been breached?

### Self-Quiz

1.	Wh	What is an advantage of a competency-based system?				
		Focuses on skills				
		Allows learners to decide what to study				
		Focuses on useable skills				
		Has a lower passing grade				
2.	What does a competency-based system recognize?					
		Outcomes				
		Schedules				
		Future potential				
		Higher skills sets				
3.	Wh	What is a range statement?				
		Connections to other outcomes				
		Summarizes the outcome statement				
		Informs the parameters of the performance outcome				
		Defines the minimum standard				
4.	Wh	What does a performance outcome define?				
		Importance of skill				
		Pathway to competency				
		Required skills and knowledge				
		Range of performance				
5.	What are the elements of competency?					
		Tasks, knowledge, job role/environment				
		Attributes, task management, skills				
		Knowledge, contingency skills, defensibility				
		Skills, knowledge, attributes				
6.	Wh	nat are the dimensions of competency?				
		Attributes, reliability, task management, valid				
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□ Job role, tasks, attributes, knowledge	

		Task, task management, contingency skills, job role/environment skills
		Fair, contingency skills, reliable, flexible
7.	Wh	ich is a job role/environment skill?
		Manage a series of tasks
		Follow workplace policy and procedures
		Adjust when break downs occur
		Demonstrating knowledge for the task
8.	What is one of the three main types of evidence?	
		Simulations
		Videos
		Indirect
		Written assessment
9. What is an example of third-party evidence?		at is an example of third-party evidence?
		Reference letters
		Competency conversations
		Practical assessments
		Projects
10.		at element of competency does third party evidence usually us on?
		Task management
		Contingency skills
		Skills
		Attributes
11. What are the rules of evidence?		
		Valid, sufficient, current, authentic
		Reliable, fair, current, authentic
		Sufficient, flexible, valid, reliable
		Fair, valid, reliable, current

12. What does sufficiency of evidence mean?				
	More than one assessment tool is used			
	Enough evidence to determine competency			
	Multiple questions are asked on the same subject			
	Evidence is valid			
13. What are the principles of assessment?				
	Fair, valid, reliable, current			
	Reliable, fair, current, authentic			
	Valid, reliable, flexible, fair			
	Valid, sufficient, current, authentic			
14. What does fair mean in the context of principles of assessment?				
	The assessment does not disadvantage a candidate			
	The assessment is reliable			
	There is defensibility in the assessment process			
	There is flexibility in the assessment process			
	Now check your answers on the next page.			

### Self-Quiz Answers

1. What is an advantage of a competency-based system?

Answer: Useable skills

2. What does a competency-based system recognize?

Answer: Outcomes

3. What is a range statement?

Answer: Informs the parameters of the performance outcome

4. What does a performance outcome define?

Answer: Required level of performance

5. What are the elements of competency?

Answer: Skills, knowledge, attributes

6. What are the dimensions of competency?

Answer: Task, task management, contingency skills, job role environment skills

7. Which is a job role/environment skill?

Answer: Follow workplace policy and procedures

8. What are the three main types of evidence?

Answer: Direct, indirect, third party

9. What is an example of third-party evidence?

Answer: Reference letters

10. What element of competency does third party evidence usually

focus on?

Answer: Attributes

11. What are the rules of evidence?

Answer: Valid, authentic, current, sufficient

12. What does sufficiency of evidence mean?

Answer: Enough evidence to determine competency

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13. What are the principles of assessment?

Answer: Valid, reliable, flexible, fair

14. What does fair mean in the context of principles of assessment?

Answer: The assessment does not disadvantage a candidate

### **Section 1056-4: Assessment**

#### What you will learn in this section

By the end of this section you will be able to demonstrate knowledge of the following key points:

- 4.1 Assessment tools within a competency-based assessment model
- 4.2 Processes related to assessment
- 4.3 Reasonable adjustment in the assessment context
- 4.4 Norm and criterion referenced assessment
- 4.5 Formative and summative assessment

### Key Point 4.1: Assessment Tools

Evidence is the cornerstone of competency-based training and assessment. Standardized and non-standardized assessments are simply tools to gather evidence to support the candidate's claim of competency. All assessment tools and types of evidence gathered must be mapped to the competency outcomes listed in the Units of Competency.

Safety-critical or important competency outcomes must be demonstrated multiple times in a variety of contexts and therefore, multiple types of evidence or multiple assessment tools must be used to gather valid, sufficient, current, and authentic evidence. Each assessment method has strengths and limitations.

Generally, certain tools support assessment methods.

Common tools	Supports assessment for
Competency conversation	Supports assessing underpinning knowledge including the ability to explore range and context and contingencies
Practical observation	Supports assessing observable skills, attributes, and the dimensions of competency Types: simulations
Written assessment	Supports underpinning knowledge from simple to complex  Types:  Multiple choice questions  True or false questions  Essays  Reports  Assignments and projects  References



#### REMEMBER!

The competency conversation is an excellent tool to explore range and context as long as it relates directly back to the question asked.

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#### **Learning Point**



An Assessor wants to find out if a candidate knows how to change the oil in a vehicle. The Assessor chooses a multiple-choice exam to test the candidate's knowledge of the procedure to change oil. Think about the following:

What can the multiple-choice exam tell the Assessor about the candidate's ability to change oil?

What are the limitations of the chosen assessment tool?

What other tools could be used to give the Assessor confidence that the candidate can change the oil and understands why they are doing it?

## Key Point 4.2: Processes Related to Assessment

The Assessor plays an important and key role in the assessment process. This includes:

- Planning the assessment
- Conducting a fair and objective assessment
- Reviewing all evidence and making a decision
- Maintaining detailed records
- Providing constructive feedback and gap training plans where applicable
- · Contributing to a quality assessment program

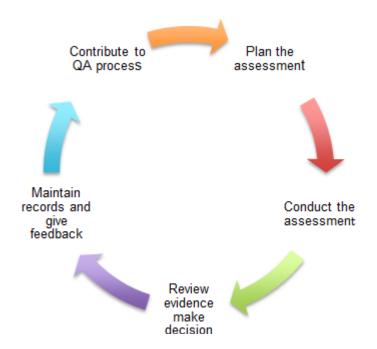


Figure 6: Roles of the Assessor

#### Plan the assessment

The Assessor is responsible for:

- Planning the assessment
- Taking into consideration the Units of Competency and assessment tools available when developing the assessment strategy
- Planning the time required for the assessment

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- Determining the order of the assessment process (which tool to use and when)
- Deciding which Units of Competency will be holistically assessed together based on workplace needs and availability
- Ensuring assessment is fair, valid, reliable, and flexible
- Enabling a process that provides an accurate view of candidate's competency
- Modifying the process without changing the Standard if the candidate has specific requirements
- Determining if reasonable adjustments need to be made in the assessment process

#### Conduct the assessment

The Assessor is responsible for:

- Conducting the written assessment (where applicable), and recording results against the outcomes in the relevant Units of Competency
- Conducting the competency conversation and recording results against the Standard
- Conducting the practical assessment and field competency conversation and recording the results against the outcomes in the relevant Units of Competency
- Determining a reasonable amount of time (where applicable) to demonstrate practical competency
- · Reviewing the body of evidence

#### Review evidence and make decision

The Assessor must ask:

- Do I have sufficient evidence of each competency outcome in the units being assessed?
- Did the candidate demonstrate the elements and dimensions of competency?
- Would another Assessor make the same decision?
- Would my decision stand up to scrutiny or appeal?
- Do I have any personal involvement with the candidate that would affect my professional judgment?
- Does the evidence show demonstrated competency multiple times in a variety of contexts especially in safety critical areas?

#### Maintain records and give feedback

The Assessor must:

- Keep detailed and accurate records of the assessments
- Keep detailed and accurate records of the candidate's progress through the assessment process
- Provide a pathway and plan for gaps in competency to be

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- filled, and a reassessment plan
- · Be constructive and professional with all feedback provided

#### Contribute to quality assessment process

The Assessor must:

- Ensure all activities are conducted in a safe manner that prevents and avoids risks to the Occupational Health and Safety of any person and are compliant with relevant company policy, procedures, regulations, and legislation
- Adopt a continuous improvement approach as an Assessor through professional development activities, and moderation and validation exercises with other Assessors

#### **REMEMBER!**



In order for an Assessor to demonstrate competency they must be able to demonstrate the ability to:

- Plan the assessment
- Conduct the assessment
- Review the evidence and make a professional judgement
- Maintain records and provide feedback
- Contribute to a quality assurance process

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# Key Point 4.3: Reasonable Adjustment

Reasonable adjustment ensures that all people are treated equal in the assessment process. Reasonable adjustment does not lower the standard required to achieve competency - it simply means that, under certain conditions the needs of the candidate are taken into consideration and "reasonable adjustments" are made to the assessment process.

#### This may include:

- Candidates with special needs/disabilities
- Candidates for whom English is not the first language
- Candidates with limited formal education
- Older candidates
- · Candidates from rural or remote areas
- Candidates with limited ability to read

Based on the candidate's needs and abilities adjustments considered reasonable may include the following examples:

Issue	Reasonable adjustment
English as a second language	Providing interpreters.
Disability	Installing ramps or adjustable desks. Provide additional time for assessments.* Use technology or computer software.
Older candidates	Provide assistance with managing stress and anxiety.
Rural or remote candidates	Telephone interviews rather than face to face.
Candidates with limited education or low numeracy or reading skills	Simple terminology, have a support person to read for the candidate.**
*Where time is not a re	quirement of competency.

\*\*Where reading is not a requirement to demonstrate competency.

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#### **Learning Point**



A candidate has applied to challenge for the Certificate of Qualification for Heavy Duty Equipment Technician. The practical observation of this assessment is done on large equipment where climbing is required and where the candidate will be working in awkward positions for long periods of time. On his application the candidate advises that he has only has one leg.

What is reasonable adjustment in the assessment process for this candidate?



#### **REMEMBER!**

Reasonable adjustment does not lower the standard or change the outcome requirement for an assessment.

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# Key Point 4.4: Norm and Criterion Referenced Assessment

#### Norm referenced

Norm referenced assessment is commonly found in schools or academic settings and involves the candidate being compared against a cohort of others. This type of assessment involves the candidate receiving a mark where some will do well, others achieve mediocrity, and the rest will perform poorly. A norm-referenced system can result in a pass of 50% plus, leaving a large portion of the required learning 'failed' or not achieved.

#### Criterion referenced

Criterion referenced assessment means that the candidate is assessed against pre-established criteria most often found in the competency outcomes listed in a Unit of Competency. These "standards" are developed through consensus and industry groups determining what competency in the workplace looks like. In criterion-referenced assessment, there are only two possible outcomes; the outcome has been met, or the outcome has not-yet been met. There are no marks in a pure criterion referenced assessment process.



#### **Learning Point**

Feeling unwell you go to the doctor. The norm referenced passing grade for a doctor is 51% in the school of medicine.

You are given the option of seeing one of two doctors. The first doctor received 58% in school, and the second doctor achieved a mark of 98%.

Which doctor would you like to see? Why? How would you feel if both doctors were assessed by criterion-referenced assessment?

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#### **REMEMBER!**

Competency based assessment is always against the outcomes as listed in the relevant Units of Competency.

## Key Point 4.5: Formative and Summative Assessment

#### Formative assessment

Formative assessment is usually related to training and is used continuously in the training process. This may be in a formal setting or informally on the job and is used to help the candidate and Trainer identify the areas in which performance or knowledge can be improved. Formative assessment is often task related, or used when assessing underpinning knowledge.

Assessments in the learning process are markers that help the learner and Trainer identify when someone is ready to move on to the next level. Formative assessments can be used to build a portfolio of evidence and in some cases, can equal the summative assessment.

#### Summative assessment

Summative assessment is a formal assessment of the "sum" of the candidate's learning. In a summative assessment setting the time for training has passed and the focus is entirely on assessment. This type of assessment does not focus on a particular task or area of knowledge.

In a competency-based system the summative assessment is often a holistic assessment across multiple Units of Competency directly related to activities conducted in the work place.

For example, a learner may have a formative assessment on the operation of the chainsaw. In the summative assessment, the assessor would want to observe the operation of the chainsaw as part of the entire work activity.



#### **Learning Point**

A learner over the course of a two-year training program has multiple formative assessments guiding their learning and development focusing on tasks and underpinning knowledge. The program decides to no longer have summative assessments but to use the formative assessments as the "sum" of or a portfolio of the learning.

From a competency-based perspective, what key dimension of competency would be missed?

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#### **REMEMBER!**

Formative assessment is often related to a specific task in training. Summative assessment looks at the bigger picture in the work context.

# Section 1056-5: Legal and Ethical Requirements

What you will learn in this section

By the end of this section you will be able to demonstrate knowledge of the following key point:

5.1 Ethical responsibilities of being an Assessor

# Key Point 5.1: Ethical Responsibilities to be an Assessor

#### Assessor code of conduct

The Assessor Code of Conduct supports responsible assessment practice and is especially relevant given that the Assessor may know or work with the candidate being assessed. The Assessor must be beyond reproach in their dealings with the candidate, the workplace, and the Administrator at all times.

#### An Assessor must:

- Not unlawfully or unjustifiably discriminate against any individual
- Treat all candidates with courtesy and respect
- Maintain professional knowledge and be up to date with relevant laws and codes of practice that affect work
- Maintain a calm demeanor with the candidate at all times. Do not become involved with any altercation or disagreement with the candidate
- Maintain strict confidentiality in regard to the candidate's personal information and assessment outcomes
- Never accept favours or gifts from anyone that can be seen to benefit from influencing the Assessor
- Never be under the influence of drugs or alcohol while undertaking assessment activities
- Not disclose to the candidate the assessment results at the time of assessment
- Deliver the assessment decision in writing once all evidence has been reviewed and approved by relevant parties
- Remember that assessment is not training and should exercise caution in responding to questions or helping the candidate during the assessment
- Keep safety as the top priority and stop any assessment deemed to be unsafe in any way to the candidate, Assessor, others or surroundings
- Never assess a candidate with a potential personal or professional conflict of interest

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#### **Learning Point**

An Assessor travels a long distance to a small town the night before an assessment is to take place. After checking into the motel the Assessor heads to the local pub for drinks. After a few drinks with the locals the Assessor calls it a night.

The next day the Assessor is surprised to see that the candidate was also drinking in the bar the night before. They share a joke about "hangovers" and get on with the assessment. The candidate is found "not yet competent" and the candidate files an appeal, stating the Assessor was not "fit to assess."

Does the candidate have a case?



#### **REMEMBER!**

A friendly gesture by the Assessor or candidate can give the appearance of unethical behavior and be grounds for an appeal.

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### Self-Quiz

1.	What is the minimum level of skill or knowledge that can be transferred between occupations?		
		Element	
		Outcome	
		Unit	
		Related units	
2.	Why is holistic assessment done?		
		Less pressure on student	
		Cost and efficiency	
		Maps learning resources easier	
		Showcases workplace tasks	
3.	Which type of unit is usually holistically assessed with work activities?		
		Occupational skills units	
		Knowledge units	
		Essential skills units	
		Training units	
4.	Which best supports exploring range and context?		
		Competency conversation	
		Projects	
		Simulations	
		Multiple choice exam	
5.	What is a critical skill for Assessors?		
		Making personal judgements	
		Mapping evidence to the Standard	
		Filling gaps	
		Relationship with candidate	

6. What does formative assessment usually focus on?		nat does formative assessment usually focus on?		
		Attributes		
		Contingency skills		
		Tasks		
		Task Management		
7.	Wh	Vhat does summative assessment focus on?		
		Underpinning knowledge		
		Tasks		
		Real workplace activities		
		Defensibility		
8. Which is an example of when reasonable adjustment may needed?		nich is an example of when reasonable adjustment may be eded?		
		Candidate wants more time		
		Candidate has disability		
		Candidate cannot meet all the outcomes		
		Candidate requires help in doing the task		
9.	Wh	nich is a responsibility of being an Assessor?		
		Maintain a calm demeanor		
		Assess only candidates they can relate to		
		Train candidate on gaps		
		Give results immediately after the assessment		
	l	Now check your answers on the next page.		

### Self-Quiz Answers

1. What is the minimum level that can be transferred between occupations?

Answer: Unit

2. Why is holistic assessment done?

Answer: Cost and efficiency

3. Which type of unit is usually holistically assessed with work activities?

Answer: Occupational skills

4. Which assessment tool best supports exploring range and context?

Answer: Competency conversation

5. Which is a critical skill for Assessors?

Answer: Mapping evidence to the Standard

6. What does formative assessment usually focus on?

Answer: Tasks

7. What does summative assessment focus on?

Answer: Real workplace activities

8. What is an example of reasonable adjustment?

Answer: Candidate has disability

9. Which is an ethical responsibility of being an Assessor?

Answer: Maintain a calm demeanor

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