



Australian Government

Department of Education, Employment and Workplace Relations

ICASAS202A Apply problem-solving techniques to routine IT malfunctions

Release: 1

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Modification History

Release	Comments
Release 1	This Unit first released with <i>ICA11 Information and Communications Technology Training Package version 1.0</i>

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to apply problem-solving techniques to determine the origin of a routine malfunction and plan for its resolution.

Application of the Unit

This unit applies to frontline technical support personnel who are required to identify technical malfunctions, determine appropriate remedial action and recommend potential solutions. Communicating effectively, simplifying technical problems and determining potential solutions are key components of this support role.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement but users should confirm requirements with the relevant federal, state or territory authority.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Element	Performance Criteria
<i>Elements describe the essential outcomes of a unit of competency.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.</i>

Elements and Performance Criteria

1. Identify routine problems	1.1 Identify hardware, software, user or procedural problem areas to <i>appropriate person</i> in the organisation 1.2 Define and determine problem to be investigated 1.3 identify and document current conditions of the <i>hardware, software, user or problem</i>
2. Research solutions to routine problems	2.1 Identify potential solutions to problem 2.2 Develop document, rank and present recommendations about possible <i>solutions</i> to the appropriate person for decision
3. Recommend solutions to problems	3.1 Plan implementation of solutions 3.2 Plan evaluation of implemented solutions 3.3 Document the recommended solution and submit to the appropriate person for confirmation

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- communication skills to:
 - provide clear and precise advice that varies according to audience
 - use questioning and active listening to clarify general information
- literacy skills to document:
 - initial problems
 - recommendations to solve problems
- customer-service skills to effectively deal with clients
- organisational skills to use time management and prioritise work requests
- research skills to source basic information from readily available sources
- technical skills to:
 - identify routine malfunctions
 - rank recommendations about possible solutions.

Required knowledge

- current industry hardware and software products and services
- current industry maintenance, service and help-desk practices, processes and procedures
- current operating systems
- current industry standard diagnostic tools.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of the ability to: • apply problem-solving techniques to determine the root cause of a routine malfunction • document recommended solutions to problems following established procedures and referring unresolved problems to support persons.
Context of and specific resources for assessment	Assessment must ensure access to: • a workstation • detailed information relating to organisational processes and procedures • information on a range of information technology (IT) business solutions • appropriate learning and assessment support when required. Where applicable, physical resources should include equipment modified for people with special needs.
Method of assessment	A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit: • direct observation of candidate identifying and defining the problem • direct observation of candidate documenting the details of the problem • verbal or written questioning to assess candidate's knowledge of enterprise escalation procedures • review of documentation provided by candidate about possible problems, recommended solutions, and their implementation and evaluation.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, where appropriate. Assessment processes and techniques must be culturally appropriate, and suitable to the communication skill level, language, literacy and numeracy capacity of the candidate and the work being performed.

	Indigenous people and other people from a non-English speaking background may need additional support. In cases where practical assessment is used it should be combined with targeted questioning to assess required knowledge.
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Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<i>Appropriate person</i> may include:	- authorised business representative - client - help-desk person - subject matter expert - supervisor - system administrator.
<i>Hardware</i> may include:	- cabling - modems or other connectivity devices - networks - personal computers - remote sites - servers - workstations.
<i>Software</i> may include:	- application: - database - internet browser - spreadsheet - word-processing - commercial - customised - in-house - programming: - assembler - compiler - development tools - system: - computer security - device drivers - operating system.
<i>User</i> may include:	- contractor - department within the organisation - person within a department - support staff

	• third party.
Problem may include:	• routine malfunction that affects the work environment: • cable fault • complementary metal oxide semiconductor (CMOS) battery failure • computer freeze • faulty motherboard • hard drive crash • incompatible software • insufficient memory • loss of internet access • malware • virus.
Solutions may include:	• hardware: • renew • upgrade • software: • reload • renew • upgrades • user training • implementing a new system.

Unit Sector(s)

Systems administration and support