



Australian Government

Department of Education, Employment and Workplace Relations

ACMCAN501A Contribute to enclosure and exhibit design or renovation projects

Revision Number: 1

ACMCAN501A Contribute to enclosure and exhibit design or renovation projects

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the process of assessing current exhibit status, identifying the need for new or renovation enclosure or exhibit works, preparing proposals and contributing to project planning and implementation. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
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Application of the Unit

Application of the unit	The unit is applicable to senior or more experienced keepers, such as the keeper in charge, who operates as a specialist in exhibit design and development whilst demonstrating competence in other specialist areas, including animal husbandry, interpretive and learning programs, nutrition, collection management and conservation and research. In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Research enclosure or exhibit needs	1.1. Exhibit purpose is established. 1.2. Animal needs are researched. 1.3. Climate, landscape and other environmental conditions on site are reviewed. 1.4. Public access and safety requirements are researched. 1.5. Staff and animal security issues are identified.
2. Review exhibit options	2.1. Current relevant exhibit performance is critically evaluated in relation to occupational health and safety (OHS), animal welfare requirements , regulatory and facility policies and procedures. 2.2. Features of other exhibits are evaluated for relevance to current project. 2.3. Exhibit longevity, wear and tear potential are estimated based on experience and research of specific animal behaviour and needs. 2.4. Exhibit design features are prioritised from animal welfare and staff safety perspective. 2.5. Impact of building and construction works on other exhibits is evaluated.
3. Present findings to project team	3.1. Concept findings are confirmed in consultation with other staff or experts . 3.2. Contributions are made to prepare images that illustrate design features and needs for report. 3.3. Relevant references or support are identified for exhibit needs justification. 3.4. Issues relating to potential construction impact on workplace operation from keepers perspective are itemised and justified. 3.5. Report is prepared and presented to project team and/or management.
4. Contribute to project planning and implementation	4.1. Concept briefs are prepared, in consultation with others, and presented to project team and/or management as required. 4.2. Contributions are made to project management plan and implementation strategies development. 4.3. Issues that compromise animal welfare, staff, contractor and public safety are raised with project team throughout the project planning and implementation stages as they arise.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- evaluate enclosure or exhibit status, including security and safety
- evaluate detailed costing and work plans
- identify animal housing behavioural and physical requirements
- implement facility policies and procedures
- maintain records and write concept briefs and reports
- read, interpret and prepare basic technical drawings in consultation with others
- literacy skills to read and follow institutional policies and procedures, including OHS and waste management; develop sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to fulfil the job role as specified by the facility, including questioning techniques, active listening, training others and consulting with staff, other departments, relevant experts and management
- numeracy skills to complete mathematical calculations relating to enclosure and exhibit design and renovation
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources when developing concept briefs and contributing to project management strategy development.

Required knowledge

- animal care and management strategies
- animal biology and husbandry requirements relevant to enclosures and exhibits
- educational and interpretive functions of enclosures
- environmental enrichment
- exhibit maintenance and security requirements
- institution master plan and collection policy
- interaction between animal types and various habitats
- internal decision making process leading to approval of new exhibits or renovation of existing ones
- principles of animal welfare and ethics
- principles of enclosure landscaping and horticulture, including basic working knowledge of exhibit plants and weeds
- principles and protocols for enclosure or exhibit design, including aesthetics, function and effects of introduced fixtures and features
- principles of naturalistic landscaping for enclosures and exhibits

REQUIRED SKILLS AND KNOWLEDGE

- principles of project management
- recognition of animal, keeper, client and public requirements
- relevant facility policies and procedures, including OHS and emergency procedures, animal welfare, ethics, hygiene standards and other industry guidelines
- relevant federal and state or territory legislation and codes of practice
- security control principles
- specialist enclosures for different animals.

Evidence Guide

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	The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can: • research and review enclosure and/or exhibit needs • work with others to prepare proposals and concept briefs for the design and development or renovation of exhibits and enclosures • contribute to project planning • monitor and advise on issues that arise during the implementation stages. The skills and knowledge required to contribute to enclosure and exhibit design or renovation projects must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.
Context of and specific resources for assessment	Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace. Workplaces may include small or large captive animal facilities, traditional or open-range type facilities and mobile or theme park environments. There must be access to the appropriate equipment and/or resources to enable one to demonstrate competence.
Method of assessment	To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities. The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:

EVIDENCE GUIDE	
	• written and/or oral assessment of candidate's required knowledge • observed, documented and first-hand testimonial evidence of candidate's application of practical tasks • simulation exercises that reproduce normal work conditions • third-party evidence • workplace documentation (e.g. reports and concept briefs) • portfolio. This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.
Guidance information for assessment	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

Range Statement

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>Research</i> may include:	• exhibit theme and relationship to institutional master plan • other requirements: • animal behaviour • animal husbandry • current best practice examples • display and interpretative • habitat • horticultural and maintenance • OHS and other legislative requirements.
<i>Enclosures and exhibits</i> may include:	• defined spaces where animals are kept and includes both: • exhibit public viewing areas • off-exhibit holding spaces • enclosures and exhibits may be for: • existing species • new single species • multi-species and multi-taxa.
<i>Staff and animal security</i> considerations may include:	• animal housing faults that may result in escape • compatibility of species and breeds within housing • keeper access and safety • locks and slides are in good working order • restriction of access to authorised personnel • structures are maintained in good order.
<i>Exhibit performance</i> measures may include:	• animal husbandry and behaviour • environmental constraints • feedback from the public and staff • hazard identification and risk management • interaction of animals with the public and their habitat • problems associated with a simulated

RANGE STATEMENT	
	environment the durability and appropriateness of enclosure furniture.
OHS hazard considerations related to exhibit performance may include:	- animal bites, envenomation, kicks, scratches and crush injuries - biological hazardous waste and sharps disposal - electrical when using water in close proximity to electrical outlets - handling of chemicals and medicines - inhalation of aerosol particles - intraocular contamination - manual handling, including carrying, lifting and shifting - moving parts of machinery or equipment - needle pricks and cuts from other sharps - noise, including machinery and some animals - release of infective agents (animal and human) - repetitive strain injury (e.g. raking and scrubbing) - slippery or uneven work surfaces - zoonoses.
Animal welfare requirements include:	- adequate housing, nutrition and stock levels - compliance to appropriate state or territory legislation and regulations and international conventions - enrichment opportunities - the absence of pests and vermin - the compatibility of species and breeds.
Other staff and experts may include:	- exhibit design advisory groups - keepers within the section, in other sections or keepers in charge - management - other institutions' staff - species experts - technical or architectural advisers/consultants.
Concept briefs may include:	- graphical representation to illustrate overall concept supported by: - short introduction of the idea - background research and benchmarking - design and interpretive features, layout and materials

RANGE STATEMENT

	• animal species habitat, husbandry and environmental enrichment suitability • resources required: • estimated funding • skills and technical resources.
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Unit Sector(s)

Unit sector	Captive animals
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		