



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **AHCWRK603A Design and conduct a field-based research trial**

**Release: 1**

## AHCWRK603A Design and conduct a field-based research trial

### Modification History

Not Applicable

### Unit Descriptor

<b>Unit descriptor</b>	This unit covers the process of designing and conducting field-based research trials and defines the standard to: establish sound research parameters that enables achievable results; conduct research consistent with recognised scientific practice; analysis and reporting reflects the scope and consequences of the project.
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### Application of the Unit

<b>Application of the unit</b>	This unit applies to designing and conducting field-based research trials.
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### Licensing/Regulatory Information

Not Applicable

### Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Not Applicable

## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>

ELEMENT	PERFORMANCE CRITERIA
1. Design the trial	<p>1.1. Problems and/or opportunities that support undertaking a trial are identified and the trial subject and projected outcomes are defined according to enterprise guidelines, market research, client requirements, cost analysis and cost benefits to the enterprise.</p> <p>1.2. Research into available evidence is undertaken to establish the performance criteria of the subject, product or treatment to be trialled and the trial design.</p> <p>1.3. Trial sites are located according to trial design requirements and enterprise capabilities, and site factors are identified and incorporated into the trial design.</p> <p>1.4. Approvals and/or permits required to conduct the trial are identified and obtained.</p> <p>1.5. Data collection and recording specifications are established according to the trial design, and proper conventions and controls are followed to satisfy statistical audit requirements and eliminate variables according to sound clinical practice.</p>
2. Prepare to conduct the trial	<p>2.1. Occupational Health and Safety (OHS) hazards associated with the implementation of the trial are identified, risks assessed and controls developed according to enterprise guidelines, costed and documented in the trial design.</p> <p>2.2. Environmental implications associated with implementation of the trial are identified and documented in the trial design.</p> <p>2.3. Materials, tools, equipment and machinery required for the trial are identified, costed, and availability confirmed with suppliers, contractors and appropriate personnel.</p> <p>2.4. Trial sites are established and prepared for implementation of the trial according to the specifications of the trial design.</p> <p>2.5. Detailed trial site plans, trial specifications and trial procedures are documented clearly and comprehensively in the trial design.</p>
3. Conduct the trial	<p>3.1. Staged data collection is undertaken throughout the course of the trial according to the specifications of the trial design.</p> <p>3.2. Trial implementation is monitored for accuracy, compliance to the trial design and</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>out-of-specification procedures or events.</p> <p>3.3. All monitoring and trial data is recorded faithfully, promptly and accurately according to the specifications of the trial design.</p>
<p>4. Assess practical application of trial outcome</p>	<p>4.1. Statistical auditing is undertaken for the trial outcomes, and proper conventions and controls are followed to eliminate variables according to sound clinical practice.</p> <p>4.2. Conclusions are drawn from relevant information and are based on appropriate evidence and reasoned arguments.</p> <p>4.3. Trial outcomes are assessed for practical application, based on conclusions drawn from the trial and according to enterprise guidelines and industry best practice.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

- research and evaluate information
- calculate the cost and spatial and logistical requirements of components of the trial
- enter, analyse and organise data in a mathematically sound and accurately graphed, charted or tabled representation, consistent with the trial design
- comply with legislative requirements
- use literacy skills to fulfil job roles as required by the organisation. The level of skill may range from reading and understanding documentation to completion of written reports
- use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views
- use 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.

#### Required knowledge

- growth habits, physiological properties and taxonomic specification of

**REQUIRED SKILLS AND KNOWLEDGE**

- animals/plants involved in the trial
- physical and biochemical properties of products involved in the trial
- properties and current, best practice application of treatments involved in the trial
- scientific and mathematical trialling, data collection, processing and analytical techniques and procedures
- auditing and reporting procedures
- the enterprise business and marketing plans
- enterprise work team management guidelines
- bio-ethics (where animals are involved in the trial).

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
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.	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following:</p> <ul style="list-style-type: none"> <li>• establish sound research parameters that enables achievable results</li> <li>• conduct research consistent with recognised scientific practice</li> <li>• analysis and reporting reflects the scope and consequences of the project.</li> </ul>
<b>Context of and specific resources for assessment</b>	Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.

## Range Statement

<b>RANGE STATEMENT</b>	
The range statement relates to the unit of competency as a whole.	
Trial subjects may include:	<ul style="list-style-type: none"> <li>• individual animal or plant species or cultivars</li> <li>• specified products, and treatments or applications whose performance or responses are measured in relation to defined performance criteria.</li> </ul> <p>Note: The involvement of animals in a research trial may be covered by duty of care provisions in Animal Welfare Acts and codes of practices dealing with animal ethics.</p>

**Unit Sector(s)**

<b>Unit sector</b>	Work
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**Co-requisite units**

<b>Co-requisite units</b>		

**Competency field**

<b>Competency field</b>	
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