Australian Government

Department of Education, Employment and Workplace Relations

BSBRES801A Initiate and lead applied research

Revision Number: 1

BSBRES801A Initiate and lead applied research

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to plan, conduct and report on applied research to influence strategic practices and outcomes within an organisational context. The unit also covers constructing an applied research strategy, using a range of applied research techniques, and analysing and presenting findings. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

Application of the Unit

Application of the unit	This unit applies to leaders or managers using applied research to ensure learning can enhance individual, team and organisational performance. The intended purpose and approach to applied research may vary across a range of contexts and organisations. In this unit, the focus is on applied research to attain improved organisational outcomes. It involves leading a range research activities and techniques that, in combination, can provide quality information to enhance learning related activities and the development of capabilities.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

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.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Construct an applied research strategy	1.1. Clarify and confirm ***applied research purpose*** and needs of the ***target group*** 1.2. Determine policies and procedures in relation to conducting applied research 1.3. Establish mechanisms for collecting and maintaining data in a systematic manner 1.4. Analyse ***factors affecting the reliability and validity of data*** 1.5. Review relevant research ethics and codes of conduct 1.6. Prepare ***applied research strategy*** and ***hypothesis*** 1.7. Frame a research strategy in consideration of available ***tools*** and ***resources***
2. Use a range of applied research techniques	2.1. Review and evaluate a range of ***applied research methods***, ***theories*** and ***data collection techniques*** 2.2. Select appropriate methods to gather and analyse data 2.3. Use, as appropriate, ***suitable technology*** and technology services to support data collection and analysis 2.4. Access ***appropriate sources of information*** and ***contributors*** relevant to the research 2.5. Optimise ***relevance of the research*** through integrity of the data collected and analysis tools used
3. Analyse and present findings	3.1. Evaluate how research findings such as trends and changes will impact on learning strategy 3.2. Review data and research findings for accuracy of details and adherence to any ***legal requirements*** 3.3. Collate and analyse data for relevance against the original applied research strategy 3.4. Document and ***present research findings*** in a clear and logical manner consistent with audience needs 3.5. Identify the need for and an appropriate approach to, further research

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- communication and teamwork skills to:
  - analyse and interpret structurally intricate information in the area being researched
  - consult with target groups using a range of communication techniques
  - develop written texts which deal with complex ideas and concepts
  - present research results creatively to meet audience needs
- initiative and enterprise skills to discover and source appropriate information, and to identify future implication of information and data collected
- planning and organising skills to:
  - construct an applied research strategy
  - initiate and design research methodology
  - manage an applied research project
  - frame research strategy in consideration of available resources
- problem-solving skills to:
  - develop and examine the validity of the hypothesis using a range of applied research techniques
  - collect, organise, analyse and present data
  - analyse research
  - check the integrity of data collected
  - conduct trend analyses
- self-management and learning skills to:
  - manage own time and determine priorities
  - review and adhere to relevant ethics and codes of conduct
  - store data to maintain privacy and confidentiality of information
  - conduct research to develop capabilities and learning related activities
- technical skills to:
  - select suitable technology and technical services
  - use a range of software programs
  - use technology and the internet to discover, access, collect and store data, information and research in a systematic manner.

Required knowledge

- communication processes and methods
- data collection methods
- legislation, regulations, policies, procedures and guidelines relating to handling or

REQUIRED SKILLS AND KNOWLEDGE
storing data, including privacy and freedom of information • presentation techniques • reporting methods • research ethics and codes of conduct • research tools and methods • selection of appropriate applied research techniques.

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	Evidence of the following is essential:
	• formulating a research proposal or plan which includes:
	  • specific research questions or hypotheses
	  • valid population or sample size
	  • description of the geographical, cultural, social or institutional context within which the research will be carried out
	  • full description of the data collection methods
	  • analysis of the limitations to research design
	• designing an applied research project using appropriate tools and techniques
	• research report with analysis of data, and valid and reliable findings
	• utility and relevance of the research results
	• knowledge of applied research techniques.

Context of and specific resources for assessment	Assessment must ensure: • research activity relates to an actual workplace or simulated context and topic • competence is consistently demonstrated over time, over a range of applied topics, and using a range of tools and techniques appropriate to the given situations and research topic.
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 questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate • applied projects or assessment activities relating to conducting applied research • observation of contextual application of skills • oral or written questioning to assess knowledge of

EVIDENCE GUIDE	
	applied research.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example: • BSBITB701A Implement advanced electronic technologies • BSBLED702A Lead learning strategy implementation • BSBLED703A Implement improved learning practice • BSBLED704A Review enterprise e-learning systems and solutions implementation • BSBLED709A Identify and communicate trends in career development.

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.	
Applied research purpose may be contained in documents such as:	• agreements • research brief • research contracts • research guidelines • research statement
Target group may include:	• age cohort • career choices • cultural background and needs • diversity • employees • employment status or role • end users • learners/students • learning styles and preferences • level of education achieved • literacy and numeracy skills • location • occupational health and safety • predetermined service user group • skill or competency profile • socioeconomic background
Applied research strategy may cover:	• analysis of industry specific trends, statistics and issues • collection of data to assist informed decision making, planning or risk management • data and information relating to strategy, policy, practices, or work processes developed and implemented by an organisation • formation of solutions to complex problems • information and analysis needed to develop a campaign, strategic plan, industry or sector plan and strategy, or to bargain effectively with employers

RANGE STATEMENT	
	• information and analysis to conduct a strategic or community campaign or activity • relationship or relevance of a theory, principle or practice to an immediate practical problem, issue or to test a proposed solution
Factors affecting reliability and validity may include:	• sample size • type or survey used (e.g. comparing types and methods to increase validity) • capacity to generalise findings across the whole population • access appropriate population
Hypothesis is:	• conceptual or operational proposition or explanation that will be tested through the conduct of the applied research
Tools may be:	• designed for electronic or physical presentation • involve a range of technologies (online or computer-based)
Resources may include:	• components required • design specifications • infrastructure • monetary • physical • technical manuals • samples

Applied research methods and theories may cover:	• methods such as:
	  • action research
	  • case study
	  • classification
	  • experience and intuition
	  • experiments
	  • interviews
	  • map making
	  • mathematical models and simulations
	  • participant observation
	  • physical traces analysis
	  • semiotics
	  • surveys
	  • statistical data analysis
	  • statistical surveys

RANGE STATEMENT	
	• ethnographic research • content, textual analysis, theories and techniques, which will vary upon consideration of: • application of statistical methods • causal factors and dependant or independent variables • critical analysis • experimental, quasi-experimental, non-experimental • mathematical calculations • problem solving • qualitative or quantitative research • sampling and sample size
Data collection techniques may include:	• collaboration with other experts or mentors • desk research • document research • field study • observation • physical items analysis • interviews • questionnaires • surveys
Suitable technology may include:	• communication technology and networks • databases and the use of spreadsheets, graphs, trend and time series, and mathematical equations • hardware and software
Appropriate sources of information may include:	• archives • community organisations • computer data, including internet • discussions with current industry practitioners • discussions with industry personnel, manufacturers, and technical and sales personnel • government departments • industry associations and organisations • industry journals • libraries (such as text, film, video, sound, graphic)

RANGE STATEMENT	
	• media (such as film, television, radio, newspapers, multimedia) • media archives • museums, galleries • organisational policies, procedures and journals • personal observations and experience • professional organisations • reference books • technical publications, manuals
Contributors may include:	• individuals and groups both inside and outside the organisation who have some direct interest or expertise in relation to the applied research or who provide data
Relevance of the research may be based on:	• available time and resources • feasibility of implementing the recommendations • findings of previous and current research • original research parameters and brief • quality and credibility of the methodology • value of its usefulness • value of the information and data
Legal requirements may include:	• agreements with third parties that supply research or data • competency standards • contracts • copyright and privacy laws relating to physical materials and electronic technology • licensing • plagiarism • privacy • relevant commonwealth and state/territory legislation, policy, codes of practice and national standards • security of information
Presenting research findings may include:	• circulating publications for comment and critique on the internet • contributing to strategic policy • drafting publications or reports • presentations at seminars and conferences • providing data, plans, specifications and reports resulting in changed work practice/s or

RANGE STATEMENT	
	design/s • providing internal reports verbally, in writing or via presentations • publishing papers and articles for expert review and audiences • publishing reports and articles for lay audiences

Unit Sector(s)

Unit sector	

Competency field

Competency field	Knowledge Management - Research

Co-requisite units

Co-requisite units		