



Australian Government

Department of Education, Employment and Workplace Relations

PSPSCI701A Create innovation and change through extension

Revision Number: 1

PSPSCI701A Create innovation and change through extension

Modification History

Not applicable.

Unit Descriptor

Unit descriptor

This unit covers extension work at a level meriting international recognition where sustained exceptional performance allows a major contribution to be made towards improved productivity and sustainability in one or more industries. It includes designing extension initiatives, preparing for innovation and change management, creating innovation and change, and monitoring and evaluating the adoption of innovation and change.

In practice, creating innovation and change through extension overlaps with other generalist or specialist work activities such as influencing ethical practice, influencing strategic policy, undertaking strategic risk management, leading change management etc.

This is a new unit of competency, added to the *Government Science&Technology* Competency field of the Training Package in 2004.

Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements are the essential outcomes of the unit of competency. Together, performance criteria specify the requirements for competent performance. Text in *bold italics* is explained in the Range Statement following.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

1. Design extension initiatives

- 1.1 Extension issues are identified and analysed and extension initiatives are developed to address required organisational outcomes
- 1.2 Extension *objectives* are developed to make a significant contribution to the industry in accordance with organisational and client needs
- 1.3 Leadership is provided to extension colleagues, decisions are influenced and directions are monitored and changed in accordance with emerging requirements
- 1.4 The capacity and capability of *client target groups* to accept information and change are determined, and extension methodology is developed to influence them in accordance with organisational requirements
- 1.5 Issues relating to intellectual property are identified and exploited in accordance with organisational requirements

2. Prepare for innovation and change management

- 2.1 Extensive industry experience, collaboration with national and international networks and *cutting edge professional expertise* are used to influence client decision making and industry practices
- 2.2 Industry, economic and political analyses are conducted to strategically manage risk, *resistance to change* and other contingencies in accordance with program *responsibilities*, extension objectives and organisational requirements
- 2.3 Leadership is provided in the development of innovative *change management* strategies that will make a significant contribution to the implementation of improved decision making and industry practice
- 2.4 *Risks* are determined and risk management strategies are developed and implemented in accordance with change management strategies and organisational requirements
- 2.5 Investment is attracted for significant extension programs and is managed in accordance with organisational and funding body requirements

3. Create innovation and change

- 3.1 Leadership is provided to influence the adoption of innovation and change, and to manage contingencies in areas of strategic importance or significant economic impact
- 3.2 Expert *advice* is provided on the basis of specialised knowledge of problem identification and problem solving processes and techniques relating to information and technology transfer
- 3.3 Extension campaigns are implemented and managed at state and regional level in accordance with organisational priorities

ELEMENT**PERFORMANCE CRITERIA****4. Monitor and evaluate adoption of innovation and change**

- 3.4 Industry problems are identified and analysed, solutions are negotiated and issues requiring further research are identified and actioned in accordance with organisational requirements
- 4.1 Adoption of innovation and change is evaluated and strategies are developed and implemented to improve future outcomes
- 4.2 Outcomes are evaluated and reported against extension objectives and required organisational outcomes in accordance with organisational requirements
- 4.3 Outcomes with political/policy implications are identified and advice and policy development is influenced in accordance with organisational requirements

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

Skill requirements

Look for evidence that confirms skills in:

- demonstrating strategic leadership in the context of extension work
- using facilitation and presentation strategies
- applying information management in the context of extension activities
- using a range of communication styles to suit different audiences and purposes
- responding to diversity, including gender and disability
- using problem solving to overcome resistance and develop professional relationships of trust
- reading and interpreting scientific research information, designing materials using different media for different audiences, and influencing innovation and change
- problem solving
- using technology for materials preparation and monitoring outcomes
- applying occupational health and safety and environmental requirements related to working in a scientific/technological research environment

Knowledge requirements

Look for evidence that confirms knowledge and understanding of:

- local, national and international industry (extensive knowledge and experience)
- advanced extension methodology
- principles of change management
- participatory processes in the context of extension activities
- group dynamics and group processes
- community development principles
- research principles and methodology
- evaluation processes relating to extension outcomes
- national and international innovation in extension methodology and practices
- the scientific area (broad understanding)
- specialist area of expertise
- legislation, public sector standards and organisational code of practice as they relate to work in a scientific research/technological environment
- occupational health and safety, environmental protection and other public sector legislation

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide specifies the evidence required to demonstrate achievement in the unit of competency as a whole. It must be read in conjunction with the Unit descriptor, Performance Criteria, the Range Statement and the Assessment Guidelines for the Public Sector Training Package.

Units to be assessed together

- *Pre-requisite units* that must be achieved prior to this unit: *Nil*
- *Co-requisite units* that must be assessed with this unit: *Nil*
- *Co-assessed units* that may be assessed with this unit to increase the efficiency and realism of the assessment process include, but are not limited to:

PSPETHC701A Lead and influence ethical practice in the public sector

PSPMNGT701B Provide strategic direction

PSPMNGT702A Influence and shape diversity management

PSPMNGT703A Lead and influence change

PSPPOL701A Influence strategic policy

Overview of evidence requirements

In addition to integrated demonstration of the elements and their related performance criteria, look for evidence that confirms:

- the knowledge requirements of this unit
- the skill requirements of this unit
- application of the Employability Skills as they relate to this unit (see Employability Summaries in Qualifications Framework)
- demonstration of leadership across a range of (3 or more) complex extension activities of state/national/international significance effecting change at whole of industry level (or occasions, over time)

Resources required to carry out assessment

These resources include:

- legislation, procedures, guidelines and protocols
- industry information at state, national and international level
- risk management strategies for extension work
- case studies and workplace scenarios to capture a range of complex extension experiences

Where and how to assess evidence

Valid assessment of this unit requires:

- a workplace environment or one that closely resembles normal work practice and replicates the range of conditions likely to be encountered when creating innovation and change through extension, including coping with difficulties, irregularities and breakdowns in routine

EVIDENCE GUIDE

- demonstration of leadership across a range of (3 or more) complex extension activities of state/national/international significance effecting change at whole of industry level (or occasions, over time)

Assessment methods should reflect workplace demands, such as literacy, and the needs of particular groups, such as:

- people with disabilities
- people from culturally and linguistically diverse backgrounds
- Aboriginal and Torres Strait Islander people
- women
- young people
- older people
- people in rural and remote locations

Assessment methods suitable for valid and reliable assessment of this competency may include, but are not limited to, a combination of 2 or more of:

- case studies
- portfolios
- projects
- questioning
- authenticated evidence from the workplace and/or training courses

For consistency of assessment

Evidence must be gathered over time in a range of contexts to ensure the person can achieve the unit outcome and apply the competency in different situations or environments

Range Statement

RANGE STATEMENT

The Range Statement provides information about the context in which the unit of competency is carried out. The variables cater for differences between States and Territories and the Commonwealth, and between organisations and workplaces. They allow for different work requirements, work practices and knowledge. The Range Statement also provides a focus for assessment. It relates to the unit as a whole. Text in *italics* in the Performance Criteria is explained here.

<i>Objectives</i>	<ul style="list-style-type: none"> • will typically relate to entire large industries of significant economic impact such as wool, wheat industries
<i>Client target groups may include</i>	<ul style="list-style-type: none"> • industry and community groups • Local, State or Commonwealth government organisations • general public • farmers • agri-business
<i>Demonstration of cutting edge professional expertise may occur through</i>	<ul style="list-style-type: none"> • seminars • lectures • demonstrations • reports • published material in international journals • publications • publicity/media campaigns • published material in peer reviewed publications • policy change
<i>Resistance to change may be</i>	<ul style="list-style-type: none"> • extreme, where sustained exceptional performance is required to effect change
<i>Responsibilities may include</i>	<ul style="list-style-type: none"> • industry development on a whole of (large) industry basis such as wool, wheat industries • influence on new or emerging industries of significant economic impact • dealing with situations where risks are extreme • dealing with extreme resistance to change • dealing with politically sensitive issues
<i>Change management may include</i>	<ul style="list-style-type: none"> • major contribution to influencing change at state/national/international level
<i>Risks</i>	<ul style="list-style-type: none"> • may be extreme for the agency/industry sector • may entail significant opportunity lost if innovation/change is not effected
<i>Advice may include</i>	<ul style="list-style-type: none"> • aspects of industry: • productivity

RANGE STATEMENT

- efficiency
- environmental sustainability
- crop
- livestock
- pasture production
- marketing
- feed, food and fibre processing
- soil conservation
- water conservation
- irrigation
- drainage
- farm management
- group management advice
- community development advice
- strategic planning advice
- and may relate to deeper systems issues that may need to change

Unit Sector(s)

Not applicable.

Competency field

Competency field Government Science&Technology