



Australian Government

Department of Education, Employment and Workplace Relations

SISOCVE411A Apply vertical caving skills

Release: 2

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Modification History

Not Applicable

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to apply specific exploration techniques, such as free climbing, for use in vertical caving activities. Other related competencies, such as rigging, are defined in other units.

Application of the Unit

This unit applies to those working as caving adventure guides, instructors or program managers. This may include those required to apply free climbing skills during vertical caving activities.

This unit also applies to outdoor recreation leaders working for outdoor education or adventure providers, volunteer groups, not-for-profit organisations or government agencies.

Licensing/Regulatory Information

No licensing, regulatory or certification requirements apply to this unit at the time of endorsement.

Pre-Requisites

SISOCVE302A Apply single pitch abseiling skills in caves
SISOCVE305A Apply caving specific single rope techniques

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

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.

1. Plan for vertical caving activity.

- 1.1. Identify an appropriate activity site according to ***contextual issues, relevant legislation and organisational policies and procedures.***
- 1.2. Access ***relevant sources*** to interpret detailed ***weather information*** that may impact on the activity plan.
- 1.3. Select and fit personal and safety ***equipment*** for the activity.
- 1.4. Identify potential ***hazards*** and risks associated with free climbing.
- 1.5. Develop procedures to minimise risks and protect the ***safety*** of the free climber.
- 1.6. Establish a suitable communication system to use while free climbing.

2. Free climb in a cave.

- 2.1. Apply ***techniques*** to free climb a vertical pitch.
- 2.2. Negotiate pitch hazards and obstacles safely while maintaining communication with spotter or belayer, as required.
- 2.3. Apply procedures to minimise impact on the caving environment.

3. Apply advanced climbing techniques.

- 3.1. Demonstrate the safe and efficient use of ***climbing aids.***
- 3.2. Identify ***advanced techniques*** in vertical caving used for exploration.
- 3.3. Demonstrate vertical climbing technique appropriate to the situation.

4. Evaluate activity.

- 4.1. Evaluate ***relevant aspects*** of the vertical caving activity.
- 4.2. Identify improvements for future free climbing experiences in a cave.

Required Skills and Knowledge

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

Required skills

- problem-solving skills to:
 - identify and negotiate pitch hazards and obstacles while free climbing
 - determine when to use climbing aids
- planning and organising skills to:
 - identify a suitable vertical caving pitch
 - select equipment for the activity
- communication skills to inform progress with spotter or belayer throughout free climbing
- first aid and emergency response skills appropriate to the location to enable initial response to emergencies and personal health care.

Required knowledge

- legislation and organisational policies and procedures to enable safe conduct of all activities
- advanced techniques used for exploration in vertical caves
- hazards, obstacles and risks that may be experienced while free climbing on a vertical caving pitch
- climbing aids and equipment used for spotting and belaying a free climber on a vertical caving pitch and methods of protecting a free climber to enable safe conduct of activities
- communication systems used between free climbers and spotters or belayers
- use, care and maintenance of equipment to ensure prolonged life span and safety requirements
- basic weather information to ascertain possible conditions and their affect on the activity
- safety and emergency procedures relevant to the location and activity to ensure safety of self and others.

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:

- applies relevant process to plan equipment requirements appropriate for the conditions and duration of the caving activity and arranges suitable communication systems with spotters or belayers
- negotiates obstacles and hazards while free climbing a vertical caving pitch, and adapts to problems or issues that may arise
- applies advanced techniques used for exploration in vertical caving, including the use of climbing aids to assist climb
- evaluates and reflects on own performance to identify strengths, weaknesses and areas that need improvement.

Context of and specific resources for assessment

Assessment must ensure participation in vertical caving activities in caving environments that reflect local conditions and are of sufficient breadth and duration to demonstrate competency and consistency of performance.

Assessment must also ensure access to:

- a suitable natural cave site for the conduct of vertical caving
- vertical caving, safety and rescue and communication equipment.

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:

- oral or written questioning to assess knowledge of relevant legislation and organisational policies and procedures to enable safe conduct of all vertical caving activities
- observation of safe participation and demonstration of free climbing skills
- observation of dealing with vertical caving hazards and obstacles
- third-party reports from a supervisor detailing

performance.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

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.

Contextual issues may include:

- abilities
- group size
- other users
- pitch height
- environmental impact
- soundness of surface
- access and egress
- weather conditions

Relevant legislation may include:

- occupational health and safety
- permits or permission for access
- environmental regulations.

Organisational policies and procedures may include:

- occupational health and safety
- use, maintenance and storage of equipment
- risk management
- communication protocols
- minimal impact environmental and caving codes
- Australian Speleological Federation Codes and Guidelines
- code of ethics.

Relevant sources may include:

- bureau of meteorology
- media
- national parks and wildlife centres
- police.

Weather information may include:

- satellite images
- daily and weekly forecasts
- maximum and minimum temperatures
- rainfall and flooding
- weather warnings.

Equipment may include:

- vertical caving equipment
- safety, first aid and rescue equipment
- communication equipment.

Hazards may include:

- rock fall
- flowing water

- abrasion points
 - tangled rope
 - loose clothing and hair
 - jewellery
 - strong cave breezes.
- Safety** may include:
- personal safety checks
 - spotting by other party members
 - top rope belay for longer and exposed pitches.
- Techniques** may include:
- climbing cracks
 - chimneying
 - bridging
 - the use of layback moves
 - mantle shelving.
- Climbing aids** may include:
- handlines or etriers
 - traverse lines
 - short lengths of caving ladder.
- Advanced techniques** may include:
- lead climbing
 - aid climbing
 - scaling poles
 - rope traverses.
- Relevant aspects** may include:
- hazard and risk identification
 - free climbing skills and advanced techniques
 - use of climbing aids.

Unit Sector(s)

Outdoor Recreation

Competency Field

Caving