Australian Government

Department of Education, Employment and Workplace Relations

CUVWOO502A Investigate woodworking materials and processes

Release: 1

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Modification History

Version	Comments
CUVWOO502A	This version first released with *CUV11 Visual Arts, Craft and Design Training Package version 1.0*

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to research and explore selected woodworking materials and processes and integrate their use into creative practice.

Application of the Unit

Visual artists, designers and designer-makers whose practice involves the use of wood apply the skills and knowledge in this unit. Practitioners could be making functional items or art pieces.
Material and process exploration at this level is a largely independent activity with mentoring and guidance as required. It would normally include investigation of a range of materials and processes to develop an individual professional style. In practice, this process is integrated with the skills described in the unit CUVPRP501A Realise a body of creative work.

Licensing/Regulatory Information

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

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

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.*

Elements and Performance Criteria

1. Research woodworking materials and processes	1.1 Research the detailed ***physical properties and capabilities*** of different ***woodworking materials***
	1.2 Investigate the ***safety issues*** associated with different materials and processes prior to use
	1.3 Collate and store safety and technical ***data*** to meet safety requirements and inform future practice
	1.4 Investigate the relationship between materials and ***woodworking processes***
	1.5 Determine ***cost and supply parameters***
2. Select woodworking materials and processes for exploration	2.1 Assess the ***creative and professional opportunities*** offered by different woodworking materials and processes for own art practice
	2.2 Determine ***limitations and constraints*** of particular materials and processes
	2.3 Select particular materials and processes that suit own practice
3. Integrate woodworking materials and processes into own work	3.1 Explore ***different ways of working with materials and processes*** to achieve desired outcomes
	3.2 Challenge and stretch the capabilities and uses of different materials and processes through experimentation
	3.3 Develop ***own ways of working*** with materials and processes
	3.4 Engage in informed discussion with others about the characteristics and opportunities of particular woodworking materials and processes
	3.5 Establish and follow ***safe work practices***
4. Manage woodworking resources in professional practice	4.1 Establish a ***sustainable supply*** of woodworking resources
	4.2 Develop ways of working with resources that minimise waste
	4.3 Maintain the quality and life of woodworking resources through ***appropriate handling and storage***

Required Skills and Knowledge

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

Required skills

- communication skills to engage in informed discussion around materials, processes and their relationship with ideas
- critical thinking and analytical skills to evaluate and make judgements about relationships between woodworking materials, techniques and processes
- initiative and enterprise skills to:
  - develop individual ways of working with materials and processes
  - identify and act on own professional development needs
- learning skills to develop and refine own skills to a professional practice standard
- literacy skills to analyse varied and technical information about woodworking materials and processes
- problem-solving skills to identify and resolve technical problems in woodworking work
- self-management and planning skills to:
  - develop own ways of working with woodworking materials and processes
  - research and organise sustainable supply of materials and processes
- technology skills to use the internet as a research tool.

Required knowledge

- ways in which a wide range of woodworking materials and processes can be used, adapted, combined and challenged by the professional artist
- physical properties and capabilities of the selected materials and processes
- types of technical and other data that may need to be stored for safety and other reasons
- characteristics of different materials under different treatments and the potential of these characteristics to achieve different effects
- cost and supply parameters for woodworking materials and tools in the context of professional practice
- storage requirements and options for different materials
- intellectual property issues and legislation associated with woodworking as a professional practice
- sustainability issues for the professional operation of a wood design practice
- OHS requirements for the set-up and operation of a professional work space.

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 ability to: • apply knowledge of woodworking materials and processes and how they may be adapted and extended at a professional level • evolve and refine ways of working with materials and processes through a demonstrated process of experimentation • integrate materials and processes into own work in a way that supports coherence of the creative work • demonstrate technical proficiency in the use of selected materials and processes • use safe and sustainable work practices.
Context of and specific resources for assessment	Assessment must ensure access to: • equipment, materials and tools used to produce woodwork.
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: • evaluation of the use of materials and processes in terms of the coherence of the body of work • evaluation of processes used by the candidate to develop new ways of working with woodworking materials and processes • evaluation of the work documentation • questioning and discussion about candidate's intentions and the work outcome • review of portfolios of evidence • review of third-party reports from experienced practitioners. Assessment methods should closely reflect workplace demands (e.g. literacy) and the needs of particular groups (e.g. people with disabilities, and people who may have literacy or numeracy difficulties, such as speakers of languages other than English, remote communities and those with interrupted schooling).
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example: • CUVPRP501A Realise a body of creative work.

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.

Physical properties and capabilities may relate to:	• appropriateness of material for:
	  • selected process
	  • size of project
	• durability
	• environmental safety
	• inherent and worked strength and fragility
	• personal safety
	• resistance to heat and cold
	• useability
	• weight
	• workability.

Woodworking materials may include:	• assembling, joining or binding materials, such as:
	  • other fibres
	  • rope
	  • string thread
	  • wire
	• finishing materials, such as:
	  • lacquers
	  • paints
	  • sandpapers
	  • stains
	• found objects and materials
	• other materials that support work, such as:
	  • leather
	  • metals
	  • stone
	• oxidising agents and other patina agents
	• wood
	• wood products.

Safety issues may relate to:	• dust and airborne particles • equipment used for woodworking • fire • fumes

	• manual handling requirements • noise • sharp objects • use and labelling of chemicals • use of equipment with moving parts • work posture.
Data may include:	• material safety data sheets (MSDS) • quantity calculations • results of experimentation.
Woodworking processes may include:	• assemblage • carving • combining with other materials - synthetic and natural • jig making • laminating timber and timber products • making mock-ups and prototyping • marquetry • model making • steam bending of timber • timber preparation and machining • wood finishing • wood turning • wooden tool modification and/or making.
Cost and supply parameters may relate to:	• budgetary restrictions • capacity to share costs with others • continuity of supply • delivery issues • location of suppliers • potential for use of found objects • terms of payment • use of freely available natural materials • use of recycled materials.

Creative and professional opportunities may relate to:	• creative potential:
	  • communication of ideas
	  • personal affinity with particular materials and processes
	  • potential for combining materials and processes
	  • potential for interactions of different materials and processes
	  • themes in work
	• professional potential:
	  • collaboration
	  • emerging market trends

	• professional development • saleability.
Limitations and constraints may include:	• availability of supplies • financial expenditure • safety aspects of process • storage facilities • studio space • timeframe • transportation.
Different ways of working with materials and processes may involve:	• combining materials and processes in new ways • making samples, prototypes and maquettes • varying established approaches to achieve new effects • working collaboratively with a particular material or process.
Own ways of working relate to:	• approaches that reflect and support individual voice • particular nuances and subtleties unique to the individual artist.
Safe work practices may include:	• completing MSDS • correct disposal of waste materials • dust and fume extraction • ergonomic safety • managing risk • reporting accidents and incidents • safe use of tools and equipment • using clearly designated wet and dry areas • using personal protective equipment (PPE).
Sustainable supply is:	• available when needed • environmentally friendly • of appropriate quality • safe • within budgetary requirements.

Appropriate handling and storage may include:	• avoidance of trip hazards
	• safe storage of timber and sheet material, such as:
	  • fall hazards
	  • heavy materials
	  • height constraints
	• security considerations.

Unit Sector(s)

Visual communication – wood

Custom Content Section

Not applicable.