



Australian Government

Department of Education, Employment and Workplace Relations

BSBDES303A Explore and apply the creative design process to 3D forms

Revision Number: 1

BSBDES303A Explore and apply the creative design process to 3D forms

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to explore and creatively apply the design process to the development of 3 dimensional (3D) forms. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.
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Application of the Unit

Application of the unit	This unit applies to individuals who apply the creative design process to the development of 3-dimensional forms. The unit underpins many other specialised design units.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Source information on 3-dimensional design	1.1. Identify and access relevant <i>sources of information</i> on 3-dimensional design 1.2. Evaluate and collate information to build a knowledge of 3-dimensional design
2. Explore the creative design process for 3-dimensional forms	2.1. Use <i>creative thinking techniques</i> to generate a range of ideas and options 2.2. Use <i>experimentation</i> to explore and challenge a range of different ideas 2.3. Challenge assumptions, reflect on ideas and refine approaches 2.4. Consciously change perspective, and evaluate ideas and situations in new ways
3. Communicate concepts or ideas through application of design processes to 3-dimensional forms	3.1. Investigate and reflect on how a particular <i>concept or idea</i> might be communicated in a 3-dimensional form 3.2. Select <i>materials, tools and equipment</i> relevant to the realisation of the concept or idea 3.3. Apply a creative design process to produce a range of 3-dimensional concept realisations 3.4. Reflect on own application of design process and success in communicating the concept or idea 3.5. Seek and obtain feedback from others about the 3-dimensional form and its success in communicating the concept or idea 3.6. Present and store <i>concept realisations or samples</i> in a format which takes account of the need for professional presentation and potential value for future work

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- communication skills to explain ideas and to have discussions about design concepts with others
- literacy skills sufficient to read and interpret information about 3-dimensional design
- visual literacy skills to make judgements about the application of the design process to 3-dimensional forms.

Required knowledge

- copyright, moral rights, intellectual property issues and legislation, and their impact on aspects of design
- creative thinking techniques that can be used as part of the design process
- elements and principles of design as applied to 3-dimensional forms
- materials, tools and equipment required for the design of 3-dimensional forms in the relevant work context
- notion of individual interpretation and choice within the design process
- particular challenges and issues in the design of 3-dimensional forms
- relationships between form and space.

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: - production of a range of samples or concept realisations which show the creative application of the processes to 3-dimensional forms - knowledge of the design process as it applies to 3-dimensional work.
Context of and specific resources for assessment	Assessment must ensure: access to the materials resources and equipment needed to apply design processes to 3-dimensional forms.
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 - evaluation of samples or concept realisations produced by the candidate and interrogation of the creative process used - oral or written questioning to assess knowledge of 3-dimensional design.
Guidance information for assessment	The design process does not occur in isolation. Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

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.

Sources of information may include:

- anecdotal sources, personal observation
- art and design work
- books and magazines
- natural and manufactured forms, objects and/or structures
- optics, including single and multiple vanishing points
- scientific texts
- web-based resources

Creative thinking techniques may include:

- brainstorming:
 - bulletin board
 - buzz session
 - computer-aided
 - sequencing
 - stop and go
- daydreaming and mental wandering
- Edward de Bono's six thinking hats
- ego alter or heroes
- graphic organisers:
 - concept fans
 - visual maps
 - webbing
- lateral thinking games
- making associations
- mind mapping
- morphological analysis
- storytelling
- sub-culture surfing
- trigger words
- use of metaphors and analogies
- vision circles
- visualisation

RANGE STATEMENT	
	• wishful thinking • word salads
Experimentation may involve consideration of:	• bending • binding • cutting • folding • mass • moulding and modelling • pasting and taping • positive and negative forms • proportion • relationships of form to form and form to space • rhythm • shape • size • stitching • stretching • symmetry, asymmetry, balance • tone • twisting
Concept or idea to be communicated may relate to a range of activities such as:	• advertising and promotion • artistic works • exhibitions or events • fashion designs • interactive digital media products • interior designs • sign making
Materials, tools and equipment may include:	• brushes • buckets and containers • clamps • clays and other plastic compounds (plasticene, plaster) • cutting tools (scissors, knives blades) • drill • fibres, tape, string • foamcore, polystyrene • found materials • glue • hammer • measuring tools

RANGE STATEMENT

	• nails, screws, wire • papers, cardboard and paper pulp • pliers • recycled materials • relevant and current hardware and software • saw • shaping tools (surform blades, planers, modelling and carving tools) • wood, metal, fabric, plastic
<i>Concept realisations or samples</i> may be:	• digital output • fabricated and constructed works • models • prototypes

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Design - Design Process
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Co-requisite units

Co-requisite units		