Australian Government

Department of Education, Employment and Workplace Relations

LMFFDT5013A Evaluate furniture design proposals and concepts

Revision Number: 1

LMFFDT5013A Evaluate furniture design proposals and concepts

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit specifies the outcomes required to evaluate design proposals and concepts with reference to set criteria established from original design briefs and enterprise objectives.

Application of the Unit

Application of the unit	This unit supports the attainment of skills and knowledge required for competent workplace performance in the wide variety of furniture maker operations. The competency applies to custom furniture business or design support environment and involves application of skills and knowledge at a post trade level. These skills and knowledge are to be used within the scope of the person's job and authority. The evaluation involves assessment of own designs and designs generated by others. This unit requires employability skills in planning and organising and problem solving to assess designs against criteria. Communication skills are used to research and document industry information and self management skills are used to analyse findings. Learning skills are required in order reflect on and assess own work against set criteria.

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. Establish evaluation criteria for design	1.1. Applicable ***legislative***, ***OHS*** and ***enterprise requirements*** relevant to the evaluation of design proposals and concepts are verified and complied with 1.2. Original ***design brief*** is analysed to establish criteria to use in assessing design proposals and concepts 1.3. Enterprise business objectives are reviewed to identify criteria to use in assessing designs 1.4. Enterprise production capacity is identified and strengths and limitations incorporated into evaluation criteria 1.5. Current industry design trends are researched and identified 1.6. Workplace and industry standards in relation to design presentation are researched and identified 1.7. Quality criteria that apply to design processes are researched and identified 1.8. Criteria for assessment are identified and clarified with client and colleagues 1.9. The weighting of each criteria for assessment is confirmed 1.10. Details are recorded in accordance with enterprise practice
2. Evaluate design	2.1. Design is assessed to evaluate if it fits the intention of the design brief 2.2. ***Form***, ***function*** and ***style*** of the design are assessed and evaluated 2.3. ***Environmental impact*** of the design is assessed and evaluated 2.4. ***Cultural relevance*** of the design is analysed and evaluated 2.5. ***Economic significance*** of the design is assessed and evaluated 2.6. ***Design methodology*** is reviewed for adherence to the elements and principles of design 2.7. ***Material*** choice appropriateness is analysed and evaluated 2.8. ***Technical integrity*** of the design is assessed and evaluated 2.9. The design is evaluated for consistency with current

ELEMENT	PERFORMANCE CRITERIA
	industry trends and influences
3. Evaluate design concepts for construction and production suitability	3.1. Details of enterprise and related ***construction constraints*** are assessed 3.2. Details of enterprise and subcontractor ***production constraints*** are identified and reviewed 3.3. ***Production ability*** of the design is analysed and evaluated 3.4. ***Equipment*** selection is assessed and evaluated 3.5. ***Manufacturing process***, assembly and ***finishing*** techniques selected for the design are reviewed and evaluated 3.6. Design is evaluated against construction and production constraints 3.7. Changes to design are recommended and recorded in accordance with enterprise practice
4. Determine and report on design suitability	4.1. Design is evaluated against each criteria 4.2. ***Weighted assessment*** is used to make comparisons and rank components of design 4.3. Recommendations are made for improvements to design in order to further address criteria 4.4. Design suitability in meeting criteria is determined and documented with recommendations for improvements

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- collect, organise and understand information related to design a furnishing products
- communicate ideas, information and advice to client to enable confirmation of design selection, plans and specifications
- prepare evaluation documentation
- work with others and in a team to evaluate design proposals
- work with clients to review designs
- apply listening and analysis techniques to anticipate production and construction problems and plan around them
- recognise and respond to circumstances outside instructions or personal competence
- adopt a proactive relationship with the clients to recognise issues and create alternatives
- plan activities covering the choice of evaluation method, the preparation and layout of the design information
- use mathematical ideas and techniques to correctly complete evaluation models
- clarify and confirm evaluation instructions
- plan evaluation within given task parameters
- accept responsibility for given tasks
- set, monitor and satisfy personal work goals
- satisfy the competency requirements for the job
- maintain current knowledge of production methods
- maintain current knowledge of evaluation methods
- seek learning opportunities
- use the workplace technology related to the electronic communication with colleagues and clients as well as documenting and presenting information.

Required knowledge

- State or Territory OHS legislation, regulations, standards and codes of practice relevant to the design and construction of furnishing products
- design methodology
- furniture styles and movements
- visual aesthetics of furnishing products
- environmental and ethical issues in making a furnishing product
- materials used to produce furnishing products
- production methodologies of furniture makers
- assessment and evaluation techniques

REQUIRED SKILLS AND KNOWLEDGE
• overhead components and costing techniques • contemporary techniques for collating and preparing visual information • established communication channels and protocols • problem identification and resolution • document control methods.

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	• Comply with legislation, regulations, standards, codes of practice and established safe practices and procedures for planning of evaluation of design proposals • Use of calculators, computer programs and other aids in the calculation of proposal rankings • Documentation of evaluation criteria clearly from original design brief • Assessment and documentation of evaluation of product proposals or concepts to move forward in the design process • Recommendations for design improvements for concepts, construction, production and final design presented • Work effectively with others • Modify activities to cater for variations in workplace contexts and environment

Context of and specific resources for assessment	• The application of competency is to be assessed in the workplace or simulated workplace
	• Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
	• Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
	• Assessment is to comply with relevant regulatory or Australian Standards requirements
	• The following resources should be made available:
	  • workplace location or simulated workplace
	  • realistic product proposals
	  • specific information covering materials, constructions and production methods
	  • design brief and client instructions
	  • details of the product requirements

Method of assessment	• Assessment must satisfy the endorsed assessment

EVIDENCE GUIDE	
	guidelines of the Furnishing Industry Training Package • Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of underpinning knowledge • Assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure its correct interpretation and application • Assessment may be applied under project related conditions (real or simulated) and require evidence of process • Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances • Assessment may be in conjunction with other related units of competency e.g. LMFFM4021A Research product needs, LMFFM4022A Create ideas in response to a brief and inspirational information
Guidance information for assessment	

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.	
Legislative requirements	• are to be in accordance with applicable legislation from all levels of government that affect enterprise operation. Requirements may include but not be limited to award and enterprise agreements, industrial relations, Australian Standards, confidentiality and privacy, OHS, the environment, equal opportunity, anti-discrimination, relevant industry codes of practice, duty of care, heritage, copyright, design right and patent law
OHS requirements	• are to be in accordance with Commonwealth, State or Territory legislation and regulations, enterprise safety policies and procedures
Enterprise requirements	• may include but not be limited to legal, enterprise, guidelines, policies and procedures relating to own role and responsibility, quality assurance, procedural manuals, quality and continuous improvement processes and standards, OHS, emergency and evacuation, ethical standards, recording and reporting, access and equity principles and practices, equipment use, maintenance and storage, environmental management (waste disposal, recycling and re-use guidelines)
Design brief	• may include but not be limited to client needs and objectives, client aims and objectives and criteria for evaluation, milestones for the design project, organisational or personal profiles and aims, image requirements and function, target market, budget, timeline and consultation requirements
Form	• may include but not be limited to proportion and aesthetics
Function	• may include but not be limited to ergonomics and practicality

RANGE STATEMENT	
Style	• may include but not be limited to traditional, contemporary, modern, functional, commercial and artistic
Environmental impact	• may include but not be limited to how the use of raw materials effects the ecology and environment and how its continued use will affect the area it has been sourced from, energy consumption in achieving the material, greenhouse gases created, waste levels, resource utilisation and transport effects. Similarly what impact will be felt by reducing or stopping material from the source
Cultural relevance	• may include but not be limited to demography, geography (local, regional, national), religious, climatic, societal, lifestyle, attitudinal, gratification, honour, living conditions, infrastructure, status and habitude
Economic significance	• may include but not be limited to the potential financial return which the product could return, including sales volume and profitability
Design methodology	• is to include but not be limited to the approach taken in addressing the design brief
Material	• may include but not be limited to native timber (native and imported), man-made timber products, plastic, metal, alloys, stones, glass, textiles, fibreglass, foam, cardboard, paper products or any other manipulable substance
Technical integrity	• is to include but not be limited to the intended structural qualities and construction methods of a designed product
Construction constraints	• are the types of construction methods of joining parts and sub-assemblies together to make the structure and form of the product produced within the enterprise. These will depend on the skills and knowledge of the makers within the enterprise
Production constraints	• are the methods of producing the individual parts and sub-assemblies of a product. These are dependent on the enterprise's machinery and skills and knowledge of their operators

RANGE STATEMENT	
Production ability	• is to include but not be limited to how readily a design can be produced, the cost in producing it, the availability of equipment and skilled personnel
Equipment	• may include but not be limited to hand tools, static machinery, portable power tools and computer numerically controlled equipment • may also include procedures for lock out protecting operators and co-workers from accidental injury by isolating the machine from the power source
Manufacturing process	• may include but not be limited to the methods by which the product will be produced, these steps usually entail working from working drawings and specifications, producing components utilising machine operations, assembly of the components and finishing techniques
Finishing	• may include but not be limited to paints, waxes, lacquers, stains, pigments, oils and plastic coatings
Weighted assessment	• must be developed from original criteria to rank the proposals allowing for the weighting of each criteria

Unit Sector(s)

Unit sector	

Competency field

Competency field	

Co-requisite units

Co-requisite units		