Australian Government

Department of Education, Employment and Workplace Relations

CUFDIG503A Design e-learning resources

Revision Number: 1

CUFDIG503A Design e-learning resources

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to design an e-learning resource. 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	The skills and knowledge outlined in this unit are applied by people working in education or training organisations, or in media production companies that specialise in the development of e-learning resources. The focus of this unit is different to that of the two units in the Training and Assessment Training Package that deal with e-learning resources. Namely: • TAADES503B Research and design e-learning resources • TAADES504B Develop and evaluate e-learning resources. These two units are written from the perspective of people in training organisations who are responsible for developing and delivering learning materials to be included in e-learning resources. CUFDIG503A is written from the perspective of a department or company responsible for developing the design of broad ranging e-learning resources in consultation with clients. However, there are synergies between the units and it may be appropriate to combine them in learning programs.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

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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.

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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Identify project requirements	1. With reference to project briefs, identify ***target learner characteristics*** and their impact on the way resources are designed 2. Identify ***content*** to be incorporated or generated and how this content is to be accessed or delivered 3. Identify ***delivery platforms*** and implications that these will have on selection of ***media assets*** 4. Consult with clients to clarify ***project requirements***
Research and select instructional design model	5. Analyse content to clearly establish learning outcomes and assessment strategies 6. Research a range of ***instructional design models***, considering their characteristics, differences and ability to meet briefs 7. Identify ***standards*** that may apply for a range of delivery platforms 8. Identify ***learning styles*** of target learners and consider how these may impact on the design 9. Consider a range of ***learning activities*** that best meet learning objectives and needs of target learners 10. Consult with ***relevant personnel*** to ensure that a full range of instructional design models has been identified and sourced 11. Select the instructional design model that best meets learning needs and project requirements
Draft design specifications	12. Use selected instructional design model to design the overall architecture of an e-learning resource 13. Design sequences and interactivity based on content and project requirements 14. Develop content templates for content experts if required 15. Specify media assets as required 16. Specify ***communication and collaborative tools*** as required 17. Specify user interface of the e-learning resource 18. Specify ***production requirements***, including appropriate ***testing strategies*** 19. Write draft ***design specifications*** to include relevant advice to design and development teams 20. Discuss draft design specifications with clients to ensure

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ELEMENT	PERFORMANCE CRITERIA
	designs are consistent with project briefs
Finalise design specifications	21. Review designs against required project outcomes and target learner needs 22. Review designs to ensure they meet creative and technical requirements 23. Adjust designs as necessary after discussions with relevant personnel 24. Clarify ***legislative or ownership issues*** to comply with production and organisational requirements 25. Confirm with clients acceptance of design specifications, including deliverables, milestones and timelines

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Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- communication, teamwork and literacy skills sufficient to:
  - interpret and clarify project briefs
  - establish rapport with clients
  - work collaboratively in a team environment to find the best design solutions
  - clearly and concisely document specifications for the design of e-learning resources
- initiative and enterprise in the context of:
  - generating ideas for the design of e-learning resources that meet the needs of target learners
  - thinking laterally when developing ideas
  - selecting the most appropriate instructional design model
  - maintaining design integrity
- technical skills sufficient to:
  - create storyboards, maps and other diagrams to specify the architecture and navigation of e-learning resources
  - construct material in a logical order, one sequence flowing on from another
  - develop techniques for holding learner's attention
- self-management skills sufficient to:
  - meet deadlines
  - provide appropriate and timely documentation

Required knowledge

- typical formats and techniques for documenting the design of e-learning resources
- OHS standards as they relate to working for periods of time on computers
- range of learning models
- way in which various learning styles impact on learning models
- industry knowledge, including:
  - roles and responsibilities of project team members, e.g. designers, content creators, information architects, programmers and coders
  - sequence and interrelationship of stages in the process of developing e-learning resources
  - web standards, including usability, W3C Accessibility and interoperability
  - web applications and technologies that are relevant to e-learning
  - issues and challenges that arise in designing and developing e-learning resources

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REQUIRED SKILLS AND KNOWLEDGE
• intellectual property rights and copyright clearance procedures

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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:
	• design specifications for e-learning resources that:
	  • are well documented and clearly presented
	  • meet learner requirements
	  • are technically feasible
	• ability to work effectively as a member of a production team.

Context of and specific resources for assessment	Assessment must ensure: • practical demonstration of skills through the design of at least two e-learning resources for delivery on different platforms • access to project briefs on which designs can be based • access to appropriate learning and assessment support when required • use of culturally appropriate processes and techniques appropriate to the language and literacy capacity of learners and the work being performed.
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 • evaluation of designs for e-learning resources documented by the candidate and of their effectiveness in terms of meeting project requirements • role-play involving a candidate presenting his/her design for an e-learning resource to a client and explaining how it meets requirements • written or oral questioning to test knowledge as listed in the required skills and knowledge section of this unit.

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EVIDENCE GUIDE	
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example: • CUFPPM404A Create storyboards.

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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.	

Target learner characteristics may include:	• computer literacy
	• demographics, such as:
	  • age
	  • gender
	  • education
	  • occupation
	  • location
	  • cultural background
	• hobbies
	• interests
	• internet literacy
	• language, literacy and numeracy levels
	• learning environment, such as:
	  • workplace
	  • classroom
	  • home
	  • community
	  • mobile
	• personas
	• preferred learning styles
	• skills level
	• specific needs - physical or psychological.

Content may include:	• audio/visual materials
	• curriculum documents, such as:
	  • Training Packages and their units of competency
	  • modules
	• guides
	• manuals
	• PowerPoint presentations
	• pre-existing learning materials
	• printed materials

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RANGE STATEMENT	
	• reference texts • training handouts.

Delivery platform may include:	• CD/DVD
	• digital television set
	• internet, including:
	  • websites
	  • blogs
	  • wikis
	  • database repositories
	  • learning management systems, such as:
	  • Blackboard
	  • WebCT
	  • Janeson
	  • Moodle
	  • virtual classrooms
	  • conferencing
	  • discussion forums
	  • flash-based
	  • chat
	  • podcasting
	  • video streaming
	  • audio streaming
	  • other online collaboration tools
	• mobile phone
	• personal digital assistant (PDA)
	• other wireless/mobile devices.

Media assets may include:	• animations • audio • audio/visual files, such as PowerPoint • graphics • images • text documents, such as PDF and Word • video.
Project requirements may include:	• access to facilities and resources • assessment strategies • budget • deliverables • learner characteristics • milestones

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RANGE STATEMENT	

	• personnel, including:
	  • number
	  • availability
	  • expertise
	• prototyping
	• technical issues, including:
	  • delivery platform
	  • disk space
	  • bandwidth
	  • testing plan
	• timelines.

Instructional design models include:	• exploration • game • instructional • lock step • mentoring • problem-solving • puzzle • simulation • story-telling.
Standards may include:	• AQTF • interoperability • SCORM • usability • W3C Accessibility.
Learning styles may include:	• activist • learning preferences, including auditory, visual or sensory • pragmatist • reflective • theorist
Learning activities may include:	• blogs • case studies • checklists • discussions and debates • games • interviews • media presentations • problems

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RANGE STATEMENT	
	• projects • quizzes • research reports • role-plays • simulations • tasks • work-based practical activities.
Relevant personnel may include:	• art director • client • content expert • educator • graphic designer • head of department • information architect • language, literacy and numeracy specialist • programmer • reference group member • technical director • technical staff • other specialist creative and administrative staff.
Communication and collaborative tools may include:	• blogs • chat • discussion forums • messaging • TiVo • wikis • other social software tools.
Production requirements may include:	• levels of expertise • production deadlines • production schedules • production team • testing strategies.
Testing strategies may include:	• alpha • beta • completion • continuous • milestone • prototype • staged.

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RANGE STATEMENT	
Design specifications may include:	• content inventory • diagrams • flow charts • maps • navigation charts • plans • storyboards • technical specifications • user interface mock-ups • wire frames
Legislative or ownership issues may be:	• access and equity • clearances • confidentiality • copyright • intellectual property rights • non-disclosure agreements • open source licensing • ownership of assets • product licensing.

Unit Sector(s)

Unit sector	

Competency field

Competency field	Visual communication - digital content and imaging

Co-requisite units

Co-requisite units		

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Co-requisite units		

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