



Australian Government

Department of Education, Employment and Workplace Relations

TAADES504B Develop and evaluate e-learning resources

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit specifies the competency required to develop and evaluate e-learning resources based on an agreed design concept.

Application of the Unit

Learning resources are designed to enhance and support the effectiveness of the learning process. They provide guidance, materials, learning and assessment activities, and relevant information that address the competencies/learning outcomes to be achieved by the learner. An e-learning resource is any learning resource that is assisted by electronic technology. This includes but is not limited to web-based and computer-based resources, virtual classrooms, digital collaboration, Internet, Intranet, Extranet, interactive CD-ROM, hand-held computers and satellite broadcast.

In the **TAA04 Training and Assessment Training Package**, learning resources are defined as learning products that have been specifically developed to address a substantive area of learning such as a Training Package, a qualification or a learning program. E-learning resources are used to support e-based learning or blended delivery and may be used in conjunction with print-based or other learning resources. The complexity of the e-resource will vary depending on its focus, type and audience. The emphasis is on the clarity and structure of the learning resource and how the technology supports this, not the technology itself.

This unit focuses on developing an e-learning resource following a design concept. It involves working with others to develop and evaluate a prototype, improving the e-learning resource based on the evaluation and then working with others to develop the finished resource. It addresses this competency from the perspective of contributing to the development of content, not the technical specifications. However, technological literacy to work with technical experts is necessary.

The competency of creating the design concept is separately addressed in **TAADES503B Research and design e-learning resources**. Separate competency standards have been developed because these two functions are often undertaken separately and by different team members. Where competency is required across both the design and development phase co-learning and co-assessment is recommended.

This unit has some content overlap with **TAADES502B Design and develop learning resources** which focuses on print-based learning resources but it is differentiated by the technological skills, knowledge and application required to perform this work. It is recommended that individuals undertake **TAADES502B Design and develop learning resources** before commencing **TAADES503B Research and design e-learning resources** or this unit of competency.

This competency would normally be achieved in a collaborative working environment involving a project team that develops the complete e-learning resource.

The prototype developed for evaluation may not be a fully functional e-learning resource. Parts of it may be in detailed draft or presentation form, such as a storyboard, with supporting information yet to be built into an e-learning resource.

The competency specified in this unit is typically required by instructional designers, learning product developers, trainers/ facilitators, training consultants.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

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

Elements and Performance Criteria

Element	Performance Criteria
1 Participate in the development process	1.1 Individuals who can contribute expertise to the e-learning resource development are identified and proposed to the project manager
	1.2 Own role in developing the e-learning resource is identified and agreed with the project manager including responsibilities for client liaison, where relevant
	1.3 Roles of each team member and their contribution to developing the e-learning resource are clarified through team discussions
	1.4 A collaborative work ethic with team members is demonstrated throughout the development process
	1.5 Appropriate documentation is maintained throughout the development process
2 Develop the e-learning resource prototype in conjunction with others	2.1 The design concept and any relevant standards or guidelines are read, interpreted and clarified
	2.2 The identified target audience and their learning needs and characteristics are identified or confirmed using information from the design phase

- 2.3 The **technical parameters and technological requirements** are discussed with team members throughout development phase
 - 2.4 Learning expertise is applied to write or present the learning content for the **prototype** in accordance with the **quality requirements** of the design concept
 - 2.5 Technical and/or content issues are raised with relevant persons immediately they arise and collaborative approaches are used to resolve them
- 3 **Trial and evaluate the e-learning resource prototype**
 - 3.1 **Tools** which specify **relevant criteria** for trialling and evaluation are developed in collaboration with others
 - 3.2 Trial sites/audiences/users are identified, confirmed and the trialling/evaluation process is undertaken in collaboration with others
 - 3.3 Feedback and results from the evaluation are documented and analysed to determine any changes or improvements relating to own areas/s of development responsibility
 - 3.4 Identified modifications are made and the prototype is finalised in collaboration with others
- 4 **Collaborate in developing the full e-learning resource**
 - 4.1 Designated responsibilities in developing the e-learning resource are carried out and any milestones, budgets and timelines are met
 - 4.2 Other members of the project team are supported in fully developing and completing their designated components of the resource
 - 4.3 The completed e-learning resource is evaluated through a collaborative process with team members against criteria, standards and guidelines

Required Skills and Knowledge

Not applicable.

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

To demonstrate competency against this unit candidates must be able to provide evidence that they can develop and evaluate a prototype e-learning resource by following the design brief, and ensure that learning outcomes/competency standards are addressed.

The e-learning resource must meet the principles of instructional design, be well structured and organised, and provide variety for the learner and clear pathways for learning. The designer will work with a project team (which may include a range of experts from various technical fields) on the development of the e-learning prototype resource and final product to ensure the learning components are addressed.

The prototype developed for evaluation may not be a fully functional e-learning resource. It may include information that will be built into an e-learning resource by team members who have the expertise required to complete the resource.

Evidence Requirements

Required knowledge includes:

knowledge of IT principles, for example:

Internet

technology capabilities

e-learning methodologies and vocabulary

project management, for example:

time management

work flow

team management

meeting budgets

administration

effective learning using technology, e.g. using:

multiple perspectives

opportunities for reflection

opportunities for collaborative learning

authentic assessment

incremental learning

variety

organisation

language, literacy and numeracy appropriate for the learner group

resources available to support learning, for example:

books

articles

documents

manuals

web links

lectures

differences in e-learning versus face-to-face mode, for example:

ways of communicating electronically versus face-to-face for the learner and deliverer

electronic terms and new language that makes reference to specific functions of e-learning

ways of sharing information and collaborating that differ electronically from face-to-face learning

instructional design for electronic materials, for example:

systematic instructional strategies

learning design principles

criterion-referenced test items

order of increasing difficulty

opportunities for review of material and repetition

the need for interactivity

inclusion of a variety of approaches and

techniques for presenting information and activities
structure of the information
what happens if the person makes a mistake
how to get help
techniques to hold the user's attention

relevant policy, legislation, codes of practice and national standards including Commonwealth and state/territory legislation, for example:

copyright and privacy laws relating to electronic technology

security of information

plagiarism

competency standards

licensing

industry/workplace requirements

duty of care under common law

anti-discrimination including equal opportunity, racial vilification and disability discrimination

workplace relations

industrial awards/enterprise agreements

relevant occupational health and safety (OHS) knowledge relating to the work role, and OHS considerations to be include in the content of the e-learning resource

OHS obligations of the training and/or assessment organisation, the trainer/facilitator and learner

Required skills and attributes include:

overcoming barriers to e-learning, for example:

using graphics and pathways which are appealing and engaging

identifying and addressing lack of technical knowledge in potential users

	<p>learning, using and applying electronic technology</p> <p>collaboration skills to:</p> <p>work with vendors and consultants</p> <p>share ideas and information</p> <p>seek feedback on the e-learning design</p> <p>communication skills to:</p> <p>negotiate</p> <p>problem solve</p> <p>listen to others</p> <p>adjust personal use of technical language to meet level of understanding of other collaborators/likely users</p>
Products that could be used as evidence include:	<p>final or prototype e-learning resource</p> <p>parts of the e-learning resource under development</p> <p>plans, diagrams or notes taken during development</p> <p>evaluation tools developed</p> <p>results of prototype trials</p>
Processes that could be used as evidence include:	<p>how team roles were allocated and why</p> <p>how learning outcomes/competency standards were related to technical parameters</p> <p>how trial sites/audiences were selected and why</p>
Resource implications for assessment include:	<p>technology required for development</p> <p>support personnel</p>
The collection of quality evidence requires that:	<p>assessment must address the scope of this unit and reflect all components of the unit i.e. the Elements, Performance Criteria, Range Statement, Evidence Guide, Employability Skills</p> <p>a range of appropriate assessment</p>

methods/evidence gathering techniques is used to determine competency

evidence must be gathered in the workplace whenever possible. Where no workplace is available, a simulated workplace must be provided

the evidence collected must relate to a number of performances assessed at different points in time and in a learning and assessment pathway these must be separated by further learning and practice

assessment meets the rules of evidence

a judgement of competency should only be made when the assessor is confident that the required outcomes of the unit have been achieved and that consistent performance has been demonstrated

Specific evidence requirements must include:

evidence of supporting and contributing to the development for an e-learning resource through collaborative working relationships with colleagues

contributing to the development of the prototype

developing the specific components/areas of content

conducting the trial and evaluation

responding to feedback, modifying the prototype and finalising the resource in association with team members

Integrated assessment means that:

this unit can be assessed alone or as part of an integrated assessment activity involving relevant units in the **TAA04 Training and Assessment Training Package**. Suggested units include but are not limited to:

TAADES503B Research and design e-learning resources

TAATAS503B Manage contracted 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.

Project manager may include:

self
supervisor

Roles of each team member may include:

project management
communication
graphic design
multimedia
software design
computer programming
audio-visual expertise
research
instructional design
content writer/developer
editing
proofreading

Documentation may include:

draft materials/content
draft e-learning activities
technical specifications
tools for evaluation
feedback/results of trial/evaluation process
comments/feedback from client

Design concept includes:

the basis for the proposed design including sample design construct or representation for the e-learning resource

Standards or guidelines may refer to:

Guidelines for Toolbox Learning Materials
Guidelines for Training Package support materials
competency standards
Web Content Accessibility Guidelines from the World Wide Web Consortium

(interoperability)

Preferred Standards to Support National
Cooperation in Applying Technology to
Vocational Education and Training

requirements under the Australian Quality
Training Framework (AQTF) for access and
equity

legislative requirements relating to:

disability discrimination

equal opportunity

racial discrimination

sex discrimination

Target audience and their learning needs must include:

who the learning resource is for
what the learning resource is designed to do
why an e-learning medium is being considered
how the learning resource will be used
where learning resource will be used

Characteristics may include:

level and breadth of work experience
level and previous experiences of formal education
skill/competency profile
socio-economic background, age, gender, range of abilities (disabilities)
cultural background and needs
specific needs - physical or psychological
motivation for learning
language, literacy and numeracy needs of learners
learning style and preferences

Technical parameters and technological requirements may include:

type of electronic media
required technical software and hardware
learner management interfaces
technical navigation tools
integration of media

A prototype may include:

CD-ROM
web pages
storyboards
audiovisual resource
virtual classroom
simulation via Internet/Intranet/Extranet
satellite broadcast
computer-based resource
a skeleton of a resource
a representation of colour, look and feel of the resource

written information yet to be built into the resource

Quality requirements include:

design is relevant to targeted learners

design is easy to navigate/use

design encourages participation and engagement

design motivates and provides effective learning resources

design provides opportunities for learner reflection and collaboration

design meets needs of client

Tools may include:

surveys

interviews

trial applications

Relevant criteria may include:

navigation/ease of use

quality instructional design

application of relevant standards

Unit Sector(s)

Not applicable.

Competency Field

Learning Design