



Australian Government

Department of Education, Employment and Workplace Relations

TAEDEL801A Evaluate, implement and use ICT-based educational platforms

Release 1

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Modification History

| Release | Comments |
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| Release 1 | This Unit first released with <i>TAE10 Training and Education Training Package version 3.0</i> . |

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to evaluate, implement and use complex ICT-based educational platforms in an organisational context.

The unit also covers the skills required to facilitate learning, collaboration and development of online communities using ICT.

Application of the Unit

This unit applies to educators taking a leadership position in using ICT-based solutions to facilitate learning.

Leaders in learning should be able to implement advanced electronic technologies, such as those associated with e-learning, mobile and wireless technologies; and technologies relating to the development of online communities and their use in project-based learning.

Leadership in learning in relation to introducing technologies to enhance educational processes may involve complex judgements.

The unit may relate to learning activities in an educational institution.

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 |
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| <i>Elements describe the essential outcomes of a unit of competency.</i> | <i>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.</i> |

Elements and Performance Criteria

| Element | Performance Criteria |
|--|---|
| 1. Evaluate the accuracy and usefulness of ICT resources supporting project-based learning | 1.1 Research advances in ICT resources in a given content or vocational education and training area 1.2 Analyse and evaluate integration into educational delivery practices of ICT for learning outcomes 1.3 Research how the convergence of different technologies can affect learning practice 1.4 Explore requirements for ICT resources to interoperate technically and operationally with organisation's management of learner services, performance, learning and decision support 1.5 Review and report opportunities to improve educational infrastructure, systems and solutions |
| 2. Analyse network hardware and software for learning environment | 2.1 Research trends in teaching methods associated with different types of virtual environments and knowledge-building environments 2.2 Determine organisation's strategic and learning requirements 2.3 Review and report opportunities to stakeholders on range of options to improve ICT online infrastructure, systems and solutions 2.4 Analyse and report risks associated with implementation of an online environment for educational outcomes 2.5 Devise policy and procedures that ensure safe and sustainable use of online environment for users and appropriateness to organisational requirements |
| 3. Analyse current ICT technologies allowing communication and collaboration between learners and other stakeholders | 3.1 Research trends in teaching methods associated with different types of communication and collaboration technologies 3.2 Review and report opportunities to stakeholders on range of options to improve communication and collaboration, systems and solutions in relation to learning outcomes 3.3 Analyse and report risks associated with implementation of a communication and collaboration solution for educational outcomes 3.4 Devise policy and procedures that ensure safe and sustainable use of communication and collaboration technologies for users and appropriateness to organisational requirements |
| 4. Develop a pilot ICT | 4.1 Choose appropriate software and hardware solution |

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| 1. Evaluate the accuracy and usefulness of ICT resources supporting project-based learning | 1.1 Research advances in <i>ICT resources</i> in a given content or vocational education and training area 1.2 Analyse and evaluate integration into educational delivery practices of ICT for learning outcomes 1.3 Research how the convergence of different technologies can affect learning practice 1.4 Explore requirements for ICT resources to interoperate technically and operationally with organisation's management of learner services, performance, learning and decision support 1.5 Review and report opportunities to improve educational infrastructure, systems and solutions |
| educational platform solution | to meet identified problem 4.2 Configure and administer appropriate solution 4.3 Test solution to ensure connectivity and interoperability with existing systems |

Required Skills and Knowledge

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

Required skills

- communication skills to:
 - collaborate and work with vendors and consultants
 - conduct project-based activities
 - initiate and facilitate group discussions
 - share ideas and information
- planning and organising skills to:
 - analyse and identify suitable learning practices and learning strategies for groups and individual learners
 - evaluate effectiveness of learning practices
- literacy skills to prepare reports and contract variations
- numeracy skills to calculate budget requirements
- teamwork skills to monitor group and individual interactions
- technology skills to:
 - assess suitability and reliability of hardware and software
 - compare and recommend new technology solutions that improve learning outcomes
 - complete electronic research
 - review and discuss learning styles and practice involving ICT.

Required knowledge

- budgeting and cost-benefit analysis principles
- capabilities and limitations of infrastructure of educational platforms
- content and requirements of the relevant delivery and assessment strategies
- content of learning resources and learning materials
- learner requirements for use of educational platforms
- pedagogical theory and practice, learner interests and changing learning styles, and application of ICT to learning and teaching
- process for creating an effective learning experience using electronic technology
- range of appropriate learning strategies, and teaching and assessment methods.

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.

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| Overview of assessment | |
| Critical aspects for assessment and evidence required to demonstrate competency in this unit | <p>Evidence of the following is essential:</p> <ul style="list-style-type: none">• knowledge of contemporary ICT in an educational environment• documented review of ICT solutions for an educational environment, collaboration, and communication technologies• research on theory and practice in relation to advanced learning practice, especially where these are enabled by new content solutions; and vocational education and training approaches or technologies• creation of working pilot using relevant ICT solutions. |
| Context of and specific resources for assessment | <p>A range of e-assessment methods should be used to assess practical skills and knowledge. Effective e-assessment methods should achieve one of more of the following criteria:</p> <ul style="list-style-type: none">• promote active learning, engaging learners actively in the learning process• provide opportunities to construct meaning by assisting learners to build their own cognitive structures, based on previous knowledge, to integrate new skills and knowledge• encourage collaboration by providing environments in which people learn from each other and solve problems together• support intentional learning by linking learning to the learner's goals• address real problems, engaging learners in solving the complex and ill-structured problems they will encounter in the real world• contextualise learning by situating it in some meaningful real world task, or by using simulated, case-based or problem-based learning |

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| | <ul style="list-style-type: none"> • promote conversation by involving learners in dialogue so that they can appreciate multiple perspectives • promote reflection by providing opportunities for learners to reflect on the learning process and how they can apply what they have learnt to new situations. <p>Assessment must ensure:</p> <ul style="list-style-type: none"> • competence is consistently demonstrated over time, and over a range and variety of complex situations. |
| Method of assessment | <p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> • direct questioning combined with review of portfolios of evidence and third-party workplace reports of on-the-job performance by the candidate • review of applied projects or learning activities • direct observation of contextual application of skills • oral or written questioning to assess knowledge of constructing and implementing advanced earning practice. |
| Guidance information for assessment | <p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> • TAEDEL802A Use e-learning with social media • TAELED704A Review enterprise e-learning systems and solutions implementation • TAELED802A Investigate the application of ICT knowledge. |

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.

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| ICT resources may include: | <ul style="list-style-type: none"> • application: <ul style="list-style-type: none"> • commercial • database • internet browser • spreadsheet • word-processing • customised • development tools • cloud-based solutions • in-house • laptop • mobile communications • notebook • other mobile devices • peripheral devices • personal computer (Mac or PC) • personal digital assistant (PDA) • server • smartphone • system: <ul style="list-style-type: none"> • computer security • device drivers • operating system • tablet (iPad or similar) • virtual private network (VPN) • voice network • wide area network (WAN) • wireless solution • workstation. |
| Virtual environments may include: | <ul style="list-style-type: none"> • collaborative virtual environments (CVEs) • immersive virtual environments (IVEs) • massively multiplayer online games (MMOGs) |

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| | <ul style="list-style-type: none"> • massively multiplayer online role-playing games (MMORPGs) • MUD object oriented (MOOs) • multi-user domains (MUDs) • multi-user virtual environments (MUVES). |
| <i>Knowledge-building environments</i> may include: | <ul style="list-style-type: none"> • community, collaboration, content management systems (C3MS) • computer supported intentional learning environments (CSILE) • learning management systems (LMS) • wikis. |
| <i>Analysing and reporting risks</i> may involve: | <ul style="list-style-type: none"> • budgetary considerations • contract variations • licensing • term contracts. |
| <i>Organisational requirements</i> may include: | <ul style="list-style-type: none"> • access and equity principles and practices • business and performance plans • collaborative or partnership arrangements • confidentiality requirements • defined resource parameters • ethical standards • existing technology and systems • goals, objectives, plans, systems and processes • legal and organisational policies and guidelines for ICT-based educational platforms • workplace health and safety (WHS) policies, procedures and programs • quality assurance or procedures manuals • recording and reporting procedures • team and business unit structures and focus. |
| <i>Communication and collaboration technologies</i> may include: | <ul style="list-style-type: none"> • asynchronous conferencing • synchronous conferencing • application sharing • data conferencing • electronic calendars • electronic meeting systems (EMS) • email • enterprise bookmarking • faxing • instant messaging |

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| | <ul style="list-style-type: none">• internet forums• knowledge management systems• online chat• online proofing• project management systems• revision control• SMS• social software systems• telephony• videoconferencing• voice mail• web publishing• wikis• workflow systems. |
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Unit Sector(s)

Delivery and facilitation