Australian Government
Department of Education, Science and Training

IBSA
INNOVATION & BUSINESS SKILLS AUSTRALIA

CUF01 Film, TV, Radio and Multimedia Training Package

Volume 6 of 6

Version Number: 3
Review Date: 30 May 2004

ISC INDUSTRY SKILLS COUNCILS
Creating Australia's Future

CUF01
Film, TV, Radio and Multimedia Training Package

Competency Standards

Volume 6 of 6
Film, Television, Radio, Multimedia Industry Training Package (Volume 6)

Volume 1 Overview, Qualifications Framework, Assessment Guidelines and Competency Standards

Volume 2 Competency Standards

Volume 3 Competency Standards

Volume 4 Competency Standards

Volume 5 Competency Standards

This volume should not be used in isolation but in the context of the complete film, television, radio and multimedia training package.

The material contained within this volume is part of the endorsed component of the film, television, radio and multimedia training package endorsed by the National Training Quality Committee in May 2001 and agreed by Ministers. This training package is to be reviewed by 30 May 2004.

©Commonwealth of Australia, 2003
Date Acquired from NTIS: 11 April 2007

CUF01 Film, TV, Radio and Multimedia Training Package
© , 2003

This work has been produced with the assistance of funding provided by the Commonwealth Government through the Department of Education, Science and Training (DEST).

An individual may make a photocopy of all or part of the work for their personal use.

A Registered Training Organisation may make photocopies of all or part of the work for the teaching purposes of that organisation, including for supply to its students provided that any consideration does not exceed the marginal cost of preparation, reproduction, assembly and delivery.

Except as permitted under the Copyright Act 1968, all other rights are reserved. Requests for permission may be directed to:
Department of Education, Science and Training
16 Mort Street
Canberra ACT 2600
Phone: (02) 6240 8111
Website: www.dest.gov.au

This work is the result of wide consultations with Australian industry participants. It is a collaborative view and does not necessarily represent the view of DEST or any specific body. For the sake of brevity it may omit factors which could be pertinent in particular cases.

While care has been taken in the preparation of this Training Package, DEST and the original developer do not warrant that any licensing or registration requirements specified here are either complete or up-to-date for your State or Territory. DEST and the original developer do not accept any liability for any damage or loss (including indirect and consequential loss) incurred by any person as a result of relying on the information contained in this Training Package.

This Training Package should not be regarded as professional advice and it should not be relied upon in any important matter without obtaining appropriate advice relevant to your circumstances.
Published by:

First published: 2001-05-01
ISBN: 0 642 80075 8

Printed by:

AEShareNet Code: P
Print Version No: 3
Release Date: 10/10/2005

TABLE OF CONTENTS

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Version Modification History

The version details of this endorsed Training Package are in the table below. The latest information is at the top of the table.

Version	Release Date	Comments
3	10/10/2005	CUSSOU24A Edit sound using computerised digital equipment/systems replaces CUSSOU12A.
2.00	09/12/03	Changes made within Certificate IV and Diploma of Makeup, new unit added to replace unit in Group B and C respectively.
2.00	20/11/03	Changes made within unit CUFPOP09A
2.00	17/01/03	Introduction of Diploma of Broadcasting CUF50501, units added to Diploma bank plus unit title & code corrections
1.00	01/05/01	Primary Release

Forms control: All endorsed training packages will have a version number displayed on the imprint page of every volume constituting that training package. Every training package will display an up-to-date copy of this modification history form, to be placed immediately after the contents page of the first volume of the training package. Comments on changes will only show sufficient detail to enable a user to identify the nature and location of the change. Changes to training packages will generally be batched at quarterly intervals. This modification history form will be included within any displayed sample of that training package and will constitute all detail available to identify changes.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Qualifications Framework

The Australian Qualifications Framework

What is the Australian Qualifications Framework?

A brief overview of the Australian Qualifications Framework (AQF) follows. For a full explanation of the AQF see the *AQF Implementation Handbook, 3rd Edition 2002*. You can download it from the Australian Qualifications Advisory Board (AQFAB) website (*www.aqf.edu.au*) or obtain a hard copy by contacting AQFAB on phone 03 9639 1606 or by emailing AQFAB on aqfab@curriculum.edu.au

The AQF provides a comprehensive, nationally consistent framework for all qualifications in post-compulsory education and training in Australia. In the vocational education and training (VET) sector it assists national consistency for all trainees, learners, employers and providers by enabling national recognition of qualifications and Statements of Attainment.

Training Package qualifications in the VET sector must comply with the titles and guidelines of the AQF. Endorsed Training Packages provide a unique title for each AQF qualification which must always be reproduced accurately.

Qualifications

Training Packages can incorporate the following eight AQF qualifications.

- Certificate I in …
- Certificate II in …
- Certificate III in …
- Certificate IV in …
- Diploma of …
- Advanced Diploma of …
- Vocational Graduate Certificate of …
- Vocational Graduate Diploma of …

On completion of the requirements defined in the Training Package, a Registered Training Organisation (RTO) may issue a nationally recognised AQF qualification. Issuance of AQF qualifications must comply with the advice provided in the *AQF Implementation Handbook* and the Australian Quality Training Framework *Standards for Registered Training Organisations*, particularly Standard 10.

Statement of Attainment

Where an AQF qualification is partially achieved through the achievement of one or more endorsed units of competency, an RTO may issue a Statement of Attainment. Issuance of Statements of Attainment must comply with the advice provided in the *AQF Implementation Handbook* and the Australian Quality Training Framework *Standards for Registered Training Organisations*, particularly Standard 10.

Under the *Standards for Registered Training Organisations*, RTOs must recognise the achievement of competencies as recorded on a qualification or Statement of Attainment issued by other RTOs. Given this, recognised competencies can progressively build towards a full AQF qualification.

AQF Guidelines and Learning Outcomes

The *AQF Implementation Handbook* provides a comprehensive guideline for each AQF qualification. A summary of the learning outcome characteristics and their distinguishing features for each VET related AQF qualification is provided below.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Certificate I

Characteristics of Learning Outcomes

Breadth, depth and complexity of knowledge and skills would prepare a person to perform a defined range of activities most of which may be routine and predictable.

Applications may include a variety of employment related skills including preparatory access and participation skills, broad-based induction skills and/or specific workplace skills. They may also include participation in a team or work group.

Distinguishing Features of Learning Outcomes

Do the competencies enable an individual with this qualification to:

- demonstrate knowledge by recall in a narrow range of areas;
- demonstrate basic practical skills, such as the use of relevant tools;
- perform a sequence of routine tasks given clear direction
- receive and pass on messages/information.

Certificate II

Characteristics of Learning Outcomes

Breadth, depth and complexity of knowledge and skills would prepare a person to perform in a range of varied activities or knowledge application where there is a clearly defined range of contexts in which the choice of actions required is usually clear and there is limited complexity in the range of operations to be applied.

Performance of a prescribed range of functions involving known routines and procedures and some accountability for the quality of outcomes.

Applications may include some complex or non-routine activities involving individual responsibility or autonomy and/or collaboration with others as part of a group or team.

Distinguishing Features of Learning Outcomes

Do the competencies enable an individual with this qualification to:

- demonstrate basic operational knowledge in a moderate range of areas;
- apply a defined range of skills;
- apply known solutions to a limited range of predictable problems;
- perform a range of tasks where choice between a limited range of options is required;
- assess and record information from varied sources;
- take limited responsibility for own outputs in work and learning.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Certificate III

Characteristics of Learning Outcomes

Breadth, depth and complexity of knowledge and competencies would cover selecting, adapting and transferring skills and knowledge to new environments and providing technical advice and some leadership in resolution of specified problems. This would be applied across a range of roles in a variety of contexts with some complexity in the extent and choice of options available.

Performance of a defined range of skilled operations, usually within a range of broader related activities involving known routines, methods and procedures, where some discretion and judgement is required in the section of equipment, services or contingency measures and within known time constraints.

Applications may involve some responsibility for others. Participation in teams including group or team co-ordination may be involved.

Distinguishing Features of Learning Outcomes

Do the competencies enable an individual with this qualification to:

- demonstrate some relevant theoretical knowledge
- apply a range of well-developed skills
- apply known solutions to a variety of predictable problems
- perform processes that require a range of well-developed skills where some discretion and judgement is required
- interpret available information, using discretion and judgement
- take responsibility for own outputs in work and learning
- take limited responsibility for the output of others.

Certificate IV

Characteristics of Learning Outcomes

Breadth, depth and complexity of knowledge and competencies would cover a broad range of varied activities or application in a wider variety of contexts most of which are complex and non-routine. Leadership and guidance are involved when organising activities of self and others as well as contributing to technical solutions of a non-routine or contingency nature.

Performance of a broad range of skilled applications including the requirement to evaluate and analyse current practices, develop new criteria and procedures for performing current practices and provision of some leadership and guidance to others in the application and planning of the skills. Applications involve responsibility for, and limited organisation of, others.

Distinguishing Features of Learning Outcomes

Do the competencies enable an individual with this qualification to:

- demonstrate understanding of a broad knowledge base incorporating some theoretical concepts
- apply solutions to a defined range of unpredictable problems
- identify and apply skill and knowledge areas to a wide variety of contexts, with depth in some areas
- identify, analyse and evaluate information from a variety of sources
- take responsibility for own outputs in relation to specified quality standards
- take limited responsibility for the quantity and quality of the output of others.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Diploma

Characteristics of Learning Outcomes

Breadth, depth and complexity covering planning and initiation of alternative approaches to skills or knowledge applications across a broad range of technical and/or management requirements, evaluation and co-ordination.

The self directed application of knowledge and skills, with substantial depth in some areas where judgement is required in planning and selecting appropriate equipment, services and techniques for self and others.

Applications involve participation in development of strategic initiatives as well as personal responsibility and autonomy in performing complex technical operations or organising others. It may include participation in teams including teams concerned with planning and evaluation functions. Group or team co-ordination may be involved.

The degree of emphasis on breadth as against depth of knowledge and skills may vary between qualifications granted at this level.

Distinguishing Features of Learning Outcomes

Do the competencies or learning outcomes enable an individual with this qualification to:

- demonstrate understanding of a broad knowledge base incorporating theoretical concepts, with substantial depth in some areas
- analyse and plan approaches to technical problems or management requirements
- transfer and apply theoretical concepts and/or technical or creative skills to a range of situations
- evaluate information, using it to forecast for planning or research purposes
- take responsibility for own outputs in relation to broad quantity and quality parameters
- take some responsibility for the achievement of group outcomes.

©Commonwealth of Australia, 2003

Advanced Diploma

Characteristics of Learning Outcomes

Breadth, depth and complexity involving analysis, design, planning, execution and evaluation across a range of technical and/or management functions including development of new criteria or applications or knowledge or procedures.

The application of a significant range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts in relation to either varied or highly specific functions. Contribution to the development of a broad plan, budget or strategy is involved and accountability and responsibility for self and others in achieving the outcomes is involved.

Applications involve significant judgement in planning, design, technical or leadership/guidance functions related to products, services, operations or procedures.

The degree of emphasis on breadth as against depth of knowledge and skills may vary between qualifications granted at this level.

Distinguishing Features of Learning Outcomes

Do the competencies or learning outcomes enable an individual with this qualification to:

- demonstrate understanding of specialised knowledge with depth in some areas
- analyse, diagnose, design and execute judgements across a broad range of technical or management functions
- generate ideas through the analysis of information and concepts at an abstract level
- demonstrate a command of wide-ranging, highly specialised technical, creative or conceptual skills
- demonstrate accountability for personal outputs within broad parameters
- demonstrate accountability for personal and group outcomes within broad parameters.

The qualifications at a glance

There is one industry wide qualification and four sets of specialist qualifications in the national film, television, radio and multimedia industry training package. The specialist screen qualifications include further specialisations.

Industry wide

Certificate I in Media allows learners to develop basic skills in radio, video and multimedia and provides an avenue for study which will articulate into higher level qualifications.

Screen (film and television)

This group of qualifications consists of five specialist areas:

- Screen production and design (including animation, digital imaging, internet, information technology, camera, editing, special effects, sound, production planning and operations, and broadcast and studio operations)
- Art and construction (sets, props and scenic art)
- Costume (costume making, costume development, management and supervision)
- Make-up (including the provision of make-up and specialist services)
- Laboratory (including performing processing duties within film processing laboratories and the provision of specialist laboratory services)

Broadcasting (radio and television)

These qualifications cover a range of broadcasting skills including production/sound

©Commonwealth of Australia, 2003

production, operating broadcast facilities in geographically remote locations and managerial and executive duties.

Broadcast Engineering

These qualifications include performing specialist technical engineering functions and the design, planning and coordination of broadcast facilities.

Multimedia

These qualifications cover the full range of skills needed in multimedia applications.

Unit banks

There are unit banks for qualifications at all levels except Certificate I. In most cases the 'elective' units specified for each qualification can be selected from the unit banks. The unit banks follow the complete set of qualifications.

INDUSTRY WIDE	BROADCAST ENGINEERING	MULTIMEDIA	BROADCASTING (RADIO AND TELEVISION)
	Advanced diploma of broadcast engineering	Advanced diploma of multimedia	Advanced diploma of broadcasting
	Diploma of broadcast engineering	Diploma of multimedia	Diploma of broadcasting
		Certificate IV in multimedia	Certificate IV in broadcasting (radio)
			Certificate IV in broadcasting (television)
		Certificate III in multimedia	Certificate III in broadcasting (radio)
			Certificate III in broadcasting (television)
			Certificate III in broadcasting (remote area operations)
		Certificate II in multimedia	Certificate II in broadcasting (radio)
			Certificate II in broadcasting (television)
Certificate I in media			

©Commonwealth of Australia, 2003

SCREEN (FILM AND TELEVISION)

Screen production and design	Art and construction	Costume	Make-up	Laboratory
Advanced diploma of screen				
Diploma of screen	Diploma of screen (art and construction)	Diploma of costume	Diploma of make-up	
Certificate IV in screen	Certificate IV in screen (art and construction)	Certificate IV in costume	Certificate IV in make-up	Certificate IV in screen (laboratory)
Certificate III in screen				Certificate III in screen (laboratory)
Certificate II in screen	Certificate II in screen (art and construction)	Certificate II in costume		

©Commonwealth of Australia, 2003

Assessment Guidelines

Introduction

These Assessment Guidelines provide the endorsed framework for assessment of units of competency in this Training Package. They are designed to ensure that assessment is consistent with the Australian Quality Training Framework (AQTF) *Standards for Registered Training Organisations*. Assessments against the units of competency in this Training Package must be carried out in accordance with these Assessment Guidelines.

Assessment System Overview

This section provides an overview of the requirements for assessment when using this Training Package, including a summary of the AQTF requirements; licensing/registration requirements; and assessment pathways.

Benchmarks for Assessment

Assessment within the National Training Framework is the process of collecting evidence and making judgements about whether competency has been achieved to confirm whether an individual can perform to the standards expected in the workplace, as expressed in the relevant endorsed unit of competency.

In the areas of work covered by this Training Package, the endorsed units of competency are the benchmarks for assessment. As such, they provide the basis for nationally recognised Australian Qualifications Framework (AQF) qualifications and Statements of Attainment issued by Registered Training Organisations (RTOs).

Australian Quality Training Framework Assessment Requirements

Assessment leading to nationally recognised AQF qualifications and Statements of Attainment in the vocational education and training sector must meet the requirements of the AQTF as expressed in the *Standards for Registered Training Organisations.*

The *Standards for Registered Training Organisations* can be downloaded from the DEST website at *www.dest.gov.au* or can be obtained in hard copy from DEST. The following points summarise the assessment requirements under the AQTF.

Registration of Training Organisations

Assessment must be conducted by, or on behalf of, an RTO formally registered by a State or Territory Registering/Course Accrediting Body in accordance with the *Standards for Registered Training Organisations*. The RTO must have the specific units of competency and/or AQF qualifications on its scope of registration. See Section 1 of the *Standards for Registered Training Organisations*.

Quality Training and Assessment

Each RTO must have systems in place to plan for and provide quality training and assessment across all its operations. See Standard 1 of the *Standards for Registered Training Organisations*.

Assessor Competency Requirements

Each person involved in training, assessment or client service must be competent for the functions they perform. See Standard 7 of the *Standards for Registered Training Organisations* for assessor competency requirements. Standard 7 also specifies the competencies that must be held by trainers.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Assessment Requirements

The RTO's assessments must meet the requirements of the endorsed components of Training Packages within its scope of registration. See Standard 8 of the *Standards for Registered Training Organisations*.

Assessment Strategies

Each RTO must identify, negotiate, plan and implement appropriate learning and assessment strategies to meet the needs of each of its clients. See Standard 9 of the *Standards for Registered Training Organisations*.

Mutual Recognition

Each RTO must recognise the AQF qualifications and Statements of Attainment issued by any other RTO. See Standard 5 of the *Standards for Registered Training Organisations*.

Access and Equity and Client Services

Each RTO must apply access and equity principles, provide timely and appropriate information, advice and support services that assist clients to identify and achieve desired outcomes. This may include reasonable adjustment in assessment. See Standard 6 of the *Standards for Registered Training Organisations*.

Partnership Arrangements

RTOs must have, and comply with, written agreements with each organisation providing training and/or assessment on its behalf. See Standard 1.6 of *Standards for Registered Training Organisations*.

Recording Assessment Outcomes

Each RTO must have effective administration and records management procedures in place, and must record AQF qualifications and Statements of Attainment issued. See Standards 4 and 10.2 of the *Standards for Registered Training*.

Issuing AQF Qualifications and Statement of Attainment

Each RTO must issue AQF qualifications and Statements of Attainment that meet the requirements of the *AQF Implementation Handbook* and the endorsed Training Packages within the scope of its registration. An AQF qualification is issued once the full requirements for a qualification, as specified in the nationally endorsed Training Package are met. A Statement of Attainment is issued where the individual is assessed as competent against fewer units of competency than required for an AQF qualification. See Standard 10 and Section 2 of the *Standards for Registered Training Organisations*.

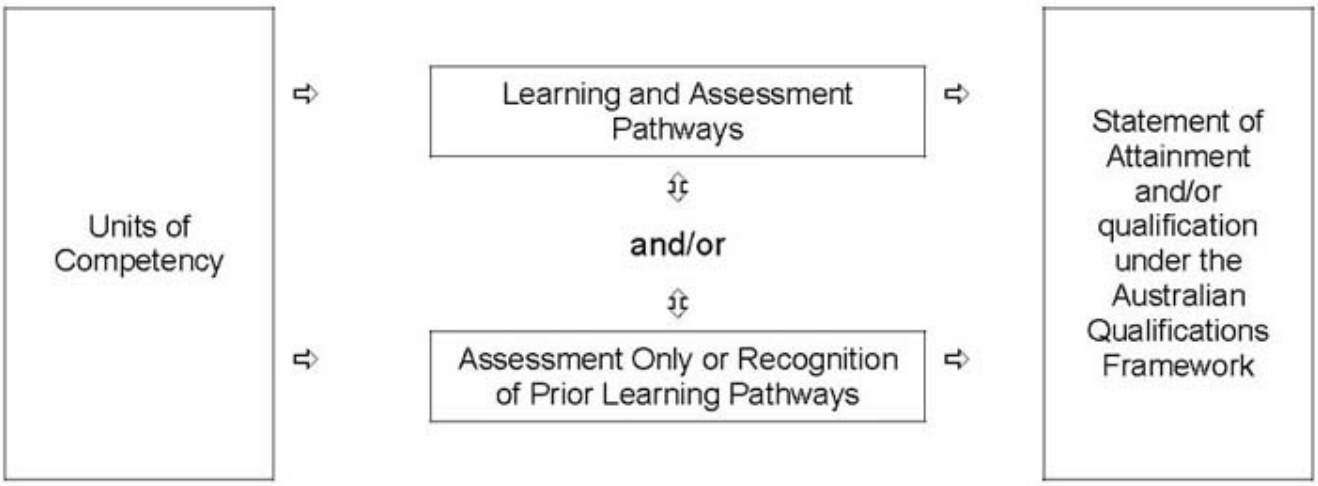
Pathways

The competencies in this Training Package may be attained in a number of ways including through:

- formal or informal education and training
- experiences in the workplace
- general life experience, and/or
- any combination of the above.

Assessment under this Training Package leading to an AQF qualification or Statement of Attainment may follow a learning and assessment pathway, an assessment-only or recognition pathway, or a combination of the two as illustrated in the following diagram.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007



Each of these assessment pathways leads to full recognition of competencies held - the critical issue is that the candidate is competent, not how the competency was acquired.

Assessment, by any pathway, must comply with the assessment requirements set out in the *Standards for Registered Training Organisations*.

Learning and Assessment Pathways

Usually, learning and assessment are integrated, with assessment evidence being collected and feedback provided to the candidate at anytime throughout the learning and assessment process.

Learning and assessment pathways may include structured programs in a variety of contexts using a range of strategies to meet different learner needs. Structured learning and assessment programs could be: group-based, work-based, project-based, self-paced, action learning-based; conducted by distance or e-learning; and/or involve practice and experience in the workplace.

Learning and assessment pathways to suit New Apprenticeships have a mix of formal structured training and structured workplace experience with formative assessment activities through which candidates can acquire and demonstrate skills and knowledge from the relevant units of competency.

Assessment-Only or Recognition of Prior Learning Pathway

Competencies already held by individuals can be formally assessed against the units of competency in this Training Package, and should be recognised regardless of how, when or where they were achieved.

In an assessment-only or Recognition of Prior Learning (RPL) pathway, the candidate provides current, quality evidence of their competency against the relevant unit of competency. This process may be directed by the candidate and verified by the assessor, such as in the compilation of portfolios; or directed by the assessor, such as through observation of workplace performance and skills application, and oral and/or written assessment. Where the outcomes of this process indicate that the candidate is competent, structured training is not required. The RPL requirements of Standard 8.2 of the *Standards for Registered Training Organisations* must be met.

As with all assessment, the assessor must be confident that the evidence indicates that the candidate is currently competent against the endorsed unit of competency. This evidence may take a variety of forms and might include certification, references from past employers, testimonials from clients, and work samples. The onus is on candidates to provide sufficient evidence to satisfy assessors that they currently hold the relevant competencies. In judging evidence, the assessor must ensure that the evidence of prior learning is:

- authentic (the candidate's own work)
- valid (directly related to the current version of the relevant endorsed unit of competency)

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- reliable (shows that the candidate consistently meets the endorsed unit of competency)
- current (reflects the candidate's current capacity to perform the aspect of the work covered by the endorsed unit of competency), and
- sufficient (covers the full range of elements in the relevant unit of competency and addresses the four dimensions of competency, namely task skills, task management skills, contingency management skills, and job/role environment skills).

The assessment only or recognition of prior learning pathway is likely to be most appropriate in the following scenarios:

- candidates enrolling in qualifications who want recognition for prior learning or current competencies
- existing workers
- individuals with overseas qualifications
- recent migrants with established work histories
- people returning to the workplace, and
- people with disabilities or injuries requiring a change in career.

Combination of Pathways

Where candidates for assessment have gained competencies through work and life experience and gaps in their competence are identified, or where they require training in new areas, a combination of pathways may be appropriate.

In such situations, the candidate may undertake an initial assessment to determine their current competency. Once current competency is identified, a structured learning and assessment program ensures that the candidate acquires the required additional competencies identified as gaps.

Assessor Requirements

This section identifies the mandatory competencies for assessors, and clarifies how others may contribute to the assessment process where one person alone does not hold all the required competencies.

Assessor Competencies

The *Standards for Registered Training Organisations* specify mandatory competency requirements for assessors. For information, Standard 7.3 from the *Standards for Registered Training Organisations* follows:

7.3 **a** The RTO must ensure that assessments are conducted by a person who has:

i the following compentecies[1] from the Training Package for Assessment and Workplace Training, or demonstrated equivalent competencies:

a TAAASS401A Plan and organise assessment;
b TAAASS402A Assess competence;
c TAAASS404A Participate in assessment validation;

ii relevant vocational competencies, at least to the level being assessed.

b However, if a person does not have all of the competencies in Standards 7.3 **a** (i) and the vocational competencies as defined in 7.3 **a** (ii), one person with the competencies listed in Standard 7.3 **a** (i), and one or more persons who have the competencies listed in Standard 7.3 **a** (ii) may work together to conduct assessments.

[1] A person who holds the competencies BSZ401A Plan assessment, BSZ402A Conduct assessment, and BSZ403A Review assessment from the Training Package for Assessment and Workplace Training will be accepted for the purposes of this standard. A person who has demonstrated equivalent competencies to BSZ401A and BSZ402A and BSZ403A in the period up to 12 months following publication of the Training and Assessment Training Package will also be accepted for the purposes of this standard.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Designing Assessment Tools

This section provides an overview on the use and development of assessment tools.

Use of Assessment Tools

Assessment tools provide a means of collecting the evidence that assessors use in making judgements about whether candidates have achieved competency.

There is no set format or process for the design, production or development of assessment tools. Assessors may use prepared assessment tools, such as those specifically developed to support this Training Package, or they may develop their own.

Using Prepared Assessment Tools

If using prepared assessment tools, assessors should ensure these are benchmarked, or mapped, against the current version of the relevant unit of competency. This can be done by checking that the materials are listed on the National Training Information Service (http://www.ntis.gov.au). Materials on the list have been noted by the National Training Quality Council as meeting their quality criteria for Training Package support materials.

Developing Assessment Tools

When developing assessment tools, assessors must ensure that they:

- are benchmarked against the relevant unit or units of competency
- are reviewed as part of the validation of assessment strategies as required under 9.2 (i) of the *Standards for Registered Training Organisations*
- meet the assessment requirements expressed in the *Standards for Registered Training Organisations*, particularly Standards 8 and 9.

A key reference for assessors developing assessment tools is TAA04 Training and Assessment Training Package and the unit of competency TAAASS403A *Develop assessment tools*. There is no set format or process for the design, production or development of assessment materials.

Conducting Assessment

This section details the mandatory assessment requirements and provides information on equity in assessment including reasonable adjustment.

Mandatory Assessment Requirements

Assessments must meet the criteria set out in Standard 8 from the *Standards for Registered Training Organisations*. For information, Standard 8 from the *Standards for Registered Training Organisations* is reproduced below.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

8 RTO Assessments

The RTO's assessments meet the requirements of the endorsed components of Training Packages and the outcomes specified in accredited courses within the scope of its registration.

8.1 The RTO must ensure that assessments (including RPL):

i. comply with the assessment guidelines included in the applicable nationally endorsed Training Packages or the assessment requirements specified in accredited courses;

ii. lead to the issuing of a statement of attainment or qualification under the AQF when a person is assessed as competent against nationally endorsed unit(s) of competency in the applicable Training Package or modules specified in the applicable accredited course;

iii. are valid, reliable, fair and flexible;

iv. provide for applicants to be informed of the context and purpose of the assessment and the assessment process;

v. where relevant, focus on the application of knowledge and skill to standard of performance required in the workplace and cover all aspects workplace performance, including task skills, task management skills, contingency management skills and job role environment skills;

vi. involve the evaluation of sufficient evidence to enable judgements to be made about whether competency has been attained;

vii. provide for feedback to the applicant about the outcomes of the assessment process and guidance on future options in relation to those outcomes;

viii. are equitable for all persons, taking account of individual needs relevant to the assessment; and

ix. provide for reassessment on appeal.

8.2 a The RTO must ensure that RPL is offered to all applicants on enrolment

b The RTO must have an RPL process that:

i. is structured to minimise the time and cost to applicants; and
ii. provides adequate information, support and opportunities for participants to engage in the RPL process.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Access and Equity

An individual's access to the assessment process should not be adversely affected by restrictions placed on the location or context of assessment beyond the requirements specified in this Training Package.

Reasonable adjustments can be made to ensure equity in assessment for people with disabilities. Adjustments include any changes to the assessment process or context that meet the individual needs of the person with a disability, but do not change competency outcomes. Such adjustments are considered 'reasonable' if they do not impose an unjustifiable hardship on a training provider or employer. When assessing people with disabilities, assessors are encouraged to apply good practice assessment methods with sensitivity and flexibility.

Review and maintenance

CREATE Australia is responsible for monitoring and evaluating its effectiveness. This process will be incorporated in the general review and maintenance of the training package.

Any review will ensure that the guidelines:

- continue to meet the requirements of the industry
- are consistent with the ARF standards for RTOs and the relevant policies and procedures of state/territory training recognition authorities
- promote confidence in the system and the assessment outcomes on the part of industry, employers, enterprises, unions, employees, trainees, assessors and trainers
- ensure assessment processes and outcomes are valid, reliable, fair and flexible
- support RTOs to effectively carry out their responsibilities

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Further Sources of Information

The section provides a listing of useful contacts and resources to assist assessors in planning, designing, conducting and reviewing of assessments against this Training Package.

Contacts

TVET Australia Ltd
Level 21, 390 St Kilda Road
MELBOURNE VIC 3000
PO Box 12211
A'Beckett Street Post Office
MELBOURNE VIC 8006
Telephone: (03) 9832 8100
Fax: (03) 9832 8199
Web: *www.atpl.net.au*
Email: sales@atpl.net.au

Innovation and Business Industry Skills Council
Building B, Level 2
192 Burwood Road
HAWTHORN VIC 3122
Telephone: (03) 9815 7000
Fax: (03) 9815 7001
Email: virtual@ibsa.org.au

General Resources

Refer to http://antapubs.dest.gov.au/publications/search.asp to locate the following ANTA publications.

AQF Implementation Handbook, third Edition. Australian Qualifications Framework Advisory Board, 2002, *aqf.edu.au*

Australian Quality Training Framework (AQTF) - for general information go to: *www.dest.gov.au/sectors*

Australian Quality Training Framework (AQTF) - for resources and information go to: *www.dest.gov.au*

Australian Quality Training Framework *Standards for Registered Training Organisations*, Australian National Training Authority, Melbourne, 2005. Available in hard copy from State and Territory Training Authorities or can be downloaded from *www.dest.gov.au*

TAA04 Training and Assessment Training Package. This is available from the Innovation and Business Skills Australia (IBSA) Industry Skills Council and can be viewed, and components downloaded, from the National Training Information Service (NTIS). National Training Information Service, an electronic database providing comprehensive information about RTOs, Training Packages and accredited courses – www.ntis.gov.au *Style Guide for Training Package Support Materials*, Australian National Training Authority, Melbourne, 2003. Can be downloaded from the ANTA page at www.dest.gov.au

Assessment Resources

Training Package Assessment Guides - a range of resources to assist RTOs in developing Training Package assessment materials developed by DEST with funding from the Department of Education, Training and Youth Affairs. It is made up of 10 separate titles, as described at the ANTA publications page of *www.dest.gov.au*. Go to *www.resourcegenerator.gov.au/loadpage.asp?TPAG.htm*

Printed and/or CD ROM versions of the Guides can be purchased from Australian Training Products (ATP). The resource includes the following guides:

1 Training Package Assessment Materials Kit

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

2 Assessing Competencies in Higher Qualifications
3 Recognition Resource
4 Kit to Support Assessor Training
5 Candidate's Kit: Guide to Assessment in New Apprenticeships
6 Assessment Approaches for Small Workplaces
7 Assessment Using Partnership Arrangements
8 Strategies for ensuring Consistency in Assessment
9 Networking for Assessors
10 Quality Assurance Guide for Assessment

An additional guide "Delivery and Assessment Strategies" has been developed to complement these resources.

Assessment Tool Design and Conducting Assessment

VETASSESS & Western Australian Department of Training and Employment 2000, *Designing Tests - Guidelines for designing knowledge based tests for Training Packages*. Vocational Education and Assessment Centre 1997, Designing Workplace Assessment Tools, *A self-directed learning program*, NSW TAFE.

Manufacturing Learning Australia 2000, *Assessment Solutions*, Australian Training Products, Melbourne.

Rumsey, David 1994, *Assessment practical guide*, Australian Government Publishing Service, Canberra.

Assessor Training

Australian Committee on Training Curriculum (ACTRAC) 1994, *Assessor training program - learning materials*, Australian Training Products, Melbourne.

Australian National Training Authority, *A Guide for Professional* Development, ANTA, Brisbane.

Australian Training Products Ltd *Assessment and Workplace Training, Training Package - Toolbox*, ATPL Melbourne.

Green, M, et al. 1997, *Key competencies professional development Package*, Department for Education and Children's Services, South Australia.

Victorian TAFE Association 2000, *The professional development CD: A learning tool*, VTA, Melbourne.

Assessment System Design and Management

Office of Training and Further Education 1998, *Demonstrating best practice in VET project - assessment systems and processes*, OTFE Victoria.

Toop, L., Gibb, J. & Worsnop, P. *Assessment system designs*, Australian Government Publishing Service, Canberra.

Western Australia Department of Training and VETASSESS 1998, *Kit for Skills Recognition Organisations*, WADOT, Perth.

©Commonwealth of Australia, 2003 **Date Acquired from NTIS: 11 April 2007**

CUFIMA01A Produce and manipulate digital images

Unit Descriptor

This unit describes the skills and knowledge required to produce and manipulate digital images for a multimedia production within the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Assess digital camera qualities	1.1 Assess camera software compatibility with hardware systems and select appropriate software for the production 1.2 Match pixel resolution of the camera to the required quality and resolution of outcome 1.3 Check the RAM capacity of the camera to see that it is appropriate to the number of images required to be captured 1.4 Assess shutter speed, focal lengths and camera feature modes as suitable to the quality of and use of photographic image required 1.5 Handle and store lithium batteries in accordance with occupational health and safety requirements
2. Photograph and upload a digital image	2.1 Consider focus and exposure in operation of the digital camera to ensure capture of image meets production requirements 2.2 Ensure correct use of digital image software including entering and exiting the selected software 2.3 Save and retrieve digital photographs using designated file formats 2.4 Load and operate the digital camera in accordance with manufacturer's specifications and appropriate to the quality of image to be photographed 2.5 Upload the IBM-PC or Macintosh card interface/disk onto the relevant computer and save the image on hard disk 2.6 Create and store photographic image files of the computer in accordance with software procedures 2.7 Enhance, crop and alter photographic images electronically to deliver the required image 2.8 Check photographic images for fitness of purpose to comply with specifications 2.9 Assess photographic images for the relevant delivery mode (print, CD-ROM, visual appeal and effectiveness) and deliver appropriately

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

3. Incorporate digital photography into a multimedia sequence	3.1 Create graphics that incorporate the principles of design using the designate software 3.2 Edit, enhance, amend and save digital images using the designated software 3.3 Combine digital images into a designated multimedia sequence 3.4 Integrate digital images into a designated multimedia sequence 3.5 Evaluate the outcome for visual impact, effectiveness and fitness for purpose

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	1
Working with others and in teams	1
Using mathematical ideas and techniques	1
Solving problems	1
Using technology	2

RANGE STATEMENT

- aspects or sections of film/video production:
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorder performances
  - music video
  - television production of any type (eg music, drama, comedy, variety, sport)
  - live or pre-recorded television production
- educational product
- game
- promotional product
- Information product
- training product
- e-commerce
- a range of others

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- appropriate hardware
- software and communication packages
- LANs
- organisation's backup systems

- 2D Graphics
- 3D Graphics
- videos
- sound
- text animation
- scanned images

- a wide range of programs, some current examples of which may be:
- Photoshop
- Pagemill
- Frontpage
- Dreamweaver
- Flash
- Director
- Hyper Studio

NOTE: These programs are constantly being upgraded and replaced, and appropriate up-to-date programs should be selected.

- flash
- scrollage
- icon menu
- close-up
- wide angle and telephoto capacity

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in:

- basic principles of photography and visual design
- knowledge of selected digital image software
- ability to interpret a brief
- knowledge of the limiting factors of computer hardware
- knowledge of computers and computer operating systems
- interpreting simple scripts (texts), specifications and instructions
- interpreting and communicating production specifications

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFMEM07A Apply principles of visual design/

communication to the development of a

multimedia project

- CUFMEM10A Design and create a multimedia interface

Critical aspects of evidence

This unit of competence applies to a range of industry sectors. The focus of assessment will depend on the industry sector. Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- ability to assess the capacity to upload and process digital image s using industry hardware and software, to deliver a designated quality of image outcome

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of theses. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- work samples or simulated workplace activities
- oral questioning/interview aimed at the evaluating the process used in developing and realising the creative concept
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources and equipment currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFIMA03A Create 2D digital animation

Unit Descriptor

This unit describes the skills and knowledge required to use digital animation techniques and industry standard software to create 2D animation for a range of media applications within the cultural industries.

Unit Sector

No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Identify animation requirements	1.1 Obtain design brief and storyboard and discuss production requirements with relevant personnel 1.2 Identify all 2D animation requirements including production and technical specifications and discuss with relevant personnel
2. Identify scope of 2D animation software	2.1 Identify the range of industry standard 2D animation software and computer assisted animation techniques 2.2 Assess software compatibility with production and technical requirements and specifications 2.3 Select the appropriate software in relation to specified multimedia delivery platform 2.4 Discuss software with relevant design personnel to ensure selection will meet specified outcomes
3. Product key drawings for animation	3.1 Product key drawings by the most appropriate method to reflect the animation requirements 3.2 Product sufficient quantity of key drawings to establish the required action or design and ensure that they meet the production, creative and technical requirements 3.3 Comply with any soundtrack breakdown when producing drawings 3.4 Produce key drawings within the constraints of the production and scan hard-copy drawings as required 3.5 Clearly label key drawings
4. Produce 2D animation	4.1 Import key drawings into selected 2D animation software 4.2 Combine objects into a single animated steam according to creative requirements and specifications 4.3 Create static or moving backgrounds as required and integrate animated objects into static or moving backgrounds 4.4 Use animation techniques as required and as appropriate according to the software 4.5 Incorporate sound where necessary 4.6 Save and store using appropriate file formats and file management procedures

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

5. Evaluate animation	5.1 Present animation sequences to relevant personnel for detailed responses and recommendations 5.2 Discuss and identify and required design changes that may be needed 5.3 Incorporate design changes to complete the 2D animations and meet the recommendations 5.4 Obtain final agreement from relevant personnel for finished 2D animation sequences

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	3
Using mathematical ideas and techniques	-
Solving problems	2
Using technology	3

RANGE STATEMENT

- be produced in a variety of graphic styles
- involve a broad range of graphic styles and techniques

- details outlined in the storyboard and design brief
- director's instructions
- soundtrack breakdown

- registered hand drawn images
- electronic compiling
- computer-generated forms and actions

- timeline
- deadline
- budget
- resources:
  - hardware
  - software
  - personnel

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- budget
- resources
- purpose
- audience
- storyboard
- script

- motion blur
- object exaggerations

- computer generated
- manually written
- production schedules
- manufacture schedules
- manufacturer's specifications/instructions
- contracts
- edit decision lists (EDLs)
- fault reports
- list of sequences with relevant short numbers
- assembly order
- marked up scripts
- marked up transcripts

- file format
- file size
- operating system
- hardware specifications including memory size, RAM
- delivery platform
- media form

- aspects or sections of film/video production:
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorded performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television productions
- education product
- game
- promotion product
- information product
- training product
- e-commerce
- a range of others

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- project manager
- navigation designers
- producer
- instructional designers
- editing personnel
- sound editing personnel
- director
- producer
- director of photography
- graphic production personnel
- music composer
- sound effects personnel
- other technical staff
- other specialist staff
- designers

- a wide range of programs, some current examples of which may be:
- Director
- Flash
- Soft Image

NOTE: These programs are constantly being upgraded and replaced and appropriate up-to-date programs should be selected

- world wide web
- CD-ROM
- DVD
- Beta-cam
- video
- film
- title sequences
- credit sequences
- background graphics
- animation techniques such as stop motion, analogue, digital
- transitions:
  - cuts
  - mixes
  - wipes
  - keys
  - special effects
  - dissolves
  - fade in
  - fade outs
  - supers
  - subtitles

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- image libraries
- computer software image library packages
- the internet

- safety
- working copies

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- principles of 2D graphic design
- appropriate 2D software to create graphics
- computers and computer operating systems
- the limiting factors of computer hardware
- strategies to test media sequences and products
- digital animation formats
- computer assisted animation techniques
- screen principles
- basic editing principles, eg composition, framing, pacing, timing
- collecting and interpreting creative information, scripts and images
- visualisation and interpretation of creative concepts
- understanding the capabilities of other collaborative personnel
- understanding the creative elements of a production
- familiarity with current graphic image design conventions, techniques/methods and equipment
- drawing skills
- information sources and management
- effective communication skills
- copyright laws, regulations and clearance procedures

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFIMA01A Produce and manipulate digital images
- CUFMEM14A Create, manipulate digital images
- CUFMEM07A Apply principles of visual design/

communication to the development of a

multimedia product

- CUFIMA04A Create 3D digital animation
- CUFIMA05A Create 3D digital models and images

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Critical aspects of evidence

This unit of competence applies to a range of industry sectors. The focus of assessment will depend on the industry sector. Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- production of two different sequences incorporating 2D animation according to job specifications and the listed performance criteria
- finding and using information relevant to the task from a variety of information sources
- the development of creative graphic images which met practical requirements including type of production and resource constraints, in particular budgetary constraints
- effective verbal and written communication with a range of individuals/organisations
- knowledge and application of a range of 2D graphic production methods and equipment

Method and context of assessment

Assessment may take place on the job, off the job or a mix of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role paly
- case studies
- work samples or simulated workplace activities
- oral questioning/interview aimed at evaluating the processes used in developing and realising the creative concept
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources and equipment currently sued by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFIMA04A Create 3D digital animation

Unit Descriptor

This unit describes the skills and knowledge required to use digital animation techniques and industry standard software to create 3D digital animation for a range of media applications within the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Identify animation requirements	1.1 Obtain design brief and storyboard and discuss production requirements with relevant personnel 1.2 Identify all 3D animation requirements including production and technical specifications and discuss with relevant personnel 1.3 Identify and soundtrack requirements in discussion with relevant personnel
2. Identify scope of 3D animation software	2.1 Identify the range of industry standard 3D animation software and computer assisted animation techniques 2.2 Assess software compatibility with production and technical requirements and specifications 2.3 Select the appropriate software in relation to specified multimedia delivery platform 2.4 Discuss software with relevant design personnel to ensure selection will meet specified outcomes
3. Produce 3D animation	3.1 Identify and select appropriate computer 3D animation technique to meet creative and technical requirements 3.2 Construct rigid and non-rigid objects as required by the design brief and storyboard 3.3 Combine objects into a single animated steam according to creative requirements and technical specifications 3.4 Create simple and complex animated movements and static or moving backgrounds according to creative and technical requirements 3.5 Integrate animated objects or characters into static or moving backgrounds, using animation techniques available within software as required, and as appropriate according to the software 3.6 Apply time stamping techniques to animation frames 3.7 Incorporate sound where necessary, referring to soundtrack breakdown 3.8 Save and store 3D animation using appropriate and adequate file formats

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

4. Evaluate animation	4.1 Present 3D animation sequences to relevant personnel for detailed responses and recommendations 4.2 Discuss and identify and required design changes that may be needed 4.3 Incorporate design changes to complete the 3D animations and meet the recommendations 4.4 Obtain final agreement from relevant personnel for finished 3D animation sequences

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	3
Using mathematical ideas and techniques	-
Solving problems	2
Using technology	3

RANGE STATEMENT

- storyboard
- layout drawings
- director's instructions
- camera sheet
- soundtrack breakdown

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- timeline
- deadline
- budget
- resources:
  - hardware
  - software
  - personnel
- purpose
- audience
- storyboard
- script
- computer generated
- manually written
- budgets
- scripts
- production schedules
- operational/project plan
- manufacture schedules
- manufacturer's specifications/instructions
- contracts
- edit decision lists (EDLs)
- fault reports
- list of sequences with relevant shot numbers
- assembly order
- marked up scripts
- marked up transcripts

- file format
- file size
- operating system
- hardware specifications including memory size, RAM
- delivery platform
- media form

- aspects or sections of film/video production:
  - feature
  - documentary
  - short file and/or video
  - animations
  - commercials
  - live or pre-recorded performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television productions
- educational product
- game
- promotion product
- information product
- training product
- e-commerce
- a range of others

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- 3D graphic production personnel
- 3D animation production personnel
- project manager
- navigation designers
- video producer
- editing personnel
- sound/music personnel
- director
- producer
- director of photography
- other technical staff
- other specialist staff
- designers

- a wide range of programs, some current examples of which may be:
- Director
- Flash
- Soft Image

NOTE: These programs are constantly being upgraded and replaced and appropriate up-to-date programs should be selected.

- world wide web
- CD-ROM
- DVD
- Beta-cam
- video
- film

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- 3D animation and graphic design conventions, techniques/methods and equipment
- appropriate software design to create 3D animation and graphic design
- application of different animation and graphic design methods
- principles and techniques of animation production
- computers and computer operating systems
- the limiting factors of computer hardware
- the strategies to test media sequences and products
- screen principles
- basic editing principles, eg composition, framing, pacing, timing
- collecting and interpreting creative information, scripts and images, specifications and instructions
- visualisation of creative concepts
- understanding the capabilities of other collaborative personnel
- understanding the creative elements of a production
- design and drawing skills
- maintaining design integrity
- effective communication skills
- information sources and management
- copyright laws, regulations and clearance procedures

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFIMA01A Produce and manipulate digital images
- CUFMEM14A Create, manipulate digital images
- CUFMEM07A Apply principles of visual design/

communication to the development of a multimedia product

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Critical aspects of evidence

This unit of competence applies to a range of industry sectors. The focus of assessment will depend on the industry sector. Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- production of multimedia sequences incorporating 3D animation according to job specifications and the listed performance criteria
- finding and using information relevant to the task from a variety of information sources
- the development of creative 3D images which meet practical requirements including type of production and resource constraints, in particular budgetary constraints
- effective verbal and written communication with a range of individuals/organisations
- knowledge and application of a range of 3D animation and graphic production methods and equipment

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview aimed at evaluating the processes used in developing and realising the creative concept
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios and realising the creative concept

Resource requirements

Assessment requires access to a range of resources and equipment currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFIMA05A Create 3D digital models and images

Unit Descriptor

This unit describes the skills and knowledge required to use digital animation techniques and industry standard software to create 3D animation for a range of media applications within the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Identify animation requirements	1.1 Obtain design brief and storyboard and discuss production requirements with relevant personnel 1.2 Identify all 3D animation requirements including production and technical specifications and discuss with relevant personnel
2. Identify scope of 3D animation software	2.1 Identify the range of industry standard 3D animation software and computer assisted animation techniques 2.2 Assess software compatibility with production and technical requirements and specifications 2.3 Select the appropriate software in relation to specified multimedia delivery platform 2.4 Discuss software with relevant design personnel to ensure selection will meet specified outcomes
3. Product key drawings for animation	3.1 Product key drawings by the most appropriate method to reflect the animation requirements 3.2 Product sufficient quantity of key drawings to establish the required action or design and ensure that they meet the production, creative and technical requirements 3.3 Comply with any soundtrack breakdown when producing drawings 3.4 Produce key drawings within the constraints of the production and scan hard-copy drawings as required 3.5 Clearly label key drawings
4. Produce 3D animation	4.1 Import key drawings into selected 3D animation software 4.2 Combine objects into a single animated steam according to creative requirements and specifications 4.3 Create static or moving backgrounds as required and integrate animated objects into static or moving backgrounds 4.4 Use animation techniques as required and as appropriate according to the software 4.5 Incorporate sound where necessary 4.6 Save and store using appropriate file formats and file management procedures

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

5. Evaluate animation	5.1 Present animation sequences to relevant personnel for detailed responses and recommendations 5.2 Discuss and identify and required design changes that may be needed 5.3 Incorporate design changes to complete the 3D animations and meet the recommendations 5.4 Obtain final agreement from relevant personnel for finished 3D animation sequences

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	3
Using mathematical ideas and techniques	-
Solving problems	2
Using technology	3

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. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs if the candidate, accessibility of the item, and local industry and regional contexts.

- be produced in a variety of graphic styles
- involve a broad range of graphic styles and techniques

- details outlined in the storyboard and design brief
- director's instructions
- soundtrack breakdown

- registered hand drawn images
- electronic compiling
- computer-generated forms and actions

- timeline
- deadline
- budget
- resources:
  - hardware
  - software
  - personnel

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- budget
- resources
- purpose
- audience
- storyboard
- script

- motion blur
- object exaggerations

- computer generated
- manually written
- production schedules
- manufacture schedules
- manufacturer's specifications/instructions
- contracts
- edit decision lists (EDLs)
- fault reports
- list of sequences with relevant short numbers
- assembly order
- marked up scripts
- marked up transcripts

- file format
- file size
- operating system
- hardware specifications including memory size, RAM
- delivery platform
- media form

- aspects or sections of film/video production:
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorded performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television productions
- education product
- game
- promotion product
- information product
- training product
- e-commerce
- a range of others

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- project manager
- navigation designers
- producer
- instructional designers
- editing personnel
- sound editing personnel
- director
- producer
- director of photography
- graphic production personnel
- music composer
- sound effects personnel
- other technical staff
- other specialist staff
- designers

- a wide range of programs, some current examples of which may be:
- Director
- Flash
- Soft Image

NOTE: These programs are constantly being upgraded and replaced and appropriate up-to-date programs should be selected

- world wide web
- CD-ROM
- DVD
- Beta-cam
- video
- film
- title sequences
- credit sequences
- background graphics
- animation techniques such as stop motion, analogue, digital
- transitions:
  - cuts
  - mixes
  - wipes
  - keys
  - special effects
  - dissolves
  - fade in
  - fade outs
  - supers
  - subtitles

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- image libraries
- computer software image library packages
- the internet

- safety
- working copies

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- principles of 3D graphic design
- appropriate 3D software to create graphics
- computers and computer operating systems
- the limiting factors of computer hardware
- strategies to test media sequences and products
- digital animation formats
- computer assisted animation techniques
- screen principles
- basic editing principles, eg composition, framing, pacing, timing
- collecting and interpreting creative information, scripts and images
- visualisation and interpretation of creative concepts
- understanding the capabilities of other collaborative personnel
- understanding the creative elements of a production
- familiarity with current graphic image design conventions, techniques/methods and equipment
- drawing skills
- information sources and management
- effective communication skills
- copyright laws, regulations and clearance procedures

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFIMA01A Produce and manipulate digital images
- CUFMEM14A Create, manipulate digital images
- CUFMEM07A Apply principles of visual design/ communication to the development of a multimedia product
- CUFIMA04A Create 3D digital animation

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Critical aspects of evidence

This unit of competence applies to a range of industry sectors. The focus of assessment will depend on the industry sector. Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- production of two different sequences incorporating 3D animation according to job specifications and the listed performance criteria
- finding and using information relevant to the task from a variety of information sources
- the development of creative graphic images which met practical requirements including type of production and resource constraints, in particular budgetary constraints
- effective verbal and written communication with a range of individuals/organisations
- knowledge and application of a range of 3D graphic production methods and equipment

Method and context of assessment

Assessment may take place on the job, off the job or a mix of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview aimed at evaluating the processes used in developing and realising the creative concept
- projects/reports/log books
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources and equipment currently sued by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFIMA06A Develop and implement visual effects designs

Unit Descriptor

This unit describes the skills and knowledge required to interpret the creative brief, develop and implement visual effects designs for any production in the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Receive and interpret the brief for visual effects design	1.1 Liaise with the relevant personnel and interpret and confirm the visual effects requirements so that technical and script or production requirements are met 1.2 Participate in preliminary concept meetings to discuss the visual effects requirements of the production 1.3 Identify the available budget for the production 1.4 Identify the deadline for production and implementation of the visual effects design
2. Break down scripts to produce a plan for the visual effects	2.1 Produce and maintain master script or production schedule breakdown 2.2 Determine and document the volume and types of visual effects required, for the use of all relevant personnel during the design development
3. Generate and assess ideas	3.1 Generate a range of ideas for the visual effects design which respond sympathetically to the brief and provide creative solutions to all design issues 3.2 Discuss ideas and collaborate, as required, with relevant personnel to ensure contribution of ideas to the initial concept 3.3 Continuously reflect on and appraise ideas for implications on cost, technical feasibility and suitability to meet the brief
4. Conduct research and experimentation	4.1 Research the style and genre of the production 4.2 Identify any factors that might influence visual effects styles and production techniques 4.3 Undertake research into the resources necessary to fulfil the production requirements and their cost 4.4 Trial various techniques to test the suitability of their use in the final production of the visual effects 4.5 Organise research and experimentation material for ease of use of all relevant personnel during the design development process 4.6 Analyse and document research and experimentation findings for use during the development of the visual effects design 4.7 Evaluate the initial concepts generated, against the research and experimentation findings

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

5. Develop and document the visual effects design	5.1 Establish or maintain an accessible recording system for the use of all relevant personnel 5.2 Hold ongoing discussions with all relevant personnel so that additional or changed production requirements and new ideas are considered and incorporated during the development of the design 5.3 Ensure that agreement is reached with relevant personnel on a consistent interpretation of visual effects requirements 5.4 Evaluate initial concepts and select the most appropriate idea, giving consideration to: 5.4.1 the budget 5.4.2 ongoing discussions 5.4.3 research findings 5.4.4 ongoing reflection on the design brief 5.5 Develop the visual effects designs from the initial concepts ensuring: 5.5.1 consistency with the requirements of the script or production 5.5.2 that research findings are incorporated 5.5.3 that ideas are technically feasible and demonstrate awareness of parameters and resource constraints 5.5.4 that ideas demonstrate effective use of resources 5.6 Determine production materials, methods and techniques 5.7 Prepare working technical production specifications and samples/ methods 5.8 Record all designs accurately with scene/production sequence numbers
6. Communicate design ideas and make amendments	6.1 Present the visual effects design using a range of visual and technical materials, including production specifications, to the relevant personnel for acceptance 6.2 Participate in the initial and ongoing evaluation of the presented designs 6.3 Negotiate and agree to additional requirements or modifications to the design and undertake any necessary amendments 6.4 Agree to the designs and present final visual effects production specifications to all relevant personnel ensure that the visual effects meet design and other production requirements

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

7. Liaise with others to implement visual effects production	7.1 Discuss, with relevant personnel, and agree upon the future role of the designer in the realisation of the visual effects design 7.2 Liaise with relevant personnel to ensure that all visual effects production requirements are met, quality standards are adhered to and work is undertaken within item, budget and technical constraints 7.3 Participate in ongoing production meetings and evaluation of the visual effects created 7.4 Ensure that any visual effects design modifications are agreed, noted and acted upon 7.5 Inform relevant personnel of visual effects design changes 7.6 Update any required documentation and record and file according to enterprise requirements

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	3
Collecting analysing and organising information	3
Planning and organising activities	3
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	3
Using technology	2

RANGE STATEMENT

- computer database
- manual files
- library

- demonstration of computer generated imagery
- models
- sketches
- technical drawings
- colour illustrations
- storyboard
- artwork
- video/film of created effects
- matts

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- talking and listening to experts
- watching documentary films and videos
- reading newspapers, books and other references
- use of the internet
- contact with historical associations
- reading manufacturer's manuals and specifications
- testing

- computer generated
- manually written

- specialist services/personnel available for visual effects production
- reference/research materials
- draft and final visual effects designs
- performance details and specifications

- post-production facility
- editing suite
- in a studio
- on location - interior
- on location - exterior
- outside broadcast
- day
- night

- aspects or sections of film/video production
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorded performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television productions
- educational product
- game
- promotional product
- information product
- training product
- e-commerce
- a range of others

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- production designer
- visual effects department personnel
- visual effects supervisor/manager
- visual effects production personnel
- computer imaging personnel
- computer graphics personnel
- computer animation personnel
- animation personnel
- specialist manufacturers
- specialist equipment designers
- personnel with specialist expertise in visual effects productions and execution
- supervisor
- head of department
- director of photography
- director
- producer
- project manager
- technical director
- other technical staff
- other specialist staff
- designers

- computer generated visual effects
- computer generated audio effects
- models and miniatures:
  - demonstration type
  - real type
  - figures
  - landscapes
  - buildings
- road cases, boxes, crates for storage and transportation
- electronic hardware
- sculpture - human, animal, inanimate
- animatronics and creatures
- green screen
- chromakey

- detail of resources required to produce visual effects
- production schedule - timelines
- access to the location of filming

- computer generated imagery
- animation
- painting and finishing
- sculpting and other shaping methods

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- commonwealth, state and territory occupational health and safety regulations
- relevant national and international standards, guidelines and codes of practice

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- collecting and interpreting creative information, scripts and images
- understanding the creative elements of a production
- exercising a high level of creativity and ingenuity
- maintaining design integrity
- principles and techniques of design and script breakdown
- research techniques and methods
- visualisation and interpretation of creative concepts
- understanding the capabilities of other collaborative designers or contractors
- familiarity with the current range of visual effects production methods and techniques
- developing production specifications
- drawing/model making/painting or other representation techniques, either manually or with CAD
- familiarity with filming and video techniques: miniature filming techniques, lens angles, camera positions, motions control and camera speed
- knowledge of and ability to use various types of visual effect software computer programs
- accessing materials and components from a range of sources and suppliers and ascertaining their suitability
- communications, negotiation and presentation techniques
- copyright legislation and regulations
- production scheduling
- resource management including human resources
- team leading skills
- information management
- managing costing, budgeting, liaison
- relevant occupational health and safety legislation and regulations - local, state/territory and commonwealth

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFRAD02A Develop and implement designs
- CUSRAD02A Conduct research
- CUEFIN2A Manage a budget
- CUSGEN04A Participate in negotiations
- CUSGEN05A Make presentations

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Critical aspects of evidence

This unit of competence applies to a range of industry sectors. The focus of assessment will depend on the industry sector. Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- the development of creative visual effects design concepts which meet practical requirements and resource constraints, in particular budgetary constraints
- effective verbal and written communication with a range of individuals/organisations
- knowledge and application of research techniques
- presentation skills

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of theses. However, assessment if this unit would most effectively be undertaken on the job due to the specific workplace environment requirements. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview aimed at the evaluating the process used in developing and realising the creative concept
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources and equipment currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFIMA07A Create titles for screen production

Unit Descriptor

This unit describes the skills and knowledge required to interpret the creative brief and develop and create titles for productions within the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Receive and interpret the brief for the creation of titles	1.1 Liaise with relevant personnel and interpret and confirm the requirements for the titles so that technical production requirements are met 1.2 Participate in preliminary discussions to determine the title requirements of the production 1.3 Identify the available budget for the production of titles 1.4 Identify the deadline for production and implementation of the title design
2. Identify items to be included in the titles	2.1 Produce and maintain a schedule of items to be included in the titles and content of titles 2.2 Determine is there is a need to import any graphic items from other sources and source these items 2.3 Determine if there is a need to obtain copyright clearance to use any imported items and obtain clearances and approvals, as required
3. Generate and assess ideas	3.1 Generate a range of ideas for the visual effects design which respond sympathetically to the brief and provide creative solutions to all design issues 3.2 Discuss ideas and collaborate, as required, with relevant personnel to ensure contribution of ideas to the initial concept 3.3 Continuously reflect on and appraise ideas for implications on cost, technical feasibility and suitability to meet the brief

©Commonwealth of Australia, 2003

4. Produce and evaluate titles and other graphic items	4.1 Obtain, incorporate and manipulate any moving or static graphic items to be included in the titles 4.2 Modify all titles and sources items to ensure that the required visual effect is achieved 4.3 Trial various techniques and styles and produce initial compilation of titles ensuring that the style, content and creative intentions are met 4.4 Decide upon the appropriate parameters of display to meet with creative requirements and technical specifications 4.5 Evaluate the initial titles created against the design brief to ensure that they meet technical and creative requirements 4.6 Ensure that the movement of titles and other graphic items maximises the visual impact aimed for by the production 4.7 Ensure that the titles incorporate captions with all required images and sound, and are correctly synchronised with sound 4.8 Ensure that the titles are legible and appropriately spaced 4.9 Record and store all titles and other graphic images according to organisational procedures
5. Present the initial title compilation and make amendments	5.1 Present the initial title compilation created to the relevant personnel for acceptance 5.2 Participate in the initial and ongoing evaluation of the presented titles 5.3 Confirm text, spelling, punctuation and content 5.4 Negotiate and agree to additional requirements or modifications to the titles and undertake any necessary amendments 5.5 Ensure that agreement is reached with, and approval granted by, relevant personnel before proceeding with the final production of titles

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	3
Using technology	2

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

RANGE STATEMENT

- background
- logos
- images:
  - static
  - moving
  - graphic
  - photographic
  - cinematographic
- objects
- text
- captured frames

- static
- rolling
- crawling
- zip
- reveal
- effect
- animated
- faded
- dissolved
- layered

- expansion
- compression
- bounce
- rotation

- speed
- choreography of movement
- type
- focus
- colour frequency
- signal requirements

- style
- typeface
- thickness
- shading
- spacing
- colour
- spelling
- punctuation
- duration

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- feature films
- documentaries
- short films
- animated productions
- commercials
- training and promotional
- filmed events or performances
- music video
- television productions of any type (eg music, drama, comedy, variety, sport)
- live or pre-recorded television productions

- educational product
- game
- promotional product
- information product
- training product
- e-commerce
- aspects or sections or film/video production:
  - feature films
  - documentaries
  - short films
  - animated productions
  - commercials
  - training and promotional
  - filmed events or performances
  - music video
  - television productions of any type (eg music, drama, comedy, variety, sport)
  - live or pre-recorded television productions

- production designer
- supervisor
- head of department
- director of photography
- director
- producer
- other technical staff
- other specialist staff
- designers
- editing personnel
- sound personnel

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- collecting and interpreting creative information, scripts and images
- understanding the technical and creative elements of a production
- exercising a high level of creativity and ingenuity
- visualisation and interpretation of creative concepts
- maintaining design integrity
- principles of typographic design
- the effects of caption movement in one plane
- the effects of captions movement in multiple planes and axes
- communication and presentation techniques
- copyright legislation and regulations
- how to use various types of title production software computer programs

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFRAD01A Originate and develop the concept
- CUFRAD02A Develop and implement designs
- CUFMEM07A Apply principles of visual design/

communication to the development of a multimedia product

Critical aspects of evidence

This unit of competence applies to a range of industry sectors. The focus of assessment will depend on the industry sector. Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- the development of creative title designs which meet practical requirements and resource constraints
- effective verbal and written communication with a range of individuals/organisations

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of theses. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview aimed at the evaluating the process used in developing and realising the creative concept
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources and equipment currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFMEM01A Use an authoring tool to create an interactive sequence

Unit Descriptor

This unit describes the skills and knowledge require to use an authoring tool to create a discrete interactive sequence for a multimedia production within the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Plan use of authoring tool	1.1 Identify a range of multimedia authoring tools 1.2 Discuss with relevant personnel the range of authoring tools and their application to various multimedia projects 1.3 Discuss with relevant personnel the purpose, scope, storyboard and design of the multimedia project 1.4 Discuss with relevant personnel the technical requirements of the multimedia project and use of the authoring program
2. Prepare to use authoring tool	2.1 Load authoring software 2.2 Create a new file for the specified task and name appropriately 2.3 Display and use tools and features of software relevant to the authoring process
3. Use authoring tool	3.1 Import multimedia components into the authoring tool 3.2 Apply design principles to the screen design and layout 3.3 Design the screen and layout according to creative and production requirements and technical specifications 3.4 Create buttons and other interactive elements 3.5 Link all components according to storyboard 3.6 Save and store in appropriate file format
4. Check functionality of multimedia sequence	4.1 Check that all links function 4.2 Present sequence to relevant personnel 4.3 Incorporate changes as required

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	1
Using technology	3

©Commonwealth of Australia, 2003

RANGE STATEMENT

- designer
- trainer
- supervisor
- programmer
- graphic designers
- instructional designers
- other specialist staff

- images
- text
- animation
- graphics

- RTF
- GIFF
- MIDI
- Jpeg
- PICT
- TIFF
- HTML
- DIR

- a wide range of programs, some current examples of which may be:
  - Pagemill
  - Frontpage
  - Dreamweaver
  - Flash
  - Director
  - Hyper Studio

NOTE: These programs are constantly being upgraded and replaced and appropraite up-to-date progras should be selected.

- world wide web
- CD-ROM

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- aspects or sections of film/video production:
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorded performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television productions
- educational product
- game
- promotional product
- information product
- training product
- e-commerce
- a range of others

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- knowledge of computers and computer operating systems
- knowledge of scope and elements of multimedia
- skills in using appropriate authoring software, including its primary tools and features
- knowledge of digital components of multimedia, their distinguishing features and functions
- features and functions of multimedia operating systems
- the role of multimedia
- knowledge of the limiting factors of computer hardware
- knowledge of health and safety standards
- effective communication skills

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFWRT07A Write an interactive script for multimedia
- CUSRAD01A Collect and organise information

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Critical aspects of evidence

Assessment must be customised to meet the needs of the particular sector in which performance is being assessed.

Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- the development of a discrete multimedia sequence that operates as planned and provides appropriate interactivity and effective design

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview aimed at evaluating the processes used in developing and realising the creative concept
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources, equipment and software listed in the range of variables statement, currently used by the multimedia industry.

©Commonwealth of Australia, 2003

CUFMEM02A Author a multimedia product

Unit Descriptor

This unit describes the skills and knowledge required in authoring a complete multimedia product using an industry standard authoring tool for productions within the cultural industries.

Unit Sector

No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Identify multimedia elements	1.1 Obtain all relevant plans, storyboards, navigation designs and design brief 1.2 Locate all multimedia elements as required to meet creative and production requirements and technical specifications 1.3 Discuss issues of integration and formats of the multimedia elements with appropriate personnel 1.4 Save all multimedia elements in the appropriate format for inclusion, and store for each access 1.5 Determine a sequence which will become the " prototype"
2. Identify scope of authoring software	2.1 Identify the range of industry standard authoring software 2.2 Assess the software in relation to specified multimedia delivery platform 2.3 Discuss selection of software with relevant design personnel to ensure selection will meet specified outcomes 2.4 Select authoring software
3. Use authoring software	3.1 Load authoring software 3.2 Create a new file for the specified task and name appropriately 3.3 Display and use tools and features of software relevant to the authoring process
4. Create multimedia sequence	4.1 Import and assemble multimedia elements in appropriate sequence according to creative requirements 4.2 Create interactive elements according to creative and technical requirements 4.3 Check multimedia sequence conforms to navigation design 4.4 Check multimedia sequence conforms to loading specifications 4.5 Test and run multimedia sequence as a presentation to ensure the sequence meets creative, production and technical requirements 4.6 Save file formats and identify for specified purpose

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

5. Evaluate multimedia prototype	5.1 Play back final sequence with relevant personnel 5.2 Evaluate against criteria including achievement of a creative and user-friendly product 5.3 Discuss and agree on required changes 5.4 Assist if required in tests and user trials 5.5 Evaluate feedback from user trials 5.6 Confirm endorsement from relevant personnel to develop prototype into complete product
6. Transform prototype into final product	6.1 Make necessary changes as indicated by user trials 6.2 Integrate all multimedia elements as required by specifications 6.3 Make final checks to ensure all sequences conform to the navigation design 6.4 Save into specified storage systems

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	3
Collecting analysing and organising information	3
Planning and organising activities	3
Working with others and in teams	3
Using mathematical ideas and techniques	3
Solving problems	1
Using technology	3

RANGE STATEMENT

- project manager
- graphic interface designer
- navigation designer
- sound engineer
- video producer
- animator
- artist
- instructional designers
- programmers
- graphic designers

- time
- disc space
- delivery platform
- format for final product
- navigation design

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- sound
- video
- images
- text
- animation
- graphic

- RTF
- GIFF
- MIDI
- Jpeg
- PICT
- TIFF
- HTML

- wide range of programs, some current examples of which may be:
  - Pagemill
  - Frontpage
  - Dreamweaver
  - Flash
  - Director
  - Hyper Studio

NOTE: These programs are constantly being upgraded and replaced and appropriate up-to-date programs should be selected.

- world wide web
- CD-ROM
- DVD

- aspects or sections of film/video production:
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorded performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television productions
- educational product
- game
- promotional product
- information product
- training product
- e-commerce
- a range of others

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- knowledge of computers and computer operating systems
- knowledge of elements of multimedia
- knowledge of range of multimedia file formats
- knowledge of a range of multimedia delivery platforms
- skill to correctly interpret a design brief and navigation design
- knowledge in the scope and applicability of industry standard authoring software
- skills in using appropriate authoring software, including its primary tools and features
- knowledge of software used for web authoring, its application, advantages and disadvantages
- knowledge of and ability to make the types of adjustments requited when converting artwork to a range of delivery platforms
- knowledge of internet-related issues such as bandwidth, platform-independence and screen types, and how they are resolved
- knowledge of the purpose and process of validation and the role of standards and extension
- knowledge of and ability to use the hardware, software and configurations required to view completed work
- knowledge of multimedia text software and ability to create, incorporate and format text into a multimedia product
- knowledge of the principles of analogue and digital audio and contemporary digital audio formats
- knowledge of methods for saving and producing digital audio outputs and optimising file size
- knowledge of the principles of editing audio tracks
- understanding of the technical requirements for preparing a range of artwork for multimedia output which may include animation, graphics, text, video and audio
- recognition and how to use and apply different technologies for design purposes
- broad knowledge base incorporating theoretical concepts of multimedia software packages
- knowledge of sources of technical and design information

knowledge of the principles of digital video and contemporary digital video formats

- knowledge of methods for saving and producing digital video outputs
- knowledge of digital components of multimedia, their distinguishing features and functions
- electronic components of multimedia
- the scopr and role of multimedia

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- features and functions of multimedia operating systems
- knowledge of the limiting factors of computer hardware
- knowledge of health and safety standards

effective communication skills

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFMEM07A Apply principles of visual design and

communication to the development of a

multimedia product

- CUSRAD01A Collect and organise information
- ICPMM41CA Incorporate text into multimedia

presentations

- ICPMM44CA Incorporate audio into multimedia presentations
- CUFMEM13A Incorporate, design and edit digital video

Critical aspects of evidence

Assessment must be customised to meet the needs of the particular sector in which performance is being assessed.

Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- the development of an integrated and functional interactive multimedia product that conforms to the navigation design and shows creativity

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview aimed at evaluating the processes used in developing ad realising the creative concept
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources, equipment and software listed in the range of variables statement, currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFMEM03A Integrate and use scripting language in authoring a multimedia product

Unit Descriptor

This unit describes the skills required to integrate and use scripting language in authoring a multimedia product within the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Investigate mark-up and scripting options	1.1 Obtain production and technical specifications 1.2 Identify areas where mark-up and scripting languages may be required 1.3 Locate script/mark-up libraries for pre-written scripts or programming 1.4 Brief programmer on customised scripts/mark-up languages 1.5 Determine applicability of mark-up to product functionality 1.6 Present and discuss scripting options with relevant personnel to ensure compliance with technical specifications 1.7 Select mark-up language and scripting options
2. Integrate mark-up and scripting language	2.1 Apply and integrate mark-up and scripting language into authoring process 2.2 Ensure scripted elements comply with all navigation and graphic design interface considerations 2.3 Eliminate or merge redundant scripting and mark-up elements
3. Test mark-up and scripting language	3.1 Test routines to verify script (programming) elements fulfil requirements 3.2 Test that mark-up and language elements run true to requirements 3.3 Conduct tests to ensure that elements conform to required technical specifications 3.4 Test for faults and document findings 3.5 Use standard techniques to remove any faults
4. Evaluate mark-up and scripting language	4.1 Liaise with relevant personnel to evaluate process and record all decisions 4.2 Archive suitable and relevant scripts for future use

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	3
Planning and organising activities	3
Working with others and in teams	2
Using mathematical ideas and techniques	3
Solving problems	3
Using technology	3

RANGE STATEMENT

- project manager
- navigation designer
- interface designer
- graphic artists
- other specialist technical staff

- budget
- resources
- purpose
- audience
- navigation design

- file format
- file size
- operating systems
- browser specifications
- hardware specifications including memory size, RAM
- delivery platforms

- HTML
- XML
- Javascript
- PERL
- Lingo

- world wide web
- CD-ROM
- DVD

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- aspects or sections of film/video production:
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorded performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television productions
- educational product
- game
- promotional product
- information product
- training product
- e-commence
- a range of others

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- computer scripts which may be used
- evaluation of technical requirements, and more

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFMEM06A Design a multimedia product
- CUSRAD02A Conduct research
- CUFMEM02A Author a multimedia product

Critical aspects of evidence

Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- the development of skills and knowledge to integrate mark-up and scripting language into authoring multimedia products

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources and equipment listed in the range of variables statement, currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFMEM04A Test a multimedia product

Unit Descriptor

This unit refers to the ability to develop a strategy for testing and to conduct the test of a multimedia product within the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Determine the criteria for testing	1.1 Define the criteria that are to be used for testing/evaluation 1.2 Identify the points at which progress will be measured 1.3 Document and communicate them to all involved in the production
2. Determine the methods to be used in testing the product	2.1 Identify the various methods and levels of testing for multimedia 2.2 Determine the characteristics and appropriateness of methods of testing during development and on completion 2.3 Develop a plan for testing the product during development and on completion
3. Test and review the multimedia product at agreed stages	3.1 Determine the progress towards completion at the identified reporting points 3.2 Test the product at the identified reporting points 3.3 Provide feedback to staff on progress and quality 3.4 Use the testing strategy to ensure that the product satisfies its aims and creative, production and technical requirements 3.5 Document the testing process and record problems and remedial steps taken 3.6 Deal with problems and faults detected during testing in accordance with agreed project or industry practice
4. Evaluate the final product	4.1 On completion, evaluate the final product against the previously determined criteria 4.2 Identify strategies that were successful and those that let to difficulties 4.3 Document the findings to inform subsequent projects

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	3
Planning and organising activities	3
Working with others and in teams	2
Using mathematical ideas and techniques	3
Solving problems	3
Using technology	3

©Commonwealth of Australia, 2003

RANGE STATEMENT

- concept
- prototyping
- peer review
- usability testing
- platform testing
- field trials
- aggressive testing
- navigation
- graphics
- visual impact
- any other problems

- check of data
- check of data sequence
- all navigation pathways explored
- all interactivity works
- user records faithful and accurate
- works on chosen platform

- complexity of the project
- time available
- money available
- project specifications

- description of fault
- priority code
- relevant comment
- remedial action taken
- retest result
- date, tester's details

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- aspects or sections of film/video production:
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorded performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television productions
- educational product
- game
- promotional product
- information product
- training product
- e-commence
- a range of others

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- types of testing that may be used for multimedia products
- planning skills and the ability to communicate technical information
- stages at which testing should be done
- reasons for testing

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFMEM06A Design a multimedia product
- CUFMEM10A Design and create a multimedia interface
- CUFMEM11A Design the navigation for a multimedia product
- CUSADM06A Develop and implement an operational plan

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Critical aspects of evidence

Assessment must be customised to meet the needs of the particular sector in which performance is being assessed.

Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- development of a testing strategy
- the ability to analyse test results
- use of results to deal with problems and faults detected during testing

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview aimed at evaluating the processes used in developing ad realising the creative concept
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrates the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources and equipment listed in the range of variables statement, currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFMEM05A Manage multimedia assets

Unit Descriptor

This unit covers the ability to undertake all the formal procedures related to systems for documenting a multimedia project within the cultural industries including setting up the conventions for file naming, sourcing, sorting and storing material, and recording project details.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Establish systematic procedures for managing content and outputs	1.1 Set up file naming conventions ad protocols 1.2 Review filing and backup systems 1.3 Set up processes to record information required for tracking assets 1.4 Establish conventions for recording progress and locations of files and assets 1.5 Develop strategy for tracking and recording material
2. Record information on assets	2.1 Document sources of material according to established procedures 2.2 Document progress and details of a range of outputs 2.3 Maintain records of technical information on work in progress 2.4 Track assets and record information according to established system 2.5 Maintain version control and identify status of interim products, prototypes and other relevant assets
3. Plan for project completion and storage	3.1 Confirm schedule for final sign off with relevant personnel 3.2 Determine requirements for arching 3.3 Confirm procedures for finalisation of project
4. File and save project materials	4.1 File and index formal documents in accordance with agreed project or enterprise procedures 4.2 File and index scripts in accordance with agreed project or enterprise procedures 4.3 Archive artwork files and media elements in accordance with established system and industry practice 4.4 Ensure access to all materials developed by the project

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	3
Planning and organising activities	3
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	3

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

RANGE STATEMENT

- final proposal
- agreed terms and conditions
- intermediate and final sign-offs
- confidentiality agreements
- contracts with sub-contractors
- assets rights clearances

- asset details
- transfer details
- date of transfer
- version

- graphics
- videos
- audio
- animation (2D, 3D, models)
- photographs

- aspects or sections of film/video production:
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorded performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television productions
- educational product
- game
- promotional product
- information product
- training product
- e-commence
- a range of others

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- skills for organising and filing information
- project closure requirements
- accepted industry protocols for saving and filing information

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUSRAD01A Collect and organise information
- CUSADM03A Manage a project

Critical aspects of evidence

Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- ability to set up and maintain systems
- record keeping, updating and tracking
- resource management

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence

Resource requirements

Assessment requires access to a range of resources and equipment listed in the range of variables statement, currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFMEM06A Design a multimedia product

Unit Descriptor This unit describes the skills required to integrate and use scripting language in authoring a multimedia product within the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Investigate mark-up and scripting options	1.1 Obtain production and technical specifications 1.2 Identify areas where mark-up and scripting languages may be required 1.3 Locate script/mark-up libraries for pre-written scripts or programming 1.4 Brief programmer on customised scripts/mark-up languages 1.5 Determine applicability of mark-up to product functionality 1.6 Present and discuss scripting options with relevant personnel to ensure compliance with technical specifications 1.7 Select mark-up language and scripting options
2. Integrate mark-up and scripting language	2.1 Apply and integrate mark-up and scripting language into authoring process 2.2 Ensure scripted elements comply with all navigation and graphic design interface considerations 2.3 Eliminate or merge redundant scripting and mark-up elements
3. Test mark-up and scripting language	3.1 Test routines to verify script (programming) elements fulfil requirements 3.2 Test that mark-up and language elements run true to requirements 3.3 Conduct tests to ensure that elements conform to required technical specifications 3.4 Test for faults and document findings 3.5 Use standard techniques to remove any faults
4. Evaluate mark-up and scripting language	4.1 Liaise with relevant personnel to evaluate process and record all decisions 4.2 Archive suitable and relevant scripts for future use

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	3
Planning and organising activities	3
Working with others and in teams	2
Using mathematical ideas and techniques	3
Solving problems	3
Using technology	3

RANGE STATEMENT

- project manager
- navigation designer
- interface designer
- graphic artists
- other specialist technical staff

- budget
- resources
- purpose
- audience
- navigation design

- file format
- file size
- operating systems
- browser specifications
- hardware specifications including memory size, RAM
- delivery platforms

- HTML
- XML
- Javascript
- PERL
- Lingo

- world wide web
- CD-ROM
- DVD

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- aspects or sections of film/video production:
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorded performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television productions
- educational product
- game
- promotional product
- information product
- training product
- e-commence
- a range of others

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- computer scripts which may be used
- evaluation of technical requirements, and more

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFMEM06A Design a multimedia product
- CUSRAD02A Conduct research
- CUFMEM02A Author a multimedia product

Critical aspects of evidence

Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- the development of skills and knowledge to integrate mark-up and scripting language into authoring multimedia products

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources and equipment listed in the range of variables statement, currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFMEM07A Apply principles of visual design and communication to the development of a multimedia product

Unit Descriptor

This unit describes the skills and knowledge required to incorporate the principles of visual design and communication into the development of multimedia products for use within the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Receive and interpret the brief	1.1 Liaise with the relevant personnel to interpret and identify the objective and outcomes of the multimedia product, considering the application of visual design and communication techniques to ensure the creative, technical and production requirements can be met 1.2 Identify all relevant factors which may determine and affect visual design and communication concepts and application through the breakdown and interpretation of the brief and liaison with relevant personnel 1.3 Clarify target user/audience to determine the format and delivery platform of the multimedia product through discussion with relevant personnel
2. Generate and assess ideas	2.1 Generate a range of visual design and communication ideas which are technically feasible, respond to the brief and provide creative solutions to all design issues 2.2 Discuss visual design and communication ideas and collaborate, as required, with relevant personnel to ensure contribution of a range of ideas and creative solutions to the initial concept 2.3 Continuously reflect on and assess the creative ideas and solutions for implications on budget, timeline, technical feasibility and suitability to meet the brief
3. Conduct research	3.1 Research and compare techniques and tools for visual design and communication available for use in the creation of a multimedia product , exploring the characteristics and differences of digital imaging and traditional imaging 3.2 Research and compare the range of delivery platforms available for multimedia products 3.3 Explore the range of typographical and visual elements that are appropriate in the development of a multimedia product 3.4 Identify the relationship between the visual components and the hardware required 3.5 Organise research media and findings for use by all relevant personnel throughout the design development process, updating as required 3.6 Evaluate the initial discussions and design brief against the findings and discuss with relevant personnel

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

4. Select media/materials for use in visual design and communication	4.1 Identify the range of visual design and communication techniques available and present to the relevant personnel for the consideration of their ability to meet the creative, technical and production brief 4.2 Select the appropriate visual design and communication techniques which fulfil the creative, technical, and production requirements of the brief 4.3 Gather relevant materials and media, ensuring their compatibility to the creative and technical specifications of the multimedia product 4.4 Consult relevant personnel to ensure that all required media is identified and sourced and ensuring that selection is based on the understanding of the user characteristics and capabilities
5. Apply visual design and communication techniques	5.1 Using selected design techniques to develop for the structure of the product, ensuring that all elements are fully documented for future use 5.2 Consider the relevant multimedia elements required to achieve the desired outcome 5.3 Discuss technical parameters and planning with relevant personnel to achieve the most appropriate format 5.4 Determine the range of appropriate design parameters and employ these to fulfil the brief, ensuring the creative, technical and production resources are adequate to achieve the final outcome
6. Evaluate visual and communication design techniques	6.1 Review the visual design and communication techniques to assess creative solutions to design brief, appropriateness to the user/audience and technical feasibility 6.2 Discuss and confirm additional requirements or modifications to the overall design and undertake any necessary amendments

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	3
Collecting analysing and organising information	3
Planning and organising activities	3
Working with others and in teams	2
Using mathematical ideas and techniques	1
Solving problems	2
Using technology	2

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

RANGE STATEMENT

- art director
- technical director
- computer graphic designers
- programmers
- graphic designers
- heads of department
- other technical staff
- user/audience
- other specialist creative and technical staff

- drawing
- storyboard
- drawing on a tablet
- scanning drawings and photographs
- using image and background generation tools
- thumbnail sketches
- flow charts

- composition
- proportion
- balance
- framing
- colour
- line
- texture
- shape
- form
- tone
- scale
- movement
- typography:
  - point
  - tracking
  - leading
  - kerning
  - typeface
  - alignment

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- screen images:
  - graphics
  - photographs
  - drawings
  - video
  - film
- buttons
- colours
- text
- content
- style
- icons
- backgrounds
- flow chart

- world wide web
- CD-ROM

- aspects or sections of film/ video production:
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorded performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television productions
- educational product
- game
- promotional product
- information product
- training product
- e-commerce
- a range of others

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- application of principles of graphic and visual/ communication design
- characteristics of digital and traditional graphics
- familiarity with the capability of a range of tools and techniques for producing and manipulating images
- the ability to review decisions in term of user characteristics and requirements
- principles of learning and instructional approaches
- planning and research
- effective visual communication skills
- knowledge of the scope, technology and components applicable to multimedia products
- knowledge and application of a range of computer design software
- knowledge of the limiting factors of computer hardware and software
- knowledge of strategies to test instructional products
- interpreting creative information, scripts and images
- understanding the capabilities of other collaborative personnel
- understanding the creative elements of a production
- design and drawing skills
- ability to maintain design integrity
- information sources and management
- copyright laws, regulations and copyright clearance procedures

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFRAD01A Originate and develop a concept
- CUFMEM06A Design a multimedia product
- CUFMEM14A Create, manipulate, and incorporate 2D graphics

Critical aspects of evidence

Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- design/produce of an effective and creative design for a multimedia product which demonstrates the application of visual design and communication principles

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview aimed at evaluating the processes used in developing and realising the creative concept
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources and equipment listed in the range of variables statement, currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFMEM08A Apply principles of instructional design to a multimedia product

Unit Descriptor

This unit describes the skills and knowledge required for incorporating the principles of instructional design in the development of multimedia products for use within the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Receive and interpret the brief for the instructional design	1.1 Liaise with the relevant personnel to interpret and identify the objective and learning outcomes of the instructional product, ensuring the creative, technical and production requirements of the brief can be met 1.2 Identify all relevant factors which may determine and affect the instructional design through the breakdown and interpretation of the brief and liaison with relevant personnel 1.3 Clarify target user/audience to determine the format and delivery platform of the instructional product through discussion with relevant personnel
2. Generate and assess ideas	2.1 Generate a range of ideas for the instructional design which are technically feasible, respond to the brief and provide creative solutions to all design issues 2.2 Discuss ideas and collaborate, as required, with relevant personnel to ensure contribution of a range of ideas and creative solutions to the initial concept 2.3 Continuously reflect on and assess the creative ideas and solutions for implications on budget, timeline, technical feasibility, and suitability to meet the brief
3. Conduct research	3.1 Research the range of instructional approaches that reflect the requirements of the brief and may influence the overall design development 3.2 Organise research media and findings for use by all relevant personnel throughout the design development process, updating as required 3.3 Evaluate the initial discussions and design brief against the findings and discuss with relevant personnel
4. Select an instructional design model	4.1 Identify a range of instructional design models, considering their characteristics, differences and ability to meet the brief 4.2 Consult with relevant personnel to ensure that the full range of models have been identified and sourced 4.3 Select the instructional design model which fulfils the creative, technical, and production requirements of the brief 4.4 Ensure that selection is based on an understanding of the user characteristics and capabilities

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

5. Plan and compose the instructional product	5.1 Using selected instructional design techniques to compose the structure of the product, ensuring that all elements are fully documented for future use 5.2 Plan content, sequence and interactivity of learning activities to be included according to technical, creative and production requirements 5.3 Determine the relevant multimedia elements necessary to construct the product 5.4 Discuss technical parameters and planning with relevant personnel to achieve the most appropriate format 5.5 Determine the range of appropriate design parameters and employ these to fulfil the brief, ensuring the creative, technical and production resources are adequate to achieve the final outcome
6. Evaluate instructional strategies and materials	6.1 Review instructional product ta assess the application of creative solutions to the design brief, the technical feasibility and its appropriateness to the user/audience 6.2 Discuss and confirm additional requirements or modifications to the instructional design and undertake any necessary amendments

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	3
Collecting analysing and organising information	3
Planning and organising activities	3
Working with others and in teams	3
Using mathematical ideas and techniques	1
Solving problems	3
Using technology	2

RANGE STATEMENT

- enhancing the learning environment
- extending the educators ability to educate
- boosting the learners capacity
- providing experiences not available in the real world
- facilitating collaboration across cultural, social and physical boundaries
- supporting personal and authentic learning

- audience
- environment
- resource requirements
- language and developmental stage of the learner

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- degree of interactivity
- relevance to the audience (based on consultation and research)
- accommodation of various learning styles
- familiarity of the intended audience with the technology
- language and literacy levels
- balance between various components (images, text, sound, animation)
- ease of use
- level of interest and strategies for rewarding the user

- material in logical order, one sequence flowing on from another
- in order of increasing difficulty
- opportunities for repetition and review of material
- the need for interactivity
- inclusion of a variety of approaches, techniques of presenting information and activities
- structure of the information
- what happens if the person makes a mistake
- how to get help
- techniques for holdering the users attention and making the program interesting

- world wide web
- CD-ROM

- aspects or sections of film/ video production:
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorded performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television productions
- educational product
- game
- promotional product
- information product
- training product
- e-commerce
- a range of others

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- principles of learning and instructional approaches
- planning and research
- effective communication
- knowledge of the scope, technology and components applicable to multimedia products
- knowledge and application of a range of instructional software
- knowledge of the principles of instructional design and construction
- knowledge of the limiting factors of computer hardware and software
- knowledge of strategies to test instructional products
- interpreting creative information, scripts and images
- understanding the capabilities of other collaborative personnel
- understanding the creative elements of a production
- design and drawing skills
- ability to maintain design integrity
- information sources and management
- copyright laws, regulations and copyright clearance procedures

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFRAD01A Originate and develop the concept
- CUFMEM06A Design a multimedia product
- CUFGEN01A Develop and apply industry knowledge
- CUSRAD01A Collect and organise information
- CUSRAD02A Conduct research

Critical aspects of evidence

Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- ability to present and organise information for educational and learning purposes
- understanding of a range of software for on-line learning
- developed communication skills

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview aimed at evaluating the processes used in developing and realising the creative concept
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources and equipment listed in the range of variables statement, currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFMEM09A Apply principles of game design to a multimedia product

Unit Descriptor

This unit describes the skills and knowledge required to incorporate the principles of game design, including planning and designing a game, into the development of a multimedia product for use within the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Receive and interpret the brief for the game design	1.1 Liaise with the relevant personnel to interpret and confirm the game objective and outcome, ensuring the creative, technical and production requirements can be met 1.2 Identify all relevant factors which may determine and affect the game design through the breakdown and interpretation of the brief and liaison with relevant personnel 1.3 Clarify target user/audience to determine the format and delivery platform of the game through discussion with relevant personnel
2. Generate and assess ideas	2.1 Generate a range of ideas for the game design which are technically feasible, respond to the brief and provide creative solutions to all design issues 2.2 Discuss ideas and collaborate, as required, with relevant personnel to ensure contribution of a range of ideas and creative solutions to the initial concept 2.3 Continuously reflect on and assess the creative ideas and solutions for implications on budget, timeline, technical feasibility, and suitability to meet the brief
3. Conduct research	3.1 Research the range of game design styles including appropriate genre and environments that reflect the requirements of the brief and may influence the design development 3.2 Examine the range of possible goals and actions and other relevant factors in the design of a game, considering the most appropriate to fulfil the requirements of the brief 3.3 Organise research media and findings for use by all relevant personnel throughout the design development process, updating as required 3.4 Evaluate the initial discussions and design brief against the findings and discuss with relevant personnel
4. Select a game design model	4.1 Identify and present a range of game design models to the relevant personnel for the consideration of their characteristics, differences and ability to meet the brief 4.2 Consult with relevant personnel to ensure that the full range of models have been identified and sourced 4.3 Select the game design model which fulfils the creative, technical, and production requirements of the brief

©Commonwealth of Australia, 2003

5. Compose the game elements	5.1 Using design techniques to develop the structure of the game, ensuring that all elements are fully documented for future use 5.2 Discuss technical parameters and planning with relevant personnel to achieve the most appropriate composition 5.3 Determine the range of appropriate game parameters and employ these to fulfil the design brief, ensuring the creative, technical and production resources are adequate to achieve the final outcome 5.4 Determine the multimedia elements necessary to construct the game
6. Evaluate game based on design principles	6.1 Review game design for innovative approach, technical feasibility and its fulfilment of the design brief 6.2 Discuss and confirm additional requirements or modifications to the game design and undertake any necessary amendments

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	3
Collecting analysing and organising information	3
Planning and organising activities	3
Working with others and in teams	2
Using mathematical ideas and techniques	1
Solving problems	2
Using technology	2

RANGE STATEMENT

- technical specifications
- creative requirements:
- user capabilities
- user characteristics
- production requirements

- budget
- timeline
- technical resources
- human resources
- complexity of game
- delivery platform
- implementation
- user

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- plot
- setting
- virtual architecture
- characters
- conflict
- point of view
- navigation

- skill levels
- judgements
- choices
- decisions
- codes
- rules
- levels of progression
- goals
- actions
- events
- levels of difficulty
- scoring
- calculation of scoring
- user control
- user interaction
- options for single player or multi-player
- customisation

- game designers
- programmers
- technical director
- other specialist technical staff
- director
- producer
- art director
- graphic designers
- heads of department
- user/audience
- other specialist personnel

- drawing
- storyboarding
- scanning drawings and photographs
- using image and background generation tools

- colour
- line
- tone
- texture
- shape
- form

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- screen images:
  - graphics
  - photographs
  - drawings
  - video/film
  - animation
- buttons
- colours
- text
- content
- videos
- style
- icons
- backgrounds
- flow chart

- world wide web
- CD-ROM

- aspects or sections of film/ video production:
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorded performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television productions
- educational product
- game
- promotional product
- information product
- training product
- e-commerce
- a range of others

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- the ability to review decisions in term of user characteristics and requirements
- knowledge and application of a range of game software
- knowledge and application the principles of game design and construction knowledge of computers and computer operating systems
- knowledge of the limiting factors of computer hardware
- knowledge and application of strategies to test games and products
- interpreting creative information, scripts and images
- understanding the capabilities of other collaborative personnel
- understanding the creative elements of a production
- design and drawing skills
- ability to maintain design integrity
- knowledge of screen principles
- knowledge of basic editing principles, eg composition, framing, pacing, timing
- information sources and management
- effective communication skills
- copyright laws, regulations and copyright clearance procedures

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFRAD01A Originate and develop the concept
- CUFMEM06A Design a multimedia product
- CUFMEM14A Create, manipulate, and incorporate 2D graphics
- CUSRAD02A Conduct research

Critical aspects of evidence

Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- design/production and planning of game design for a multimedia product which demonstrates the application of communication principles

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview aimed at evaluating the processes used in developing and realising the creative concept
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources and equipment listed in the range of variables statement, currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFMEM10A Design and create a multimedia interface

Unit Descriptor

This unit describes the skills and knowledge to design and create the graphical user interface (GUI) for a multimedia product within the cultural industries..

Unit Sector

No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Plan an interface design	1.1 Obtain and study the project brief, navigation plan and technical specifications for a multimedia product 1.2 Discuss the concept and specifications with relevant personnel to identify the design concept or metaphor 1.3 Identify the budget, technical and resource constraints to ensure that all requirements are considered during the design phase 1.4 Clarify the client and user/audience needs in order to identify the format of the interface to be used
2. Develop the interface	2.1 Visualise the concept and develop preliminary sketches 2.2 Develop and present a series of roughs to relevant personnel and discuss the various merits for selection 2.3 Continuously evaluate new ideas and incorporate them as appropriate 2.4 Develop a final detailed sketch taking into consideration all ideas generated 2.5 Gain approval from relevant personnel to ensure that the interface meets all requirements
3. Create the interface	3.1 Use appropriate industry standard software to create screen design, applying visual design principles to all screen elements 3.2 Ensure all elements, screens, transitions, sequences, pages and buttons are integrated to conform to the basic design concept or metaphor 3.3 Ensure all elements conform to the specified technical requirements 3.4 Develop a prototype version of the interface and experiment to ensure its utility
4. Evaluate the interface	4.1 Present, discuss and evaluate the interface design prototype to relevant personnel, obtaining and noting detailed response, comments and any required changes 4.2 Incorporate design changes to complete interface design 4.3 Obtain final agreement from relevant personnel for finished design to ensure that the design brief has been achieved

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	1
Collecting analysing and organising information	2
Planning and organising activities	3
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	1
Using technology	3

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. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs if the candidate, accessibility of the item, and local industry and regional contexts.

- budget
- resources
- metaphor
- purpose
- audience
- navigation design
- multimedia elements

- file format
- file size
- operating system
- delivery platform

- project manager
- navigation designers
- sound engineer
- video producer
- animators
- artists
- instructional designers
- programmers
- graphic designers
- technical staff
- other specialist staff

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- educational product
- game
- promotional product
- information product
- training product

- a wide range of software, some current examples of which may be:
  - Photoshop
  - Illustrator
  - Coral Draw
  - Fireworks
  - Studio Max
  - Bryce
  - Freehand

NOTE: These programs are constantly being upgraded and replaced and appropriate up to date programs should be selected.

- world wide web
- CD-ROM

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- ability to interpret a brief
- ability to follow a navigation design
- drawing skills
- understanding of visual design principles
- knowledge of appropriate 2D and 3D software to produce interface design
- understanding of cultural context of multimedia product use
- effective communication skills
- knowledge of strategies to test usability

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUSGEN01A Use and adapt to new technology
- CUFMEM06A Design a multimedia project
- CUFWRT07A Write an interactive sequence for multimedia
- CUSRAD02A Conduct research

Critical aspects of evidence

Assessment must be customised to meet the needs of the context in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- the development and evaluation of a graphic interface design for a multimedia product. The GUI should be user friendly, efficient, original and creative

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview aimed at evaluating the processes used in developing and realising the creative concept
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources, equipment and software listed in the range of variables statement, currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFMEM11A Design the navigation for a multimedia product

Unit Descriptor

This unit describes the skills and knowledge required to design the navigation for a multimedia product.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Plan navigation	1.1 Discuss the concept with relevant personnel/client to ensure that the design brief is fully understood 1.2 Identify technical parameters of the product including its delivery platform 1.3 Identify the audience/user to ensure that all navigation requirements can be incorporated into the design 1.4 Identify the multimedia elements to be integrated into the product 1.5 Conduct necessary research to ensure that the script is fully scoped and contains all necessary contents
2. Develop navigation	2.1 Sketch overall product architecture and ensure that linkages are shown between the multimedia elements which identify all non-linear pathways 2.2 Ensure that user interactivity functions are clearly shown 2.3 Experiment with and determine the search functions to ensure that the navigation method is workable 2.4 Sketch a draft storyboard or flow chart for each sequence 2.5 Present navigation drafts to relevant personnel for comment to ensure that all appropriate ideas for navigation are generated 2.6 Review all suggestions against various merits and incorporate suggestions into the final design
3. Construct navigation	3.1 Draw freehand or use appropriate software to present navigation map/plan, storyboard or flow chart 3.2 Detail all necessary navigation specifications and functions so that documentation can be referred to throughout the development phase 3.3 Show frames, forms, tables and other structural elements where necessary 3.4 Show all linkages to multimedia elements activated by buttons and other interactive 'hotspots' 3.5 Ensure intuitive and logical flow for each non-linear sequence 3.6 Ensure appropriate and logical exit points 3.7 Develop templates where necessary for integration of specific text and graphic elements

©Commonwealth of Australia, 2003

4. Evaluate navigation	4.1 Present the navigation design to relevant personnel 4.2 Discuss with relevant personnel strategies to evaluate the navigation design 4.3 Obtain detailed response and opinions from legitimate sources 4.4 Incorporate design changes to complete navigation design 4.5 Obtain final agreement from relevant personnel for finished design

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	3
Collecting analysing and organising information	3
Planning and organising activities	3
Working with others and in teams	2
Using mathematical ideas and techniques	1
Solving problems	2
Using technology	3

RANGE STATEMENT

- budget
- resources
- metaphor
- purpose
- audience
- multimedia elements
- script

- file format
- file size
- operating system
- delivery platform

- project manager
- sound engineer
- video producer
- animators
- artists
- instructional designers
- programmers
- graphic designers
- technical staff
- other specialist staff

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- educational product
- game
- promotional product
- information product
- training product

- a wide range of software, some current examples of which may be:
  - Story Vision
  - Story Space
  - Powerpoint

NOTE: These programs are constantly being upgraded and replaced and appropriate up to date programs should be selected.

- world wide web
- CD-ROM

- characters
- buttons
- labels
- environments
- props
- headings
- menus

- aspects or sections of film/ video production:
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorded performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television productions
- educational product
- game
- promotional product
- information product
- training product
- e-commerce
- a range of others

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- ability to interpret a brief
- drawing skills
- knowledge of the limitations and capacities of various delivery platforms.
- knowledge of appropriate software to draw storyboard or flow chart
- understanding of cultural context of multimedia product use
- effective communication skills
- knowledge of strategies to test usability

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFMEM06A Design a multimedia product
- CUFWRT07A Write an interactive sequence for multimedia
- CUSRAD01A Collect and organise information
- CUFMEM08A Apply principles of instructional design to media project

Critical aspects of evidence

This unit of competence applies to a range of outcomes and the focus of assessment will depend on the outcome required.

Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- the development of a navigation design for a multimedia product that is effective and achieves the specified outcome

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview aimed at evaluating the processes used in developing and realising the creative concept
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources and equipment listed in the range of variables statement, currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFMEM12A Update web pages

Unit Descriptor

This unit describes the skills required to update the information on a website within the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Check information for relevance and currency	1.1 Confirm frequency of site upgrades with relevant personnel 1.2 Obtain revised and additional content material in electronic form from client 1.3 Confirm with relevant personnel the age limit of links that should be retained or deleted 1.4 Confirm with relevant personnel other revisions if required
2. Check links and navigation	2.1 Select appropriate link-checking software, run software to test links and check currency of existing links 2.2 Save report document according to technical and organisational requirements
3. Edit information as required	3.1 Check broken or failed links to determine site closure or new site addresses 3.2 Delete closed links and re-establish new site links if available 3.3 Check internal page links and rectify as required 3.4 Delete old links as required 3.5 Insert and edit content material as required 3.6 Make heading, typographical and image revisions as required 3.7 Insert additional pages as required, ensuring the links are made correctly within the site structure 3.8 Advise relevant personnel if new buttons, interface or navigation design are required to incorporate additional materials
4. Test and confirm changes	4.1 Check all links are valid before requesting that client checks all content changes and confirms that they are valid 4.2 Provide client with a full report of all changes made

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

- supervisor
- web manager
- programmers and technical support people
- clients
- other specialist creative and administrative staff as appropriate

- heading replacements
- typographical errors
- image replacements or additions

- a wide range of programs, some current examples of which may be:
  - Eudora (accessing the world wide web)
  - Netscape (assessing the world wide web)
  - Authorware
  - Dreamweaver
  - Attain
  - WebCT

Note: These programs are constantly being upgraded and replaced and appropriate up-to-date programs should be selected.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- ISDN
- PPP
- TCP/IP
- URL
- Java
- JavaScript
- HTML
- download
- world wide web
- cookies
- zip files

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- knowledge of how to initiate and conclude an internet connection
- knowledge of appropriate software
- knowledge of appropriate uses of difference internet protocols and data types (world wide web, email, etc)
- knowledge of privacy and security measures related to on-line tasks
- knowledge of information services

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUSRAD01A Collect and organise information
- ICPMM65DA Create web pages with multimedia
- CUFMEM06A Design a multimedia product

Critical aspects of evidence

This unit of competence applies to the multimedia sector and a range of other interested areas. Assessment must be customised to meet the needs of the particular workplace in which performance is being assessed. Assessment should only address those circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- the ability to add to or revise information on web pages and check the accuracy of the information, the links and document the process

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Method and context of assessment

Assessment of this unit of competence will usually include observation of real or simulated work processes and procedures but may include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence

Resource requirements

Assessment requires access to a range of resources and equipment currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUFMEM13A Incorporate, design and edit digital video

Unit Descriptor

This unit describes the skills and knowledge required in authoring a complete multimedia product using an industry standard authoring tool for productions within the cultural industries.

Unit Sector

No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Identify multimedia elements	1.1 Obtain all relevant plans, storyboards, navigation designs and design brief 1.2 Locate all multimedia elements as required to meet creative and production requirements and technical specifications 1.3 Discuss issues of integration and formats of the multimedia elements with appropriate personnel 1.4 Save all multimedia elements in the appropriate format for inclusion, and store for each access 1.5 Determine a sequence which will become the " prototype"
2. Identify scope of authoring software	2.1 Identify the range of industry standard authoring software 2.2 Assess the software in relation to specified multimedia delivery platform 2.3 Discuss selection of software with relevant design personnel to ensure selection will meet specified outcomes 2.4 Select authoring software
3. Use authoring software	3.1 Load authoring software 3.2 Create a new file for the specified task and name appropriately 3.3 Display and use tools and features of software relevant to the authoring process
4. Create multimedia sequence	4.1 Import and assemble multimedia elements in appropriate sequence according to creative requirements 4.2 Create interactive elements according to creative and technical requirements 4.3 Check multimedia sequence conforms to navigation design 4.4 Check multimedia sequence conforms to loading specifications 4.5 Test and run multimedia sequence as a presentation to ensure the sequence meets creative, production and technical requirements 4.6 Save file formats and identify for specified purpose

©Commonwealth of Australia, 2003

5. Evaluate multimedia prototype	5.1 Play back final sequence with relevant personnel 5.2 Evaluate against criteria including achievement of a creative and user-friendly product 5.3 Discuss and agree on required changes 5.4 Assist if required in tests and user trials 5.5 Evaluate feedback from user trials 5.6 Confirm endorsement from relevant personnel to develop prototype into complete product
6. Transform prototype into final product	6.1 Make necessary changes as indicated by user trials 6.2 Integrate all multimedia elements as required by specifications 6.3 Make final checks to ensure all sequences conform to the navigation design 6.4 Save into specified storage systems

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	3
Collecting analysing and organising information	3
Planning and organising activities	3
Working with others and in teams	3
Using mathematical ideas and techniques	3
Solving problems	1
Using technology	3

RANGE STATEMENT

- project manager
- graphic interface designer
- navigation designer
- sound engineer
- video producer
- animator
- artist
- instructional designers
- programmers
- graphic designers

- time
- disc space
- delivery platform
- format for final product
- navigation design

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- sound
- video
- images
- text
- animation
- graphic

- RTF
- GIFF
- MIDI
- Jpeg
- PICT
- TIFF
- HTML

- wide range of programs, some current examples of which may be:
  - Pagemill
  - Frontpage
  - Dreamweaver
  - Flash
  - Director
  - Hyper Studio

NOTE: These programs are constantly being upgraded and replaced and appropriate up-to-date programs should be selected.

- world wide web
- CD-ROM
- DVD

- aspects or sections of film/video production:
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorded performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television productions
- educational product
- game
- promotional product
- information product
- training product
- e-commerce
- a range of others

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- knowledge of computers and computer operating systems
- knowledge of elements of multimedia
- knowledge of range of multimedia file formats
- knowledge of a range of multimedia delivery platforms
- skill to correctly interpret a design brief and navigation design
- knowledge in the scope and applicability of industry standard authoring software
- skills in using appropriate authoring software, including its primary tools and features
- knowledge of software used for web authoring, its application, advantages and disadvantages
- knowledge of and ability to make the types of adjustments requited when converting artwork to a range of delivery platforms
- knowledge of internet-related issues such as bandwidth, platform-independence and screen types, and how they are resolved
- knowledge of the purpose and process of validation and the role of standards and extension
- knowledge of and ability to use the hardware, software and configurations required to view completed work
- knowledge of multimedia text software and ability to create, incorporate and format text into a multimedia product
- knowledge of the principles of analogue and digital audio and contemporary digital audio formats
- knowledge of methods for saving and producing digital audio outputs and optimising file size
- knowledge of the principles of editing audio tracks
- understanding of the technical requirements for preparing a range of artwork for multimedia output which may include animation, graphics, text, video and audio
- recognition and how to use and apply different technologies for design purposes
- broad knowledge base incorporating theoretical concepts of multimedia software packages
- knowledge of sources of technical and design information

knowledge of the principles of digital video and contemporary digital video formats

- knowledge of methods for saving and producing digital video outputs
- knowledge of digital components of multimedia, their distinguishing features and functions
- electronic components of multimedia
- the scopr and role of multimedia

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- features and functions of multimedia operating systems
- knowledge of the limiting factors of computer hardware
- knowledge of health and safety standards

effective communication skills

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFMEM07A Apply principles of visual design and

communication to the development of a

multimedia product

- CUSRAD01A Collect and organise information
- ICPMM41CA Incorporate text into multimedia

presentations

- ICPMM44CA Incorporate audio into multimedia presentations
- CUFMEM13A Incorporate, design and edit digital video

Critical aspects of evidence

Assessment must be customised to meet the needs of the particular sector in which performance is being assessed.

Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- the development of an integrated and functional interactive multimedia product that conforms to the navigation design and shows creativity

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview aimed at evaluating the processes used in developing ad realising the creative concept
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources, equipment and software listed in the range of variables statement, currently used by the multimedia industry.

©Commonwealth of Australia, 2003

CUFMEM14A Create, manipulate and incorporate 2D graphics

Unit Descriptor

This unit describes the skills and knowledge required to create, edit and incorporate 2D graphics into multimedia products for use within the cultural industries. It is equivalent to Incorporate 2D graphics into multimedia presentations in the printing and graphic arts industries training package.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Work with digital imaging	1.1 Use the correct terminology for digital imaging within a specified context 1.2 Use a range of graphic file formats, file management and transfer systems for storing, arriving, importing, exporting and transferring digital images as electronic files 1.3 Identify current Vector and bitmapped graphic editing software programs and the properties of Vector and bitmapped images 1.4 Convert bitmapped to Vector and vice versa as required for particular jobs 1.5 Operate scanning devices to convert contiguous tone or line image to digitised data with attention to tonal detail, half tones and image correction
2. Use 2D multimedia graphics software	2.1 Assess and select appropriate 2D software for the required medium 2.2 Use selected graphics software and all tools and features of the program 2.3 Edit and manipulate graphics using all tools and features of the program 2.4 Save and retrieve graphics using the designated file formats

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

3. Create 2D multimedia graphic designs	3.1 Assess design brief for the appropriate digital imaging solution 3.2 Create graphics applying principles of visual design using the designated software to product bitmapped or Vector graphics and digital artwork 3.3 Use 2D digital artwork techniques including the correct use of painting, editing and pallets 3.4 Create digital collages and montages by adjusting image mode and resolution, modifying image using filters and selecting the correct colour mode for output 3.5 Edit, enhance and amend graphic designs using accurate selection techniques, special effects, cropping and resizing of images, and save using the designated software 3.6 Evaluate images for creative, dramatic and technical quality, and file size, and suitability to meet the brief 3.7 Integrate elements of visual design into a designated multimedia sequence 3.8 Test and run graphics as part of a multimedia presentation 3.9 Present designs in the appropriate format

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	3
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	3

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

RANGE STATEMENT

- aspects or sections of film/video production:
  - feature
  - documentary
  - short film and/or video
  - animations
  - commercials
  - live or pre-recorder performances
  - music video
  - television production of any type (music, drama, comedy, variety, sport)
  - live or pre-recorded television production
- educational product
- game
- promotional product
- information product
- training product
- e-commerce
- a range of others

- a wide range of programs are currently available

- title sequences
- credit sequences
- background graphics
- transitions such as cuts, mixes, wipes, keys, special effects, dissolves, fade ins, fade outs, supers, subtitles

- image libraries
- computer software image library packages
- the internet

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in the following areas:

- understand the creative elements of a production
- application of different graphic design methods
- graphic design conventions
- graphic and stylistic language and conventions
- collecting and interpreting creative information, scripts (text) and images
- visualisation and interpreting creative information, scripts (text) and images
- visualisation and interpretation of creative concepts
- information management
- copyright laws, regulations and clearance procedures
- the principles of digital imaging
- file formats, file management and transfer systems
- principles of 2D multimedia graphic design
- presentation techniques

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- CUFMEM07A Apply principles of visual design/

communication to the development of a multimedia project

- CUFIMA01A Produce and manipulate digital images

Critical aspects of evidence

This unit of competence applies to a range of industry sectors. The focus of assessment will depend on the industry sector. Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- produce two different multimedia sequences incorporating 2D graphics according the job specifications and the listed performance criteria
- knowledge and application of a range of 2D graphic production methods and equipment

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of theses. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview aimed at the evaluating the process used in developing and realising the creative concept
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence which demonstrate the processes used in developing and realising the creative concept

Resource requirements

Assessment requires access to a range of resources and equipment currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

ICAIT1097A Install and configure a network

Unit Descriptor

This unit describes the skills and knowledge required to carry out installation of network hardware and software and initial configuration within the cultural industries.

This unit is imported from the information technology industry training package, with necessary changes made to the range of variables and evidence guide statements ensuring its applicability to the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Confirm client requirements and network equipment	1.1 Review existing network design documentation to ensure it is current and complete 1.2 Identify network components, both hardware and software, that need to be installed 1.3 Confirm equipment specifications and ensure availability of all components
2. Install hardware	2.1 Confirm installation of cabling and associated components, ensuring it is in accordance with industry standards and building requirements for type of cable and bandwidth 2.2 Gain security clearance and time slot approval from authorised personnel 2.3 Install server hardware in accordance with organisational and industry standards 2.4 Install work station and other client hardware in accordance with organisational and industry standards 2.5 Install any other hardware components such as printers, routers, hubs, gateways etc in accordance with organisational and industry standards
3. Install software	3.1 Install server software in accordance with organisational or industry standards 3.2 Configure server software in accordance with organisational policies and procedures 3.3 Install work station software in accordance with organisational or industry standards 3.4 Configure work station software in accordance with organisational policies and procedures
4. Configure and test network	4.1 Install and configure any other software required for the network to operate 4.2 Test hardware installation to ensure that all components are functioning as expected 4.3 Test network to ensure it is functioning according to specification

©Commonwealth of Australia, 2003

5. Document and sign off	5.1 Complete hardware and asset recording documentation in line with organisational requirements 5.2 Document PC boot up procedures and configuration 5.3 Gain client and/or higher authority sign off

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

- large and small LANs, national WANs, the use of the PSTN for dial up modems only, private lines, digital, data and voice, etc. This does not include international WANs

- simple addition or upgrade
- major new installation

- UTP
- STP
- fibre

- audit trails
- naming standards
- version control
- inventory recording requirements

- micro platforms
- mainframe platforms
- mid-range platforms
- routers
- printers

- most likely to be packaged software but can be supplied from many varying vendors and can include full suites to individual components

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- based upon formal, well documented methodologies or non-existent.

For training delivery purposes, best practice examples from industry will be used.

- as per company, statutory and vendor requirements. Ergonomic and environmental factors must be considered during the demonstration of this competency

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- knowledge of current industry accepted hardware and software products with broad knowledge of general features and capabilities
- broad knowledge of the client business domain, business function and organisation, for example when confirming client requirements and network equipment
- networking technologies with broad knowledge of general features and capabilities incorporating substantial depth in some areas
- broad knowledge of occupational health and safety requirements in relation to work safety, environmental factors and ergonomic considerations
- broad knowledge of transmission technologies and protocols
- plain English literacy and communication skills in relation to dealing with clients and team members, for example when PC boot up procedures and configuration are documented
- report writing skills for business, requiring analysis and evaluation of information in a defined range of areas, for example when hardware and asset recording documentation is completed in line with organisational requirements
- research skills for identifying, analysing and evaluating broad features of a particular business domain and best practice in networking technologies, for example when network components, both hardware and software that are required to be installed, are identified
- project planning skills in relation to set benchmarks and identified scope
- problem solving skills for a defined range of predictable situations

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Linkages to other units

This unit may be assessed with a range of other units relating to design and production of a multimedia product. For example:

- CUSRAD01A Collect and organise information
- ICAITU126A Use advanced features of computer applications
- ICAITU127A Operate system software

Critical aspects of evidence

This unit of competence applies to a range of industry sectors. The focus of assessment will depend on the industry sector. Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- the ability to network technologies
- understanding of how hardware and software is installed and configured
- the ability to install network hardware and software
- the ability to configure the network

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence

Resource requirements

Assessment requires access to a range of resources and equipment currently used by the multimedia industry.

©Commonwealth of Australia, 2003

ICAITAD058A Apply skills in object oriented design

Unit Descriptor This unit describes the cyclic process of iteration from identification of CIRTs (Class, Instance, Role, Type) to the final complete OO model of the application

Unit Sector Analyse and Design

ELEMENT	PERFORMANCE CRITERIA
1. Derive the high level design from specification	1.1 Design elaboration is systematic in approach to ensure coherence and cohesion of design 1.2 The design model is aligned to the conceptual model and meets time to develop, cost constraints, efficiency and performance requirements 1.3 Abstract candidates are identified and object components developed
2. Refine the design	2.1 Detailed investigation of behavioural and state modes of classes is carried out 2.2 Refinement of the design is continued with each iteration 2.3 Base classes are identified by stripping out commonality and inheritance scenarios are developed 2.4 Generic class library items which may be used in place of in-house developed classes are identified
3. Validate the design	3.1 Service criteria and autonomy of classes are reviewed and confirmed 3.2 Interface and communication requirements between classes are determined 3.3 Manager modules and driver programs are prepared to exercise classes 3.4 Documentation and access issues code for public functions are developed

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

©Commonwealth of Australia, 2003

RANGE STATEMENT

Security, business criticality

The level of abstraction is a factor of the number of allowed iterations and developments of further granularity

The level of use of generic libraries or frameworks is a variable of the application and the organisation

This is an issue relating to the number of iterations. As analysis proceeds, the amount of service provided by a class may increase or decrease. The class structure may be flat or deep with each class performing a large number of services, with a larger number of classes providing more specific service

Can vary from large system that will impact thousands of users in a large organisation to one used by a handful of people. Will also vary in complexity, size and operational characteristics.

Will vary from formal procedures that must be adhered to with check points and sign offs throughout development to less formal or non-existent standards.

May be a department within the organisation or a third party, and so the relation and ease of access will vary.

Will vary from the traditional Systems Development life cycle with little or no formalisation to a very well structured CASE tool.

Audit trails, naming standards, version control

As per company, statutory and vendor requirements. Ergonomic and environmental factors must be considered during the demonstration of this competency

May be based upon formal, well documented methodologies or non-existent. For training delivery purposes best practice examples from industry will be used

©Commonwealth of Australia, 2003

EVIDENCE GUIDE

Related Competency Standard	The project lifecycle and the IT methodology employed will determine which particular units of competency are relevant to this unit. Some include Project Management, Teamwork, Documentation and Build.
Critical aspects of evidence	Assessment must confirm sufficient knowledge of OO techniques and analysis skills Assessment must confirm the ability to meet technical requirements by successfully producing the required design
Interdependent assessment of units	This unit may be assessed with any of the following: ICPMM65cA, ICPMM67cA, ICAITB070A, ICAITB076B, ICAITB069A, ICAITAD049A, ICAITB060B, ICAITB065B, ICAITB068B, ICAITB075A. The interdependence of units of competency for assessment will vary with the particular project or scenario.
Underpinning knowledge	• A broad knowledge base incorporating some detailed theoretical concepts of design refinement techniques • Detailed knowledge of the implementation of design principles • A broad knowledge base incorporating some detailed theoretical concepts of various lifecycle options • A broad knowledge base incorporating some detailed theoretical concepts of methodological philosophy • A broad knowledge base incorporating some detailed theoretical concepts of design quality metrics (eg. coupling and cohesion **)**
Underpinning skills	• Domain analysis in relation to successfully producing the required design • Completion of abstractions in relation to successfully producing the required design • Refinement of inheritance hierarchies in relation to successfully producing the required design • Class naming in relation to successfully producing the required design • Abstract classes in relation to successfully producing the required design
Resources	Peers and supervisors for obtaining information on the extent and quality of the contribution made.
Consistency	Competence in this unit needs to be assessed over a period of time to ensure consistency of performance in a range of contexts

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Context

Assessment of this unit of competence will usually include observation of real or simulated work processes and procedures; quality projects, questioning on underpinning knowledge and skills

This competency can be assessed in the workplace or in a simulated environment.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

ICAITB060A Identify physical database requirements

Unit Descriptor

This unit describes the skills and knowledge required to create the physical database from the data dictionary and design specifications.

This unit is imported from the information technology industry training package, with necessary changes made to the range of variables and evidence guide statements ensuring its applicability to the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Identify database scope	1.1 Ensure architecture, client user requirements and nature of information to be loaded is confirmed against architecture and client user requirements 1.2 Evaluate DBMS options through iteration against technical specifications and client requirements 1.3 Determine database size from client requirements and technical specifications
2. Identify database requirements	2.1 Identify database files and relationships from technical specifications 2.2 Specify database dictionary from technical specifications 2.3 Develop database reports from acceptance criteria and client requirements 2.4 Iterate and align DBMS and user security to security system plan 2.5 Identify and evaluate performance/recovery/audit trail requirements

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

©Commonwealth of Australia, 2003

RANGE STATEMENT

- relationship databases
- object-relational databases
- flat file databases
- proprietary databases
- off the shelf database packages

- will vary according to project and type of database

- will vary according to data/information to be loaded

- describes detail of IT platform on which database will sit.
- components will vary from project to project and will affect considerations such as: database options, size of database, performance of database

- can vary from a system that will impact on thousands of users in a large organisation to one used by a handful of people. It will also vary in complexity, size and operational characteristics

- will vary from formal procedures that must be adhered to with check points and sign offs throughout development to less formal or non-existent standards

- describes the mix of performance versus warehousing/query requirements determined by the organisation

- organisational related

- organisational related

- organisational related

- organisation/industry related

- depend on the tools used to develop the application. A range of GUI, 'client side' database maintenance/change tools are available

- improvements to response time, simultaneous access

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- database administrator
- supplier support
- development support - database designer
- maintenance of database dictionary
- database security

- a department within the organisation or a third party and so the relation and ease of access will vary

- will vary from the traditional Systems Development life cycle with little or no formalisation to a very well structured CASE tool

- audit trails
- naming standards
- version control

- company requirements
- statutory requirements
- vendor requirements
- ergonomic factors
- environmental factors

- may be based upon formal, well documented methodologies or non-existent.

For training delivery purposes, best practice examples from industry will be used.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- broad knowledge base incorporating theoretical concepts of three or more current principles of databases, for example when identifying database scope
- current industry accepted hardware and software products with broad knowledge of general features and capabilities, and detailed knowledge in some areas, for example when identifying database scope
- broad knowledge base incorporating theoretical concepts of database design, for example when identifying database requirements
- broad general knowledge of the client business domain, for example when identifying database scope
- detailed technical knowledge of required database, for example when identifying database requirements
- design and analysis skills for identifying, analysing and evaluating a range of different solutions, for example when DBMS options are evaluated through iteration against technical specifications and client requirements
- DBMS administration skills for identifying, analysing and evaluating a range of different solutions
- data modelling skills for identifying, analysing and evaluating a range of different solutions, for example when identifying database requirements
- problem solving skills for a defined range of unpredictable situations involving participation in the development of technical solutions, for example when DBMS options are evaluated through iteration against technical specifications and client requirements

Linkages to other units

This unit may be assessed with a range of other units relating to design and production of a multimedia product. For example:

- CUSRAD01A Collect and organise information
- ICAITU126A Use advanced features of computer applications
- ICAITU127A Operate system software

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Critical aspects of evidence

This unit of competence applies to a range of industry sectors. The focus of assessment will depend on the industry sector. Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- the ability to identify technical considerations affecting the physical design of the database
- the ability to build a database which meets the client's database performance requirements

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence

Resource requirements

Assessment requires access to a range of resources and equipment currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

ICAITB061A Monitor physical database implementation

Unit Descriptor

This unit details the competency required to model and monitor database performance within the cultural industries.

This unit is imported from the information technology industry training package, with necessary changes made to the range of variables and evidence guide statements ensuring its relevance to the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Undertake DBMS modelling	1.1 Load data samples according to technical sequence 1.2 Base load conditions on prototype and iteration outcomes 1.3 Monitor performance against prototype outcomes
2. Monitor database performance	2.1 Evaluate database performance against acceptance criteria 2.2 Identify, tune and document areas needing enhancement 2.3 Modify document and document changes according to project standards 2.4 Determine readiness for data load from client acceptance criteria

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

- relationship databases
- object-relational databases
- flat file databases
- propriety databases
- off the shelf database packages

- number and naming conventions will vary according to project and type of database

©Commonwealth of Australia, 2003

- fields and definitions will vary according to data/information to be loaded

- database options
- size of database
- performance of database

- describes the mix of performance versus warehousing/query requirements determined by the organisation

- will vary from formal procedures that must be adhered to with checkpoints and sign offs throughout development to less formal or non-existent standards

- organisational related

- organisational related

- organisational related

- organisational related
- industry related

- GUI
- 'client-side' database maintenance/change tools

- improvements to response time
- simultaneous access

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- broad knowledge base incorporating theoretical concepts of three or more current principles of databases, for example when undertaking DBMS modelling
- current industry accepted hardware and software products with broad knowledge of general features and capabilities' and detailed knowledge in some areas
- broad knowledge base incorporating theoretical concepts of database and design, for example when undertaking DBMS modelling
- broad knowledge base of quality assurance practices, for example when undertaking DBMS modelling and monitoring database performance
- broad general knowledge of the client business domain, for example when monitoring database performance
- detailed technical knowledge of required database, for example when undertaking DBMS modelling and monitoring database performance
- design and analysis skills for identifying, and evaluating a range of solutions
- DBMS administration skills for identifying, analysing and evaluating a range of solutions
- data modelling skills for identifying, analysing and evaluating a range of solutions
- problem solving skills for a defined range of unpredictable involving participation in the development of technical solutions

Linkages to other units

This unit may be assessed with a range of other units relating to design and production of a multimedia product. For example:

- CUSRAD01A Collect and organise information
- ICAITU126A Use advanced features of computer applications
- ICAITU127A Operate system software
- ICAITB060A Identify physical database requirements

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Critical aspects of evidence

This unit of competence applies to a range of industry sectors. The focus of assessment will depend on the industry sector. Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- the ability to produce multimedia scripts incorporating several sequences and a range of different elements, according to job specifications and the listed performance criteria

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence

Resource requirements

Assessment requires access to a range of resources and equipment currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

ICAITB075A Use a library or pre-existing components

Unit Descriptor This unit describes the competency required to identify, evaluate and incorporate reuse components

Unit Sector Build Information Technology Solutions

ELEMENT	PERFORMANCE CRITERIA
1. Estimate potential reuse units from design program specifications	1.1 Iteration and/ or classes are reviewed to identify possible reuse units 1.2 Class libraries, data scripts, objects are reviewed for possible reuse against elicitation requirements 1.3 Domain model is reviewed against existing reuse units for relevant and viable components
2. Identify components and assess their fit	2.1 The quality of potential components is evaluated to determine reuse value 2.2 The time and cost benefits of modifying reuse components are evaluated against development costs, project time and cost constraints 2.3 Components are modified to deliver required technical and business outcomes 2.4 Modifications are clearly documented against project or reuse criteria
3. Evaluate for new gaps	3.1 Existing and modified reuse components are assessed to identify further gaps against technical and business criteria 3.2 Existing reuse components are evaluated against any further identified gaps for useability and time and cost saving
4. Link/ use components	4.1 Dependencies and associated processes are identified from technical criteria through iteration 4.2 Components are linked to related task scripts and side or exceptions scripts 4.3 The reuse of components is optimised 4.4 Components are linked to deliver relevant and viable outcomes based on technical and business requirements

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

©Commonwealth of Australia, 2003

RANGE STATEMENT

May include but are not limited to code, design patterns, specifications or requirements

Documentation for existing components can and will vary greatly affecting certainty and time considerations

The existence and/ or quality of a reuse library will vary greatly from non-existent to badly catalogued to well documented

Will vary according to preferred project requirements

Domain modelling, completion of abstractions, contract specification

Can vary from large system that will impact thousands of users in a large organisation to one used by a handful of people. Will also vary in complexity, size and operational characteristics.

Will vary from formal procedures that must be adhered to with check points and sign offs throughout development to less formal or non-existent standards.

Will vary from the traditional Systems Development life cycle with little or no formalisation to a very well structured CASE tool.

Audit trails, naming standards, version control

As per company, statutory and vendor requirements. Ergonomic and environmental factors must be considered during the demonstration of this competency

May be based upon formal, well documented methodologies or non-existent. For training delivery purposes best practice examples from industry will be used

Will vary from building everything to acquiring packages with possible modification. May require additional hardware and network equipment as well as software.

Some organisations may be quality certified and have well documented standards for addressing quality while others will not.

©Commonwealth of Australia, 2003

Will vary depending upon whether the organisation uses a formal method for development. In some sites there will be no guidelines to follow.

May vary depending upon the development method or language used

EVIDENCE GUIDE

Related Competency Standard

The project lifecycle and the IT methodology employed will determine which particular units of competency are relevant to this unit. Some include the Analysis and Design, Project Management, Test, Implement, the teamwork functional areas and documentation

Critical aspects of evidence

Assessment must confirm sufficient knowledge of effective and efficient opportunities for reuse

Assessment must confirm the ability to meet client requirements by efficiently identifying, modifying and integrating components for reuse

Interdependent assessment of units

This unit may be assessed with any of the following: ICPMM65cA, ICPMM67cA, ICAITB070B, ICAITAD058A, ICAITAD049A, ICAITAD057A. The interdependence of units of competency for assessment will vary with the particular project or scenario

Underpinning knowledge

- A broad knowledge base incorporating some theoretical concepts of current industry development and design methodologies
- A broad knowledge base incorporating some theoretical concepts of families, libraries content and structure
- A broad knowledge base incorporating some theoretical concepts of patterns, frameworks and idioms
- A broad knowledge base incorporating some theoretical concepts of frameworks
- A broad knowledge base incorporating some theoretical concepts of metrics collection
- A broad knowledge base of contract specifications
- A broad knowledge base incorporating some theoretical concepts of domain modelling
- A broad knowledge base incorporating some theoretical concepts of genericity specification
- A broad knowledge base incorporating some theoretical concepts of repository tools

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

Underpinning skills

- Domain analysis skills for identifying, analysing and evaluating a range of different solutions
- Completion of abstraction for a range of different solutions
- Refinement of inheritance hierarchies for a range of different solutions
- Indexing skills for a range of different solutions
- Class naming skills for a range of different solutions
- Abstract classes for a range of different solutions
- Research skills for identifying, analysing and evaluating broad features of current reuse issues and best practice in component reuse

Resources

This competency can be assessed in the workplace or in a simulated environment. Questions may be directed to peers and supervisors for obtaining information on the extent and quality of the contribution made.

Consistency

Competence in this unit needs to be assessed using formative assessment to ensure consistency of performance in a range of contexts

Context

Assessment of this unit of competence will usually include observation of real or simulated work processes and procedures; quality projects, questioning on underpinning knowledge and skills. The questioning of team members will provide valuable input to the assessment

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

ICAITD128A Create user and technical documentation

Unit Descriptor Define and document reference material to use, support and maintain system

Unit Sector Documentation

ELEMENT	PERFORMANCE CRITERIA
1. Determine documentation standards and requirements	1.1 Standards for documentation are determined from overall project documentation standards and industry standards 1.2 Documentation types and design templates are identified and agreed with higher authorities 1.3 Authors are informed of the standards and any technical resources/materials/manuals to support documentation
2. Produce technical software documentation	2.1 Technical documentation is recorded in line with project documentation standards 2.2 All supporting technical information such as the architecture and detailed project plan are clearly and accurately referenced 2.3 Modification and maintenance requirements are clearly documented to documentation standards 2.4 Documentation is understandable to programmers as a stand alone document
3. Create client user documentation	3.1 Developed software's operational procedures are clearly and coherently documented in non-technical jargon 3.2 Documentation is aligned with client requirements to support ease of use 3.3 Documentation is written in clear, coherent and concise plain English and logically sequenced and cross referenced
4. Obtain endorsement/sign-off	4.1 Developed documentation is reviewed by target audience 4.2 Changes are made according to target audience feedback 4.3 Documentation is submitted for higher authority sign off
5. Underpinning knowledge Current business practices in relation to preparing reports Detailed knowledge of documentation practices and standards Broad knowledge base of quality assurance practices Broa	**Underpinning skills** • Problem solving skills for a defined range of predictable problems • Report writing skills for business requiring depth in some areas, analysis and evaluation of information in a defined range of areas • Plain English literacy and communication skills in relation to analysis, evaluation and presentation of information • Technical writing skills for business requiring depth in some areas, analysis and evaluation of information in a defined range of areas • Comprehension skills relevant to technical materials

©Commonwealth of Australia, 2003

6. Site content requirements are determined	6.1 Site purpose and functionality is confirmed with reference to client specification 6.2 Customer information needs are identified with reference to audience, site functionality and client requirements 6.3 Content channels and format requirements are identified as required 6.4 Templates and style guides are identified where relevant 6.5 Relevant content is identified and analysed with reference to audience needs, maintenance requirements, information architecture and site design and functionality 6.6 Alterations to site design are negotiated as required by identified content requirements
7. Site content is written	7.1 Content is generated in accordance with requirements 7.2 Content is able to be scanned and information readily digestible 7.3 Content is edited with reference to audience needs, site functionality and client requirements
8. Upload content	8.1 Log into server site using either administrative or anonymous FTP protocol 8.2 Transfer software is launched and destination directory navigated to either graphically or through command line 8.3 Files are stored and ordered according user needs and file extensions 8.4 Contention is closed

KEY COMPETENCIES

Key Competencies are competencies essential for effective participation in the emerging patterns of work and work organisation. They focus on the capacity to apply knowledge and skills in an integrated way in work situations. (Mayer definition)

There are seven key competencies that have been formally identified. The Key Competencies are generic in that they apply to work generally, rather than being specific to work in particular occupations or industries.

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

RANGE STATEMENT

RANGE OF VARIABLES

Can include, but are not restricted to policy relating to sign-off, storage, distribution, revision

Standards can include ISO/AS standards, organisational standards, project standards

Can include: tools for documenting eg. word processing packages, desktop publishing packages.

Can include, but are not restricted to: technical manuals, user manuals, policy and procedure manuals, training materials in either hard copy, electronic copy, on-line help, Internet/intranet.

Style of templates will vary according to type of documentation and tools used to undertake documentation

May be a department within the organisation or a third party and so the relation and ease of access will vary.

Will vary from the traditional Systems Development life cycle with little or no formalisation to a very well structured CASE tool.

Audit trails, naming standards, version control

As per company, statutory and vendor requirements. Ergonomic and environmental factors must be considered during the demonstration of this competency

May be based upon formal, well documented methodologies or non-existent. For training delivery purposes best practice examples from industry will be used

EVIDENCE GUIDE

Related Competency Standard

The project lifecycle and the IT methodology employed will determine which particular units of competency are relevant to this unit; however, documentation is relevant to all functional areas.

Critical aspects of evidence

Assessment must confirm the ability to clearly and coherently document client and technical information in a manner which is accepted by the target audience as applicable and useable

©Commonwealth of Australia, 2003

Interdependent assessment of units

The interdependence of units of competency for assessment will vary with the particular project or scenario. This unit has importance to a range of IT services and should therefore be assessed in a holistic manner with the technical/ support units.

Underpinning knowledge

- Current business practices in relation to preparing reports
- Detailed knowledge of documentation practices and standards
- Broad knowledge base of quality assurance practices
- Broad general knowledge of the client business domain
- General OH&S principles and responsibilities
- Current industry accepted hardware and software products with broad knowledge of general features and capabilities
- Broad knowledge base of vendor product directions

Underpinning skills

- Problem solving skills for a defined range of predictable problems
- Report writing skills for business requiring depth in some areas, analysis and evaluation of information in a defined range of areas
- Plain English literacy and communication skills in relation to analysis, evaluation and presentation of information
- Technical writing skills for business requiring depth in some areas, analysis and evaluation of information in a defined range of areas
- Comprehension skills relevant to technical materials

Resources

Project specific resources and documentation. Peers and supervisors for obtaining information on the extent and quality of the contribution made.

Consistency

Competence in this unit needs to be assessed using formative assessment to ensure consistency of performance in a range of contexts

Context

This competency can be assessed in the workplace or in a simulated environment. This competency can be assessed in the workplace or in a simulated environment. Assessment of this unit of competence will usually include observation of real or simulated work processes and procedures; quality projects, questioning on underpinning knowledge and skills.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

ICAITTB070A Create code for applications

Unit Descriptor

This unit describes the skills and knowledge required to produce a commercial grade program code, and capture and handle errors which occur as part of the program operation.

This unit is imported from the information technology industry training package, with necessary changes made to the range of variables and evidence guide statements ensuring its relevance to the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Declare and assign variables	1.1 Correctly employ naming conventions 1.2 Declare variables according to scope requirements, ie global, instance, local 1.3 Collect dynamic variables after use
2. Develop structure of code sections	2.1 Develop class instances or code modules as specified 2.2 Ensure modules meet cohesion and coupling standards 2.3 Develop dynamic arrays, tables and memory structures
3. Unit test each module	3.1 Develop testing routines to verify that the code produced actually fulfils the requirement 3.2 Test memory structures, eg arrays, for boundary violations 3.3 Terminate control structures or loops
4. Identify range of exceptions	4.1 Determine the coding areas where exceptions may occur 4.2 Determine the system areas where exceptions may occur, eg file opening 4.3 Prepare a global approach to exception handling
5. Determine handling and propagation procedures for exceptions	5.1 Develop an exception handling code section 5.2 Ensure all exceptions are caught 5.3 Document all try and catch routines with specific traces
6. Use debugging and error handling techniques	6.1 Disable debugging techniques, eg set-jump for live running 6.2 Develop specific documentation for error handling methods, such as assert and exit 6.3 Ensure external (eg use of database) error handling methods remain highly cohesive and loosely coupled

©Commonwealth of Australia, 2003

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

- LAN
- WAN
- stand alone
- peer to peer

- traditional third generation languages
- modern object oriented languages

- may be limited or minimum supervision

- networks
- stand alone

- depending on the budgetary constraints, may be repeated a number of times

- client organisational requirements
- project development requirements

- system that will impact on thousands of users in a large organisation
- one used by a handful of people

- will vary from formal procedures that must be adhered to with check points and sign offs throughout development to less formal or non-existent standards

- a department within the organisation or a third party and so the relation and ease of access will vary

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- will vary from the traditional Systems Development life cycle with little or no formalisation to a very well structured CASE tool

- audit trails
- naming standards
- version control

- company requirements
- statutory requirements
- vendor requirements
- ergonomic factors
- environmental factors

- formal, well documented methodologies or non-existent. For training delivery purposes, best practice examples from industry will be used

- some organisations may be quality certified and have well documented standards for addressing quality while others will not

- will vary depending upon whether the organisation uses a formal method for development. In some sites there will be no guidelines to follow

©Commonwealth of Australia, 2003

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of, and skills in, the following areas:

- development methodologies
- client business domain, for example when declaring variables and assigning valuables, and when debugging and error handling techniques are deployed
- programming languages, procedural languages (two or more) and object oriented languages (three or more)
- detailed knowledge of the operating system
- real-time programming
- input/output drivers
- current industry accepted hardware and software products with broad knowledge of general features and capabilities, and detailed knowledge in some areas
- software development configuration management processes
- size estimation
- problem solving skills for a defined range of unpredictable situations involving participation in the development of strategic initiatives, for example when testing routines are developed to verify that the code produced actually fulfils the requirement
- algorithms skills in relation to analysis, evaluation and identification of solutions
- project planning skills in relation to scope, time, cost, quality, communications and risk management

Linkages to other units

This unit may be assessed with a range of other units relating to design and production of a multimedia product. For example:

- Collect and organise information
- Author a multimedia product
- Integrate and use a scripting language in authoring a multimedia product
- Test a multimedia product

©Commonwealth of Australia, 2003

Critical aspects of evidence

This unit of competence applies to a range of industry sectors. The focus of assessment will depend on the industry sector. Assessment must be customised to meet the needs of the particular sector in which performance is being assessed. Assessment should only address those variable circumstances, listed in the range of variables statements, which apply to the chosen context.

The following evidence is critical to the judgement of competence in this unit:

- the ability to write code which is verifiable against the specification
- the ability to write code which is verifiable against the actual running of the program and the testing regime

Method and context of assessment

Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- practical demonstration (direct observation may need to occur on more than one occasion to establish consistency of performance)
- role play
- case studies
- work samples or simulated workplace activities
- oral questioning/interview
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence

Resource requirements

Assessment requires access to a range of resources and equipment currently used by the multimedia industry.

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

ICPMM11BA Identify components of multimedia

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Identify the electronic components of multimedia	1.1 Computer technology including CPU, ROM, RAM, storage devices, monitors and input devices relating to multimedia are identified and their functions explained 1.2 Analogue and digital devices relevant to multimedia are identified and the formats distinguished 1.3 The properties of digitised data are correctly defined to specifications 1.4 Issues relating to rapid technological change including electronic media and digital photography are discussed to deliver specific outcomes
2. Explore the scope of multimedia	2.1 The scope of multimedia is explored and explained relevant to the industry sector 2.2 The authoring role of a multimedia project is identified and correctly explained 2.3 The components of various multimedia projects including text, graphics, photography, typography, sound, animation and video are correctly broken down into the component media 2.4 The use of multimedia and its relationship to pre-press for delivering a specified outcome is described 2.5 The difference between passive and interactive multimedia is explored and correctly explained 2.6 The features of contemporary multimedia software relevant to text, graphics, photography, typography, sound, animation and video are identified to ensure application to outcome is relevant 2.7 The use of multimedia with respect to a variety of outcomes including newspapers, magazines, traditional sheetfed, digital printing, Internet WWW page, digital bill boards and CD-ROM are identified and the suitability of multimedia for such outcomes is discussed
3. Assess the features and functions of multimedia operating systems	3.1 The distinguishing features of contemporary operating systems including DOS, UNIX, OS/2, VMS, Macintosh, Windows systems and emerging systems are correctly identified 3.2 The disk formats of operating systems are correctly identified 3.3 Functions and structures of operating systems are correctly identified 3.4 Compression software appropriate to the operating system is identified

©Commonwealth of Australia, 2003

4. Outline the role of multimedia	4.1 The attributes of a multimedia generalist are defined in relation to the industry sector 4.2 The attributes of multimedia specialisations are defined in relation to the industry sector 4.3 The importance of resolution is examined relevant to the mode of multimedia presentation

RANGE STATEMENT

The scope of multimedia is explored in the workplace in consultation with the supervisor to ensure that a thorough understanding of the parameters of multimedia is gained

Multimedia systems used in the pre-press sector and associated sectors with which a pre-press organisation may be required to work

EVIDENCE GUIDE

Context

Competency should be assessed in the work environment using industry resources and software.

Critical aspects

The underlying skills of exploring and assessing multimedia should be transferable across the printing industry and associated sectors.

Required evidence

Identify the digital components of multimedia and explain their distinguishing features and functions.

Demonstrate an ability to find and use information relevant to the task from a variety of information sources.

Demonstrate knowledge of:

* electronic components of multimedia

* the scope of multimedia

* features and functions of multimedia operating systems

* the role of multimedia

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

ICPMM15DA Develop a multimedia script

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Identify and describe multimedia script formats and processes	1.1 Algorithmic and documentation styles are identified and their features are distinguished 1.2 Efficiencies and enhancements are identified using algorithms and documentation 1.3 A multimedia page is constructed incorporating algorithms with documentation
2. Use scripting techniques to create a multimedia production script	2.1 A scripting language and its components is identified which involves I/O operations, clip and file importation, and keyboard commands 2.2 A script is created and edited using object based script language styles 2.3 Events sequencing is documented using a flow chart 2.4 Conditionals and loops are constructed using the scripting language 2.5 A run time is produced and documented for a specified job 2.6 The script is saved in the relevant file format for a specified job

RANGE STATEMENT

Working independently but consulting others as required

Multimedia systems used in the pre-press sector and associated sectors with which a pre-press organisation may be required to work

EVIDENCE GUIDE

Context Competency should be assessed in the work environment using industry resources and software.

Critical aspects The underlying skills of multimedia scripting should be transferable across the printing industry and associated sectors.

©Commonwealth of Australia, 2003

Required evidence

Produce TWO multimedia scripts incorporating several sequences and a range of different elements according to job specifications and the listed performance criteria.

Demonstrate an ability to find and use information relevant to the task from a variety of information sources.

Demonstrate detailed knowledge of:

- multimedia script formats and processes
  - scripting language and components
  - information sources

Sample questions for underpinning knowledge

These questions are only examples. They do not represent everything you need to know. Other questions may be asked.

Answers need to show the essential knowledge required when working in a wide range of circumstances and being able to cope with the unexpected

Multimedia script formats and processes

What are the distinguishing features of algorithmic and documentation styles?

What efficiencies and enhancements can be used using algorithms and documentation?

Scripting language and components

What constitutes a scripting language?

What is meant by the terms I/O operations, clip and file importation, and keyboard commands?

How are object based script language styles used?

What is involved in documenting an events sequence?

How are conditionals and loops used in scripting language?

What is involved in producing a run time?

Information sources

What manuals, safety documentation, etc are relevant to this task and where are they kept?

What information is included in these documents?

What other sources of information are available?

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

ICPMM41CA Incorporate text into multimedia presentations

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Use multimedia text software	1.1 Appropriate software is assessed and selected for the required medium (hard copy or screen) 1.2 Entering and exiting the selected software are demonstrated and the tools and features of the program used correctly 1.3 Editing and manipulating text are demonstrated and the tools and features of the program used correctly 1.4 Text is saved and retrieved using the designated file formats
2. Create multimedia text	2.1 Text that incorporates the principles of typography is created using the designated software 2.2 Advanced issues of electronic fonts including Multiple Masters, font types and True Type are identified and discussed 2.3 Text is edited (enhanced and amended) and saved using the designated software 2.4 The elements of text are integrated into a designated multimedia sequence 2.5 Text is tested and run as part of a multimedia presentation 2.6 Text is published electronically appropriate for the job to be undertaken

RANGE STATEMENT

Multimedia text is created in the workplace in consultation with the supervisor to ensure that correct skills and procedures are used

Multimedia systems used in the pre-press sector and associated sectors with which a pre-press organisation may be required to work

EVIDENCE GUIDE

Context Competency should be assessed in the work environment using industry resources and software.

©Commonwealth of Australia, 2003

Critical aspects

The underlying skills of creating multimedia text should be transferable across the printing industry and associated sectors.

Required evidence

Produce TWO different multimedia sequences incorporating text according to job specifications and the listed performance criteria.

Demonstrate an ability to find and use information relevant to the task from a variety of information sources.

Demonstrate detailed knowledge of:

* multimedia text software

* creating multimedia text

* the principles of on screen typography and electronic publishing

* information sources

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

ICPMM44CA Incorporate audio into multimedia presentations

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Identify and describe formats of digital audio	1.1 The features of analog and digital audio are distinguished for a range of uses 1.2 Amplitude, sound waves, frequency, mono and stereo are correctly defined and their functions explained 1.3 Contemporary digital audio formats are identified and explained relevant to a defined outcome 1.4 Data rates for major digital sources are detailed relevant to a defined outcome 1.5 Methods for saving and producing digital audio outputs are described relevant to a range of sources and destinations 1.6 Sampling techniques and sources for sampling digital audio are demonstrated for a defined outcome 1.7 MIDI technology is explored and its uses explained
2. Use digital audio software	2.1 Appropriate digital audio software is assessed and selected for the job 2.2 Entering and exiting the selected software are demonstrated and the tools and features of the program used correctly 2.3 Editing and manipulating audio are demonstrated and the tools and features of the program used correctly 2.4 Sounds are saved and retrieved using the designated file formats
3. Design and edit digital audio	3.1 The editing of single and multiple audio frames is demonstrated relevant to a defined outcome 3.2 Multiple tracks of digital audio are joined in accordance with specifications 3.3 Digital effects are employed to modify and integrate digital audio tracks in accordance with specifications 3.4 Time encoding is applied to single and multiple edited digital audio tracks in accordance with specifications 3.5 Storybook design is applied to the production of digital audio sequences to deliver a defined outcome 3.6 An audio track is inserted into a multimedia production sequence in accordance with specifications

©Commonwealth of Australia, 2003

4. Construct a digital audio track	4.1 Techniques for hooking sounds are identified and correctly explained 4.2 Noise on sound recordings is eliminated at source and/or treated 4.3 Special effects and mixing techniques are used on an audio track in accordance with specifications 4.4 Sequencers are used to create digital audio tracks in accordance with specifications 4.5 MIDI and sound cards are employed to create digital audio in accordance with specifications 4.6 An audio track is produced using appropriate track construction software and hardware 4.7 Audio tracks are saved into the appropriate file formats

RANGE STATEMENT

Multimedia audio is undertaken in the workplace in consultation with the supervisor to ensure that correct skills and procedures are used

Multimedia systems used in the pre-press sector and associated sectors with which a pre-press organisation may be required to work

EVIDENCE GUIDE

Context	Competency should be assessed in the work environment using industry resources and software.
Critical aspects	The underlying skills of multimedia audio should be transferable across the printing industry and associated sectors.

©Commonwealth of Australia, 2003

Required evidence

Produce TWO different multimedia sequences incorporating audio elements according to job specifications and the listed performance criteria.

Demonstrate an ability to find and use information relevant to the task from a variety of information sources.

Demonstrate detailed knowledge of:

* the principles of analog and digital audio
* contemporary digital audio formats
* methods for saving and producing digital audio outputs
* the principles of editing audio tracks
* information sources

©Commonwealth of Australia, 2003

ICPMM61DA Prepare multimedia for different platforms

Unit Descriptor

This unit describes the skills and knowledge required to prepare multimedia for different platforms for use within the cultural industries.

This unit is imported from the printing industry national training package, with necessary changes made to the range of variables and evidence guide statements ensuring its applicability to the cultural industries.

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Identify and describe multimedia delivery techniques	1.1 Examine a range of multimedia delivery platforms and identify their distinguishing features 1.2 Explain MPEG video, CD ROM and CDI formats appropriate for the job to be undertaken 1.3 Define internet delivery options and detail limitations and advantages 1.4 Identify emerging processes for delivering multimedia relevant to the industry sector, including DOS, Macintosh and other platform (eg Sony, Nintendo, Sega) 1.5 Identify conversion methods from one platform to another for a range of processes to deliver the desired outcome
2. Prepare data for multimedia platforms	2.1 Assess suitability of digital data for delivery platform to deliver the desired outcome 2.2 Select the appropriate multimedia delivery platform to deliver the desired outcome 2.3 Redesign and/or adapt data to suit selected platform 2.4 Format or re-format data for selected platform
3. Use debugging and error handling techniques	3.1 Disable debugging techniques, eg set-jump for live running 3.2 Develop specific documentation for error handling methods such as assert and exit methods 3.3 Ensure that external (eg use of database) error handling methods remain highly cohesive and loosely coupled

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

©Commonwealth of Australia, 2003

RANGE STATEMENT

- working independently but consulting others as required

- multimedia systems used in the pre-press sector and associated sectors with which a pre-press organisation may be required to work

- personal computers
- networked systems

- established files
- applications

- commercial software applications
- organisational specific software
- word processing
- spreadsheet
- database
- graphic
- communication packages
- presentation functionalities

- key-boarding and accuracy as per organisation guidelines
- occupational health and safety guidelines:
- use of screen based equipment
- computing equipment and peripherals
- ergonomic work stations
- security procedures

- hardware
- software
- communications packages

- audit trails
- naming standards
- version control

- company, statutory and vendor requirements
- ergonomic factors
- environmental factors

- a range of methodologies:
- formal
- well documented
- non-existent

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

- aspects or sections of film/ video production:
- feature
- documentary
- short film and/or video
- animations
- commercials
- live or pre-recorded performances
- music video
- television production of any type (music, drama, comedy, variety, sport)
- live or pre-recorded television productions
- educational product
- game
- promotional product
- information product
- training product
- e-commerce
- a range of others

EVIDENCE GUIDE

Underpinning skills and knowledge

Assessment must include evidence of essential knowledge of skills in, the following areas:

- knowledge of multimedia delivery techniques
- knowledge of principles of conversion from one platform to another
- detailed knowledge of information sources
- technical requirements for preparing artwork for multimedia output
- recognition and how to use and apply different
- technologies for design purposes
- broad knowledge base incorporating theoretical concepts of design principles
- broad knowledge base incorporating theoretical concepts of multimedia software
- project planning skills in relation to scope, time, cost, quality, communications
- research skills for identifying, analysing and evaluating broad features of current multimedia usage and best practice in multimedia products and procedures
- plain English literacy and communication skills in relation to analysis, evaluation and presentation of information
- problem solving skills for a defined range of predictable problems

©Commonwealth of Australia, 2003

Linkages to other units

This unit has linkages to the following units and combined training delivery and/or assessment is recommended:

- ICPMM11BA Identify components of multimedia
- CUSRAD01A Collect and organise information
- CUFMEM06A Design a multimedia product
- CUFMEM04A Test a multimedia product

Critical aspects of evidence

The following evidence is critical to the judgement of competence in this unit:

- the ability to produce multimedia sequences
- ability to select, prepare data for delivery ensuring its compatibility
- an understanding of a range of different elements used within a multimedia sequence
- knowledge of a range of de-bugging and fault finding techniques

Produce three multimedia sequences which include a range of different elements, each on a different delivery platform, according to job specifications and the listed performance criteria.

Competency should be assessed in the work environment or in a simulated situation using industry resources and software.

Method and context of assessment

Assessment of this unit of competence will usually include observation of real or simulated work processes and procedures. A range of methods to assess the application of essential underpinning knowledge must support this and might include:

- work samples or simulated workplace activities
- oral questioning/interview
- projects/reports/logbooks
- third party reports and authenticated prior achievements
- portfolios of evidence

Resource requirements

Assessment requires access to a range of equipment and resources listed in the range of variables statement, currently used by the multimedia industry.

©Commonwealth of Australia, 2003

ICPMM65DA Create web pages with multimedia

Unit Sector No sector assigned

ELEMENT	PERFORMANCE CRITERIA
1. Identify the tools and parameters of web page design	1.1 The uses of HTML on and off the Internet are described 1.2 Principles of design and navigation are correctly applied to the context of web page viewing 1.3 Differences between page layout languages versus document content description are outlined 1.4 File types for images and other data are chosen to suit the intended viewing environment 1.5 HTML specifications and extension types are named and a suitable HTML level or DTD is chosen for the current task 1.6 Types of web authoring software are identified and selected in accordance with type of authoring task and workplace procedures
2. Produce web pages	2.1 Images, sound, and other referenced files are sourced and optimised for download and display 2.2 Web-authoring, conversion, or text editing software is used to prepare pages incorporating text with images and video, sound, scripts or programming, according to design brief 2.3 Completed HTML pages are saved to hard disk with appropriate file names 2.4 Raw HTML is checked for obvious redundancies and omissions, and enhanced if necessary with recent HTML extensions, ALT tags, etc
3. Validate and prepare for distribution	3.1 Pages are validated with suitable syntax parsing and rules checking software 3.2 HTML is corrected in response to validation reports until clean validation is achieved at chosen level 3.3 Pages and associated files are uploaded to server or transferred to other media and prepared for access 3.4 Internal and external links are checked for functionality in their final location

©Commonwealth of Australia, 2003

KEY COMPETENCIES

These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

The three levels of performance (1, 2 and 3) denote the level of competency required to perform the task:

Use routine approaches

Select from routine approaches

Establish new approaches

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

Please refer to the Assessment Guidelines for advice on how to use the Key Competencies

RANGE STATEMENT

Working independently but consulting others as required

Multimedia systems used in the pre-press sector and associated sectors with which a pre-press organisation may be required to work

World Wide Web public access, local intranet, CD-ROM, kiosk or specific purpose delivery methods as required

Approved standards from HTML 2.0 to present and browser-specific extensions in common use

SGML syntax parsers and "lint" or rules-based checkers, either accessed via the Internet or run from local disk

Web authoring and/or conversion software as used in the workplace

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

EVIDENCE GUIDE

Context	Competency should be assessed in the work environment. It is expected that special purpose tools and equipment (including industry software packages) would be used where appropriate.
Critical aspects	The underlying skills of web page creation should be transferable across sectors of the design and pre-press industries. It is important that the range of proposed viewing environments is identified and that the competencies be demonstrated with a clear identification of browser display processes.
Required evidence	Create and validate at least TWO linked web pages incorporating multimedia and prepare them for distribution on the Internet or other medium. Demonstrate an ability to find and use information relevant to the task from a variety of information sources. Demonstrate a detailed knowledge of: • software used for web authoring, how used and advantages and disadvantages • types of adjustments required when converting printable artwork to web pages • Internet-related issues such as bandwidth, platform-independence and screen types, and how they are resolved • the purpose and process of validation and the role of standards and extensions • hardware, software and configurations required to view completed work • information sources

©Commonwealth of Australia, 2003 Date Acquired from NTIS: 11 April 2007

CUF01 Film, TV, Radio and Multimedia Training Package
Film, Television, Radio, Multimedia Industry Training Package (Volume 6)
Volume 6 of 6

CUF01 Film, TV, Radio and Multimedia Training Package
Film, Television, Radio, Multimedia Industry Training Package (Volume 6)
Volume 6 of 6