Australian Government

Department of Education, Employment and Workplace Relations

ICAGAM303A Review and apply the principles of animation

Release: 1

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Modification History

Release	Comments
Release 1	This Unit first released with *ICA11 Information and Communications Technology Training Package version 1.0*

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to review and apply the principles of animation.

Application of the Unit

This unit applies to concept artists, game designers, games programmers, animators and other personnel working in the game development industry.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement but users should confirm requirements with the relevant federal, state or territory authority.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Element	Performance Criteria
Elements describe the essential outcomes of a unit of competency.	*Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.*

Elements and Performance Criteria

1. Prepare traditional animation process and the sequence of its component parts	1.1 Describe the ***traditional animation process*** and the principles of animation and its application to producing quality 3-D animation 1.2 Describe the uses of the ***twelve principles of animation*** 1.3 Identify components that are essential to producing quality 3-D animation
2. Prepare scene layout and storyboarding techniques	2.1 Describe and demonstrate scene layout techniques used in traditional animation 2.2 Describe and demonstrate storyboarding techniques used in traditional animation
3. Nominate appropriate animation keys in a proposed animation sequence	3.1 Describe the key animation process 3.2 Produce sample key drawings 3.3 Identify the criteria used for the selection of animation keys 3.4 Select appropriate animation keys in a proposed animation sequence
4. Create a short animation	4.1 Produce shot animation key drawings 4.2 Produce ***line image*** recordings of drawings 4.3 Create a short animated sequence
5. Apply traditional animation principles to a 3-D animation	5.1 Produce a 3-D animated sequence employing traditional animation principles using ***3-D modelling and animation software*** 5.2 Save and store or archive animated sequence onto appropriate ***equipment or media***

Required Skills and Knowledge

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

Required skills

- analytical skills to:
  - analyse documentation and images to inform implementation of game specifications
  - interpret briefs, work instructions, and technical and conceptual information
- communication skills to:
  - check and confirm design requirements
  - collect, interpret and communicate in visual and written forms effectively for various audiences, including engineers and artists
  - communicate clearly using speech and text
  - communicate complex designs in a structured format drawn from industry standards, styles and techniques
  - provide practical advice, support and feedback to colleagues and management
  - translate design requirements into specifications
- planning and organisational skills to:
  - appropriately refer decisions to a higher project authority for review and endorsement
  - balance talent, experience and budget
  - delegate tasks and responsibility appropriately
  - establish clear roles and goals to achieve required animation development outcomes
  - meet project deadlines
  - organise equipment and resources to achieve required outcomes
  - organise own time to meet milestones
- problem-solving skills to recognise and address potential quality issues and problems at design development stage
- research skills to:
  - undertake research into key animation and traditional animation process
  - use reference material to recreate animations
- self-management skills to manage multimedia-based and paper-based files
- technical skills to:
  - create a 10-second traditionally animated sequence
  - produce concepts drawings
  - propose and source locations of reference material.

Required knowledge

- analysis of a production brief
- animation keys
- application of traditional animation processes to digital animation
- development and recording of ideas
- filling media and paper-based assets
- principles of animation

- production of 3-D animations
- production of a storyboard
- scene layout and storyboarding processes
- scheduling of production components
- traditional animation process
- OHS requirements for:
  - ergonomics
  - electrical safety
  - materials handling.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of the ability to: • use traditional animation processes to create a short animation, using a range of 3-D modelling and animation software.
Context of and specific resources for assessment	Assessment must ensure access to: • computer hardware, software, games engines and file storage • internet access for research purposes • copyright and intellectual property legislation • OHS legislation and enterprise policy • appropriate learning and assessment support when required • modified equipment for people with special needs.
Method of assessment	Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include: • verbal or written questioning of development of idea • direct observation of candidate using traditional animation processes • review of nominated animation techniques • evaluation of 3-D animation sequence.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, where appropriate. Assessment processes and techniques must be culturally appropriate, and suitable to the communication skill level, language, literacy and numeracy capacity of the candidate and the work being performed. Indigenous people and other people from a non-English speaking background may need additional support. In cases where practical assessment is used it should be combined with targeted questioning to assess required knowledge.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Traditional animation process may include:	• concept creation • key drawings • production planning • research • script development • storyboarding • 'inbetweening' and 'tweening' drawings.
Twelve principles of animation include:	• anticipation • appeal • arcs • exaggeration • follow through and overlapping action • secondary action • slow in and slow out • solid drawing • squash and stretch • staging • straight ahead action and pose to pose • timing.
Line image may include:	• software-generated, e.g. Photoshop, Illustrator and Flash • traditionally drawn (pen and ink).
3-D modelling and animation software may include:	• 3ds Max • Blender • Cinema 4D • Houdini • Lightwave • Maya • Modo • XSI • ZBrush.
Equipment or media may include:	• blu-ray • CD • DVD

	• external hard disk, such as universal serial bus (USB) flash drive • internal hard disk.

Unit Sector(s)

Game development