Australian Government
Department of Education, Employment and Workplace Relations

ICAGAM529A Analyse business opportunities in the digital games environment

Release: 1

ISC INDUSTRY SKILLS COUNCILS
Creating Australia's Future

ICAGAM529A Analyse business opportunities in the digital games environment

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 analyse business opportunities in the digital games environment.

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. Describe the Australian digital games industry and development companies	1.1 Identify the *large and small organisations in the Australian digital games industry*
	1.2 Identify recent projects undertaken by small and large organisations in the Australian digital games industry
	1.3 Identify resources required for the production of a digital game in a small business environment
	1.4 Describe the process of subcontracting various production elements to other small businesses
2. Describe the structure of a game-development team	2.1 Identify the roles of *engineers, artists, game designers,* producers and *additional staff*
	2.2 Describe the skills required to occupy each role in a game-development team
	2.3 Describe the interaction and collaboration between roles
3. Investigate the process of starting an independent game development business	3.1 Identify the *major factors involved in starting a small business* in the digital games industry
	3.2 Identify the *legal requirements* and *financial management* of operating a small business
	3.3 Identify the legal protection of the small business operator and the dissolution procedures for a small business
4. Evaluate the role of the Australian government and other organisations related to digital game production	4.1 Identify the role of the *Australian government* and other organisations affecting the digital games industry
	4.2 Identify the influence of the Australian government related to game production and marketing
	4.3 Discuss the effect of rating standards on digital game production and *marketing*
5. Review copyright and intellectual property laws	5.1 Discuss copyright and intellectual property laws related to digital game development
	5.2 Undertake a review of the current state of national and international copyright pertaining to *digital game assets*
	5.3 Incorporate the conventions of copyright related to the production of a digital game project

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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 the digital games environment
    - 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
    - communicate technical requirements related to structuring a game development team to supervisors and other team members
    - provide practical advice, support and feedback to colleagues and management
- literacy and numeracy skills to:
    - document research
    - produce analytical documents
- management skills to manage teams in order to effectively extract useful feedback
- planning and organisational skills to:
    - 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 when creating documentation
- research skills to:
    - undertake practical, technical and desktop research into current business practice in the digital games environment
    - identify crucial components of a digital game development team
- self-management skills to organise research tasks and document findings
- teamwork skills to contribute to and work in a collaborative team
- technical skills to:
    - use correct file formats and archiving procedures
    - resolve basic hardware, software and other technical issues associated with game production.

Required knowledge

- computer game development, including specific terminology
- current game-play hardware and software products
- environmental impact and sustainability considerations
- human resources required in the process of creating a game and their respective skills and technology requirements
- OHS requirements for:

- ergonomics
- electrical safety
- materials handling
- physical hazards, including lifting
- risk and critical-path management
- technical constraints that hardware imposes on software development, graphics requirements, code development and creative visual design.

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: • demonstrate research skills to identify key roles for a game development team • document skills related to business opportunities in the digital games industry • undertake risk assessment and critical path planning • conceptualise a business plan for an independent games development business.
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	A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:
	• review of work samples or simulated workplace activities
	• verbal questioning or interview concerning aspects of game document development, including:
	  • industry standards for the game development process
	  • resources required for game development
	• evaluation of game documentation related to game development activities.

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. |

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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.

Large and small organisations in the Australian digital games industry may include:	- animation production companies - digital effects companies - games and gaming companies - pre- and post-production houses - television stations - training and simulation training organisation.
Engineers may include:	- game-play programmers - sound engineers - tools programmers.
Artists may include:	3-D modellers - animators - concept artists - lighting artists - motion capture acting - sound designers - texture artists - voice acting.
Game designers may include:	- game-play designers - level designers - writers.
Additional staff may include:	- administrative - managers - marketing - technical support.

Major factors involved in starting a small business may include:	• business capital and types of finance
	• business plans: 5 year or 10 year
	• business structures: sole trader, partnerships, limited partnership, proprietary, and limited company
	• contingency planning
	• financial plans
	• insurance, such as:
	   • personal
	   • equipment and contents
	   • public liability
	• rationale for starting a small business
	• registration of a business name
	• selecting a business location
	• setting-up procedures for small business.

Legal requirements may include:	• copyright and intellectual property legislation • workplace legislation and requirements • acknowledging the authorship of others who have collaborated in project activities • avoiding any types of conflict of interest • being honest about professional experience and capabilities • maintaining a commitment to the development of innovative design work of the highest quality • maintaining confidentiality of all client information • observing safe and healthy working practices at all times and encouraging others to do so • refusing any form of hidden compensation outside agreed contractual arrangements • respecting the work of other designers in fair and open competition.
Financial management may include:	• budgets • business confidentiality • business ethics • conflict of interest concerns • financial control systems • record keeping.
Australian government may include:	• Australian Taxation Office • NSW Film and Television Office • NSW Government Small Business Services • NSW Office of Fair Trading.
Marketing may include:	• game trailers • magazine publications • online reviews

	• television advertisements • word of mouth.
Digital game assets may include:	• 2-D art • 3-D characters • 3-D environments • audio • concept art • game designs • game engine • textures.

Unit Sector(s)

Game development

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