

Unit Title:	Design and test computer games
Level:	1
OCR unit number:	115
Credit value:	5
Guided learning hours:	40
Unit reference number:	M/600/7734

Unit purpose and aim

This unit helps learners to understand the basics of designing and testing computer games for the creative and media sector. It allows them to understand the client brief and time frames and deadlines and preparation techniques to form part of the planning and creation process:

- Candidates will explore different types of computer games, platforms and where they are used
- Plan a computer game to the client brief
- Create and edit a computer game
- Review the final product with against the original brief

The aim of this unit is for the learner to develop an awareness of the current use of game products and the implications of this technology in the Creative Media sector. The learner will also learn how to exploit these technologies to reach new audiences and generate revenue.

Learning Outcomes	Assessment Criteria	Knowledge, understanding and skills
1 Be able to explore types of games	1.1 List a range of computer games including 2D games and the platforms on which they run 1.2 Search for a range of features for each of these games 1.3 Rate the games explored	Candidates should list a range of at least 4 computer games across a range of identified platforms The range of features should include at least 3 of the following e.g. genre, objectives, game style, characters, interactions, narrative Candidates should rate the game using a minimum of 4 criteria in addition to listing the game used in the rating. There should be a minimum of 3 games rated.

<p>2 Know how to plan a new game to a given brief</p>	<p>2.1 Identify the needs of the client</p> <p>2.2 Identify the game engine to be used</p> <p>2.3 List in order the activities that you will carry out to create the game</p> <p>2.4 Identify the features of the new game</p> <p>2.5 Identify the assets that will be required</p> <p>2.6 Identify appropriate file types and formats</p>	<p>Candidates should be identifying what the client required in terms of the purpose and the target audience.</p> <p>Candidates should identify the main assets (these should include at least 2 from images or sounds). Candidates should have an awareness of copyright laws and implications.</p> <p>Candidates should list all the activities to be carried out in a logical order. This may change and can be commented on in their review</p>
<p>3 Be able to create a simple 2D game</p>	<p>3.1 Use assets to create and populate a game</p> <p>3.2 Add events, actions and properties to create the planned game</p> <p>3.3 Play, test and correct the created game</p> <p>3.4 Save and export the game in the required format as specified by the client brief</p> <p>3.5 Organise electronic files using appropriate naming conventions to facilitate access by others</p>	<p>Candidates should add objects and specify their properties</p> <p>Candidates should specify events for the player object</p> <p>Candidates should define the objective for the game including a starting point and an end point.</p> <p>Screen captures must be used to evidence these assessment objectives or a compressed video submission.</p>
<p>4 Understand how to review the game against the original brief</p>	<p>4.1 Identify strengths and weaknesses of own work</p> <p>4.2 Compare the finished object to the original brief</p> <p>4.3 Obtain feedback on the product</p> <p>4.4 Suggest improvements for own work</p>	<p>Personal review of the final outcomes identifying the strengths and weaknesses</p> <p>Candidates should obtain feedback (this can be tutor acting as the client). Candidates should identify strengths and weaknesses and suggest how they could improve their 2D game and any changes to the order of their listed activities.</p> <p>The review should identify positives and negatives relating to the finished product, rather than the creation process as this has been included in earlier evidence.</p>

Assessment

Assessment will consist of the candidate producing evidence to an OCR set or centre devised brief. All the learning outcomes and assessment criteria must be clearly evidenced in the submitted work, which is remotely moderated by OCR within their e-portfolio solution.

Results will be Pass or Fail.

Evidence requirements

This unit aims to equip the candidate with the ability to produce a computer game for a client to a standard that meets the requirements of the brief. The candidate is able to work with the client to an agreed design brief to produce a completed product and to use the necessary tools and source the required resources as appropriate.

- 1 Candidates should present a report or presentation to show their understanding of the use and purpose of computer games.
- 2 A plan to show that they have identified the client requirements, that they understand the appropriate equipment, resources and formats of designing and testing computer games to meet the brief. Candidates should be able to list in order the activities to be carried out to design, create and test a computer game.

Candidates should create sketches or drawings of ideas.

These sketches should be digitised and submitted with a planning document for moderation.

The planning document clearly meeting all the learning outcomes must be submitted for moderation.

- 3 Be able to produce the computer games in line with their plan to include:
 - Using assets to create and populate a game
 - Adding events, actions and properties to create a planned game
 - Playing, testing and correcting the created game
 - Saving and exporting the game in the required format as specified by the client brief

Evidence should also include a list of file names, types and properties of created files.

Candidates should submit the edited files and annotated screen captures in a report will also assist in evidencing their activities.

- 4 Candidates should prepare a review file to compare the finished product to the original brief and plan.

This should include feedback on the work produced, the candidate should identify strengths and weaknesses of their own work and list suggestions for improvements.

Guidance on assessment and evidence requirements

Candidates must produce all work to an acceptable standard.

Electronic evidence in the form of a report or presentation of research carried out to detail the investigation for the existing marketplace.

Report that incorporates, for example, client discussion, written brief, specification, end user requirements, purpose and timescales.

Screen captures will need to evidence the creation process, using an appropriate range of tools and techniques

Students should produce a personal review reflecting upon how successfully product meets the requirements of the brief, identifying any parameters and constraints that influenced their decisions identifying what they would do differently if faced by a similar task and why.

You should refer to the '*Admin Guide: Vocational Qualifications (A850)*' for *Notes on Preventing Computer-Assisted Malpractice*.

Details of relationship between the unit and national occupational standards

OCR Creative iMedia		Content crossover with National Occupational Standards	
Unit	Title		
115	Design and test computer games	IM1 IM20 IM22	Work Effectively in Interactive Media Design Electronic Games Test Electronic Games

Resources

Equipment: A computer system capable of running the appropriate software packages that meet the requirements of the qualification must be used. Additional resources such as cameras, microphones and props may also be required.

Additional information

For further information regarding administration for this qualification, please refer to the OCR document '*Admin Guide: Vocational Qualifications*' (A850).