OCR
Oxford Cambridge and RSA

Cambridge **NATIONALS LEVEL 1/2**

CREATIVE iMEDIA

Cambridge **NATIONALS**

Unit R091 – Designing a game concept
DELIVERY GUIDE

Version 1

CONTENTS

INTRODUCTION

This Delivery Guide has been developed to provide practitioners with a variety of creative and practical ideas to support the delivery of this qualification. The Guide is a collection of lesson ideas with associated activities, which you may find helpful as you plan your lessons.

OCR has collaborated with current practitioners to ensure that the ideas put forward in this Delivery Guide are practical, realistic and dynamic. The Guide is structured by learning outcome so you can see how each activity helps you cover the requirements of this unit.

We appreciate that practitioners are knowledgeable in relation to what works for them and their learners. Therefore, the resources we have produced should not restrict or impact on practitioners' creativity to deliver excellent learning opportunities.

Whether you are an experienced practitioner or new to the sector, we hope you find something in this guide which will help you to deliver excellent learning opportunities.

If you have any feedback on this Delivery Guide or suggestions for other resources you would like OCR to develop, please email resources.feedback@ocr.org.uk.

OPPORTUNITIES FOR ENGLISH AND MATHS SKILLS DEVELOPMENT AND WORK EXPERIENCE

We believe that being able to make good progress in English and maths is essential to learners in both of these contexts and on a range of learning programmes. To help you enable your learners to progress in these subjects, we have signposted opportunities for English and maths skills practice within this resource. We've also identified any potential work experience opportunities within the activities. These suggestions are for guidance only. They are not designed to replace your own subject knowledge and expertise in deciding what is most appropriate for your learners.

English   123 Maths   Work

Please note

The timings for the suggested activities in this Delivery Guide **DO NOT** relate to the Guided Learning Hours (GLHs) for each unit.

Assessment guidance can be found within the Unit document available from www.ocr.org.uk.

The latest version of this Delivery Guide can be downloaded from the OCR website.

UNIT AIM

This unit builds on units R081 and R082 and learners will be able to apply the skills, knowledge and understanding gained in those units.

This unit will enable learners to understand the capabilities and limitations of a range of platforms. They will be able to identify core features of digital games and gain the knowledge to create a games design concept proposal that can be presented to a client for critical review. This unit will also enable learners to understand the basics of planning and designing digital games for the creative digital media sector.

On completion of this unit, learners will know about different types of digital games and where they are used, be able to plan and design a digital game concept and present a game proposal to a client or focus group.

Unit R091 Designing a game concept	
LO1	Understand digital game types and platforms
LO2	Be able to plan a digital game concept
LO3	Be able to design a digital game proposal
LO4	Be able to review a digital game proposal

KEY TERMS

Explanations of the key terms used within this unit, in the context of this unit	
Key term	**Explanation**
2D/3D	In game terms, this refers to whether the gameplay screen is 2 dimensional or 3 dimensional. For example, an overhead view of a maze would be a 2D game whereas a walkthrough first person shooter game would be 3D.
Characters	These are the characters that are found within the game. Examples would include the player character(s) and any non-player characters, which are controlled by the game programming.
Game characteristics	This covers elements such as main theme, number and type of players, player characters, style of game play, type of environment, genre etc. In combination, they define the characteristics of the game. Contrasting examples would be a first person shooter game versus a quiz or simulation game.
Game components	The game components include clearly defined goals, rules, challenges and interactions. These would need to be developed as part of the game creation process, which is different to the descriptive nature of the game characteristics.
Game console	A dedicated piece of hardware used for playing digital games. Examples include Nintendo 64, Sega Dreamcast, Microsoft Xbox, Sony PlayStation, Nintendo Wii.
Game environment	This is the setting for the gameplay and may be the 2D background or the 3D room. This is sometimes referred to as the game world. The players' character is positioned in the environment or room. This term should not be confused with the game development environment, which would be the same as game engine.
Game platforms	The platforms are the hardware that the game is played on, which might be different to the hardware that is used for the development. Examples of games platforms would include a PC, Xbox, PS4, Wii and Smartphone.
Generations 1-8	Game consoles have been categorised using this system since the early 1970s. The generations 1 through to 8 represent periods of time when consoles have evolved. For example, Atari Pong arcade game is generation 1, the original Xbox is generation 6 along with PlayStation 2, whereas the Xbox One and PS4 are generation 8.
Genre	The style of game. Examples would be arcade, FPS (first person shooter), role playing, adventure, MMORPG (massively multiplayer online role playing game).
Legislation	In game design terms, this applies to the use of any intellectual property and copyrighted material that is planned within the content of the game. For example, the use of established and well known characters such as Mario, Harry Potter or any Marvel superheroes in a new game would not be allowed. In terms of copyrighted material, this may restrict the use of some assets eg images, graphics, sounds and background music.
Narrative	This refers to the storyline that the game is based upon. Not all games have a narrative such as a basic racing game. However, as soon as there are multiple levels or strategies as part of the game then this becomes part of the storyline.
PEGI	PEGI is the Pan European Gaming Information who provide age ratings for games based on their content. The age ratings are 3, 7, 12, 16 and 18.
Scoring systems	These are a way of measuring progress and achievement in a game. They can be based on points that are accumulated through gameplay or alternatively, based on timing systems (where a faster time to achieve an objective equates to a higher performance by the player).

Explanations of the key terms used within this unit, in the context of this unit	
Key term	**Explanation**
Visual style	This is related to the genre and refers to what is shown on the game screen. Stylisation can also refer to colours, brightness and the overall visual content, which may be dark and moody to give a sinister feel for example.
Visualisation Diagram	A visualisation diagram is a drawing or sketch that illustrates what is to be produced and/or what the final product will look like. This would be a rough version and used either for approval purposes by the client or potentially by a designer when creating the actual product. The diagram could be created either digitally or drawn by hand for example.

MISCONCEPTIONS

Some common misconceptions and guidance on how they could be overcome		
What is the misconception?	**How can this be overcome?**	**Resources which could help**
Genres of games as opposed to film or music	Discussion and explanation (review resource link). For example, should include the following genres: • Action • FPS (first person shooter) • RPG (role playing game) • MMORPG (massively multiplayer online role playing game) • Puzzle • Strategy • Sport • Quest/adventure. The content of the resource links can be displayed on a projector in the class. A discussion and explanation of these can then be included.	http://www.thocp.net/software/games/reference/genres.htm http://gaming.wikia.com/wiki/Computer_and_video_game_genres
Meaning of game platform generations	Class discussion on what consoles have been owned by learners. Use the resource links to display categories on a projector of generations 1-8 to identify what generation of console they have used.	http://www.informit.com/articles/article.aspx?p=378141 http://gaming.wikia.com/wiki/Video_game_console_generations https://en.wikipedia.org/wiki/Video_game_console
What is game narrative?	Discussion about storytelling through game play. The resource links can be used by the teacher to gain a better understanding. It is suggested that this content is summarised into a short presentation that explains how some games have a story that unfolds during the gameplay, which is called the game narrative.	http://www.gamasutra.com/view/feature/4253/the_uneasy_merging_of_narrative_php?print=1 http://hitboxteam.com/designing-game-narrative http://thegamedesignforum.com/features/narrative_in_games.html

SUGGESTED ACTIVITIES

LO No:	1		
LO Title:	**Understand digital game types and platforms**		
Title of suggested activity	**Suggested activities**	**Suggested timings**	**Also related to**
Evolution of digital game platforms for 2D/3D *See Lesson Element Exploring Digital Games*	This could start with a group discussion on what game platforms the learners actually own or use. This should move on to identify what are the main features of the platforms. The teacher should ensure platforms includes: - smartphones - PC - handheld devices - consoles. The features of platforms could be shown on a physical mood board or mind map that is displayed in the classroom. This could be added to over several weeks of unit delivery. Key features (or branches of a mind map) should include hardware, display, delivery method, networking, storage, interface and peripherals. Skillset game designer role: http://creativeskillset.org/job_roles_and_stories/job_roles/331_game_designer	60-90 minutes	R081 LO3
Researching gaming platforms	A final activity could be to organise some internet research on 'gaming platforms' and how these are characterised using the generation 1 to 8 system.	45 minutes	
Evolution of game characteristics *See Lesson Element Exploring Digital Games*	A homework activity could be for learners to ask parents and other people in a similar age group what digital games they played when younger. Learners should aim to find out about the platform, game genre and game objectives. This could be supported by a questionnaire that is to be used to collect information. The results obtained could form the basis of a question and answer session to share the information gained. The teacher should clarify what genre each of the games are. Examples would be action, sports, role playing, quest, strategy.	60-90 minutes	

Title of suggested activity	Suggested activities	Suggested timings	Also related to
Identifying game genres	The teacher could deliver a presentation that describes the key elements of a range of game genres. This should include a discussion of why the list of genres is not the same for games as it is for film, music or art for example. As a minimum, the following genres are recommended for inclusion: • action/adventure • sports • role playing game (RPG) • first person shooter (FPS) • quest • strategy. List of game genres and descriptions can be found in the link below: http://www.thocp.net/software/games/reference/genres.htm	20 minutes	
Investigating game objectives	Learners could get into groups with the aim of creating a list of game objectives. This can be based on knowledge of games they have played, together with web research into the main categories. The teacher could then organise a class discussion with the findings from the different groups. These should include: • solve • find • move to • destroy • escape from. List of game objectives and descriptions can be found in the links below: https://learn.canvas.net/courses/3/pages/level-3-dot-1-2-objectives-goals http://tvtropes.org/pmwiki/pmwiki.php/Main/VideoGameObjectives	30 minutes	

SUGGESTED ACTIVITIES

LO No:	2		
LO Title:	**Be able to plan a digital game concept**		
Title of suggested activity	**Suggested activities**	**Suggested timings**	**Also related to**
Client requirements	Teachers could demonstrate different ways in which clients could specify what they want. Examples could include a client brief or commission that identifies what is required and for what purpose. For games design concepts, this needs to include consideration for what platform will be targeted and what purpose the game is for. An alternative approach could be to verbally explain the requirements for a sample project brief and allow the learners to take notes.	45 minutes	All units LO2
Target audience requirements	Teachers could facilitate a question and answer session, starting with 'Why do we play digital games?' The responses could be placed on a whiteboard or other display. The reasons people play games will form the basis of what the target audience would want from a game, even if this is different to what the game producer is intending. A second activity may be to discuss who the target audience would be for a range of digital games on different platforms. Age and gender could be discussed in relation to game genre and platform. This could be extended to describe a new game concept, such as one with a title of 'Floodworld' where players are searching for artefacts or people following an environmental disaster.	45 minutes	All units LO2
Creating a mood board for game	Teachers could facilitate a workshop activity to show the process of how to generate ideas. Using the concepts from R081 Pre-production, learners could create either a physical or digital mood board on the topic of games. Screenshots from digital games, reviews, magazine articles and images would be some examples for this. A list of popular games found on Smartphones could also be included e.g. Minecraft, Clash of Clans, Candy Crush Saga. The purpose of the mood board should be clearly stated i.e. to collate ideas and examples of existing work in order to stimulate the generation of new ideas on a suitable theme.	1 hour	R081 LO3

Title of suggested activity	Suggested activities	Suggested timings	Also related to
Generate ideas for a new game *See Lesson Element Generating Game Ideas*	A further activity would then be to create a mind map or spider diagram of possibilities for a new game. This could be either hand drawn or created digitally using dedicated software applications e.g. Freemind. http://freemind.sourceforge.net/wiki/index.php/Main_Page The main branches of the mind map should include: • game genre • game concept • narrative • game characters • game locations/environment. Tools which could be used for creating ideas include: http://creatingminds.org/tools/tools_ideation.htm 'Edge' game developers website: http://www.gamesradar.com/edge/	1 hour	R081 LO3
Develop selected ideas in more detail	Using the range of ideas generated in the previous activity, learners could then individually choose one that they wish to develop in more detail. Group work with learners may develop greater creativity and imagination for developing ideas further. The ideas development could begin with a mind map which has the central game theme as a starting point. Branches should be added for: • platform • game play, (i.e. what the player has to do) • game objectives (i.e. what the player has to achieve) • player character style (e.g. person, animal, vehicle). Resource book: The game makers apprentice: http://www.amazon.co.uk/Game-Makers-Apprentice-Development-Beginners/dp/1590596153/ref=sr_1_1?ie=UTF8&qid=1434914793&sr=8-1&keywords=game+makers+apprentice	1 hour	R081 LO3

Title of suggested activity	Suggested activities	Suggested timings	Also related to
Produce an outline game narrative	Ideas for game play can be developed once the game narrative, or storyline has been defined. Using a chosen outline idea, learners could begin to develop a story that relates to a new game concept. The story could be an introduction that sets the scene before game play begins or alternatively, a story that unfolds in the game as the player progresses through the game world. The game story or narrative could be developed as a homework activity, which is based on creative storytelling using interactive game play. It may be in a written format, presentation or audio recording. Online resource: Night Zoo Keeper https://www.nightzookeeper.com/ Night Zookeeper is a digital learning tool that inspires learners to create their own characters to live in a magical world. The online world includes character creation, drawing, writing and has regular competitions. Resource book: The Computer Game Design Course http://www.amazon.co.uk/Computer-Game-Design-Course-Principles/dp/0500286582/ref=sr_1_1?ie=UTF8&qid=1434914982&sr=8-1&keywords=Computer+Game+Design+Course	1 hour	

SUGGESTED ACTIVITIES

LO No:	3		
LO Title:	**Be able to design a digital game proposal**		
Title of suggested activity	**Suggested activities**	**Suggested timings**	**Also related to**
Design constraints and opportunities	Teachers could deliver a presentation on the meaning and context of design constraints. The different areas for constraints should include those for any target platforms, development timescales, costs and distribution methods for specific platforms. Availability of assets can be linked to legislation, intellectual property and permissions for use.	45 minutes	
Create visualisations for a game proposal *See Lesson Element Creating Visualisations for a Digital Game*	Teachers could explain and demonstrate the options available for creating visualisation diagrams within the school. This could include both physical examples (i.e. by combining pictures, hand drawn images and text on a sheet of paper) together with digital versions (e.g. combining digital images and text in a software application). Examples of software may include (e.g. word processing, desktop publishing, presentation and image editing). Activities to create visualisation diagrams as both physical and digital versions should be included. For example, game characters could be drawn by hand and a software application used to simulate game scenes such as the start screen, game settings and game environment. This provides opportunities to show how images and photographs can be used as a background for the game.	3 hours	R081 LO3 R082 LO2
Age rating for games	The teacher could refer learners to the Pan European Game Information organisation website (PEGI), who provide age rating labels for use with computer games, according to the content of particular games. The different age ratings include (i.e. 3, 7, 12, 16, and 18). The use of the descriptor logos should also be included in the investigation into the role of PEGI. For this purpose, the teacher could make available a selection of game boxes (or learners could bring their own in to school). The use of the descriptors can then be identified and confirmed by reference to the PEGI website. PEGI information and labels, can be found in the link below: http://www.pegi.info/en/index/id/23/	30 minutes	

Title of suggested activity	Suggested activities	Suggested timings	Also related to
Deciding on a game structure or theory	The teacher could deliver a presentation on the basics of a three act structure, which is used in both films and game design. The three acts are: • Beginning – equilibrium (e.g. a stable game world). • Middle – upset to the equilibrium with challenges that must be won through gameplay. • End – return to equilibrium (e.g. by destroying the big boss or enemy in the game). The teacher should explain how these can vary depending on what game genre and narrative being used. A group discussion by learners will allow them to identify the three stages in games that they are familiar with. These could be shared among the class. Game theory articles, can be found in the link below: https://gamedesignconcepts.wordpress.com/ Resource book: The art of game design: http://www.amazon.co.uk/Art-Game-Design-Lenses-Second/dp/1466598646/ref=sr_1_1?ie=UTF8&qid=1434920822&sr=8-1&keywords=game+design	1 hour	
Creating a game proposal	Teachers have an opportunity to build on IT skills in order to create a game proposal document. This includes the formatting and layout of the proposal, which will need to be in a format that could be given or presented to a client. When creating a proposal document, this should include a title page and list of contents that includes the relevant sections: • introduction • game objectives and genre • target audience and PEGI rating • game structure (e.g. three act) • narrative structure (e.g. storyline, actions, script) • game characters (e.g. player and NPC) • visual style (e.g. first person, third person and any selectable views) • scoring systems • extended features such as downloadable content. Class activities could be to present ideas for a game; using a practice scenario.	3 hours	

Title of suggested activity	Suggested activities	Suggested timings	Also related to
Legislation	Teachers could identify key aspects of copyright, trademarks and intellectual property using data sheets from the UK Intellectual Property Office. www.ipo.gov.uk This basic knowledge should be applied to the concept of game creation. For example, learners could identify what copyright they will have on their own work for a design concept. They could also develop knowledge of what assets and ideas may already be protected and therefore restricted in their use within the game concept. In particular, teachers could explain how intellectual property of well-known characters from films, comics and games are protected.	45 minutes	R081 LO2

SUGGESTED ACTIVITIES

LO No:	4		
LO Title:	**Be able to review a digital game proposal**		
Title of suggested activity	**Suggested activities**	**Suggested timings**	**Also related to**
Review a game proposal for a client or focus group	Teachers could demonstrate how a review should identify strengths and weaknesses of the finished game proposal. This should cover the structure and formatting of the proposal, whether produced as a document or presentation. Examples of game proposals such as those produced by the teacher should be used for this purpose since initially, it can be difficult for learners to be objective and identify weaknesses in their own work.	45 minutes	R091 LO3
Areas for improvement	Learners could comment on the game ideas as a group discussion since it is often easier to critically review, in the first instance in a group setting or pairs to grow confidence. During this teaching phase, learners could use a template that asks key questions about the game idea and be prompted to identify areas that could be improved.	20 minutes	
Ideas for improving a chosen game	The teacher could select one existing game for review purposes. The game should be played by learners or demonstrated in terms of game play, game objectives and the visual style. Learners could then work in groups to discuss how the game could be improved. Examples of areas to be considered would be: • visuals i.e. 2D/3D graphics • game controls • player interaction with the game world • difficulty • interest and motivation • options to enhance gameplay.	30 minutes	
Using version control with the game proposal	The teacher could deliver a presentation on the purpose and options for version control. The benefit of using this on the game proposal for a client should be explained (i.e. so that improvements and additions can be made that can always be referenced back and it is clear what the latest version is). The options for how to incorporate version control into the file name can be explained. Examples would be: • using version numbers (e.g. v1, v2) • using a date code (e.g. 15-09-2015).	20 minutes	R081 LO3

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