



Accredited



Creative iMedia

Level 1/2

UNIT R082 - Creating digital graphics

DELIVERY GUIDE

VERSION 2

INDEX

Introduction	3
Unit R082 – Creating digital graphics	4
Key terms	5
Misconceptions	6
Suggested activities	
Learning Outcome 1 – Understand the purpose and properties of digital graphics	7
Learning Outcome 2 – Be able to plan the creation of a digital graphic	8
Learning Outcome 3 – Be able to create a digital graphic	9
Learning Outcome 4 – Be able to review a digital graphic	10



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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 specification.

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.

PLEASE NOTE

The activities suggested in this Delivery Guide **MUST NOT** be used for assessment purposes. (This includes the Consolidation suggested activities).

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.

OPPORTUNITIES FOR ENGLISH AND MATHS SKILLS DEVELOPMENT

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. 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.

KEY



UNIT R082 - CREATING DIGITAL GRAPHICS

Guided learning hours : 30

PURPOSE OF THE UNIT

This unit builds on unit R081 and learners will be able to apply the skills, knowledge and understanding gained in that unit and vice versa.

Digital graphics feature in many areas of our lives and play a very important part in today's world. The digital media sector relies heavily on these visual stimulants within the products it produces, to communicate messages effectively.

The aim of this unit is for learners to understand the basics of digital graphics editing for the creative and digital media sector. They will learn where and why digital graphics are used and what techniques are involved in their creation. This unit will develop learners' understanding of the client brief, time frames, deadlines and preparation techniques as part of the planning and creation process.

On completion of this unit, learners will understand the purpose and properties of digital graphics, and know where and how they are used. They will be able to plan the creation of digital graphics, create new digital graphics using a range of editing techniques and review a completed graphic against a specific brief.

Learning Outcome - The learner will:

1 Understand the purpose and properties of digital graphics

2 Be able to plan the creation of a digital graphic

3 Be able to create a digital graphic

4 Be able to review a digital graphic

KEY TERMS

Key terms used within this unit, explained in the context of this unit	
Key term	Explanation
Assets	These are the component parts that are used in the creation of the digital graphic. Examples would be photographs, images, graphics, text, logos.
Design and layout of graphics	This refers to the use of colour, composition, white space and styles in the digital graphic in the context of a given target audience. For example, choices of colour can be very different depending on the age group of the target audience. The colours should also contrast and complement each other. Composition refers to the layout of the different elements on the overall graphic, using suitable sizes and positions of different images and assets. White space is not necessarily a white colour – it is any blank space and can be used effectively to emphasise key parts of the graphic. The styles are associated with different genres of graphic products. Examples would include themed magazine covers, gaming covers, film posters, advertisements. These concepts of design and layout can be applied in the development of the visualisation diagram.
File formats	This refers to the type of image file and file extension that is being used or considered. Typical examples of file formats are .tif, .jpg, .png, .bmp, .gif and .pdf.
Image editing software	This is the type of software required for the unit. It is not the same as desktop publishing software, which does not have the required range of image editing tools and techniques.
Legislation	In the context of digital graphics, this refers to the differences between copyright protected, copyright free, royalty free and use of trademarks. For example, a final graphic may be considered as an orphan work but the copyright on component images and assets remains with the original author/owner. Google images should not be accepted as a copyright free source. Since candidates are working in a vocational context, it is not appropriate to say that copyright is free for educational use.
Properties	The properties of digital graphics refer primarily to the pixel dimensions and dpi resolution. Final work that is 595 x 842 pixels will be the correct aspect ratio for an A4 page but since this would only be at 72dpi it is not suitable for print purposes. Furthermore, a graphic that is saved using pixel dimensions of 2480 x 3508 (i.e. A4 at 300dpi) using jpeg low quality settings might reduce the file size but that does not mean it is suitable for web use. The fitness for purpose of the final graphics is fundamental to the unit. This means it must have an appropriate number of pixels – whether for print or web use.
Resources	This refers to the hardware and software used to create the graphics. Examples would include both the computer equipment, image capture hardware and the image editing software application.
Technical compatibility of assets	Component images that are to be used in a digital graphic should be technically compatible with each other. This primarily refers to the pixel dimensions and dpi resolution. For example, a 300 x 200 pixel image at 72 dpi would be unsuitable for use as the background image to a full size A4 print poster. If for print, this should be converted for typically 300dpi and the pixel dimensions taken into consideration for the print size of this component image rather than the overall finished product. Alternatively, high resolution photographs may not be suitable as a component part of a web graphic. The file formats would also be part of the technical compatibility consideration.
Visualisation diagram	This is a pre-conceived sketch or diagram of what is to be created as the digital graphic. It can be hand drawn or produced using a software application. The intention is such that any other person or the client can get an idea of what the final product will look like. It can include annotations in addition to a draft layout of the content.



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
Properties of digital graphics and suitability for use.	Work through OCR Lesson Elements	Lesson elements on compatibility and file formats. This covers pixel dimensions and dpi resolutions for both print and web use.
How different purposes and audiences influence the design and layout.	Class activity to define a purpose and audience first and then consider what design and layout would be suitable. This is different to analysing an existing graphic and commenting on its design and layout.	<p>Google Book: Design, layout and typography for beginners</p> <p>Can be located using web search on 'design layout target audience graphics'</p> <p>Chapter 1 is a good introduction to the basics whereby the initial decisions are deciding what you want to say and who the audience will be for that message.</p>
Interpretation of client brief.	Class activity to develop own interpretation of a client brief, which is more than just restating the scenario.	Lesson element 'Wrap'. Use class discussions alongside Task 2. This will expand on what the brief is and how it can be developed further.
Identify assets and resources.	Class discussion that builds on planning so that some thought is given to what will be needed – before any assets are located.	Lesson element on Rollercoaster – extension tasks.
What are advanced tools?	Review R082 thread on the OCR Social Forum for Cambridge Nationals in Creative iMedia. There is a discussion on what are accepted as advanced tools.	<p>http://social.ocr.org.uk/node/28/conversations/1233</p> <p>Depending on what image editing software is being used, further questions on what are advanced tools could be posted.</p>

LEARNING OUTCOME 1 - UNDERSTAND THE PURPOSE AND PROPERTIES OF DIGITAL GRAPHICS

Suggested content	Suggested Activities	Suggested timings	Links to other units
1 Uses of digital graphics	How and why - Learners could investigate a wide range of digital graphics (e.g. magazine adverts, CD/DVD covers, film posters, cartoons, web images and graphics, concept art from games, logos). With teacher support, learners could identify the purpose of these digital graphics (e.g. entertainment, information, education, advertising, promotion) and create an asset list to clearly show this information.	1 hour 30 minutes	R085 LO2, LO3 R086 LO2, LO3 R087 LO2, LO3 R092 LO2
2 Types of digital graphics	Learners could investigate a range of (minimum being three) digital graphics. These should be in both print and electronic format and may be the same as those used in the first activity.	30 minutes	
3 File formats and the properties of digital images and graphics	Learners could investigate the properties of images sourced from digital cameras, scanners, the internet and photo libraries. This should include pixel dimensions, resolutions and suitability for use (i.e. 200-300dpi for print use and 72dpi for web use) with an appropriate total number of pixels. Teachers could illustrate examples of both bitmap/raster images and vector based graphics to show the impact of magnification and scalability.	1 hour 30 minutes	R085 LO2 R087 LO2, LO3
4 Design and layout	Learners could research the use of colour, composition and layout for graphics design that targets specific audiences, based on web searches and examples sourced. Teachers could provide a template with sections for key aspects of graphics layout such as use of images, colour, text, white space, composition.	45 minutes	


LEARNING OUTCOME 2 - BE ABLE TO PLAN THE CREATION OF A DIGITAL GRAPHIC

Suggested content	Suggested Activities	Suggested timings	Links to other units
1 Client requirements 	Teachers could demonstrate different ways in which clients could specify what they want. Examples should include a client brief or commission that identifies what is required and for what purpose. An alternative approach would be to verbally explain the requirements for a sample project brief and allow the learners to take notes. A discussion on the final target audience as well as the client should be included.	45 minutes	All
2 Work plans 	Teachers could demonstrate different types of work plan using web search results. For example, an image search for 'work plan' will find examples of both text based and graphical styles. These could be produced in Project, Spreadsheet or Word processing software applications. Both text based and graphical examples should be included (e.g. a table of activities to be completed and a Gantt chart of a media project). The tasks and activities relevant to creating graphics should be included in the work plans.	2 hours	All
3 Creating a visualisation diagram	Teachers could explain and demonstrate the options available for creating visualisation diagrams within the school. This could include both tactile examples (e.g. by combining pictures, hand drawn images and text onto a sheet of paper) together with digital versions (e.g. combining images and text) in application software that supports images. Examples of software may include word processing, desktop publishing, presentation and image editing.	1 hour 30 minutes	R081 LO3
4 Assets and resources	Learners could experiment with available hardware and software applications to digitise and create original work. This could be achieved with a computer system and/or a portable tablet style device where work is digitised using the inbuilt camera. Documents and artwork may be scanned and files may be stored in different file formats. The creation of pdf documents should be covered in addition to exporting digital files in a range of generic formats. Note that as a planning activity, learners must to identify what images they might need to meet a specific brief. A sample project could be used with a discussion on the image content, file format, style and pixel/dpi properties.	45 minutes	R081 LO2, LO3
5 Legislation	Teachers could identify key aspects of copyright, trademarks and intellectual property using data sheets from the UK Intellectual Property Office www.ipa.gov.uk . A key point is to apply this basic knowledge to creative media work that is being produced. For example, learners could find out that any final graphic they create themselves becomes their own copyrighted material (but only on their own work and not that of source images). Teachers could facilitate a task to find out the difference between copyright free and royalty free images. Teachers are also advised to explain how some organisations are very protective of their intellectual property such as Disney, even where the work is being used in an educational context.	45 minutes	All units LO2

LEARNING OUTCOME 3 - BE ABLE TO CREATE A DIGITAL GRAPHIC

Suggested content	Suggested Activities	Suggested timings	Links to other units
1 How to source and create graphics	Learners could search for images from the internet using suitable descriptions and search criteria. Teachers could explain the importance of [image] size to ensure that any images found have sufficient pixels to be fit for purpose in a final graphic. Teachers should explain the use of pixel counts and dpi resolution since most images on the Internet are 72dpi and yet print production requires typically 200-300dpi. Teachers could then illustrate how new graphics can be created using suitable image properties, in terms of pixel dimensions, dpi resolution and canvas size.	3 hours	
2 Technical compatibility of images	Teachers could show how to resize an image so that it is compatible with the digital graphic to be created i.e. converting the dpi resolution from 72 to 300. Teachers could also demonstrate the effect of excessive enlargement of a low resolution image so that the image quality is very poor. Teachers could also explain how technical compatibility includes colour modes and profile of each different image.	45 minutes	
3 Using tools and technique	Teachers could demonstrate the use of a broad range of tools and techniques in the image editing software. This may include (but not be restricted to) cropping, rotating, brightness/contrast, levels, colour adjustment, cloning, retouching, red eye removal, filters, selections, use of layers and adding text. Learners could then experiment with these basic tools and techniques to create a series of sample graphics for both print and web use.	6 hours	
4 Saving/exporting graphics in different formats	Teachers could explain how to create a high resolution master file that can be used to create/export lower resolution versions and in different file formats. These may be used for proofing purposes or alternatively web/multimedia use. The importance of storing a master (high resolution) version should be included. Learners could then save/export a series of different files in a range of file formats (e.g. tif, jpg, gif, png).	30 minutes	R081 LO3
5 Version control	Teachers could explain these concepts using their own examples. For instance, naming conventions should include the use of relevant words and phrases that describe the content of the digital graphic file. The renaming of a photograph from a digital camera would be a good starting point e.g. 'DSCN1056.jpg' being renamed to 'school_entrance.jpg'. Teachers could explain the use of version control in the context of development for a digital graphic. The first draft of the graphic being saved as 'school_montage_v_0.1' with subsequent versions v_0.2, v_0.3 etc. Teachers could identify alternative file naming conventions such as using a date code yyyyymmdd such as school_montage_20130902.jpg (for 2nd September 2013). The use of naming conventions and version control could apply equally to both file names and folders.	15 minutes	All units LO3

LEARNING OUTCOME 4 - BE ABLE TO REVIEW A DIGITAL GRAPHIC

Suggested content	Suggested Activities	Suggested timings	Links to other units
1 Reviewing a digital graphic 	Teachers could demonstrate how a review should identify positives and negatives relating to the finished product, rather than the creation process. This could be achieved using examples of the teachers own final products in the form of digital graphics. Inviting the learners to comment on the work can be a good way to introduce this topic since it is often easier to critically comment on somebody else's work (such as that of the teacher). Learners could use a template that asks key questions about the graphic together with areas that could be improved.	1 hour 30 minutes	All units LO4

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