L2 Unit 20: Creating animation for the WWW using ICT (2010)

Learning outcomes

By completing this unit candidates will develop a knowledge and understanding of how to design, produce and test a short animation which is fit for purpose.

Candidates will be able to:

- review existing animations
- design an animation
- create an animation
- test the animation.

The use of pre-defined design sets or templates is not permitted in this unit.

It is anticipated that a candidate will require 20 guided learning hours to complete this unit.

Assessment objectives	Knowledge, understanding and skills		
1 Review existing	At least two different animations must be reviewed eg:		
animations	animated gifs from the Internet		
	flash/shockwave animations		
	animated web banners		
	For each animation reviewed, candidates should:		
	identify the good and not so good features		
	identify the purpose of the animation		
	 comment on how the purposes are met 		
	 if the purposes are not met why not? 		
	Suggest possible improvements		
2 Design an animation	ign an animation Produce design documentation eg:		
	describe the purpose of the animation		
	describe the audience of the animation		
	tweening or frame-by-frame		
	storyboard showing eg:		
	 content of the animation 		
	o text		
	o images		
	o sound		
	o timings		
	o transitions	continued	

Assessment objectives	Knowledge, understanding and skills		
	o effects		
	o animation size		
	 created graphics eg shapes, lines 		
	o colours		
	o frame rate		
	 looping eg individual elements 		
	o animation techniques		
3 Create an animation	Animation editing techniques eg:		
	 graphic techniques eg drawing, editing shapes, use of colour, lines 		
	• text		
	 importing, editing and optimising components eg images, sound, buttons 		
	cutting, copying and pasting		
	tweening and/or frame-by-frame		
	• sound		
	frame rates		
	motion guides		
	looping eg individual elements		
	export animation in suitable file format		
	Optimise components and the animation for the use on the www eg size, colours, download time		
4 Test the animation	Test plan to include eg:		
	suitable content		
	appropriate components		
	 components work as intended 		
	whether correct message conveyed		
	suitable frame rate		
	runs for the correct length of time		
	whether the animation loops correctly		
	suitable file format		
	Make improvements based on testing outcomes.		

Assessment

This unit is centre assessed and externally moderated.

In order to achieve this unit, candidates must produce a portfolio of evidence showing that they have met all of the assessment objectives.

Portfolios of work must be produced independently. They will need to be made available, together with witness statements and any other supporting documentation, to the OCR Visiting Moderator when required.

Centres must confirm to OCR that the evidence produced by candidates is authentic. An OCR Centre Authentication Form is provided in the Centre Handbook and includes a declaration for assessors to sign. It is a requirement of the QCA Common Criteria for all Qualifications that proof of authentication is received.

Guidance on assessment and evidence requirements

Candidates will not be penalised for their choice of software but must ensure they are making full use of the tools/features available to them in the particular software they decide to use. Candidates could use eg Macromedia Flash, Serif DrawPlus, other.

Candidates should be advised that the animation created should be of **at least 15 seconds** in length; some consideration should be given to the file size of the animation.

For Assessment Objective 1 centres may provide candidates with animations for reviewing. At least two different animations must be reviewed. Best practice would be for the animations to be reviewed to be significant animations with a real purpose – the animations should have the potential to allow candidates to provide comments up to the highest level.

Candidates may be given some structure eg a review form with some prompts to help them explore specific aspects of each animation. However, any forms provided must not be too directed for example, open questions should be used, which encourage descriptive and evaluative answers. Candidates should also be encouraged to discuss specific aspects/features of each animation related to its particular purpose. These aspects are unlikely to be prompted by a prescriptive writing frame.

All candidates must give at least one good point and at least one feature that is not effective, for each animation. To be credited as comments on the different animations the comments must be clearly different. The comments must be appropriate to the animation being reviewed, therefore it is inappropriate to give credit for the same or similar comments made for each animation.

At higher levels the comments should be sufficiently detailed to allow candidates to explain, for each animation, how the improvements will help it meet its purposes.

For Assessment Objective 2 candidates must produce design documentation for their animation including a storyboard. At the higher levels, the description of purpose and audience should include some consideration of what will be needed to suit these needs. The storyboard will need to be detailed enough to provide information of the main content, timings and key points in the animation; there is no need to provide evidence of planning every frame. Candidates are not required to create every element themselves, they may select and use components from a bank of resources provided by the centre or they may source components themselves. Storyboards at

Distinction level should consider details of all areas given in the Knowledge, Understanding and Skills section.

For Assessment Objective 3 an animation of at least 15 seconds is required. In order to demonstrate the range and appropriateness of animation techniques and skills required at the higher levels, it is likely that the animation may be longer than the minimum 15 second duration. It is not acceptable for candidates to create an animation of a shorter duration which is looped to be of the required duration. The animation must be suitably complex for candidates to evidence the use of a range of animation techniques and skills. A complex animation will consist of multiple objects animated simultaneously which run smoothly and should meet the purpose. When creating the animation, candidates should not lose sight of the purpose and appropriateness of their animation eg they should not reduce the frame rate for the purpose of extending the animation duration. The range, complexity and appropriateness of animation techniques and skills used, as well as the effectiveness of the animation will determine the level awarded for this assessment objective. As the animation is to be used on the www candidates must export it to a suitable file format. For Distinction level consideration must be given to optimising individual components as well as the animation itself for the www; optimisation techniques should be appropriate to the software used.

For Assessment Objective 4 candidates must produce a test plan for their animation, they must decide what areas of their animation to test. It is not acceptable for assessors to provide templates identifying the tests to be carried out. Reference should be made to the examples listed in the Knowledge, Skills and Understanding section.

Candidates should carry out the tests and evidence this through a completed test plan. Screen shots are not required as evidence for carrying out these tests however evidence of the final animation or the electronic file of the final animation should back up any claims on test plans.

Based on the outcomes of their tests, candidates must come to their own conclusions and make suggestions for improvement(s). Identifying errors in the animation does not fulfil this requirement. Peer evaluation can be useful for giving candidates ideas for improvement but for credit to be given, candidates must make their own statement about this.

For the higher levels there must be clear evidence that improvements have been made. This might be through annotated screenshots, or 'before' and 'after' animation files with explanation.

Mapping to national occupational standards

The mapping in the table below provides an indication of where evidence might be available for assessment against some of the knowledge and understanding contained in the national occupational standards (NOS). It does not claim to guarantee that evidence will meet the NOS.

Occupational standards	Unit number	Title
IT Users (e-skills UK)	SBS2	Specialist or bespoke software Level 2
IT Users 2009 (e-skills UK)	IPU: B	Improving productivity using IT
IT Users 2009 (e-skills UK)	ISF:FS:B	IT software fundamentals
IT Users 2009 (e-skills UK)	MM: B	Multimedia software
IT Users 2009 (e-Skills UK)	BS:B	Bespoke or specialist software
IT Users 2009 (e-skills UK)	DIS:B	Design & imaging software
IT Users (e-skills UK)	PS2	Presentation software Level 2
IT Users 2009 (e-skills UK)	PS:B	Presentation software
IT Users (e-Skills UK)	ART2	Artwork and imaging software Level 2
IT Users (e-skills UK)	WP2	Word processing software Level 2
IT Users 2009 (e-skills UK)	WP:B	Word processing software
IT Practitioners and Professionals (e-skills UK)	ICTTEST	Testing ICT systems Level 2
Business & Administration NOS (Cfa)	O8NBA317v 2	Artwork and Imaging software V2 (317)

Signposting to functional skills

✓ The unit contains opportunities for developing Functional Skills.

Functional Skills Standards				
English		Mathematics	ICT	
Speaking and Listening		Representing	Use ICT systems	✓
Reading	✓	Analysing	Find and select information	✓
Writing	✓	Interpreting	Develop, present and communicate information	✓

Resources

This section provides suggestions of suitable resources. The list is neither prescriptive nor exhaustive, and candidates should be encouraged to gather information from a variety of sources.

Some suggested resources are intended for Tutor use. The resources in this section were current at the time of production.

Books

Ulrich, K	Macromedia Flash MX 2004 for Windows and
,	Macintosh
	Peachpit Press ISBN: 9780321213440

Films, videos and broadcasts

Pixar Animations – Toy Story, Toy Story 2, Finding Nemo, Monsters Inc, The Incredibles

CD-Roms and computer software

Macromedia Flash

Adobe Creative Suite

Serif DrawPlus

Websites

www.animationmagazine.net

Computer animation software and technology information.

www.pixar.com

Computer animation studios – latest developments about feature animated films and shorts.

www.animationfactory.com

Free 3D animated gifs, clipart and graphics

http://www.creativepro.com/article/create-web-animations-photoshop-cs3

Tutorial for creating an animation using Adobe CS3

Grading

Assessment	Pass	Merit	Distinction
Objective			
AO1 Review existing animations	Candidates will review at least two different animations and list the good and not so good features of each animation. They will identify at least one feature from their reviews to use or avoid in their own animation.	Candidates will review at least two different animations and identify the purpose of each animation. Candidates will give a detailed explanation of the good and not so good features of each animation and suggest valid improvements for each animation. They will identify at least one feature from their reviews to use or avoid in their own animation. They will explain why they will use/avoid this feature in their own animation.	Candidates will review at least two different animations and identify the purpose of each animation. Candidates will give a thorough explanation of the good and not so good features of each animation, and suggest a range of valid improvements to help each animation meet its purposes. They will identify features from their reviews to use or avoid in their own animation. They will explain why they will use/avoid these features in their own animation.
AO2 Design an animation	Candidates describe the purpose of the animation. A storyboard covering the main elements for an animation of at least 15 seconds is provided.	Candidates describe the purpose and audience of the animation. A storyboard covering the main elements will be provided. This will include timings of the components for an animation of at least 15 seconds. The design will have a clear structure.	Candidates are thorough in their description of the purpose and audience for the animation. A storyboard covering all elements will be provided. This will include the key points and the timings of the components for an animation of at least 15 seconds. The design will cover all content, will be logical, well structured and could be followed by a third party.

Assessment	Pass	Merit	Distinction
Objective			
AO3 Create an animation	The animation must be at least 15 seconds in length.	The animation must be at least 15 seconds in length.	The animation must be at least 15 seconds in length.
	The animation makes some use of:	The animation makes good use of:	The animation makes effective use of:
	basic graphic techniques	graphic techniques	graphic techniques
	tweening or frame-by-frame	 frame rates 	 importing and optimising objects
	Some elements may not work as	• timings	• sound
	intended.	 tweening and/or frame-by-frame 	 frame rates
	The animation must be appropriate to the purpose.	 looping of at least one individual 	• timings
	The animation will be exported in a suitable file format and will work.	element. Most elements work as intended.	tweening or frame-by-frame animation
		The animation must be appropriate to the purpose and audience.	 looping of at least one individual element.
		The animation will be exported in a suitable file format and will work	All elements work as intended.
			The animation must be appropriate to the purpose and audience.
			The animation will be optimised and exported in a suitable file format and will work.
AO4	Candidates will create and use a test	Candidates will create and use a test	Candidates will create and use a test
Test the animation	plan to test the main aspects of their animation. Some tests will be	plan to test all aspects of their animation. Most tests will be appropriate.	plan to test all aspects of their animation.
	appropriate.	They will identify areas for improvement	The tests will cover all areas and components as well as the effectiveness
	They will identify at least one area for	and action some of them.	of their animation.
	improvement.		All tests will all be appropriate.
			They will identify areas for improvement and action most of them.