



## National Unit Specification

### General information

**Unit title:** Computer Games: Media Assets (SCQF level 6)

**Unit code:** HX9W 46

**Superclass:** CB

**Publication date:** February 2018

**Source:** Scottish Qualifications Authority

**Version:** 01

### Unit purpose

The purpose of this unit is for learners to develop a comprehensive understanding of the different types of media assets required for developing a computer game. Learners will develop knowledge and skills that will allow them to identify legitimate methods for acquiring media assets and learn how to plan and produce media assets for use in a game development environment.

This is a **non-specialist** unit, intended for a wider range of learners. It is particularly suitable for learners who wish to further develop their skills in the production of media assets for computer games.

The unit covers the following knowledge and skills:

- ◆ knowledge of legal issues of copyright, intellectual property, and consequences thereof
- ◆ ability to describe a range of media assets for a computer game
- ◆ ability to identify online sources for different types of media asset
- ◆ ability to select appropriate software tools for capturing, creating and editing media assets
- ◆ ability to produce four different types of media asset

On completion of this unit, learners will be able to produce different types of media assets and have an awareness of legal issues surrounding the use of media assets.

Learners may progress to NC or HNC Computer Games Development.

## National Unit Specification: General information (cont)

**Unit title:** Computer Games: Media Assets (SCQF level 6)

### Outcomes

On successful completion of the unit, the learner will be able to:

- 1 Explain sources of media assets.
- 2 Plan the production of assets for a computer game.
- 3 Produce media assets for a computer game.

### Credit points and level

1 National Unit credit(s) at SCQF level 6: (6 SCQF credit points at SCQF level 6)

### Recommended entry to the unit

No previous knowledge or experience is required. However, it would be beneficial if learners possessed basic operational skills of creative software. This may be evidenced by possession of HX9W 45 *Computer Games: Media Assets*.

Some previous knowledge of graphics or sound editing is desirable but not essential.

### Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the support notes for this unit specification.

There is no automatic certification of Core Skills or Core Skill components in this unit.

### Context for delivery

If this unit is delivered as part of a group award, it is recommended that it should be taught and assessed within the subject area of the group award to which it contributes.

This unit is part of the National Progression Award in Computer Games Development at SCQF level 6. As such, it may be delivered alongside other component units such as HX9V 46 *Computer Games: Design* and HX9X 46 *Computer Games: Development*. In this circumstance, teaching, learning and assessment may be integrated across the units. Further details are provided in the support notes.

The Assessment Support Pack (ASP) for this unit provides assessment and marking guidelines that exemplify the national standard for achievement. It is a valid, reliable and practicable assessment. Centres wishing to develop their own assessments should refer to the ASP to ensure a comparable standard. A list of existing ASPs is available to download from SQA's website (<http://www.sqa.org.uk/sqa/46233.2769.html>).

### Equality and inclusion

This unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website [www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements).

## **National Unit Specification: Statement of standards**

### **Unit title:** Computer Games: Media Assets (SCQF level 6)

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Where evidence for outcomes is assessed on a sample basis, the whole of the content listed in the performance criteria section must be taught and available for assessment. Learners should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

### **Outcome 1**

Explain sources of media assets.

#### **Performance criteria**

- (a) Explain types of media assets in terms of their technical characteristics and typical uses
- (b) Explain relevant items of legislation covering copyright
- (c) Explain criteria for copyright infringement
- (d) Explain implications of copyright infringement
- (e) Describe legitimate sources of copyright-free media assets

### **Outcome 2**

Plan the production of assets for a computer game.

#### **Performance criteria**

- (a) Identify different types of media assets to be produced for a computer game
- (b) Discuss the features of software tools required to produce game assets
- (c) Justify the software tools selected for the production of media assets
- (d) Identify sources of copyright-free media assets for a computer game

### **Outcome 3**

Produce media assets for a computer game.

#### **Performance criteria**

- (a) Acquire complex copyright-free media assets for a computer game
- (b) Produce a complex 2D graphical media asset for a computer game
- (c) Produce a 3D graphical media asset for a computer game
- (d) Produce a complex audio media asset for a computer game
- (e) Produce an animation for a computer game

### **Evidence requirements for this unit**

Evidence is required to demonstrate that learners have achieved all outcomes and performance criteria. Learners will need to provide evidence to demonstrate the performance criteria across all outcomes.

## National Unit Specification: Statement of standards (cont)

### Unit title: Computer Games: Media Assets (SCQF level 6)

The evidence requirements for this unit will consist of **two** types of evidence:

- 1 **knowledge** evidence
- 2 **product** evidence

The **knowledge** evidence will relate to Outcomes 1 and 2. Knowledge evidence is normally required for all performance criteria. However, sampling of knowledge is permissible in certain contexts, such as when traditional testing is used to generate the evidence. When sampling is used, the sampling frame must be broad enough to ensure that every outcome is covered (but not every performance criterion in every outcome). In this circumstance, the test must be carried out under controlled, supervised and timed conditions, without access to reference materials.

The **knowledge** evidence for this unit may be written or oral or a combination of these. Evidence may be captured, stored and presented in a range of media (including audio and video). Particular consideration should be given to digital formats and the use of multimedia.

The **knowledge** evidence is required to demonstrate that the learner can:

- ◆ name **at least two** items of relevant legislation covering copyright infringement
- ◆ describe **at least three** ways in which a developer might infringe copyright
- ◆ explain **at least two** implications from infringement for the developer
- ◆ describe **at least two** legitimate sources of copyright-free media
- ◆ list **at least four** different types of media assets needed for their game
- ◆ justify **at least two** software tools to be used in the production/editing of assets
- ◆ discuss software features that will be used in the production of media assets

Assessors should use their professional judgement, subject knowledge and experience, and understanding of their learners to determine the most appropriate ways to generate evidence and the conditions and contexts in which they are used.

The **product evidence** will relate to Outcome 3 and will take the form of **at least four** media assets. It will demonstrate that the learner has acquired the skills needed to produce media assets for a computer game. It must satisfy the following performance criteria:

- ◆ Acquire copyright-free media elements for a computer game
- ◆ Produce **at least one** 2D graphical media asset for a computer game
- ◆ Produce **at least one** 3D graphical media asset for a computer game
- ◆ Produce **at least one** sound media asset for a computer game
- ◆ Produce **at least one** animation for a computer game

This evidence may be produced over the life of the unit, under loosely controlled conditions (including access to reference materials). Authentication will be necessary (see below).

The SCQF level (Level 6) of this unit provides additional context on the nature of the required evidence and the associated standards. The SCQF level descriptors should be used (explicitly or implicitly) when making judgements about the evidence.

When evidence is produced in uncontrolled or loosely controlled conditions it must be authenticated. The *Guide to Assessment* provides further advice on methods of authentication.

The support notes section of this specification (see *Guidelines on Approaches to Assessment*) provides specific examples of instruments of assessment.



## National Unit Support Notes

**Unit title:** Computer Games: Media Assets (SCQF level 6)

Unit support notes are offered as guidance and are not mandatory.

While the exact time allocated to this unit is at the discretion of the centre, the notional design length is 40 hours.

### Guidance on the content and context for this unit

Please note that the following guidance, relating to specific outcomes, does not seek to explain each performance criterion, which is left to the professionalism of the teacher. It seeks to clarify the statement of standards where it is potentially ambiguous. It also focuses on non-apparent teaching and learning issues that may be over-looked, or not emphasised, during unit delivery. As such, it is not representative of the relative importance of each outcome or performance criterion.

#### Outcome 1: Discuss legitimate sources of media assets

It is anticipated that learners will research and study relevant legislation on copyright.

They should demonstrate more detailed knowledge of:

- (a) Names of items of legislation covering copyright and its infringement
- (b) Some criteria for copyright infringement
- (c) The consequences and penalties for copyright infringement
- (d) Multiple sources of copyright-free media assets

Learners should be able to describe how to stay within copyright legislation and avoid infringement. They should be able to describe more than one source of copyright-free assets and explain the implications of infringing copyright. This may be demonstrated in a number of ways, including reports, posters, recorded exposition or discussion.

#### Outcome 2: Plan the production of assets for a computer game

At this level, a feasible game will have a much larger number and range of media assets. Graphical assets might include backgrounds and various sprites/objects (in 2D and 3D). Sound assets might be background music, sound effects and speech. Animations or video might also be incorporated.

Learners should list the assets that they intend to create and how they are to be used in the game.

Some of these assets may be selected from copyright-free sources, but others must be created and/or edited to suit the game being planned.

It is anticipated that learners will have access to a range of tools for the creation of media assets. Learners should compare the features of these tools in order to justify a choice of tool for the creation of their media assets. Learners will show that the tools are suitable for the creation of the media assets for their game.

## National Unit Support Notes (cont)

**Unit title:** Computer Games: Media Assets (SCQF level 6)

### **Outcome 3: Produce different types of media assets for a computer game**

It is expected that some of the media assets will be acquired from copyright-free sources. There are plenty of online sources for downloadable graphics and sounds for use within the learner's game.

Learners will also create their own 2D and 3D graphical elements, such as sprites or backgrounds. These can be created in any suitable graphics package.

The audio media asset can be captured or created using any method. Sound effects, such as footsteps, could be recorded using a microphone or mobile phone. Music can be created using software or online, on sites like Soundation. Sound effects and music can be treated as different types of asset for assessment purposes.

Animations and video elements can also be created or edited for incorporation into the game.

### **Guidance on approaches to delivery of this unit**

If this unit is undertaken in the context of the NPA in Computer Games Development at SCQF level 6, the following sequence of delivery is recommended:

- ◆ *Computer Games: Design*
- ◆ *Computer Games: Media Assets*
- ◆ *Computer Games: Development*

A variety of different types of information sources should be used for Outcome 1. There is a large range of informative websites available on the internet.

Learners should be encouraged explore a range of graphics and sound editing software in order to make an informed choice.

Learners could use a pro forma with suitable headings to aid gathering and organising of appropriate information leading to their plan.

This unit could be delivered in the context of a larger game, with each learner designing a level of a computer game or some of the graphics and sounds. In these circumstances it essential that each learner identifies their own contribution, of both graphics and sounds, to the game and provides evidence for their own individual portfolio.

The actual distribution of time across outcomes is at the discretion of the centre. However, the following distribution and order is suggested:

Outcome 1: 10 hours  
Outcome 2: 10 hours  
Outcome 3: 20 hours

Summative assessment may be carried out at any time. However, when testing is used (see evidence requirements) it is recommended that this is carried out towards the end of the unit (but with sufficient time for remediation and re-assessment). When continuous assessment is used (such as the use of a web log), this could commence early in the life of the unit and be carried out throughout the life of the unit.

## National Unit Support Notes (cont)

### Unit title: Computer Games: Media Assets (SCQF level 6)

There are opportunities to carry out formative assessment at various stages in the unit. For example, formative assessment could be carried out on the completion of each outcome to ensure that learners have grasped the knowledge contained within it. This would provide assessors with an opportunity to diagnose misconceptions, and intervene to remedy them before progressing to the next outcome.

### Guidance on approaches to assessment of this unit

Evidence can be generated using different types of assessment. The following are suggestions only. There may be other methods that would be more suitable to learners.

Centres are reminded that prior verification of centre-devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

A portfolio approach to assessment could be taken. The portfolio may be paper or electronic (digital). The portfolio should be constructed over the period of the unit, with learners contributing material to the portfolio on an on-going basis. The contents of the portfolio should be clearly labelled and related to specific evidence requirements. The inclusion of specific items in the portfolio should be negotiated between learner and assessor, with only the 'best' example of work stored.

E-assessment may be appropriate for Outcome 1 of this unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the evidence requirements are met, regardless of the mode of gathering evidence. Further advice is available in SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003), SQA Guidelines on e-assessment for Schools (BD2625, June 2005).

If an e-portfolio is used to capture learners' work, it may take one of a variety of forms, ranging from general purpose digital repositories to specialised e-portfolio products. For example, a web log (blog) could be used to record learner activity over the duration of the unit. Specific entries to the blog could provide sufficient evidence in their own right (for example, a required identification) or could link to a file stored in another web service (such as a file hosting site). The use of a blog would aid authentication since any record of a learner's day-to-day activities would provide implicit evidence of participation and ownership.

The blog would provide knowledge evidence (in the descriptions and explanations) and should be assessed using defined criteria to permit a correct judgement about the quality of the evidence. In this scenario, every performance must be evidenced; sampling would not be appropriate.

If a learner is undertaking this unit as part of the NPA in Computer Games Development at SCQF level 6, then the evidence should be retained as part of a portfolio of work required for the units HX9V 46 *Computer Games: Design* and HX9X 46 *Computer Games: Development* (SCQF level 6).

## National Unit Support Notes (cont)

**Unit title:** Computer Games: Media Assets (SCQF level 6)

Formative assessment could be used to assess learners' knowledge at various stages throughout the life of the unit. An ideal time to gauge their knowledge would be at the end of each outcome. This assessment could be delivered through an item bank of selected response questions, providing diagnostic feedback to learners.

If a blog is used for summative assessment, it would also facilitate formative assessment since learning (including misconceptions) would be apparent from the blog, and intervention could take place to correct misunderstandings on an on-going basis.

### Opportunities for e-assessment

E-assessment may be appropriate for some assessments in this unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software.

Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the evidence requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at [www.sqa.org.uk/e-assessment](http://www.sqa.org.uk/e-assessment).

### Opportunities for developing Core and other essential skills

In this unit, learners are required to investigate technologies and to create media assets which can provide opportunities to gather evidence towards aspects of *Information and Communication Technology* and *Problem Solving* at SCQF level 6.

This unit may be delivered in the context of a larger game, with each learner producing assets for a level of a computer game. This would provide opportunities to gather evidence towards aspects of *Working with Others* (SCQF level 6).



## History of changes to unit

Version	Description of change	Date

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## General information for learners

### Unit title: Computer Games: Media Assets (SCQF level 6)

This section will help you decide whether this is the unit for you by explaining what the unit is about, what you should know or be able to do before you start, what you will need to do during the unit and opportunities for further learning and employment.

This *Computer Games: Media Assets* unit can be completed as a standalone unit, or as part of the NPA in Computer Games Development. If you are undertaking this unit as part of the NPA Computer Games Development, you should do this unit after HX9V 46 *Computer Games: Design*.

You will look at what assets are, where you can get them and how to create them. You will look at copyright issues and why they are important. You will decide what kind of assets (sounds, music, characters, backgrounds, etc) you will need for your game. You will also look at a few bits of graphics/sound software to help you create/edit your media assets.

Finally, you will create a range of assets for use in your computer game.

There is a large range of informative websites available on the Internet to help you find out what you need to know. You will also get some hints from your assessor on what sort of thing you should be looking for.

Your assessor will probably give you a blank grid with suitable headings to help you organise your screenshots and other information needed. Another way you could show your evidence would be in a blog or e-portfolio. Your assessor will help you choose the best option for you.

About half of the 40 hours will be spent on the first two outcomes, before starting to create your assets.

Have fun!