



Higher National Unit Specification

General information

Unit title: Sound Production: Audio for Multimedia (SCQF level 6)

Unit code: J0L4 33

Superclass: XL

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Version: 02

Unit purpose

This unit is designed to introduce learners to the use of audio within multimedia applications. This will provide learners with practical experience of the uses of audio within specific multimedia contexts. This unit will allow learners to develop the skills to prepare and apply audio within a multimedia context. This unit is intended to introduce learners to the use of audio within multimedia applications as an area of potential employment.

Outcomes

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

- 1 Capture and edit audio using a digital audio workstation.
- 2 Apply prepared audio to a multimedia artefact.

Credit points and level

1 Higher National Unit credit(s) at SCQF level 6: (8 SCQF credit points at SCQF level 6)

Recommended entry to the unit

Learners should have an understanding and basic experience of working with audio within a computer environment. An understanding of the basic principles of audio and multimedia may also be beneficial. This may be demonstrated by the achievement of a relevant Music Technology or Sound Production units such as F58H 12 *Sound Engineering and Production* or F1KT 11 *Digital Media: Audio Editing*. Learners should also have good communication skills. These may be demonstrated by the achievement of the Core Skill of *Communication* at SCQF level 5 such as possession of National 5 English (SCQF level 5) or a suitable NQ Communication unit (SCQF level 5).

Higher National Unit Specification: Statement of standards

Unit title: Sound Production: Audio for Multimedia (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.

Outcome 1

Capture and edit audio using a digital audio workstation.

Knowledge and/or skills

- ◆ Creating a plan of action
- ◆ Audio peripheral connections
- ◆ Session parameters configuration
- ◆ Recording audio
- ◆ Editing audio
- ◆ Effects processing
- ◆ Project file management

Outcome 2

Apply prepared audio to a multimedia artefact.

Knowledge and/or skills

- ◆ Delivery format and saving audio for use within a multimedia artefact
- ◆ Importing and embedding audio within a multimedia artefact

Evidence requirements for this unit

Outcome 1

Learners will need to provide product evidence supported by an assessor observation checklist to demonstrate their knowledge and/or skills by showing that they can, in response to a brief:

- ◆ Complete an action plan which will include:
 - A summary of the multimedia artefact
 - Identification of required sources of audio
 - Methods of capture for sources of audio and equipment required
 - Proposed edits to captured audio
 - Proposed effect processing of captured audio
- ◆ Set up external connections to facilitate the recording and playback of audio
- ◆ Configure session parameters to facilitate the recording and playback of audio
- ◆ Apply audio recording and editing appropriately on a minimum of four sources, at least two of which must be live and one of which must be pre-recorded
- ◆ Apply a minimum of two types of effects processing appropriately
- ◆ Perform project file management appropriately adhering to the naming and storing criteria specified in the brief

Higher National Unit Specification: Statement of standards (cont)

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Learners will respond to a brief where they must first create a plan of action detailing the need and requirements for audio within their chosen multimedia artefact. They will then capture and acquire audio which may be collected from any source necessary for the learner to meet the requirements stated in this plan. The learner must capture a minimum of four sources. Two of these must be live recordings and one must be from a pre-recorded audio source.

A minimum of one edit must be applied on each captured source. Edits can include applicable top and tailing, fade in/out, or inserting silence.

A minimum of two types of effects processing must be applied. Effects can include applicable delay, reverb or Equalisation (EQ).

The final result must be recorded as digital audio onto an appropriate digital audio workstation. All audio must be edited to the required specification using audio editing software.

Learners must submit a session containing all edited and processed audio files.

Outcome 2

Learners will need to provide product evidence supported by an assessor observation checklist to demonstrate their knowledge and/or skills by showing that they can:

- ◆ Effectively save audio in an appropriate delivery format for use within a multimedia artefact
- ◆ Effectively import and embed audio within a multimedia artefact
- ◆ Effectively apply audio within a multimedia artefact

Each learner will need evidence to show that they can, in relation to a given brief, correctly apply prepared audio to a multimedia artefact.

The learner should demonstrate appropriate application of audio to the chosen multimedia artefact. A copy of the final multimedia artefact on a suitable medium should be retained as evidence along with all project files.

Outcomes may be assessed individually however the learner would benefit from a combined assessment of both outcomes by working on a project that provides an opportunity for all evidence requirements to be met.

For Outcome 1 and Outcome 2, evidence should take the form of product evidence along with an assessor observation checklist.

Assessment should be carried out in open-book, supervised conditions at appropriate points throughout the unit.



Higher National Unit Support Notes

Unit title: Sound Production: Audio for Multimedia (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

This unit is primarily intended to introduce learners to the use of audio within multimedia applications. The overall structure of the unit has been developed to give learners both theoretical and practical experience of the uses of audio within specific multimedia contexts. The learner should, on completion of this unit, be able to confidently and appropriately plan, prepare and apply audio within a multimedia context. It is possible that some learners may have prior knowledge in audio recording or multimedia production. This unit should be used as a tool to further develop the learners' understanding of both the creation and appliance of audio within a specific context. Although it is advisory that learners should be subject to an understanding of the general use of audio within a variety of commercially available multimedia genres, the learners are only required to develop evidence for use within one multimedia application, familiar or accessible to learners within, for example, their place of study.

Outcome 1 looks at the use of Digital Audio Workstations (DAWs) in the creation of audio within multimedia context. The learners should have a plan which details exactly what they hope to achieve by applying audio to the artefact. This should be taken into account when selecting, and editing audio needed for this outcome.

Outcome 2 looks at the practical appliance of audio to a multimedia artefact. The learners should already have all necessary preparation written and detailed within their action plan. As learners are required to apply the prepared audio within a multimedia artefact, the learners should have a basic understanding of the DAW used in the creation of the chosen multimedia project. The learners should have prior knowledge of various audio file formats (compressed and uncompressed) used within the chosen multimedia context, as well as their compatibility with the software used in the creation process. Audio file formats may include .wav, .mp3, .aiff, .ogg, .flac, .au.

On successful completion of this unit learners may progress to J0L6 34 *Sound Production: Audio for Multimedia* (SCQF level 7).

This unit allows aspects of the following NOS to be developed:

CCSMT1	Follow health and safety practices in music and sound industries
CCSMT8	Use essential analogue and digital sound recording skills
CCSMT9	Use essential analogue and digital sound editing techniques
CCSMT12	Create a sample and audio file library — archive digital content

Higher National Unit Support Notes (cont)

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Guidance on approaches to delivery of this unit

Learners should be given a written brief which outlines the requirements for each outcome.

While this unit may be delivered as a 'stand-alone' unit, it is envisaged that it will form a part of the HN Sound Production group award and as such be taught in the context of the subject area. This unit is designed to be used as an introduction to the uses of audio within a multimedia context. The unit should be delivered in such a way that it gives the learners the choice of using a relevant multimedia artefact, which may have been created by the learners within a corresponding or relevant unit.

It is advisable that all learners are given the opportunity to understand the uses of audio within a variety of multimedia-based artefacts. This can be demonstrated by specific lessons, research and practical use of such multimedia artefacts. It would also be advisable for learners to use an audio-free, pre-produced multimedia application as a reference for each outcome, leading to the learners' appliance of audio to this specific multimedia context.

Learners would benefit from formative exercises, practicing their skills on a variety of recordings and again, being encouraged to reflect and improve their skills through appropriate feedback from centre staff. Learners should be given practical demonstrations on audio capture and editing.

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.

Assessment will be carried out as follows:

Outcomes 1 and Outcome 2 will be based on learners' practical performance to create a final product. Outcomes should be completed and assessed in chronological order.

It is possible to assess the outcome knowledge and/or skills separately. This could be conducted at a single assessment event carried out in open-book, supervised conditions using an observation checklist to record achievement. However, it is recommended that a holistic approach is used to produce a completed project.

Outcome 1

The learner should be given (or agree) a brief to create audio for a multimedia artefact. From this the learner should plan the acquisition of audio, subsequent editing and effects processing and intended output formats. The learner should create folders for the recording and saving of all created files. When editing audio for use within the chosen multimedia context, this could include editing the audio to the desired length eg, top and tail. The learner should also demonstrate the creation of both one shot and seamless looping audio files. Appropriate and effective application of effects to meet the requirements needed for the audio to be used within the chosen multimedia context should be included.

Higher National Unit Support Notes (cont)

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Effects types could include the following:

- ◆ Distortion — ie, overdrive
- ◆ Dynamic — ie, compression
- ◆ Filter — ie, Equalisation (EQ)
- ◆ Modulation — ie, chorus, vibrato, phase
- ◆ Time-domain — ie, delay, reverb, echo

Outcome 2

Learners should output the digital audio files in an appropriate format and save the files appropriately, meeting the requirements of the chosen multimedia artefact before importing and embedding the prepared audio for use within the multimedia artefact.

The learner should effectively apply audio within the multimedia artefact which will enable the learner to demonstrate the effective use of audio within the multimedia artefact. The learner will be required to demonstrate use of the prepared audio in context and should include the appliance of audio to specific time points within the multimedia artefact, including the streaming of audio with any visual elements.

The learner should then produce a finalised multimedia artefact on a suitable medium.

Performance evidence for all outcomes should be observed and recorded on an assessor checklist. Where there is doubt regarding the authenticity of learners evidence, oral questioning could be used to verify evidence authenticity.

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.

Opportunities for developing Core and other essential skills

This unit provides the opportunity to develop the following aspects of Core and other essential skills.

Problem Solving: The learner will employ critical thinking when selecting the appropriate tools and processes for selecting, recording and editing audio material.

Information and Communication Technology (ICT): The learner could have the opportunity to develop skills in accessing information through use of online tutorial resources during delivery of this unit.

Employability skills: The learner will have the opportunity to develop self-management, problem solving and application of IT elements of employability skills.

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This Unit has the Critical Thinking and Planning and Organising components of Problem Solving embedded in it. This means that when learners achieve the Unit, their Core Skills profile will also be updated to show they have achieved Critical Thinking at SCQF level 4 and Planning and Organising at SCQF level 4.

This Unit has the Core Skill of Information and Communication Technology embedded in it, so when learners achieve this Unit their Core Skills profile will be updated to show that they have achieved Information and Communication Technology at SCQF level 5.

History of changes to unit

Version	Description of change	Date
02	Core Skills Components Critical Thinking and Planning and Organising at SCQF level 4 embedded. Core Skill Information and Communication Technology at SCQF level 5 embedded.	31/08/18

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General information for learners

Unit title: Sound Production: Audio for Multimedia (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 unit is designed to introduce you to the use of audio within multimedia applications. The overall structure of the unit will provide you with practical experience of the uses of audio within specific multimedia contexts. This unit will also allow you to develop the skills to prepare and apply audio within a multimedia context. This unit is intended to introduce you to the use of audio within multimedia applications as an area of potential employment.

You will be assessed by working to a specific brief where you're required to capture and edit audio using a digital audio workstation and then applying prepared audio to a multimedia artefact.

You will have the opportunity to develop elements of the following Core Skills: *Problem Solving, Communication, Information and Communication Technology (ICT) and Working with Others.*

You will have the opportunity to develop elements of the following other skills: critical listening skills, employability skills and entrepreneurial skills.

This Unit has the Critical Thinking and Planning and Organisation components of Problem Solving embedded in it. This means that when you achieve the Unit, your Core Skills profile will also be updated to show you have achieved Critical Thinking at SCQF level 4 and Planning and Organising at SCQF level 4.

This Unit has the Core Skill of Information and Communication Technology embedded in it, so when you achieve this Unit your Core Skills profile will be updated to show that you have achieved Information and Communication Technology at SCQF level 5.