



## **National Unit specification: general information**

**Unit title:** Sound Production: Recording and Editing (SCQF level 5)

**Unit code:** H1TF 11

**Superclass:** KG

**Publication date:** October 2012

**Source:** Scottish Qualifications Authority

**Version:** 02

### **Summary**

This Unit introduces candidates to the process of sound recording and editing. It gives candidates the opportunity to develop practical and creative skills which will allow them to use recording equipment to capture and edit a variety of sound. Candidates will use sound production equipment and techniques to create recordings suitable for stereo or mono reproduction. Basic editing will be performed and a final audio product created for use in appropriate scenarios.

This is an optional Unit within the National Certificate in Creative Industries at SCQF level 5. It is also available as a freestanding Unit. It is suitable for candidates who wish to pursue a career in the creative industries where sound recording and editing is used as part of the creative process.

### **Outcomes**

- 1 Produce recordings in accordance with a given brief.
- 2 Edit recordings in accordance with a given brief.
- 3 Deliver finished audio files in three formats.

### **Recommended entry**

Entry is at the discretion of the centre, candidates need not have any recording or editing experience.

## General information (cont)

**Unit title:** Sound Production: Recording and Editing (SCQF level 5)

### Credit points and level

1 National Unit credit at SCQF level 5: (6 SCQF credit points at SCQF level 5\*)

*\*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

### Core Skills

Achievement of this Unit gives automatic certification of the following Core Skills component:

Complete Core Skill	None
Core Skill component	Critical Thinking at SCQF level 4 Processing Information at SCQF level 4

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

## **National Unit specification: statement of standards**

### **Unit title:** Sound Production: Recording and Editing (SCQF level 5)

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**

Produce recordings in accordance with a given brief.

##### **Performance Criteria**

- (a) Carry out the recording procedure safely.
- (b) Use appropriate recording techniques.
- (c) Produce recordings without distortion.
- (d) Label and store recordings correctly for editing.

#### **Outcome 2**

Edit recordings in accordance with a given brief.

##### **Performance Criteria**

- (a) Correctly set up digital audio editor and monitoring for editing audio.
- (b) Edit audio files appropriately.
- (c) Use equalisation, dynamics, effects, panning and level controls effectively.
- (d) Use appropriate fade edits.

#### **Outcome 3**

Deliver finished audio files in three formats.

##### **Performance Criteria**

- (a) Export the edited audio files as 'master' format for archiving.
- (b) Export the edited audio files as un-compressed 16 Bit 44.1kHz stereo audio files.
- (c) Export the edited audio files as compressed stereo files.

## **National Unit specification: statement of standards (cont)**

**Unit title:** Sound Production: Recording and Editing (SCQF level 5)

### **Evidence Requirements for this Unit**

Evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria.

Written and/or oral recorded and product and performance evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria. Evidence must be generated under supervised conditions. Evidence may be generated holistically or Outcome by Outcome.

Each candidate will produce recordings that meet a brief with the following as the minimum requirements:

#### **Recording**

- ◆ at least one example of a mono sound source recorded and edited in mono from a microphone source
- ◆ at least two different examples of a stereo sound source recorded and edited in stereo: one from microphone source and one from line source

#### **Editing**

- ◆ at least one edit where time domain effects have been applied to the audio (eg reverb, delay/echo)
- ◆ at least one edit involving equalisation for creative and/or technical purposes

#### **Outcome 1 — Product and Written and /or Oral recorded Evidence**

Three primary recordings of at least 30 seconds duration for each example are required. Additional recordings can be of any length and either mono or stereo in accordance with the brief. For each recording example, evidence must be provided that it has been:

- ◆ recorded using appropriate safety features
- ◆ recorded without distortion using the appropriate gain structure
- ◆ named and stored safely on a hard-drive prior to editing

A brief recording log which must contain:

- ◆ details of each recording source
- ◆ details of the equipment used for recording
- ◆ details of equipment settings during recording
- ◆ recording duration

## **National Unit specification: statement of standards (cont)**

**Unit title:** Sound Production: Recording and Editing (SCQF level 5)

### **Outcome 2 — Performance Evidence**

Candidates are required to generate evidence that shows they have:

- ◆ created a session within a digital audio editor with the correct settings for editing the imported audio
- ◆ imported the audio to be edited correctly
- ◆ 'topped and tailed' the recorded audio by applying fade-in and fade-out regions
- ◆ demonstrated appropriate use of equalisation, dynamics, panning and level controls
- ◆ used audio effects from within the audio editor appropriately

### **Outcome 3 — Product Evidence**

Candidates are required to generate evidence that shows they have:

- ◆ exported the edited audio files as:
  - edited master files in the highest sample rate and bit depth available, for archiving and/ or future editing
  - edited stereo uncompressed 16Bit 44.1kHz standard files
  - edited compressed stereo files appropriate for the intended purpose of the brief

These files must be produced for the assessor correctly named in digital format or on clearly labelled CD-ROM.

## National Unit specification: support notes

### Unit title: Sound Production: Recording and Editing (SCQF level 5)

This part of the Unit specification is offered as guidance. The support notes 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 broadly aligned to the following Creative Skillset National Occupational Standard (NOS):

SKSJ21: Record audio material

This standard is about recording effective audio material, both on location using portable recording devices, and in studios.

- ◆ it involves selecting and using the correct equipment and recording techniques, testing and checking equipment, and recording audio from a variety of sources
- ◆ it is about having a basic understanding of acoustics in order to recognise and record sound of the required quality
- ◆ it is about identifying and dealing with equipment failures and breakdowns and ensuring that equipment is always secure and available for use
- ◆ it also involves ensuring that recordings are appropriately named, labelled and securely stored

In addition the following NOS may provide useful context.

SKSJ30 Edit audio material  
SKSRC15v1 Edit, process and mix audio  
SKSPSS20 Edit sound

This is an optional Unit in the National Certificate in Creative Industries at SCQF level 5, but is also available as a freestanding Unit.

This Unit introduces candidates to basic recording and editing of mono and stereo audio files and the technologies and vocabulary associated with sound production.

The use of digital audio in the creative industries is widespread, for example in art installations, audio books, cinema, computer gaming, internet, mobile communications, music, multimedia, podcasting, radio and social networking. As a result, the nature and purpose of what is recorded and edited should be flexible so as to provide candidates who are pursuing a particular strand of the creative industries to use the product to their advantage.

Due to the diverse opportunities for the use of recorded sound in the creative industries, recordings can be of any suitable source, including but not limited to: music, speech, nature/field recordings, abstract, electronic, acoustic, electro-acoustic, foley, sound effects, etc.

## **National Unit specification: statement of standards (cont)**

### **Unit title:** Sound Production: Recording and Editing (SCQF level 5)

Under supervision of the tutor, candidates may be expected to set up and dismantle equipment. Sound production industry conventions and standards and health and safety procedures must be observed. When using microphones, candidates should be aware that microphone techniques and placement are critical to the capture/recording quality and that the exact placement and application is dependent upon factors such as acoustic environment, instrumentation and performer and dynamic characteristics of the sound source. The use of equalisation and pan controls, their effects on image and frequency content should reflect use of audio in appropriate stereo format delivery. The use of effects and signal balancing should be appropriate to the musical or source content and the requirements of the given brief. Appropriate monitoring levels should be stressed to candidates, particularly when using headphones.

As a minimum it is recommended that the sound-recorder and the audio editing software used should be able to record/edit audio wave files as follows: Bit Depth, 16-Bit. Sample Rate, 44.1kHz. Ideally the recorder would be capable of 24-Bit 48kHz for professional audio standards using broadcast-wave files.

The recordings will be edited and the creation of the final exports will be correct in terms of ability to play back on a stereo audio format. A 16 bit 44.1kHz CD is not essential. The requirement for 16Bit 44.1 files and compressed files, eg MP3 at 128kbps is for raising candidate awareness of the difference in audio quality and file sizes.

### **Guidance on learning and teaching approaches for this Unit**

As an introduction to the use of recorded and edited files in a creative context, learning and teaching should concentrate on the practical nature of this process rather than on the inherent theory behind the process. Where possible, content can be integrated with other Units which have related audio or musical Performance Criteria, eg video or radio production, interactive media, music and drama etc. Within the context of the area(s) of study, candidates would benefit from hearing examples of how sound/audio is used professionally, followed by examples from previous candidates' work so that targets and milestones can be set.

Classroom activities should include tutor/lecturer demonstrations of industry standard practice and good working practice related to the available equipment. Candidates should be given sufficient time to practice using the equipment before attempting the summative assessments.

If using a separate recorder with external microphones appropriate microphone types should be discussed focusing on polar pattern, frequency response and application. Example recordings could be listened to and test recordings could be made by candidates to aid learning through practice.

Candidates should continually evaluate their work and make decisions based on signal quality, quality of performance and whether or not another take/pass of the source recording is required. At this level, candidates should be capable of independent study or work within peer groupings.

## **National Unit specification: statement of standards (cont)**

### **Unit title:** Sound Production: Recording and Editing (SCQF level 5)

Related to the context and content of the brief, tutor demonstrations for the editing of audio files should include the use of standardised professional practice for modifying or augmenting the audio files using time domain, dynamics and equalisation techniques.

During the editing stage candidates would benefit from the experience of comparing their intended work with that of recordings of a similar nature, which would allow a technical comparison and aural discrimination of recording and production values.

### **Guidance on approaches to assessment for this Unit**

A suitable instrument of assessment for this Unit would be a structured practical exercise that allows candidates to respond to a brief by demonstration of creative and imaginative development of a theme or topic. The given brief should support and encourage skills development and creativity. Formative assessment should be on-going and could be through one-to-one tutor/candidate critique, self-assessment or through supervised peer group evaluation.

Assessor observation checklists must be used to record that all tasks have been undertaken by the candidate.

#### **Outcome 1**

Practice and formative exercises should be undertaken so that candidates can become familiar with the operation of the equipment. The brief could, for example, detail the recording of a musical performance, foley sound effects or speech/ dialogue. The brief could specify:

- ◆ purpose and instruments/source to be recorded (eg music, foley, or dialogue)
- ◆ recording format (eg digital file type, sampling frequency and bit depth)
- ◆ details of the production style (eg for dialogue and music; close, near, distant)
- ◆ the extent to which a particular mood needs to be captured/ created
- ◆ types of recording technique, ie suitable microphone techniques, etc

#### **Outcome 2**

Practice and formative exercises should be undertaken so that candidates can become familiar with the operation of the audio editing software. The brief could specify:

- ◆ type of effect to be used and where (eg reverb on percussion, delay on vocal)
- ◆ use of short or long fades (eg instant start/finish or 5 or 10 second fade in/out)
- ◆ appropriate peak output level
- ◆ type of edit required (eg top and tail, cross-fade)



## National Unit specification: statement of standards (cont)

**Unit title:** Sound Production: Recording and Editing (SCQF level 5)

### Outcome 3

Candidates should practice exporting the edited audio files and test their suitability in the appropriate context. For example, if the audio is to be embedded in other software, eg a presentation, web page, etc it will need to be tested in situ. Any errors should be remediated before final delivery. The brief should specify the exact audio file formats and standards required:

- ◆ the edited 'Master' files should be in the highest sample rate and bit depth available
- ◆ the uncompressed stereo files should be 16-Bit 44.1kHz (1,411.2 kbit/s)
- ◆ the compressed stereo files should be appropriate for the intended purpose of the brief, eg MP3 at 128kbit/s and/ or 320kbit/s

The files should be delivered to the lecturer/assessor electronically or on a clearly labelled CD-ROM. It is recommended that evidence is retained for verification purposes.

### Opportunities for the use of 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 candidate 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)*.

### Opportunities for developing Core Skills

As they are doing this Unit candidates may develop aspects of the Core Skills of *Communication, Information and Communication Technology (ICT)* and *Problem Solving*. Candidates may develop:

- ◆ *Communication* skills by interpreting a brief and producing recordings
- ◆ *Problem Solving* skills by recording and editing
- ◆ *ICT* skills by using computers to edit the audio and manage the files

In addition aspects of the following Core Skill could be developed where particular learning and teaching approaches are adopted:

- ◆ *Working with Others* through collaboration during the recording process

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

## **National Unit specification: support notes (cont)**

**Unit title:** Sound Production: Recording and Editing (SCQF level 5)

### **Disabled candidates and/or those with additional support needs**

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website [www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements)

## History of changes to Unit

Version	Description of change	Date
02	Core Skills Components Critical Thinking and Processing Information at SCQF level 4 embedded.	09/10/2012

© Scottish Qualifications Authority 2012

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

Additional copies of this Unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Business Development and Customer Support team, telephone 0303 333 0330.