

SVQ for IT Users (ITQ) — level 3 (SCQF level 6)

F9AJ 04: Audio Software 3

4 SCQF credit points at SCQF level 6

Description: This is the ability to use a software application designed to record and edit audio sequences.

Outcomes	Skills and Techniques	Knowledge and Understanding
On completion of this Unit the candidate should be able to:		
1 Use hardware and software to capture audio sequences.	1 Select and use an appropriate combination of input device and audio software to optimise the recording of information. 2 Select and use an appropriate combination of hardware and software to originate and develop new content for sequences. 3 Store and retrieve sequences using appropriate file formats and compression, in line with local guidelines and conventions where available.	1 Determine the content needed for sequences, and when to originate it. 2 Describe the impact file size and file format will have on saving sequences. 3 Explain any compatibility issues between combinations of input device and audio software. 4 Analyse and explain the impact file size and file format will have, including when to use information coding and compression .
2 Use audio software tools and techniques to edit sequences.	1 Select and use appropriate audio software tools and techniques to mark-up and edit sequences to achieve required effects. 2 Organise, combine and link information for sequences in line with any copyright constraints, including across different software.	1 Provide guidance on how copyright constraints affect use of own and others' information.

Outcomes	Skills and Techniques	Knowledge and Understanding
On completion of this Unit the candidate should be able to:		
3 Play and present audio sequences.	1 Select and use an appropriate combination of audio playback software and display device to suit the file format. 2 Present sequences effectively by exploiting the features and settings of the playback software and display device to maximise quality and meet needs.	1 Explain the features and constraints of playback software and display devices as appropriate for different purposes. 2 Evaluate the quality of sequences and explain how to respond to quality issues and problems.

Note: The **emboldened** items are exemplified in the Support Notes.

Evidence Requirements

Completion of a portfolio (manual, electronic or combination) to cover all of the Skills and Techniques and Knowledge and Understanding points stated above. The evidence generated should adhere to the Assessment Strategy for this award and encompass a range of evidence types.

NB: It is possible to achieve this Unit by Accreditation of Prior Achievement (APA), however, the relevant evidence must be referenced within the portfolio.

General information

This Unit equates to NOS (National Occupational Standards for IT Users 2009) code AV: Audio and Video Software level 3. It has a stated number of SCQF credit points = 4 at SCQF level 6.

Support Notes

Summary

A SCQF level 6 (ITQ level 3) user can select and use a range of advanced audio software tools and techniques to record and edit complex or no-routine audio sequences.

Audio software tools and techniques will be defined as 'advanced' because:

- ◆ the software tools and functions used will be complex and at times involve having the idea that there may be a tool or function to do something (eg improve efficiency or create an effect), exploring technical support, self-teaching and applying
- ◆ the inputting, manipulating and outputting techniques will be complex, and will involve research, identification and application
- ◆ the user will take full responsibility for inputting, manipulating and outputting information

Examples of context which illustrate typical activities which might be undertaken by users:

- ◆ recording a series of interviews and specially scripted links using a digital Dictaphone
- ◆ editing to create a short podcast
- ◆ editing to fit into a multimedia business presentation

Examples of content are given separately for highlighted text, where explanatory notes are required on terminology in the Outcomes, and do not form part of the standards. Such examples are not meant to form a prescriptive list for the purposes of assessment but rather to amplify and interpret the generic terms used in the Performance Criteria in the light of current usage of ICT systems and software. These examples are subject to change as new tools and techniques become commonplace and older ones drift out of use.

The examples given below are indicative of the learning content and are not intended to form a prescriptive list for the purpose of assessment.

Outcome 1

Audio compatibility issues: Between built-in codec used by input device, available editing software, file formats, *operating systems, plug-ins*.

Input devices: Microphone, Dictaphone, mobile phone; difference between analogue and digital. Input techniques: copy and paste, screen grabs/shots, file download (eg connect USB lead, drag and drop).

Originate and develop: Process: plan (eg storyboard, script, compose), prepare (eg information, equipment), develop, test, refine.

Types of content: audio (eg music, sound effects, voiceovers).

File size: Small, medium, large, link between size and quality.

File format: Proprietary formats supported by software used (eg QuickTime, RealPlayer, iTunes).

Container formats: Audio (eg WAV, XMF, AIFF, MP4). *Popularity, overhead, support for advanced functionality and content, support of streaming media.*

Information coding and compression: Codec, compression, difference between lossy and lossless compression, *factors affecting quality.*

Store and retrieve: Files (eg create, name, open, save, save as, print, close, find, share); version control; import/export; file size; *file properties*, folders (eg create, name); *archive (backup, restore).*

Outcomes 2

Sequence: Short (eg 2 minutes), medium length (eg 10 minutes 30 minutes).

Marking-up and editing tools: Preset by software, key frames, sequences; cut, copy, paste, sequence, *special effects.*

Combine information: Combine images with sound (eg dub or overlay sound track onto film sequence; *integrate an audio sequence with another application*):

- ◆ Techniques: copy and paste, insert.
- ◆ File download (eg connect USB lead, drag and drop), file transfer protocol (FTP).
- ◆ Forms of information: sound; pre-recorded, live, *web-streaming*.

Copyright constraints: Effect of copyright law (eg on music downloads or use of other people's images), acknowledgment of sources, avoiding plagiarism, permissions.

Outcome 3

Features and constraints: Software supported, memory, processing speed, screen resolution, data bandwidth, transmission speeds.

Display device: PC, laptop, video camera, Dictaphone, mobile phone, handheld audio device (eg mp3 player, iPod).

Audio quality issues: High or low volume, sound (eg clicks, disjoints, noise), *unwanted objects*.

Adjust playback and display settings: Playback controls, sound, sound quality.

Guidance on examples of evidence

Typical examples of evidence for Outcomes 1–3

The recording of a series of interviews and specially scripted links using a digital Dictaphone, then editing these to create a short podcast; storyboarding and adding soundtrack to a prepared/supplied short promotional film sequence. Editing a soundtrack, eg voiceover to fit into a multimedia business presentation.

To assess competence in the Knowledge and Understanding sections for all of the Outcomes a knowledge test in the form of multiple-choice questions (say 16–20 questions) or candidate statement or expert witness testimonial statements or a semi structured interview could be employed. Either one or a combination of these methods would be appropriate. If oral questioning techniques are employed it is essential to keep a record of the questions asked, together with a record in a suitable format of the candidate's responses to these for evidence purposes.

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