National Unit Specification

General information

Unit title: Digital Media: Moving Images (SCQF level 4)

Unit code: HW4Y 44

Superclass:	KA
Publication date:	October 2017
Source:	Scottish Qualifications Authority
Version:	1

Unit purpose

The purpose of this unit is to allow learners to gain foundational knowledge and acquire basic skills in moving images such as simple animations and basic videos. It is an introductory unit, suitable for all learners. No prior knowledge or experience is required.

Learners will gain knowledge and experience of the basic techniques involved in acquiring and editing simple moving images (including video) and combining these into a single digital product. Basic product planning is also covered. Although the focus is on practical skills, learners will also acquire essential underpinning knowledge. The unit also aims to develop learners' technical vocabulary relating to digital media to ensure that they understand the basic terminology employed within this field.

On completion of this unit, learners may wish to broaden their knowledge of digital media by completing HW4X 44 *Digital Media: Still Images* and/or HW4W 44 *Digital Media: Audio*. Alternatively, learners might wish to gain a deeper understanding of moving images by completing HW4Y 45 *Digital Media: Moving Images*.

Outcomes

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

1 Plan a moving image sequence for a specified brief.
2 Acquire moving image material for the specified brief.
3 Produce a finished moving image sequence in a format required by the specified brief.

Credit points and level

1 National Unit credit at SCQF level 4: (6 SCQF credit points at SCQF level 4).

National Unit Specification: General information (cont)

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Recommended entry to the unit

While entry is at the discretion of the centre, it would be beneficial if learners possessed basic digital literacy skills. This may be evidenced by possession of: C741 72 National 2 *Information and Communications Technology* or equivalent qualifications or experience.

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 Digital Media at SCQF level 4. As such, it may be delivered alongside other component units, such as HW4X 44 *Digital Media: Still Images* and HW4W 44 *Digital Media: Audio*. 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**.

National Unit Specification: Statement of standards

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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

Plan a moving image sequence for a specified brief.

Performance criteria

(a) Identify the stages of the production life cycle.
(b) Contribute to a script or storyboard for the specified brief.
(c) Contribute to a production schedule for the acquisition of digital video and animation content within the time constraints of the brief.
(d) Identify required hardware and software for the acquisition of digital video and animation content.
(e) Identify copyright implications of the acquisition of moving images.

Outcome 2

Acquire moving image material for the specified brief.

Performance criteria

(a) Identify the moving images required for the brief.
(b) Identify the sources of moving images.
(c) Acquire moving images from the identified sources.
(d) Store digital video and animation material in appropriate file formats to enable efficient access and retrieval.
(e) Adhere to copyright requirements relating to the acquisition and storage of moving images.

Outcome 3

Produce a finished moving image sequence in a format required by the specified brief.

Performance criteria

(a) Edit the moving images to meet the requirements of the brief.
(b) Combine the moving images into a single product that meets the requirements of the brief.
(c) Save the final product in a format specified by the requirements of the brief.
(d) Share the final product with the intended audience using appropriate software.
(e) Adhere to the tasks and timescales in the production schedule.

National Unit specification: Statement of standards (cont)

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Evidence requirements for this unit

Evidence is required to demonstrate that learners have achieved all outcomes and performance criteria.

The evidence requirements for this unit will consist of two types of evidence: knowledge evidence and product evidence.

The knowledge evidence will relate to all outcomes and performance criteria. It may take any appropriate format (including oral). The evidence will relate to explicit knowledge (such as Outcome 1, Performance Criterion (a)) and underpinning knowledge (such as Outcome 2, Performance Criterion (d)). The focus of the knowledge evidence is breadth, not depth, so the amount of evidence should be the minimum consistent with the performance criteria. It may be produced with access to reference materials over the life of the unit.

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 product evidence will consist of at least one product plan (Outcome 1) and at least one final moving image sequence (Outcomes 2 and 3). The product plan may take any acceptable format but must satisfy Performance Criteria (b), (c), (d) and (e). There is no requirement for the learner to produce the plan without assistance so long as their contribution is significant.

The moving image sequence may be simple but must satisfy the brief and its production must adhere to the product plan. At this level, some slippage is permissible within reason. It must be produced under supervised, loosely controlled conditions and may be conducted over an extended period of time. For example, some parts of it may be carried out without supervision from an assessor. In this scenario, authentication will be required to ensure that the product is the work of the learner.

Product evidence is required to demonstrate that the learner has satisfied the specified brief:

♦   Acquire moving image material to the meet the quality requirements.
♦   Label and log moving image material to enable efficient access and retrieval.
♦   Capture and save moving images in appropriate file formats.
♦   Edit moving images to match the content plan and export in an appropriate file format.
♦   Share the completed moving image with the intended audience using appropriate software.
♦   Confirmation that the moving image adheres to copyright requirements.

The Assessment Support Pack (ASP) for this unit provides sample assessment material including an instrument of assessment for the knowledge and a given project. Centres wishing to develop their own assessments should refer to the assessment support pack to ensure a comparable standard.

National Unit Support Notes

Unit title: Digital Media: Moving Images (SCQF level 4)

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 intended for anyone with an interest in moving image who wishes to gain a basic understanding of planning, acquiring materials for, and producing moving image material.

The unit has three outcomes. The outcomes cover both the theory and practice of planning, acquiring materials for, and producing moving image material.

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 competence.

If this unit is delivered as part of the National Progression Award in Digital Media at SCQF level 4, there is significant potential for teaching, learning and assessment to be integrated across the component units.

Outcome 1

This outcome introduces learners to the stages and components required to enable acquisition of moving images. It also introduces the different file types, hardware and software that can be used.

Typical theory should include the following:

- Planning techniques, such as script, storyboard and production schedule
- Video sources, for example video camcorders, still cameras with video capture capabilities, mobile phones and webcams
- The internet and DVDs as sources of pre-recorded digital video/animation material
- How to use a cameras and camcorders
- Types of video file systems (Mpeg, Avi, Mov)
- Types of animation file systems (GIF and SWF)
- The range of editing software currently available (free and paid for) and their advantages and disadvantages

National Unit Support Notes (cont)

Unit title: Digital Media: Moving Images (SCQF level 4)

Learners must be able to use the correct terminology for the materials, hardware, software and file formats that they are using.

Learners will make a significant contribution to the production of a basic plan and schedule for at least one piece of moving image work (animation or digital video), outlining the materials, hardware and software that they will require and their awareness of any associated copyright issues.

Outcomes 2 and 3

These outcomes introduce the learner to the process of acquiring digital video and animation materials, and producing moving images.

The practical nature of this unit will include the following:

♦ Methods used to acquire moving image materials using, for example, video camcorders, still cameras with video capture capabilities, mobile phones and webcams
♦ How to label and store this material safely on a computer, network, portable or cloud-based storage
♦ How to edit this material using basic editing software. Learners must be able to:
 — import materials into their given editing software (for example: Windows Movie Maker, Serif MoviePlus, AutoDesk Maya, Toon Boom or I Can Animate)
 — apply basic editing procedures, such as adding titles and credits; trimming clips; and adding transitions, narration, soundtracks and captions
 — save the project file for future editing
♦ Awareness of the range of distribution formats available for moving image. Learners must be able to export their project file in a format appropriate for the audience outlined in the task specification supplied by the teacher/lecturer

Learners must acquire their own materials for, and produce, at least one piece of moving image work. This piece of work can be either an animation (computer or stop-motion) or digital video.

Suggested content for *Digital Media: Moving Images* levels 4 and 5

	Level 4	Level 5
Media lifecycle	Plan Acquire Produce	Design Acquire/edit Produce Evaluate
Hardware	Digital video cameras Smartphones Tablets Mobile gaming devices Webcams Tripod	DSLR cameras Clapperboard External microphones Boom CPU and RAM Support rig/stabiliser 3-point lighting system Digital recorder, eg Zoom Graphics tablet

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	Level 4	Level 5
Software	Open-source software Professional tools	Plug-ins
Moving image transfer	Cable Card reader Memory card Import Export	Cloud storage Bluetooth Wi-Fi HDMI Display port Digital Visual Interface (DVI)
Moving image storage	Hard disk Tape Optical media Backups	Internal and external hard disks Compression Internet, eg Vimeo and YouTube DVD Blu-ray
Video camera functions	Lens Battery Pan Tilt Zoom	Image stabilisation Composition — Rule of thirds Digital zoom Optical zoom Bit rate Frame rate Exposure
File format	Mpeg Avi Mov GIF SWF	Mpeg 2 Mpeg 4 AVCHD WMV H.264 DivX
Moving image editing features	Timeline Titles Credits	Chroma-key Captions Splitting Trimming Transitions
Animation terminology	Frame Onion skinning	Lighting Rendering Rigging Modelling
Legislation	Copyright permissions	Release notice Legal implications, for example privacy issues

National Unit Support Notes (cont)

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Learning and teaching materials

♦   https://www.sqaacademy.org.uk/mod/resource/view.php?id=14821
♦   http://www.bbc.co.uk/schools/gcsebitesize/dida/multimedia/videorev1.shtml

Equipment

♦   https://www.bhphotovideo.com/explora/video/buying-guide/basic-equipment-new-filmmaking-students

Techniques

♦   https://understandingcinema.wordpress.com/
♦   https://www.youtube.com/playlist?list=PLknPDlZ9eUPAt3pc1pi4J4kyfrPyNuwzC
♦   https://www.intofilm.org/
♦   http://www.bfi.org.uk/education-research/teaching-film-tv-media-studies
♦   https://www.bloopanimation.com/animation-for-beginners/
♦   http://blog.ed.ted.com/2016/07/13/animation-basics-101/

Tools

Animation

♦   I Can Animate — http://www.kudlian.net/products/icananimatev2/Home.html
♦   Zu3D — https://www.zu3d.com/
♦   Blender — https://www.blender.org/
♦   Maya — https://www.autodesk.co.uk/products/maya/overview
♦   Pivot — http://pivotanimator.net/
♦   Adobe After Effects — https://helpx.adobe.com/uk/after-effects/tutorials.html
♦   Serif DrawPlus — http://www.serif.com/Education/SerifDesignSuite/DrawPlus/

Film-making

♦   Serif MoviePlus — http://www.serif.com/Education/SerifDesignSuite/MoviePlus/
♦   Windows Moviemaker — https://support.microsoft.com/en-gb/help/13785/essentials-2012-release-notes
♦   Lightworks — https://www.lwks.com/
♦   IMovie — https://www.apple.com/uk/imovie/
♦   Pinnacle — http://www.pinnaclesys.com/en/products/studio/?gclid=EAIaIQobChMI-OSR2e_T1QIVJrXtCh1I_AC3EAAYASAAEgK9zPD_BwE
♦   Adobe Premiere — http://www.adobe.com/uk/products/premiere.html?mv=search&s_kwcid=AL!3085!3!198718164123!e!!!!adobe%20premiere&ef_id=WLrStQAAAdTgAbGz:20170813092725:s

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Guidance on approaches to delivery of this unit

Although this unit contains a significant body of knowledge, it is recommended that it is delivered in a practical context through exemplification of the principles and practice of moving image production in the context of each learner's preferred subject area of interest. Learners should be given a broad enough brief that allows them to produce a piece of moving image work in a subject area that interests them, for example sport, computer games or music.

The brief could provide learners with an opportunity to produce a short, coherent moving image piece which would equate, as a rough rule of thumb, to a 12-frame storyboard. Learners would not be expected, at this level, to produce an extended piece of work or a complete narrative. For example, a possible brief could be to produce (create) a series of general views of the learners' school or college, cut to a short copyright-cleared music piece which will be used as an introductory scene setter within a web page/ induction video for the college student association. Alternatively, learners might produce a short piece explaining some learning or a concept from another domain, a mock TV advertisement or safety briefing.

All learners will require access to at least one device which allows them to capture digital video and/or still images (ideally learners should be able to try more than one kind of device to enable them to compare and contrast features and quality). Learners will also require access to a computer that has sufficient processing power, memory, file storage and graphics capabilities, to allow them to edit, render and play back their moving image product. On completion of the moving image piece, learners must have sufficient file storage space, either locally, on a network, portable storage device, or cloud-based system, to enable them to export the project in a suitable file format.

It is recommended that learners are given an opportunity to watch and discuss, as a group, examples of moving image work, and to recognise and critique basic techniques that have been employed in the examples that are watched.

The unit could be delivered in distinct stages with learners being given the theory regarding each stage of the moving image production process with small discrete practical tasks to reinforce the learning, after which learners are presented with a final design brief/task. Alternatively, if there are time constraints to deliver the unit, learners could be presented with all of the theory at once, with the practical work being satisfied by the planning, acquisition of materials and production of a moving image piece that meets a design/brief given by the teacher/lecturer.

It is recommended that the unit is delivered in the sequence of the outcomes, since each outcome requires the underpinning knowledge and skills of earlier outcomes. A suggested distribution of time across the outcomes is:

♦ Outcome 1: 15 hours
♦ Outcome 2: 15 hours
♦ Outcome 3: 10 hours

National Unit Support Notes (cont)

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There will be opportunities for learners to collaborate by, for example, helping behind, or in front of, the camera and thereby learning from one another. The learner could participate in the production of another learner's piece of moving image work, by watching it and providing constructive feedback on the evolving piece. Although collaboration with other learners taking the unit is encouraged, each learner must be able to provide their own evidence.

Although not essential to the successful completion of the unit, moving image provides an excellent platform for outdoor learning and/or interdisciplinary work.

Summative assessment should be carried out towards the end of the unit, although learners could begin to generate the evidence at an earlier stage. However, in this case, the completed moving image piece should not be assessed until it is complete and the learner is satisfied with it.

There are opportunities to carry out formative assessment at various stages in the unit but it is recommended, for expediency and learner experience, that learners are assessed in one extended assessment once all the theory for the three outcomes has been delivered.

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 traditional approach to assessment would comprise a test (for knowledge evidence) and a practical assignment (for the product evidence).

The test could consist of a number of selected response questions. For example, a multiple-choice test, consisting of 20 items, each with four options, with a pass mark of 12 out of 20. The items would cover every outcome but not every performance criterion. The test would be timed and carried out under controlled conditions, without access to reference material. Alternatively, the test could comprise a number of short answer questions.

The practical assignment could require the learner to plan and produce a moving image sequence, based on a supplied project brief. The brief should include details, such as:

♦ quantity of work required.
♦ quality of the material to be acquired.
♦ timescale for production.

It is recommended that the practical assignment is linked to the learner's extra-curricular interests.

The sequence would consist of a few simple components, which would be identified and acquired by the learner, and combined into a single product. An observation checklist could be used for authentication purposes to ensure that the learner has completed the required tasks along with the moving image evidence. The assessor should endorse each learner checklist with their name, signature and date.

National Unit Support Notes (cont)

Unit title: Digital Media: Moving Images (SCQF level 4)

The moving image piece may be constructed under loosely controlled conditions. For example, parts of it may not be done under the supervision of the assessor. In this scenario, authentication would be required, which could take the form of oral questioning.

A more contemporary (and natural) approach to assessment would be the use of a web log (blog) to record learning over the life of the unit. Learners would post, on a regular basis, their activities, which would include details about how they planned, acquired, edited and combined the various moving images. Given the multimedia nature of blogs, individual posts could record the tasks carried out by learners, including embedded digital media, illustrating the various stages involved in carrying out the supplied brief. The blog would, of course, have to include the final moving image sequence.

The final moving image sequence must be assessed against defined criteria, and the criteria should be known to the learner before they submit their evidence. The criteria should be based on the performance criteria within this unit specification and the characteristics defined in the evidence requirements section of this unit specification together with the appropriate SCQF level descriptors.

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 (when appropriate) and opportunities for remedial action.

The assessment of this unit could be combined with the assessment of the other component units within the National Progression Award in Digital Media at SCQF level 4 by means of a project involving learners in creating a more substantial digital product comprising images and audio.

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

In this unit learners are required to plan the acquisition of a moving image sequence. This will present opportunities for developing aspects of the Core Skill of *Problem Solving* (SCQF level 4) as well as aspects of the Core Skill in *Communication* (SCQF level 4).

In addition, opportunities may arise for learners to work together as part of the learning process, such as composing and recording moving images or using software packages for editing.

History of changes to unit

Version	Description of change	Date

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.

General information for learners

Unit title: Digital Media: Moving Images (SCQF level 4)

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.

Whilst undertaking this unit, you will be required to contribute to a script or storyboard to meet the requirements of a given project (supplied by your teacher or lecturer), plan the acquisition of digital video/animation material and then acquire it. You will edit and present the edited sequence in a format appropriate to the given project.

On the successful completion of this unit, you will have the skills and knowledge to undertake the acquisition of a short digital video or animation sequence to meet the requirements of a specified given project.

This unit is suitable for you if you have an interest in moving image and you wish to acquire the basic skills required for the acquisition and editing of moving image media. No previous experience of moving image acquisition or production is required, but it may be beneficial if you possessed basic IT skill, such as National 2 *Information and Communications Technology* or equivalent qualifications or experience.

The unit is a mix of theory and practice. The theory includes the underpinning knowledge required to plan, acquire materials for, and produce, a piece of moving image work. The unit also covers some theoretical aspects of moving image, such as the hardware, software and techniques used in the field of moving image. The practical aspects of the unit include planning a moving image piece; acquiring and storing moving image materials; and editing and producing a complete piece of moving image work.

You will be assessed practically by creating your own piece of moving image work. You will be required to demonstrate knowledge of moving image technical terminology and you may produce this throughout the unit or at the end of unit delivery; your teacher/lecturer will decide this.

On completion of this unit, you may wish to broaden your knowledge of digital media by completing HW4X 44 *Digital Media: Still Images* and/or HW4W 44 *Digital Media: Audio* to gain NPA Digital Media (level 4) group award. Alternatively, you might wish to gain a deeper understanding of moving images by completing HW4Y 45 *Digital Media: Moving Images*.