

Unit 54: Film and Video Editing Techniques

Unit code:	F/502/5676
QCF Level 3:	BTEC National
Credit value:	10
Guided learning hours:	60

● Aim and purpose

This unit aims to develop learners' skills in, and understanding of, moving image post-production processes. Learners will do this through exploring the professional practice of editing, and developing their own technical and creative skills. Learners will also develop an understanding of how their work can affect the final outcome of a production.

● Unit introduction

Editing of film or video material is an essential part of any audio-visual production. Without the process of removing, adding and manipulating source material, all film and video would have to be shot in sequence and without mistakes.

The process of editing involves making creative decisions about source material. It provides an opportunity for the creativity of the filming stage to be continued through to the finished product.

Through study of the development and principles of editing, learners will develop an insight into the 'language' of editing and the technical conventions used by editors to communicate with audiences.

Skills will be practised through editing video material or, where facilities permit, film. Learners will also develop an understanding of how their work can affect the final outcome of a production.

Learners will be able to experiment with editing processes and use their skills in the production of their own film and video products. They should learn that editing is not merely a technical process, but also an aesthetic one and they should be able to demonstrate this understanding through both their practice and the articulation of principles.

● Learning outcomes

On completion of this unit a learner should:

- 1 Understand the development and principles of editing
- 2 Be able to prepare moving image material for editing
- 3 Be able to edit moving image material.

Unit content

1 Understand the development and principles of editing

Development: following the action; multiple points of view; shot variation; manipulation of diegetic time and space; film, video; analogue; digital

Purposes: storytelling eg engaging the viewer, development of drama, relationship to genre, creating motivation; combining shots into sequences; creating pace

Conventions and techniques: seamless; continuity; motivated; montage; jump-cutting; parallel editing; 180° rule; splicing; transitions eg cut, dissolve, fade, wipe; cutaways; inserts; long takes; establishing shots; point of view shot; shot-reverse-shot; providing and withholding information; editing rhythm; crosscutting; cutting to soundtrack

2 Be able to prepare moving image material for editing

Preparation techniques: checking material for faults; synchronising rushes; producing a rushes log; marking up a script; labelling tapes; storing tapes or film; producing an edit decision list; creating bins; clarifying the purpose of the work with a client or director

Preparing to edit: importing clips; bins; timelines; storage and folder management; online and offline editing; formats; resolution; aspect ratio

3 Be able to edit moving image material

Editing technology: software applications; hardware eg non-linear, linear; high definition eg 1080p, 2k, 4k, 8k; standard definition; tapes; hard disc; data transfer rates; exporting productions; file types eg mov, avi, flv, H.264; compression

Editing process: use appropriate techniques eg seamless, continuity, motivated, montage, jump-cutting, parallel editing; use appropriate transitions eg cut, dissolve, fade, wipe; use appropriate conventions eg cutaways, cutting on action, creating juxtapositions, intercutting; pace effectively; convey information effectively; use sound to create impact; synchronise sound and vision; mix soundtracks; overlap sound; offline edit; online edit

Post-production tools: on screen text; image editing; audio editing; encoding; special effects

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 describe the development and principles of editing with some appropriate use of subject terminology	M1 explain the development and principles of editing with reference to detailed illustrative examples and with generally correct use of subject terminology	D1 critically assess the development and principles of editing with supporting arguments and elucidated examples, and consistently using subject terminology correctly
P2 apply editing preparation techniques with some assistance	M2 apply editing preparation techniques competently with only occasional assistance	D2 apply editing preparation techniques to a technical quality that reflects near-professional standards, working independently to professional expectations
P3 apply editing techniques working within appropriate conventions and with some assistance. [CT]	M3 apply editing techniques to a good technical standard showing some imagination and with only occasional assistance.	D3 apply editing techniques to a technical quality that reflects near-professional standards, showing creativity and flair and working independently to professional expectations.

PLTS: This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers	RL – reflective learners	SM – self-managers
	CT – creative thinkers	TW – team workers	EP – effective participators

Essential guidance for tutors

Delivery

The first stages of this unit can be taught through seminar sessions in which the development and principles of editing are explored in key examples. This can be linked to the development of editing by taking examples from the very earliest films by the Lumiere brothers and the pioneer commercial film makers, the early experimentalists such as Griffiths and Eisenstein, and the mid-twentieth century and current practitioners (tutors will no doubt have their own favourites for the later periods). Learners could give presentations examining examples they have analysed and material they have produced themselves.

It would be instructive to compare examples from fiction, non-fiction and advertising, so that learners are acquainted with the main principles of editing for all three of the main moving image forms. Learners could compare, for example, an episode of Inspector Morse with its long stretches of uninterrupted continuity sequences, a thirty second commercial with many cuts, effects and elisions, and a news item cut in a more conservative and leisurely style using mainly montages of actuality footage. However, they may be well-advised to concentrate on one form for the practical elements of the unit.

Practical sessions with one-to-one instruction will be valuable in guiding learners through the preparation processes and enabling them to acquire skills with specific technology. Early, quite simple exercises will enable learners to become proficient in routine preparatory tasks, whilst progressively demanding exercises which concentrate on specific editing techniques will facilitate the acquisition of technical and creative skills. Early in the learning process learners should be encouraged to work with material shot by someone else in order to experience the challenges faced by an editor and enable them to appreciate the work of a skilled camera operator. Learners could also act as editors for each other's work, thus reflecting more accurately the division of labour in film and TV.

Learners should be encouraged to use this unit as an integral part of their moving image work. Once the initial skills have been developed they could start to edit their own material produced in other units in their programme of study. This work can form the evidence for the assessment of achievement of learning outcomes 2 and 3.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way of planning the teaching and assessment of this unit.

Topics and suggested assignments and activities

Introduction to unit and unit assessment.

Illustrated lectures:

- development of editing
- understanding conventions
- techniques, with study of clips illustrating various types of editing.

Topics and suggested assignments and activities

Assignment 1: Development of the Principles of Editing

Learners will produce a video blog about editing for a website designed to help develop young people's film production skills. They will describe:

- the principles of editing
- the purposes of editing
- how editing has developed over time.

Software demonstrations:

- basic steps
- file naming and saving protocols.

Practical workshops:

- language and grammar of editing
- conventions
- techniques
- found footage editing exercise.

Screening and evaluation of work.

Software demonstrations:

- importing clips
- bins
- timelines
- storage and folder management.

Exercise on editing found footage to meet three different briefs.

Technical demonstration:

- further features of editing software
- hardware
- high definition
- standard definition
- data transfer rates.

Lecture: screening of TV documentaries/DVD extras about the work of editors.

Visiting speaker: practising editor.

Demonstrations:

- the aesthetics of editing
- creative use of material
- audience and narrative.

Topics and suggested assignments and activities

Workshops:

- organising the edit
- checking material for faults
- producing a rushes log
- marking up a script
- professional practice
- labelling tapes
- storing tapes or film
- producing an edit decision list
- creating bins
- working with a client or director.

Technical workshops:

- editing outputs
- exporting and compression
- file format and size.

Screening: examples of professional excellence.

Assignment 2: Final Edit

Learners will edit a production made in connection with another film or video production unit.

Evaluation of post-production process and outcome.

Unit learning and assessment review.

Assessment

Evidence for assessment

It is important that each learner has the opportunity to demonstrate their ability individually in this unit and assessment assignments should be designed accordingly.

Achievement of learning outcome 1 can be assessed through an illustrated written report or a presentation. Presentations must be recorded for the purposes of internal and external verification. For some learners, a formal viva voce assessment might be appropriate. When more than one learner in a cohort is assessed in this way care must be taken to ensure that all learners are asked equivalent questions, and that all are given equal opportunities to expand or clarify their answers. Interviewers must also ensure that questions are not phrased in such a way as to provide or suggest an answer. Formal vivas should be recorded for the purposes of internal and external verification and at least 50 per cent of such assessments must be internally verified.

One way to assess achievement of learning outcomes 2 and 3 would be to set up an editing 'test' in which learners have a fixed time in which to produce an edited piece of work. Rushes could be shot by tutors and supplied in advance in order to enable logging to take place and an edit decision list to be produced. The final piece does not have to be extensive, something lasting two or three minutes can provide opportunities to demonstrate high level skills, provided that the aesthetic and technical challenges are sufficiently demanding. Alternatively, learners can edit a piece of work they are producing for another unit. In all cases evidence of preparation techniques should be provided through the submission of relevant documentation.

Application of grading criteria

When applying the grading criteria, tutors should follow the advice given below. Please note that any examples of evidence given here are indicative only. This advice is not exhaustive and the examples need not specifically be included in a learner's work in order for that learner to achieve the exemplified grade.

For each of the criteria learners must present evidence that addresses each italicised sub-heading of the content for the learning outcome.

P1: learners will provide an outline of the development and the main principles of editing, in which all aspects are accurate and relevant but detail will be limited. They may deal with the two matters separately, or demonstrate their understanding of the principles through their description of the development of editing. They might refer to individual films but will not select details from, or elements of, those films to exemplify points made. A pass grade learner might note, 'One of the main rules of continuity editing is the 180° rule. This means that the camera must always stay on the same side of the line along which an action takes place.' Evidence will show a basic understanding of technical terminology but learners will generally be unsure about this vocabulary and will make fairly frequent mistakes when they do use it.

P2: there will be evidence of an awareness of the processes and preparation techniques necessary for editing and of their application, but the application will be inconsistent. Documentation such as logging sheets and edit decision lists will be basic and lacking in detail.

P3: learners will demonstrate a basic ability to apply key techniques and principles but with some technical shortcomings such as occasional flash frames, jump cuts and poorly balanced sound. Techniques applied will not necessarily be suited to the genre or form of the edited piece and in terms of the imaginative qualities of their work learners will not move beyond the conventional.

P2 and P3: when engaged in practical activities, learners will need frequent assistance and support, though they will take note of and make use of this help when it is given. If they are in frequent need of such help but fail to make positive use of it they should not be considered for a pass grade for this unit.

M1: in discussing the development of editing learners will show how or why one stage developed from another. They will talk about the principles in such a way as to show how or why they have developed or will be able to say why they have become, as they are, basic to the process. They will explain why particular techniques are used in specific circumstances or to explain the strengths and weaknesses of given techniques. Detailed illustrative exemplification drawn from details or elements of the films studied will be given to support what is said, but learners will not elucidate these examples to show how they illustrate the point they support. A merit grade learner might note, 'One of the main principles of continuity editing is the 180° rule. This means that the camera must always stay on the same side of the line along which an action takes place because if it did not the viewer would soon become confused about what was happening. A good example of this is the scene in *Platoon* where Barnes goes looking for Elias in the jungle in order to kill him.' Learners will use technical vocabulary for the most part correctly, but may make mistakes or be unsure about usages at times.

M2: learners will apply editing preparation techniques systematically and the documents they produce will be functional and prepared with some care. There will be a recognition of why such documentation is necessary. However, rushes logs will typically lack full detail, edit decision lists will over-simplify sequences and the organisation of paperwork will lack proper rigour.

M3: the edited work will exhibit only minor technical flaws. Flash frames and jump cuts should generally be absent and the techniques chosen should essentially suit the genre and form of the work. There may be flaws with timing and pacing, but generally there should be a sense of competent selection and combination of sound and vision. There will be some imaginative thought behind the work so that technical skills will be employed with some inventiveness. Learners will show facility and some confidence in relation to skills and the handling of equipment and work will be approached methodically.

M2 and M3: when engaged in practical activities, learners will need only occasional assistance, though typically they will still need some support when dealing with more complex technology or trying to apply more sophisticated techniques. Like the pass grade learner, they will benefit from it.

D1: in their discussion of the development of editing, learners will develop ideas critically (that is, they will compare, assess and discriminate), supporting points with clear arguments and evidence. They will draw out of an example precisely what it is about it that exemplifies the point it illustrates. Typically, distinction grade learners will merge discussion of development with discussion of the principles of editing, demonstrating their understanding of the latter through the former. They will show a sophisticated understanding of the principles of editing, being able to say exactly why a given principle has developed. A distinction grade learner might note, 'The 180° rule developed very early, being used in the silent era. It was developed so that viewers could follow an action without getting confused, and is particularly useful when two related sequences of action are happening simultaneously. For example, in *Platoon*, when Barnes is pursuing Elias through the jungle in order to kill him, Barnes always moves from left to right across the screen, and therefore away from the rest of the platoon, while Elias always moves from right to left, which is back towards his platoon and hence to safety. Once this sense of direction has been clearly established it is carefully maintained, so that as we cut from one to the other, we can tell not only who is going where, but are vividly aware of the fact they are about to meet each other.' Technical vocabulary will be secure and used correctly and confidently at all times.

D2: work will be characterised by preparation which is thorough, systematic and detailed. Rushes logs will show a full appreciation of the possibilities and limitations of shots, and edit decision lists will provide a fully detailed blueprint for the final piece. All paperwork will be clear and organised to a near-professional standard.

D3: editing will be technically accomplished and exhibit flair in its use of structure, pace and combination of sound and vision. Techniques used will be entirely appropriate for the genre and form of the work. Not only will the finished products be technically correct, but the productions will show that learners have been creative in the use of the available media, applying their technical skills not just with imagination but with ingenuity and even elegance. Again, work will approach professional standards.

D2 and D3: in all practical activity distinction grade learners will be capable of working autonomously and effectively. The term 'working independently' means that they are able to work on their own initiative, do not need constant support or supervision, give the work their full commitment, work positively and cooperatively with others, and meet deadlines. In other words, they have the kind of self-management skills that would be expected of them in a professional context. Note also that this criterion should not be taken to mean that learners do not seek advice or that they work without discussing things with their tutor, but rather that they are not dependent upon the support of others and that when they take advice they weigh it carefully for themselves.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the assessment and grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1,M1,D1	Assignment 1: Development of the Principles of Editing	Produce a video blog about editing for a website developing young people's film production skills.	<ul style="list-style-type: none"> All research notes. Completed video blog.
P2,M2,D2 P3,M3.D3	Assignment 2: Final Edit	A production company approaches learners to take the role of editor on a drama they are shooting.	<ul style="list-style-type: none"> All documentation. Completed production.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the BTEC Art and Design suite. This unit has particular links with the following units in the BTEC Art and Design suite:

Level 2	Level 3
Working with Interactive Media Briefs	Single Camera Techniques
Working with Moving Image Briefs	Understanding Video Technology

There are also opportunities to relate the work done for this unit to Skillset National Occupational Standards in Editing as follows:

- E1 Identify and agree editing outcomes and process
- E5 Capture pictures and sound for nonlinear editing
- E9 Edit materials using linear video-tape equipment
- E11 Edit materials using non-linear equipment
- E13 Assemble pictures and sound to specification
- E14 Produce first cuts
- E15 Evaluate first cuts and agree changes to them
- E16 Produce fine cut/locked out materials for final post-production
- E23 Realise complex effects.

Essential resources

Learners will need access to professional standard editing facilities. There should be sufficient equipment available to enable simultaneous access for a whole teaching group to practise and be assessed. Some thought should be given to the storage of multiple users' work on computers, and portable hard drives may be a solution. Learners should have access to technical manuals and books on the craft of editing. It is worth building up a bank of interviews with editors from TV, radio and relevant magazines.

Employer engagement and vocational contexts

Centres should develop links with local production companies and freelancers working in film, video and television. Visiting industry speakers are particularly valuable when they are able to provide professional insight and offer industry related briefs. Some employers will be able to provide work placements or to create editing scenarios for learners replicating a variety of techniques using sound and vision for a variety of audiences.

Centres may also be able to develop relationships with external organisations which will act as clients for productions which will have real audiences. The role of the editor will be crucial to this scenario.

The following agencies exist to develop film and media in the UK. Their websites provide material for research and many of them include clips of production work. The agencies themselves do not fund production work by learners, but offer information about production, distribution and exhibition initiatives taking place across the UK:

- www.bfi.org.uk – *British Film Institute*
- www.em-media.org.uk/pages/home – *East Midlands Media*
- www.filmagencywales.com – *Film Agency for Wales*
- www.filmlondon.org.uk – *Film London*
- www.northernirelandscreen.co.uk – *Northern Ireland Screen*
- www.northernmedia.org – *Northern Film and Media*
- www.northwestvision.co.uk – *North West Vision and Media*
- www.scottishscreen.com – *Scottish Screen*
- www.screeneast.co.uk – *Screen East*
- www.screensouth.org – *Screen South*
- www.screenwm.co.uk – *Screen West Midlands*
- www.screenyorkshire.co.uk – *Screen Yorkshire*
- www.swscreen.co.uk – *South West Screen*
- www.ukfilmcouncil.org.uk – *UK Film Council*

Skillset, the Sector Skills Council for the creative media sector, has a substantial section of its website dedicated to careers, including job descriptions – www.skillset.org/film/jobs/post.

Further general information on work related learning can be found at the following websites:

- www.aimhighersw.ac.uk/wbl.htm – work-based learning guidance
- www.businesslink.gov.uk – local, regional business links
- www.nebpn.org – National Education and Business Partnership Network
- www.vocationallearning.org.uk – Learning and Skills Network
- www.warwick.ac.uk/wie/cei – Centre for Education and Industry, University of Warwick – work experience and workplace learning frameworks.

Indicative reading for learners

Textbooks

Baylis P, Freedman A, Procter N et al – *BTEC Level 3 National Creative Media Production, Student Book* (Pearson, 2010) ISBN 978-1846906725

Baylis P, Freedman A, Procter N et al – *BTEC Level 3 National Creative Media Production, Teaching Resource Pack* (Pearson, 2010) ISBN 978-1846907371

Chandler G – *Cut by Cut: Editing Your Film or Video* (Michael Wiese, 2004) ISBN 978-0941188999

Dancyger K – *The Technique of Film and Video Editing: History, Theory, and Practice, 4th Edition* (Focal, 2006) ISBN 978-0240807652

Kindem G and Musburger R – *Introduction to Media Production: From Analog to Digital, 4th Edition* (Focal Press, 2009) ISBN 978-0240810829

McGrath D – *Editing and Post-Production* (Focal Press, 2001) ISBN 978-0240804682

Murch W – *In the Blink of an Eye: A Perspective of Film Editing, 2nd Edition* (Silverman-James Press, 2001) ISBN 978-1879505629

Orlebar J – *Digital Television Production* (Hodder Arnold, 2001) ISBN 978-0340763230

Roberts-Breslin J – *Making Media: Foundations of Sound and Image Production, 2nd edition* (Focal Press, 2007) ISBN 978-0240809076

Rubin M – *The Little Digital Video Book, 2nd Edition* (Peachpit, 2001) ISBN 978-0321572622

Wells P – *Digital Video Editing: A User's Guide* (Crowood, 2007) ISBN 978-1861269522

Journals

AV

Broadcast

Television

Websites

www.bectu.org.uk – BECTU (Broadcasting Entertainment Cinematograph and Theatre Union) is the trade union representing video production professionals

www.firstlightmovies.com – First Light exists to encourage film making amongst young people and has links to Skillset and the UK Film Council

www.nt12.orbital.net/bksts/about.asp – BKSTS (British Kinematograph Sound & Television Society) organises events, courses, and new equipment demonstrations)

www.shootingpeople.org/account/auth.php – Shooting People, a film making forum

Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
Creative thinkers	generating ideas and exploring possibilities when editing sound and picture for a specific purpose, and using conventions and techniques to create meaning connecting their own and others' ideas and experiences in inventive ways by using knowledge of the work of professional editors to inform their own work adapting ideas as circumstances change whilst editing.

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	planning and carrying out research when exploring the work of editors
Reflective learners	when editing, setting goals with success criteria for their development and work reviewing progress, acting on the outcomes and evaluating experiences and learning to inform future progress
Team workers	collaborating with others to work towards common goals when working as an editor in a production team
Self-managers	working towards goals, showing initiative, commitment and perseverance organising time and resources, and prioritising actions when engaged in editing work.

● Functional Skills – Level 2

Skill	When learners are ...
ICT – Use ICT systems	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	using editing software to select, refine and combine material on a timeline
Use ICT to effectively plan work and evaluate the effectiveness of the ICT system they have used	presenting edited work using software
Manage information storage to enable efficient retrieval	digitising and storing video material using recognised storage systems
ICT – Find and select information	
Select and use a variety of sources of information independently for a complex task	researching examples of work for use in presentation
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	
ICT – Develop, present and communicate information	
Bring together information to suit content and purpose	using video editing applications to create moving and still image work and audio files
Present information in ways that are fit for purpose and audience	
Evaluate the selection and use of ICT tools and facilities used to present information	discussing qualities and purpose of various examples of digital video editing software
Mathematics	
Understand routine and non-routine problems in a wide range of familiar and unfamiliar contexts and situations	following editing practice in the use of logging and edit decision lists working with timelines
Identify the situation or problem and the mathematical methods needed to tackle it	calculating the required levels of shot trimming needed to conform with agreed running time
Select and apply a range of skills to find solutions	
Use appropriate checking procedures and evaluate their effectiveness at each stage	

Skill	When learners are ...
English	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	discussing editing principles in relation to development and principles of editing or presenting critical analyses of specific examples of editing
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	learning about editing principles through reading and summarising key texts
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	analysing and reporting on examples of editing.