



Pearson BTEC Level 2 Technical Diploma in Digital Games Production

Specification

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Issue 4

Edexcel, BTEC and LCCI qualifications

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This specification is Issue 4. Key changes are listed in the summary table on the page after next of the document. We will inform centres of any changes to this issue. The latest issue can be found on the Pearson website: [qualifications.pearson.com](https://www.pearson.com)

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Welcome

With a track record built over 30 years of learner success, BTEC qualifications are widely recognised and respected. They provide progression to the workplace, either directly or via study at higher levels. Proof comes from YouGov research, which shows that 62% of large companies have recruited employees with BTEC qualifications.

Why are BTECs so successful?

BTECs embody a fundamentally learner-centred approach to the curriculum, with a flexible, unit-based structure. In these new BTEC Level 2 Technicals, the focus is on the development of technical, practical and transferable work-related skills, and sector-specific knowledge. The development of these skills is key for learners to progress to work or to an Apprenticeship. When creating the BTEC Level 2 Technicals, we worked with employers to ensure that the qualifications meet their needs. Employers are looking for recruits with the appropriate technical knowledge, and technical and transferable skills essential for employment.

The BTEC Level 2 Technicals meet these requirements through:

- a range of occupationally-related qualifications, each with a clear purpose, so that there is a qualification to suit each learner's plan for career progression
- up-to-date content that is closely aligned with employers' needs for a skilled future workforce
- assessments chosen to help learners progress to the next stage. This means that some assessments are set by the centre to meet local needs, while others are set and marked by Pearson. This ensures that there is a core of skills and understanding common to all learners. For example, an externally-set test can be used to check that learners are confident in using technical knowledge to carry out a certain job.

We provide a wealth of support, both resources and people, to ensure that learners and their tutors have the best possible experience during their course. See *Section 11 Resources and support* for details of the support we offer.

A word to learners...

BTEC Level 2 Technicals will demand a lot of practical work from you. You will need to:

- complete a range of units
- be organised
- take some assessments that Pearson will set and mark
- take other assessments that will demonstrate your technical and practical skills
- keep a portfolio of your assignments.

But you can feel proud to achieve a BTEC because, whatever your plans in life – whether you decide to go on to work or to an Apprenticeship – success in your BTEC Level 2 Technical qualification will help you to progress to the next stage in your life.

Good luck, and we hope you enjoy your course.

Collaborative development

Learners completing their BTEC Level 2 Technicals will be aiming to go on to employment or to an Apprenticeship. It was essential, therefore, that we developed these qualifications in close collaboration with experts from professional bodies and businesses, and with the providers who will be delivering the qualifications. We are grateful to all the further education lecturers, tutors, employers, professional body representatives and other individuals who have generously shared their time and expertise to help us develop these new qualifications.

In addition, professional bodies and businesses have provided letters of support confirming that these qualifications meet their recruitment requirements. These letters can be viewed on our website.

Summary of Pearson BTEC Level 2 Technical Diploma in Digital Games Production specification Issue 4 changes

Summary of changes made between previous issues and this current issue	Page number
Change to wording to remove incorrect grade information.	Page 5
The percentage of the total qualification GLH has been changed to 25%.	Page 134
The grades earned in Examples 1 and 2 have been amended.	Page 147

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Pearson BTEC Level 2 Technicals

Introduction

BTEC Level 2 Technicals are intermediate qualifications for post-16 learners who want to specialise in a specific occupation, occupational area or technical role. They prepare learners for work or an Apprenticeship by giving them the opportunity to develop sector-specific knowledge, technical and practical skills, and to apply these skills in work-related environments. The qualifications also provide progression to Level 3 Tech Level qualifications.

Developed in close conjunction with leading employers, BTEC Level 2 Technicals develop transferable workplace skills, such as good communication and the ability to work in a team, which employers have identified as essential for gaining employment in the sector and for progression once the learner is working.

At the core of these qualifications is the concept of preparing young people for the working world. Through practical activities and occupationally-fit-for-purpose assessments, learners will gain the skills and behaviours needed for sustainable employment.

BTEC Level 2 Technicals are designed to be used flexibly, depending on their size and scope:

- as part of a full-time 16–19 study programme, alongside mathematics and English GCSEs and/or Functional Skills, work placement and enrichment activities
- as the technical qualification within an Apprenticeship or off-the-job training for those already in work
- as a roll-on, roll-off programme for those entering an Apprenticeship or employment.

Pearson has developed the BTEC Level 2 Technicals suite to meet the Department for Education (DfE) requirements for qualifications to be offered as Technical Certificates for 16–19 year olds.

This specification contains the information you need to deliver the Pearson BTEC Level 2 Technical Diploma in Digital Games Production (QN 603/0874/6). The specification signposts you to additional handbooks and policies. It includes all the units for this qualification.

This qualification is a part of the BTEC Level 2 Technicals suite for the digital games sector.

Other BTEC Level 2 Technicals available for this sector include:

Pearson BTEC Level 2 Technical Diploma in Digital Audio/Visual Production (603/0876/X)

Pearson BTEC Level 2 Technical Diploma in Digital Media Production (603/0875/8).

1 Pearson BTEC Level 2 Technical Diploma in Digital Games Production

Purpose

Who is the qualification for?

This qualification is for learners who want to start a career in digital games production. It is designed for post-16 learners and can be taken as part of a wider study programme. It is an ideal qualification for learners intending to progress directly to employment in the digital games production sector of the creative industries, or to a related Apprenticeship such as a TV production and broadcasting, or to a creative digital media Apprenticeship.

What does the qualification cover?

This qualification has been developed in consultation with employers in the digital games sector to ensure learners develop the skills and behaviours that give them the best opportunity to be successful when applying for work.

83% of the qualification is mandatory and provides a foundation of skills, knowledge and behaviours expected by employers in the digital games production sector of the creative industries. These skills are central to understanding the diverse nature of the industry and to creating a successful portfolio. The mandatory areas learners cover include:

- digital production project (externally assessed)
- planning and pitching a digital media product
- digital testing
- narrative for digital media
- animation for digital media.

Learners can also choose one optional specialist unit, which builds on and extends their skills and knowledge.

Learners will also enhance their broader skills in literacy and numeracy, which will be invaluable in supporting progression in other areas. In addition, they will develop transferable technical and practical skills in communication, research and teamwork.

What could this qualification lead to?

Achieving this qualification will give learners an advantage when applying for an entry-level job in the creative industries. The types of jobs include:

- games tester and app developer
- junior level designer.

When studied as part of a full study programme, this qualification also gives learners a sound basis to progress further in the creative industries to a Level 2 Apprenticeship, for example in visual effects and creative digital media, or to a Level 3 qualification such as a Pearson BTEC Level 3 National Diploma in Digital Games Design and Development.

About the digital games production sector

Digital games production is a part of the creative industries, a sector that outgrew the rest of the economy and generated £84.1 billion of value for the UK during 2014. The UK creative industries are renowned across the globe for driving growth and investment. There are approximately 1.8 million people employed in creative industries occupations in the UK, of which digital games production plays an important part. The jobs in this sector are varied and contribute to the quality of our digital games industry and film/TV special effects etc.

2 Structure

Total Qualification Time (TQT)

For all regulated qualifications, Pearson specifies a total number of hours that it is estimated learners will require to complete and show achievement for the qualification: this is the Total Qualification Time (TQT). Within TQT, Pearson identifies the number of Guided Learning Hours (GLH) that we estimate a centre delivering the qualification might provide. Guided learning means activities such as lessons, tutorials, online instruction, supervised study and giving feedback on performance, that directly involve tutors and assessors in teaching, supervising and invigilating learners. Guided learning includes the time required for learners to complete external assessment under examination or supervised conditions.

In addition to guided learning, other required learning directed by tutors or assessors will include private study, preparation for assessment and undertaking assessment when not under supervision, such as preparatory reading, revision and independent research.

The Pearson BTEC Level 2 Technical Diploma in Digital Games Production is a qualification that has:

- Total Qualification Time: 480 hours
- Guided Learning: 360 hours.

Centres should take note of these hours in planning their programme but should also use their professional judgement to determine the provision of guided learning and study time across the units.

Qualification structure

Learners are required to complete and achieve all mandatory units and one optional unit in the qualification.

Pearson BTEC Level 2 Technical Diploma in Digital Games Production				
Unit number	Unit title	GLH	Type	How assessed
Mandatory units – learners complete and achieve all units				
1	Planning and Pitching a Digital Media Product	30	Mandatory	Internal
2	Animation for Digital Media	60	Mandatory	Internal
3	Digital Testing	30	Mandatory	Internal
4	Digital Games Production	60	Mandatory	Internal
5	Narrative for Digital Media	30	Mandatory	Internal
6	Digital Production Project	90	Mandatory	External
Optional units – learners complete and achieve 1 unit				
7	Digital Audio	60	Optional	Internal
8	Digital Editing for Moving Image	60	Optional	Internal
9	3D Modelling	60	Optional	Internal
10	Digital Graphics	60	Optional	Internal

This qualification has 83% mandatory content and 25% external assessment.

Qualification and unit content

Pearson has developed the content of this qualification in collaboration with employers and representatives from relevant professional bodies and further education providers. In this way, we have ensured that content is up to date and that it includes the knowledge, technical and practical skills and behaviours required to work in the sector and occupational area.

83% of the content in this qualification is mandatory, which provides a balance of breadth and depth, ensuring that all learners develop the technical and practical skills required in the occupational area. Learners are then given the opportunity to develop a range of transferable skills and attributes expected by employers. It is expected that learners will apply their learning to relevant employment and sector contexts during delivery, and that they will have opportunities to engage meaningfully with employers.

BTECs have always required applied learning that brings together knowledge and understanding (the cognitive domain) with practical and technical skills (the psychomotor domain). This is achieved through learners performing practical, work-related tasks that encourage the development of appropriate work-related behaviours (the affective domain) and transferable skills. Transferable skills are those such as communication, teamwork and planning, and completing tasks to high standards, all of which are valued in the workplace.

Our approach provides rigour and balance and promotes the ability to apply learning immediately in new contexts.

Some of the units within the specification may contain references to legislation, policies, regulations and organisations, which may not be applicable in the country you deliver this qualification in (if teaching outside of England), or which may have gone out of date during the lifespan of the specification. In these instances, it is possible to substitute such references with ones that are current and applicable in the country you deliver subject to confirmation by your Standards Verifier.

Assessment

Assessment is designed to fit the purpose and objective of the qualification. It includes a range of assessment types and styles suited to skills and occupationally-based qualifications at this level.

Internal assessment

Units 1, 2, 3, 4, 5, 7, 8, 9, and 10 are assessed through internal assessment. Internal assessment allows learners to apply technical knowledge and demonstrate mastery of practical and technical skills through realistic tasks and activities. This style of assessment promotes deep learning through ensuring the connection between knowledge and practice.

Internal assessment is through assignments that are subject to external standards verification. We provide suggestions in each unit for setting assignments. This means that you can adapt materials to your local contexts and assess assignments that provide the valid and rigorous final assessment for each unit.

You will make grading decisions based on the requirements and supporting guidance given in the units. Learners must achieve all the internal units at Pass grade or above to achieve the qualification. For further information on internal assessment, including resubmissions, see *Section 6 Internal assessment*.

Synoptic external assessment

There is one external unit that provides the main synoptic assessment for this qualification, which assesses a unit that contributes 25% of the total qualification GLH. This synoptic assessment is designed to take place towards the end of the programme to ensure it draws on the learning throughout. The design of this assessment ensures that there is sufficient stretch and challenge, enabling the assessment of sector-related knowledge and technical and practical skills at the end of the learning period.

The synoptic assessment for this qualification is based on *Unit 6* and takes the form of a vocational activity in which learners have to respond to a design scenario, carrying out research in order to establish an initial design concept before developing their ideas into a final outcome. In completing this activity, learners will need to identify and use the varied practical skills and technical knowledge of the design process that they have developed during the programme.

In delivering the unit, you need to encourage learners to draw on their broader learning so that they are prepared for the assessment.

The external assessment is taken under specified conditions, then marked by Pearson and a grade awarded according to a weighted points scale. Learners must achieve the external unit at Pass grade or above to achieve the qualification. Learners are permitted to resit the external assessment once but only if they are studying for a period of longer than one year.

For further information on external assessment see *Section 7 External assessment*.

Language of assessment

Assessment of the internal and external units for this qualification will be available in English. All learner work must be in English. A learner taking the qualifications may be assessed in British sign language where it is permitted for the purpose of reasonable adjustment. For information on reasonable adjustments see *Section 8 Administrative arrangements*.

Grading of the qualification

Achievement in the qualification requires a demonstration of depth of study in each unit, assured acquisition of the practical skills required for employment in the specific sector and successful development of transferable skills.

Units are assessed using a grading scale of Distinction, Merit, Pass and Unclassified. All units in the qualification contribute proportionately to the overall qualification grade.

The qualification is graded using a scale of PP to DD. Please see *Section 10 Understanding the qualification grade* for more details.

The relationship between qualification grading scales and unit grades will be subject to regular review as part of Pearson's standards monitoring processes on the basis of learner performance and in consultation with key users of the qualification.

Employer involvement

Employer involvement in the delivery and/or assessment of technical qualifications provides a clear 'line of sight' to work, enriches learning, raises the credibility of the qualification in the eyes of employers, parents and learners, and furthers collaboration between the learning and skills sector and industry.

You need to ensure that all learners have the opportunity to undertake meaningful activity involving employers during their course.

Examples of 'meaningful activity' include:

- structured work experience or work placements that develop skills and knowledge relevant to the qualification/industry
- project(s), exercise(s) and/or assessments/examination(s) set with input from industry practitioner(s)
- units delivered or co-delivered by an industry practitioner(s); this could take the form of masterclasses or guest lectures
- industry practitioners operating as 'expert witnesses' who contribute to the assessment of a learner's work of practice, operating within a specified assessment framework; this may be a specific project(s), exercise(s) or all assessments for a qualification.

In some units, we have provided suggestions on how employers could become involved in the delivery and/or assessment of this qualification. These units are listed below.

- In *Unit 1: Planning and Pitching a Digital Media Product*, learners may present their pitch to a local production company and get feedback.
- In *Unit 2: Animation for Digital Media*, learners could respond to a brief from a digital games company in order to plan and create an animation for a game.

These are suggestions only and there will be other possibilities at local level. Centres may choose to use other approaches but must ensure that they meet the requirement for meaningful employer involvement as defined above. Centres must have an employer involvement plan in place at the start of the programme. It must detail their approach to employer involvement and how it will add value to the delivery and assessment of the qualification.

Each centre's approach to employer involvement will be monitored in two ways. It will be monitored at centre level as part of the annual quality-management review process and captured as part of the standards verification process that addresses centre strategy for delivery, assessment and quality assurance, when we will ask you to show evidence of how employer involvement is provided for all learners. You will need to show evidence in order to gain reporting clearance for certification. It will also be monitored at programme level as part of the standards verification process to confirm that plans for employer involvement meet the requirements of the specification. These approaches are designed to ensure that additional activities can be scheduled where necessary so that learners are not disadvantaged, see *Section 9 Quality assurance*.

3 Units

Understanding your units

The units in this specification set out our expectations of assessment in a way that helps you to prepare your learners for assessment. The units help you to undertake assessment and quality assurance effectively.

Each unit in the specification is set out in a similar way. There are two types of unit format:

- internal units
- external units.

This section explains how the units work. It is important that all tutors, assessors, internal verifiers and other staff responsible for the programme read and are familiar with the information given in this section.

Internal units

Section	Explanation
Unit number	The number is in a sequence for the qualification.
Unit title	This is the formal title of the unit and appears on certificates.
Level	All units are at Level 2 on the national framework.
Unit type	This says if the unit is mandatory or optional for the qualification. See <i>Section 2 Qualification structure</i> for details.
Assessment type	This says how the unit is assessed – i.e. whether it is external, internal or synoptic internal. See <i>Section 2 Qualification structure</i> for details.
GLH	Units have a GLH value of 60 and 30. This indicates the numbers of hours of teaching, directed activity and assessment expected. It also shows the weighting of the unit in the final qualification grade.
Unit in brief	A brief formal statement on the content of the unit that is helpful in understanding its role in the qualification. You can use this in summary documents, brochures etc.
Unit introduction	This is designed with learners in mind. It indicates why the unit is important, how learning is structured and how learning might be applied when progressing to employment or higher education.
Learning aims	These help to define the scope, style and depth of learning of the unit. You can see where learners should be developing and demonstrating their skills or where they should be actively researching or reviewing.
Unit summary	This section helps tutors to see at a glance the main content areas against the learning aims and the structure of the assessment. The forms of evidence given are suitable to fulfil the requirements.
Content	This section sets out the required teaching content of the unit. Content is compulsory except when shown as 'e.g.'. Learners should be asked to complete summative assessment only after the teaching content for the unit or learning aim(s) has been covered.

Section	Explanation
Assessment criteria	Each learning aim has assessment criteria to explain the achievement required to obtain Pass, Merit and Distinction grades.
Essential information for assessment decisions	This information gives guidance for each learning aim or assignment of the expectations for Pass, Merit and Distinction standard. This section contains examples and essential clarification. It is important that this is used carefully alongside the assessment criteria.
Assessment activity	This section provides information, suggested scenarios and tasks for summative assessment activities.
Further information for tutors and assessors	The section gives you information to support the delivery and assessment of the unit.
Delivery guidance	This section offers suggestions of ways of delivering the unit. It offers ideas on practical activities in a sector context that can be used to help develop relevant skills and to encourage progress.
Essential resources	Any specific resources that you need to be able to teach and assess are listed in this section. For information on support resources see <i>Section 11 Resources and support</i> .
Links to other units	This section shows you the main relationships of units to other units. This can help you to structure your programme and make the best use of available materials and resources.
Employer involvement	This section gives you information on the units that can be used to give learners involvement with employers. It will help you to identify the kind of involvement that is likely to be successful.

External units

Section	Explanation
Unit number	The number is in a sequence for the qualification.
Unit title	This is the formal title of the unit and appears on certificates.
Level	All units are at Level 2 on the national framework.
Unit type	This says if the unit is mandatory or optional for the qualification. See <i>Section 2 Qualification structure</i> for details.
Assessment type	This says how the unit is assessed – i.e. whether it is external, internal or synoptic internal. See <i>Section 2 Qualification structure</i> for details.
GLH	Units have a GLH value of 90. This indicates the numbers of hours of teaching, directed activity and assessment expected. It also shows the weighting of the unit in the final qualification grade.
Unit in brief	A brief formal statement on the content of the unit.
Unit introduction	This is designed with learners in mind. It indicates why the unit is important, how learning is structured and how learning might be applied when progressing to employment or higher education.
Summary of assessment	This sets out the type of external assessment used and the way in which it is used to assess achievement.
Assessment outcomes	These show the hierarchy of knowledge, understanding, skills and behaviours assessed. For tested units, they include information on how this hierarchy relates to command terms in sample assessment materials (SAMs).
Essential content	For external units all the content is obligatory, the depth of content is indicated in the assessment outcomes and sample assessment materials (SAMs). The content will be sampled through the external assessment over time, using the variety of questions or tasks shown.
Grade descriptors	We use grade descriptors when making judgements on grade boundaries. You can use them to understand what we expect to see from learners at particular grades.
Key terms typically used in assessment	These definitions will help you to analyse requirements and to prepare learners for assessment.
Links to other units	This section shows the main relationships of units to other units. This section can help you to structure your programme and make the best use of available materials and resources.
Employer involvement	This section gives you information on the units that can be used to give learners involvement with employers. It will help you to identify the kind of involvement that is likely to be successful.

Units

This section contains all the units developed for this qualification.

Unit 1: Planning and Pitching a Digital Media Product	13
Unit 2: Animation for Digital Media	25
Unit 3: Digital Testing	37
Unit 4: Digital Games Production	49
Unit 5: Narrative for Digital Media	61
Unit 6: Digital Production Project	73
Unit 7: Digital Audio	81
Unit 8: Digital Editing for Moving Image	91
Unit 9: 3D Modelling	103
Unit 10: Digital Graphics	113

Unit 1: Planning and Pitching a Digital Media Product

Level: **2**

Unit type: **Mandatory**

Assessment type: **Internal**

Guided learning hours: **30**

Unit in brief

Learners develop and pitch ideas for the production of a digital media product from a media sector of their choice.

Unit introduction

Did you know that people who work in the creative media industry often work on a freelance basis and have to pitch their ideas to a client in order to get work? To do this they need to make their ideas a reality for the client and convince them to invest in them.

In this unit, you will develop an idea that meets the needs of your client and formulate and develop a pitch for your own ideas for a media product. You will need to plan the content of your product effectively and be able to share your vision with the client – in the hope of convincing them that you should be the one to make a media product for them. You will be able to create ideas for products in any medium but you must make sure that they are appropriate and workable.

The skills that you learn in this unit will allow you to develop ideas for a range of products in different sectors of the media industry and give you the confidence you need to convince potential clients of their suitability.

Learning aims

In this unit you will:

- A** Plan ideas for a digital media product to meet client brief
- B** Pitch ideas for a digital media product.

Unit summary

Learning aim	Key teaching areas	Summary of suggested assessment evidence
A Plan ideas for a digital media product to meet client brief	A1 Requirements of the brief A2 Generating ideas	Ideas generation such as sketches, mind maps, images, thumbnails, draft layouts. Evidence of presentations, scripts and notes supported by observation records.
B Pitch ideas for a digital media product	B1 Formats for pitching B2 Creating a pitch B3 Pitching to the client	
Key teaching areas in this unit include:		
Sector skills	Knowledge	Transferable skills/behaviours
<ul style="list-style-type: none"> • Interpreting client brief • Generating ideas of an original production • Pitching ideas to clients 	<ul style="list-style-type: none"> • How to generate ideas • Organising and structuring content • Planning effectively 	<ul style="list-style-type: none"> • Working with others • Communication • Managing information

Unit content

Knowledge and sector skills

Learning aim A: Plan ideas for a digital media product to meet client brief

A1 Requirements of the brief

Consider the requirements of the brief in terms of client and audience needs, such as who, why, what and where:

- target audience
- purpose, why produce the product – inform, educate, entertain, provide a service
- platform – what the product will be and where it will be seen.

A2 Generating ideas

Formulation of ideas:

- ideas generation, e.g.:
 - plot outline, brief synopsis, informal proposal, summary of ideas, annotations, SWOT (strengths, weaknesses, opportunities, threats) analysis
- representing ideas visually, e.g.:
 - mood boards, mind maps, storyboards, sketching, audio-visual presentation
- selecting ideas:
 - discounted ideas with reasons why not selected
 - revisions and decisions made to ideas in the formulation process
 - final selected idea, e.g. reasons for selection, complete structure, relation to the brief, consideration of planning issues.

Learning aim B: Pitch ideas for a digital media product

B1 Formats for pitching

Learners to explore and develop (practise) a range of skills in pitching different ideas:

- a range of verbal communication techniques, to include live presentation, pre-recorded presentation, podcast, voiced slideshow
- a range of written styles, to include formal proposals or letters, forms, reports, treatments, written content in audio-visual presentations.

B2 Creating a pitch

- Content and layout:
 - slide design
 - font style, line spacing
 - key points, bullet points
 - inserting images, animations and data
 - slide transitions and timings.
- Audience engagement:
 - message
 - mode of address, selling ideas
 - active verbs and engaging content
 - use of white space and avoiding clutter
 - visual aesthetics and audience appeal.

UNIT 1: PLANNING AND PITCHING A DIGITAL MEDIA PRODUCT

B3 Pitching to the client

- Verbal communication techniques:
 - clarity of voice
 - tone of voice
 - clarity of expression
 - use of technical language where appropriate
 - appropriate register
 - style, e.g. authoritative, humorous, informative, motivational
 - persuasive techniques, e.g. alliteration, rhythm, repetition, imperative mode of address.
- Written communication techniques:
 - vocabulary, e.g. technical, formal, informal, acronyms and abbreviations
 - structure
 - grammar
 - spelling
 - punctuation
 - clarity of expression
 - persuasive techniques, e.g. alliteration, rhythm, repetition
 - mode of address, e.g. formal, informal, colloquial, authoritative, imperative
 - style.
- Audience, e.g. peers, client, tutor.

Transferable skills

Working with others

- Working in teams to plan, prepare and pitch for a digital media product.

Communication

- Communicating with others.
- Pitching to a client.

Managing information

- Developing planning materials.
- Utilising ideas in planning portfolio.
- Constructing planning portfolio.

Assessment criteria

Pass	Merit	Distinction
Learning aim A: Plan ideas for a digital media product to meet client brief		
A.P1 Outline the requirements that need to be considered when producing a digital media product.	A.M1 Develop creative ideas for a digital media product that meets client brief, showing links between the ideas and the client's requirements.	A.D1 Develop imaginative ideas for a digital media product that effectively meets client brief, showing clear and detailed links between the ideas and the client's requirements.
A.P2 Develop basic ideas for a digital media product to meet client brief.		
Learning aim B: Pitch ideas for a digital media product		
B.P3 Prepare a pitch for a digital media product.	B.M2 Prepare and pitch an idea for a digital media product, effectively demonstrating efficient use of communication techniques.	B.D2 Prepare and pitch an idea for a digital media product, confidently demonstrating consistently correct use of communication techniques.
B.P4 Pitch an idea for a digital media product, demonstrating appropriate use of communication techniques.		

Essential information for assessment decisions

Learning aim A

For distinction standard, learners will:

- formulate and communicate thoughtful and imaginative ideas for their chosen digital media product. Ideas will be original and will relate clearly to the requirements of the brief. Learners will produce a clear summary of ideas, which have been fully justified and annotated. The final idea selected for development will contain detailed reference to thought processes and the reasons for their selection, linking back to the client's requirements
- use mind maps and sourced materials to form a starting point and generate original content in the form of sketches, drafts, layouts and images as a means of outlining their ideas and indicative content. Materials produced will be well organised and contain consistent use of annotations and explanations.

For merit standard, learners will:

- formulate and communicate thoughtful ideas for their chosen digital media product. Ideas could be both original and conventional and will relate appropriately to the requirements of the brief. Learners will produce a good summary of ideas that have been annotated to aid justification. The final idea selected for development will contain reference to thought processes and their reasons for their selection
- produce sketches and drafts as a means of outlining their ideas and indicative content, as well as use of mind maps and sourced materials. Materials produced will be suitably organised and contain regular use of annotations and explanations.

For pass standard, learners will:

- formulate and communicate appropriate ideas for their chosen digital media product. Ideas will often be conventional but may not always relate clearly to the requirements of the brief. Learners will often produce an initial summary of ideas and then pick one to develop, without indicating their reasons for doing so
- outline ideas and indicative content but there will be strong reliance on mind maps and sourced materials. Materials produced will often be slightly unorganised and lack regular and effective use of annotations and explanations.

Learning aim B

For distinction standard, learners will:

- prepare a thoughtful presentation that contains all relevant details to engage the client, and which has been structured with a clear and logical running order. Consideration of the audience is extremely apparent in the use of fonts, styles and the inclusion of images. Written content is very well presented, with good use of spelling and grammar
- demonstrate a confident use of verbal communication techniques through their pitch, e.g. tone of voice is pitched appropriately and is adjusted when appropriate. The format of the presentation is well thought out; technical language will be used appropriately and points are explained clearly and clarified or expanded as appropriate. Audiences are kept engaged and there is good use of persuasive techniques to 'sell' the idea.

For merit standard, learners will:

- prepare a thoughtful presentation that contains most of the relevant details required by the client and which has been structured with a logical running order. Clear consideration of the audience is apparent in the use of fonts, styles and inclusion of images, written content is well presented with few spelling or grammar errors and is easy to read
- demonstrate mainly effective use of verbal communication techniques through their pitch, e.g. their voice is clear and projects well, with only occasional lapses in fluency. Points are reinforced, both written and verbal forms use some persuasive techniques of language to 'sell' their idea and the idea is, in the main, well communicated.

For pass standard, learners will:

- prepare an appropriate presentation that contains some of the relevant details required by the client and has been structured with some attempt at a logical running order. Some consideration of the audience is apparent in the use of fonts, styles and inclusion of images and written content is readable
- communicate the basic premise of their idea and demonstrate some appropriate use of verbal communication techniques through their pitch, e.g. appropriate level of voice, appropriate tone/register of voice, if not always fluent, and some evidence of attempting to persuade the audience through what is being presented.

Assessment activity

The summative assessment activity takes place after learners have completed their formative development. The activity should be practical, be set in a realistic scenario and draw on learning from the unit, including the transferable skills. You will need to give learners a set period of time and number of hours in which to complete the activity. *Section 6* gives information on setting assignments and there is further information on our website.

A suggested structure for summative assessment is shown in the *Unit summary* section, along with suitable forms of evidence. This is for illustrative purposes only and can therefore be adapted to meet local needs or to assess across units where suitable opportunities exist. The information in the *Links to other units* section will be helpful in identifying opportunities for assessment across units.

The following scenario could be used to produce the required evidence for this unit. Centres are free to use comparable scenarios or other forms of evidence, provided that they meet the assessment requirements of the unit.

Suggested scenario

A company that produces 'gossip' magazines has decided to make their product available in an online format. They have no experience of designing content for online use and want you to help them expand into that market.

The magazine must contain a suitable masthead and be in the style of the print version, however the content and layout is for you to decide on. You will need to pitch your ideas to the client, outlining how you plan to create the online version of their publication and how it will still attract the target audience.

If a retake is necessary, an alternative example must be used. The following is an example of a retake assessment activity.

A local dog-rescue centre is struggling with their rehoming project and needs to raise awareness of what they do, and the animals that they have available for rehoming. They want to advertise the centre in a suitable medium that will target their intended audience of pet owners.

You will need to generate ideas for the campaign and decide on the best platform on which to run it. You need to convince the client that your ideas will attract and be seen by their target audience.

Further information for tutors and assessors

Delivery guidance

The following are examples of practical activities and workshops that tutors could use when developing sector and transferable skills in the delivery of this unit. Wherever possible, practical activities should be used to help learners develop both personal and sector skills in preparation for the final assessment. These suggestions are not intended as a definitive guide to cover the full GLH of the unit.

Introduction to unit

A tutor-led discussion introducing the purpose of the unit.

Learners should be introduced to the way in which to develop ideas and plan for a media production. They will need to be able to interpret and understand the needs of the client while considering the needs of the audience.

- Understand how to identify the target audience.
- Understand how to interpret the needs of the client.
- Practical sessions in developing ideas and how to record them effectively.
- Practical sessions in creating materials for inclusion in a pitch.
- Practical sessions in creating a pitch using relevant software.
- Practical sessions in pitching to a client using peers and tutor to practise with.

Suggested time: about 6 hours.

Activity: Interpreting brief and identifying audience

Learners will need to interpret the needs of the client and the audience in relation to a scenario and set brief.

- Interpreting the needs of the client.
- Breaking down the key factors in the brief.
- Ascertaining the target audience.
- Understanding how to meet audience needs.

Suggested time: about 4 hours.

Activity: Generating ideas

Learners will need to generate a range of ideas in fulfilment of the client brief and in order to attract their target audience.

- Ideas generations to include, e.g.:
 - plot outline
 - brief synopsis
 - informal proposal
 - summary of ideas
 - annotations
 - SWOT analysis
 - representing ideas visually, e.g. mood boards, mind maps, storyboards, sketching, audio-visual presentation.
- Developing and refining ideas, selection, rejection, revisions and justifications.

Suggested time: about 8 hours.

UNIT 1: PLANNING AND PITCHING A DIGITAL MEDIA PRODUCT

Activity: Planning content and creating pitch

Learners should select suitable content for inclusion in their presentation, such as:

- images, text and font styles
- use of formats, headings, sub-headings
- running order
- scripts
- handouts.

Suggested time: about 8 hours.

Activity: Pitching to the client

Learners will undertake their pitch to the client and gain client feedback. Learners should pay attention to:

- use of verbal communication skills
- body language
- tone of voice, pitch, register
- audience engagement
- responding to client comments and questions.

Suggested time: about 4 hours.

Essential resources

For this unit, learners will need access to:

- suitable presentation software
- template and exemplar planning documentation.

Links to other units

This unit has strong links to:

- Unit 2: Animation for Digital Media
- Unit 6: Digital Production Project
- Unit 7: Digital Audio
- Unit 8: Digital Editing for Moving Image
- Unit 10: Digital Graphics.

Employer involvement

This unit would benefit from employer involvement that could be in the form of a production company for learners to present their ideas as a pitch to, outlining their plans for a project. The company can then provide feedback to contribute to the assessment decisions from a real industry perspective.

Unit 2: Animation for Digital Media

Level: **2**

Unit type: **Mandatory**

Assessment type: **Internal**

Guided learning hours: **60**

Unit in brief

Learners develop their skills in applying the tools and techniques to plan and create a digital animation for a media product.

Unit introduction

Have you ever wondered how animations are made? They can be used in many sectors of the creative media industries, including advertising, video games, music videos, films, television, mobile phones and websites. With such a wide variety of uses, it can enable you to develop expressions and creativity that meet the needs of the media industry.

In this unit, you will learn the skills and techniques required to design and produce a range of animations. You will gain an understanding of how the illusion of movement is created, and explore the professional skills and techniques required to develop them. Large and small companies, as well as freelance producers, create animation across the UK. The industry requires people to work in highly skilled and specialised roles, to create animations in a range of formats for a variety of purposes and audiences.

This unit will enable you to develop skills that can be applied to a range of digital animations. The production of animations, and the collection of visual and audio assets, will enable you to grasp the skills needed to successfully progress directly to the animation industry, or to a Level 3 BTEC programme in Creative Media Production.

Learning aims

In this unit you will:

- A** Develop ideas for a digital animation
- B** Produce and collect assets for a digital animation
- C** Use digital tools to produce an animated sequence.

Unit summary

Learning aim	Key teaching areas	Summary of suggested assessment evidence
A Develop ideas for a digital animation	A1 Considerations when producing animation A2 The development of ideas and concepts A3 Pre-production planning	Portfolio of planning and development of animation. A final digital animation for a specified purpose, including learner-generated visual and audio assets.
B Produce and collect assets for a digital animation	B1 Visual assets B2 Audio assets	
C Use digital tools to produce an animated sequence	C1 Organisation of production C2 Using digital animation tools to create the illusion of movement C3 Publishing the final animation	
Key teaching areas in this unit include:		
Sector skills	Knowledge	Transferable skills/behaviours
<ul style="list-style-type: none"> • Storyboarding/scripting • Pre-production skills • Generating visual assets • Recording audio assets • Using digital animation tools • Publishing digital animation 	<ul style="list-style-type: none"> • Considerations when producing animation • Legal and ethical considerations, including copyright and Creative Commons (CC) attributions • File formats and types 	<ul style="list-style-type: none"> • Thinking skills/adaptability • Problem solving • Managing information

Unit content

Knowledge and sector skills

Learning aim A: Develop ideas for a digital animation

A1 Considerations when producing animation

- Target audience, e.g. differences in delivery approach.
- Choice of technique and materials, to include:
 - 2D computer animation
 - 3D computer animation
 - pixilation
 - rotoscoping, e.g. image transfer.
- Purposes of animation, e.g. humour, information, entertainment, advertising.
- Types of use, such as:
 - TV programmes
 - music videos
 - games cutscenes
 - idents
 - advertisements
 - animated web content, to include interactive content and banners
 - interactive apps
 - e-learning.
- Frame rates/frames per second (FPS) on animation outcomes.
- Legal and ethical, intellectual property rights (IPR).

A2 The development of ideas and concepts

- Developing scripts to enhance digital animations.
- Developing character designs to enhance digital animations.
- The importance of storyboards and animatics when producing an animation, to include:
 - camera angles
 - shot types
 - poses and expressions to portray action.
- Providing and using a soundtrack to enhance animation productions, to include:
 - music
 - sound effects
 - dialogue.

A3 Pre-production planning

- Project management, e.g. scoping a project for ideas and development.
- Production schedule, e.g. developing milestones for stages of project delivery.
- Budget, e.g. planning and managing costs for project delivery.
- Personnel requirements, e.g. personal skills required for successful delivery of the project.
- Resources, e.g. managing and preparing the equipment, facilities, number of staff/colleagues required for project delivery.
- Contingency, e.g. developing an alternative plan to overcome a risk or unexpected outcome and/or circumstance.
- Health and safety, e.g. ensuring preventative measures are prepared to avoid harm coming to those around us.

Learning aim B: Produce and collect assets for a digital animation**B1 Visual assets**

- Producing and collecting visual assets, demonstrating consideration of copyright issues, e.g. Creative Commons (CC) attribution licences.
- Developing characters in different views and poses, to include:
 - side and front views
 - running
 - walking
 - sitting
 - close-ups with different facial expressions
 - blinking.
- Producing multidimensional models/sprites.
- Developing environments and backgrounds.
- Developing logos.
- Mise en scène, e.g. arranging animated surroundings.
- Providing appropriate text.

B2 Audio assets

Recording and collecting audio assets, demonstrating consideration of copyright issues, to include:

- dialogue
- music
- narration/voice-over
- background sound
- sound effects.

Learning aim C: Use digital tools to produce an animated sequence**C1 Organisation of production**

- Choosing the software and equipment required for animation production, to include:
 - digital 2D or 3D animation software
 - image manipulation software, e.g. Photoshop®, After Effects®
 - camera devices
 - graphics tablet.
- File and asset management, e.g. accurate storage, access, file naming, and distribution of files.

C2 Using digital animation tools to create the illusion of movement

- Setting up the animation timeline.
- Importing or creating graphics as sprites.
- Creating and working with symbols.
- Using keyframes to animate sprites.
- Using transitions between scenes/images.
- Using onion-skinning to aid keyframe animations.
- Using tweening to create animations.
- Setting appropriate frame rates and playback speed.

C3 Publishing the final animation

Exporting, saving and storing files with consideration of appropriate:

- file types, e.g. swf, flv
- file size to allow smooth playback
- plugins or software needed to play the animation, e.g. Shockwave Player.

Transferable skills

Thinking skills/adaptability

- Understanding the brief and relevant considerations when preparing for the animation.
- Undertaking pre-production planning, including storyboarding and scripting.
- Preparing visual and audio assets for a digital animation.

Problem solving

- Demonstrating skills in using digital tools to create and record assets.
- Demonstrating skills in using digital animation software to create the illusion of movement to produce a digital animation and publish in an appropriate format and file type.

Managing information

- Managing visual and audio assets in the production of a digital animation.
- Managing files in the appropriate formats and folder structures.
- Managing timeline, scenes and sprites in digital animation software.

Assessment criteria

Pass	Merit	Distinction
Learning aim A: Develop ideas for a digital animation		
A.P1 Create appropriate ideas for an animation.	A.M1 Create effective ideas and plans for an animation, describing related considerations.	A.D1 Create well-thought-out ideas and detailed plans for an imaginative animation, explaining related considerations.
A.P2 Plan an animation, identifying related considerations.		
Learning aim B: Produce and collect assets for a digital animation		
B.P3 Produce and collect appropriate visual assets.	B.M2 Produce and collect effective visual and audio assets.	B.D2 Produce and collect comprehensive visual and audio assets, demonstrating skill and creativity.
B.P4 Produce and collect appropriate audio assets.		
Learning aim C: Use digital tools to produce an animated sequence		
C.P5 Use digital animation tools appropriately.	C.M3 Use digital animation tools effectively to produce an animation for a digital media product in a suitable format.	C.D3 Use digital animation tools creatively to produce an imaginative animation for a digital media product in an appropriate format.
C.P6 Produce an animated sequence for a digital media product.		

Essential information for assessment decisions

Learning aim A

For distinction standard, learners will:

- produce highly-detailed ideas and plans imaginatively, exploring more than one idea or concept thoroughly with detailed, annotated diagrams, mind maps, storyboards, written explanations and scripts
- explain relevant considerations of the animation brief, including its purpose and target audience, the type of digital media product it is for, the style/genre, the choice of technique for production, and any legal and ethical considerations. Explanations will be detailed and comprehensive, and at least one idea will be developed into a detailed script or storyboard, with full consideration of different camera angles and shots to enhance the narrative, as well as a sophisticated soundtrack
- provide evidence that they have fully considered pre-production requirements such as scheduling, resources and contingency planning.

For merit standard, learners will:

- produce detailed ideas and plans, including more than one idea or concept using annotated diagrams, mind maps, storyboards, written explanations and/or scripts
- describe their consideration of the animation brief, including its purpose and target audience, as well as other factors. At least one idea will be developed as a storyboard or script, giving consideration to use of sound and camera shots
- consider relevant pre-production requirements.

For pass standard, learners will:

- produce ideas and plans, which may be in the form of annotated diagrams/mind maps or written descriptions, and will be lacking in detail
- identify the purpose and target audience of the animation brief and record the development of more than one idea or concept for it. At least one idea will be developed as a basic storyboard or script
- provide a limited consideration of pre-production requirements and soundtrack.

Learning aim B

For distinction standard, learners will:

- create a comprehensive portfolio of effective visual and audio assets that will be used in their animation
- generate most of the assets themselves, showing both skill and creativity in their production
- include a variety of versions of each key character to allow them to be used in different ways within the animation
- select other assets from appropriate sources effectively, with full consideration of copyright issues and attribution of sources.

For merit standard, learners will:

- create effective visual and audio assets that will be used in their animation
- mostly complete sets of assets, i.e. containing everything necessary
- generate all key assets and effectively source others, e.g. learners may have recorded all necessary dialogue and sound effects competently, with well-chosen music and background sounds sourced from sound libraries with suitable consideration of copyright issues evident.

UNIT 2: ANIMATION FOR DIGITAL MEDIA

For pass standard, learners will:

- create the visual and audio assets that will be used in their animation
- provide assets that are generally appropriate, although asset sets may not be complete and most will be collected from the internet, e.g. learners' own creation of visual assets may be limited to characters with background assets sourced from internet libraries, and recorded sound, perhaps used for dialogue, may have little consideration of acoustic quality, and may, therefore, suffer from background noises or variable sound levels
- log sources for those assets that are collected
- provide limited evidence of a consideration of copyright issues.

Learning aim C

For distinction standard, learners will:

- produce an imaginative and well-designed animation that meets the requirements of the brief and the intended purpose clearly
- use digital animation tools resourcefully and with proficiency
- organise the production and editing processes efficiently
- publish the completed animation in an appropriate file format, with consideration of the purpose and published file size.

For merit standard, learners will:

- produce an animation that meets the requirements of the brief and the intended purpose
- use digital animation tools with competence
- prepare the production and editing processes with care, showing evidence of organisation
- publish the completed animation in a suitable file format.

For pass standard, learners will:

- produce an animation that is adequate for the requirements and purpose of the brief
- lack proficiency in their use of digital tools but still achieve the illusion of movement, allowing the animation to fulfil its purpose
- provide some evidence of organisation when preparing the production and editing processes
- publish the completed animation, although the file format may lack consideration of factors such as file size.

Assessment activity

The summative assessment activity takes place after learners have completed their formative development. The activity should be practical, be set in a realistic scenario and draw on learning from the unit, including the transferable skills. You will need to give learners a set period of time and number of hours in which to complete the activity. *Section 6* gives information on setting assignments and there is further information on our website.

A suggested structure for summative assessment is shown in the *Unit summary* section, along with suitable forms of evidence. This is for illustrative purposes only and can therefore be adapted to meet local needs or to assess across units where suitable opportunities exist. The information in the *Links to other units* section will be helpful in identifying opportunities for assessment across units.

The following scenario could be used to produce the required evidence for this unit. Centres are free to use comparable scenarios or other forms of evidence, provided that they meet the assessment requirements of the unit.

Suggested scenario

Your local secondary school has commissioned you to plan and produce an animation for their virtual learning environment (VLE), featuring a cartoon character that will encourage learners to develop maths and/or English skills. You need to plan a digital animation character design, using a script and storyboard, and present the final animation for a specified purpose, including learner-generated visual and audio assets.

If a retake is necessary, an alternative scenario must be used. The following is an example of a retake assessment activity.

Your local cinema has asked you to produce a short animation to be shown before film screenings to remind viewers to turn off their mobile phones before the film starts. You need to plan a digital animation character design, using a script and storyboard, and present the final animation for a specified purpose, including learner-generated visual and audio assets.

Further information for tutors and assessors

Delivery guidance

The following are examples of practical activities and workshops that tutors could use when developing sector and transferable skills in the delivery of this unit. Wherever possible, practical activities should be used to help learners develop both personal and sector skills in preparation for the final assessment. These suggestions are not intended as a definitive guide to cover the full GLH of the unit.

Introduction to unit

The tutor introduces an outline of the learning that will take place in the unit and how it will be assessed. Learners will look at examples of the work completed by previous learners.

Suggested time: about 1 hour.

Activity: Considerations when producing animation

In pairs, learners discuss the considerations they need to take into account when producing animations, with specific examples, e.g. of different productions for different audiences. Learners will identify different examples of animation where they feel these considerations were shown within its production. The pairs will feedback to the group where their points will be developed into a spider diagram. Learners will record the group outcomes and discuss the points raised, with links to their examples identified.

Suggested time: about 2 hours.

Activity: The development of ideas and concepts and creating visual assets

The tutor runs a workshop to support learners in brainstorming and creating visuals for characters and backgrounds, focusing on examples of different versions of characters, e.g. different expressions. Learners discuss other visual assets that may be needed and where they may be sourced, supported by the tutor and incorporating copyright discussions.

Suggested time: about 4 hours.

Activity: The development of ideas into narratives

The tutor runs a workshop to develop storyboards/scripts for a given theme. In pairs, learners develop the skills needed to underpin the preparation of an animation and stage a production. They will discuss narrative ideas and how they may be used in their production.

Suggested time: about 4 hours.

Activity: Pre-production considerations

The tutor introduces learners to the use of pre-production paperwork, its uses and application. Learners will develop an understanding of the importance of completing pre-production paperwork clearly and accurately. Learners develop an understanding of production planning in order to understand and apply the skills required for animation planning. Learners to be given appropriate examples of paperwork, and develop/complete new paperwork which they feel is appropriate for a production of their choosing.

Suggested time: about 2 hours.

Activity: Sourcing, recording and editing audio assets

The tutor runs a practical workshop for learners to record sound, e.g. dialogue and edit it digitally. The tutor will demonstrate different techniques of how to record sound and editing examples. Learners will use the understanding gained from the tutor and develop their own recordings for a specified scenario. Learners will record bespoke sounds and recordings to develop their sound recording techniques, which may be used to enhance an animation production.

Suggested time: about 4 hours.

Activity: Importing and organising assets and edit using digital animation tools

This activity will form the main element of learning and will introduce learners to the practical use of digital animation tools and techniques, e.g. tweening, transitions etc.

Learners will use their prior understanding of how to develop recordings and edited audio recordings to create digital animations. They will use a range of tools and import and apply them within a short animation.

Suggested time: about 14 hours.

Activity: Publishing the final animation

The tutor provides guidance on the factors that must be considered when exporting the final animation in different formats, e.g. file size.

Suggested time: about 2 hours.

UNIT 2: ANIMATION FOR DIGITAL MEDIA

Essential resources

For this unit, learners will need access to:

- animation software
- cameras
- recording devices.

Links to other units

This unit has strong links to:

- Unit 4: Digital Games Production
- Unit 9: 3D Modelling
- Unit 10: Digital Graphics.

Employer involvement

This unit would benefit from employer involvement that could be in the form of:

- a masterclass from a digital animator exploring how different techniques and procedures are used to create movement in animation. They should ensure they reflect industry practice and give guidance to learners on how to work through the different issues and problems encountered when animating
- working with an industrial partner to develop a range of case studies to aid the delivery and assessment of the unit. Case studies should be varied and detail the different stages of an animation process.

Unit 3: Digital Testing

Level: **2**

Unit type: **Mandatory**

Assessment type: **Internal**

Guided learning hours: **30**

Unit in brief

Learners develop the skills needed to test digital media products by planning, producing and interpreting bug reports.

Unit introduction

Did you know that one of the most popular routes into a career in the creative industries is as a junior tester? With the explosion in sales of digital devices, quality assurance (QA) has become one of the most important roles in the creative digital media production process. It is also possible to get involved in testing as a learner by signing up for multiplayer beta versions of games before public release. Every media company is keen to deliver the highest quality digital experience to its users, which is why there are in-house teams in many media organisations, as well as entire companies devoted to the QA of media products, such as games, websites and apps. It is imperative that the QA testing is sufficiently thorough to ensure products perform well, move quickly and are intuitive, stable and secure.

In this unit, you will use your understanding of digital testing to plan the testing of a digital media product and adopt appropriate testing techniques to produce a bug report for a specific digital media product.

Testing media products requires patience, a methodical approach, attention to detail and the ability to solve problems. This unit will help you to develop the knowledge and skills needed for an entry-level position in a QA team. It will also support your progression to further media training programmes or qualifications.

Learning aims

In this unit you will:

- A** Plan the testing of a digital media product
- B** Produce a bug report using testing techniques.

UNIT 3: DIGITAL TESTING

Unit summary

Learning aim	Key teaching areas	Summary of suggested assessment evidence
A Plan the testing of a digital media product	A1 Test phases for digital media products A2 Testing techniques	Test plan for a digital media product. Bug report.
B Produce a bug report using testing techniques	B1 Bugs B2 Analysis and bug reports	
Key teaching areas in this unit include:		
Sector skills	Knowledge	Transferable skills/behaviours
<ul style="list-style-type: none"> • Running tests on digital media products • Identifying bugs in digital media products • Accurately recording bugs • Analysing bugs to track their progress 	<ul style="list-style-type: none"> • Quality assurance procedures • Testing techniques • Different types of bug • How to complete a bug report 	<ul style="list-style-type: none"> • Communication • Thinking skills/adaptability • Problem solving • Managing information

Unit content

Knowledge and sector skills

Learning aim A: Plan the testing of a digital media product

A1 Test phases for digital media products

There are a variety of phases throughout the life cycle of a product's development where the product needs to be tested to make sure it works.

- Pre-production:
 - tester for prototype demo responsible for making sure the demo is ready to show the publisher.
- Production:
 - small team of internal testers responsible for testing the early development of the product and its functionality.
- Post-production:
 - large team of (possibly external) testers responsible for testing the product, assets and interface for critical errors
 - QA testing.
- Post-production phase includes:
 - alpha phase (the major testing phase where the product is complete but contains bugs):
 - play testing a game
 - finding and fixing bugs that stop a product from working
 - a thorough set of tests from specialised teams of testers, including compatibility, functionality, accessibility, usability, load, localisation, security, soak and regression testing
 - beta phase (the final testing phase where the product is essentially finished):
 - testing team responsibilities, e.g. looking for product-breaking errors, graphical glitches, gameplay glitches
 - release for public demonstration
 - volunteer testing, e.g. for multiplayer games to test how well it runs with lots of players over the internet.

A2 Testing techniques

There are a number of ways to test a digital media product:

- compatibility testing to ensure that the product works:
 - on a variety of platforms, devices, operating systems and browsers
 - on a variety of settings and specifications
 - with various controllers
- functionality testing to ensure that the product works through:
 - exploratory tests to detect defects and issues, e.g. user interface issues
 - test cases, e.g. scenarios covering specific devices and locations
 - automated tests, e.g. ensure new code is appropriate
- accessibility testing to ensure that the product works for everyone:
 - regulatory compliance, e.g. certification boards, web guidelines and legal regulations
 - accessibility audits based on industry accessibility guidelines
- usability testing to ensure that the product is easy to use and simple to learn:
 - UX surveys to evaluate compliance with usability standards
 - experience tests to capture how a user interacts with the product
 - A/B and multivariate tests to compare alternative options

UNIT 3: DIGITAL TESTING

- load testing to ensure that the product can withstand a real world spike in demand and avoid poor performance in peak traffic:
 - run scalable load testing scripts to evaluate performance and find potential bottlenecks
 - game testing to push a game to its limit regarding number of players or assets onscreen
- localisation testing to ensure that the product is intuitive and understandable in different target markets around the world:
 - translation testing
 - localised tests, e.g. formatting, conversions, links, colours
- security testing to ensure that customer information is kept secure and private:
 - security audit to detect security and privacy vulnerabilities
- soak testing to ensure that the product is stable over an extended period of time:
 - tests to measure performance over an extended period of time
- regression testing:
 - after a bug is fixed, testers check it again to ensure that further bugs have not occurred (resource bugs).

Learning aim B: Produce a bug report using testing techniques**B1 Bugs**

Learners should know that bugs are usually:

- hardware errors
- software defects:
 - code input by developer
 - mismatched information between the development team
 - visual glitches arising from an oversight by the design team.

Types of bugs:

- arithmetic bugs, e.g. by numbers that are rounded up or down, lack of decimal places
- interface bugs, when software needs to communicate with other software or hardware:
 - software not launched
 - process missed out of the program
 - piece of hardware may not be triggered
 - displaying objects in a scene or assets on a screen incorrectly
 - sounds not using the sound card correctly
 - functions not having correct access to lists of information, e.g. a dynamic-link library (.dll) file
- logic bugs, which occur when there is a problem with loops:
 - loops are instructions in code that repeatedly complete a task until a certain condition has been met
 - infinite loop or unproductive loop, where the instruction to end the loop does not occur

- multithreading bugs, which can include a variety of problems arising from conflicting programming:
 - concurrency, when there is a problem with two or more programs trying to process together but are interfering with each other in an unintended way
 - deadlock, when one instruction is reliant on another, yet the other is reliant on the first, e.g. X needs Y to finish before X can start, but Y needs X to start before Y can finish
 - race condition, where the speed of a task can be unpredictable and the order in which tasks are carried out ends up differently from what the programmer originally intended
- performance bugs, which can crash the software because the computer/console/random-access memory (RAM) cannot handle the:
 - size of a particular file
 - computation, e.g. a calculation exceeds the limits of the memory
 - artist's poly counts
 - artist's pixel counts
- resource bugs, which are attributed to values not being given to certain variables by the programmer:
 - overflow of the stack buffer, e.g. a file that is too large writes beyond the buffer, overwriting adjacent stacks, causing corruption of data
- syntax bugs, caused by the incorrect usage of:
 - programming operators
 - arithmetic symbols (-+ =/*<>).

Other common games bugs:

- collision detection – 3D objects, including players:
 - are unconstrained
 - can move through objects
 - can walk through walls
 - can fall through the floor
- visual glitches – these can be a variety of problems associated with the way graphics are represented in a digital media product:
 - wrong texture
 - inappropriate animation.

B2 Analysis and bug reports

Learners will understand the process of finding a bug, reporting it and suggestions as to how to fix it:

- playtesting – identifying the game or sequence of a game with a bug
- reporting, e.g. using bug reporting software
 - name of the tester (the bug finder)
 - when the bug was found (time and date)
 - type of bug
 - how the bug was found
 - severity (significance represented by, e.g. high/medium/low; 1/2/3; A/B/C)
 - description of the bug
 - steps to recreate the circumstances or occurrence of the bug
 - a screenshot or screen recording of the bug
- analysing, e.g. art bugs by the artist, code bugs by the programmer
- verifying – the tester checks the work of the artist or programmer to make sure the bug is fixed.

UNIT 3: DIGITAL TESTING

Transferable skills

Communication

- Written skills to clearly communicate bugs to the development team.
- Checking for spelling or grammar errors in digital media products.

Thinking skills/adaptability

- Testing different aspects of a digital media product.

Problem solving

- Identifying bugs and accurately detecting the cause of the bug.

Managing information

- Logging bugs in bug reporting software.

Assessment criteria

Pass	Merit	Distinction
Learning aim A: Plan the testing of a digital media product		
A.P1 Produce a basic test plan for the alpha phase of a project life cycle for a digital media product, which adequately describes the selected testing techniques.	A.M1 Produce a detailed test plan for the alpha phase of a project life cycle for a digital media product, which effectively explains the selected testing techniques.	A.D1 Produce an extensive test plan for the alpha and beta phase of a project life cycle for a digital media product, which justifies the choice of testing techniques.
Learning aim B: Produce a bug report using testing techniques		
B.P2 Produce a report that adequately demonstrates the ability to find bugs in a digital media product.	B.M2 Produce a report that effectively demonstrates the ability to describe different types of bug in a digital media product.	B.D2 Produce a comprehensive bug report that demonstrates a high degree of competence in identifying bugs, which are reported in considerable detail to enable each bug to be fixed.
B.P3 Provide evidence that adequately records a bug that needs to be fixed in a digital media product.	B.M3 Provide evidence that effectively records the bugs that need to be fixed in a digital media product.	

Essential information for assessment decisions

Learning aim A

For distinction standard, learners will:

- produce a test plan for a digital media product covering the alpha and beta phase of the project life cycle. It will describe in detail enough relevant testing techniques to comprehensively test the digital media product
- specifically tailor all of the testing techniques described on the test plan to the digital media product being tested, justifying the choice of testing technique, e.g. 'I've decided to start compatibility testing for the Explore travel app in an emulated environment to take advantage of the low cost, speed and number of devices that an emulator can provide. I've added real devices to the beta phase of the test plan to validate that the app is functioning as expected'
- use real devices that reveal all of the limitations and quirks present in the actual client operating system, hardware and firmware combination used by the target users.

For merit standard, learners will:

- produce a test plan for a digital media product covering the alpha phase of the project life cycle. It will describe enough relevant testing techniques to adequately test the digital media product
- specifically tailor most of the testing techniques described on the test plan to the digital media product being tested, e.g. 'The Explore travel app will be available across multiple devices so I recommended compatibility testing on emulated devices so that you can test the app across various device profiles and when you encounter a fault, you will have the information to isolate and correct the problem'.

For pass standard, learners will:

- produce a test plan for a digital media product covering the alpha phase of the project life cycle. It will identify some appropriate testing techniques for the digital media product
- specifically tailor at least two of the testing techniques identified on the test plan to the digital media product being tested, e.g. for usability testing, use an A/B test to test alternative homepage themes for the Explore travel website.

Learning aim B

For distinction standard, learners will:

- find and identify the unknown software bugs through extensive playtesting on a section of a game or the testing of a digital media product, such as an app
- produce a thorough bug report that explains the identified bugs or faults, including when it was found, the type of bug or fault, how it was found, the severity of the bug or fault, the steps to recreate the bug or fault, and a screenshot or screen recording of the bug or fault.

For merit standard, learners will:

- find and identify different types of bug or fault that they did not know were there through playtesting a section of a game or testing a digital media product, such as an app
- produce a bug report that describes in detail the identified bugs or faults, including the type of bug or fault, how it was found, and the steps to recreate the bug or fault.

For pass standard, learners will:

- find at least one bug or fault that they did not know was there through playtesting a section of a game or testing a digital media product, such as an app. Although they will find the unknown bug or fault, they will not necessarily be able to identify it
- produce a simple bug report that clearly describes the found bugs or faults.

Assessment activity

The summative assessment activity takes place after learners have completed their formative development. The activity should be practical, be set in a realistic scenario and draw on learning from the unit, including the transferable skills. You will need to give learners a set period of time and number of hours in which to complete the activity. *Section 6* gives information on setting assignments and there is further information on our website.

A suggested structure for summative assessment is shown in the *Unit summary* section, along with suitable forms of evidence. This is for illustrative purposes only and can therefore be adapted to meet local needs or to assess across units where suitable opportunities exist. The information in the *Links to other units* section will be helpful in identifying opportunities for assessment across units.

The following scenario could be used to produce the required evidence for this unit. Centres are free to use comparable scenarios or other forms of evidence, provided that they meet the assessment requirements of the unit.

Suggested scenario

As part of your work experience at a local design studio, you have been asked to work as part of the quality assurance (QA) team, ensuring that all mobile, tablet and web-based games and apps are developed using industry best practice and standards.

You will be involved in different aspects of the testing processes, including:

- producing a test plan for a specific game or app that covers the alpha and beta phase of the project life cycle. The Head of QA has asked you to explain each of your chosen testing techniques in relation to the game or app and justify your choices
- playtesting a game or testing an app to find and identify bugs or faults. Each bug or fault must be recorded on a bug report.

If a retake is necessary, an alternative example must be used. The following is an example of a retake assessment activity.

Your local library is running an 'Introduction to digital media production' course for unemployed adults with an interest in pursuing a career in the creative industries. The Head of Library Services has asked you to run a workshop on QA in the creative digital media sector.

The aim of the workshop is to involve delegates in each aspect of the testing process, including:

- producing a test plan for a specific game or app that covers the alpha and beta phase of the project life cycle, explaining each of the selected testing techniques in relation to the game or app with a justification for the choices
- playtesting a game or testing an app to find and identify bugs or faults. Each bug or fault must be recorded on a bug report.

Further information for tutors and assessors

Delivery guidance

The following are examples of practical activities and workshops that tutors could use when developing sector and transferable skills in the delivery of this unit. Wherever possible, practical activities should be used to help learners develop both personal and sector skills in preparation for the final assessment. These suggestions are not intended as a definitive guide to cover the full GLH of the unit.

Introduction to unit

Tutor invites a guest speaker such as a games tester for a local games studio to speak to learners about the different test phases in the life cycle of a game. They use a series of practical examples to highlight the importance of testing and QA to the production process.

Learners can prepare questions to ask the guest speaker about their role and their digital testing experiences.

Suggested time: about 3 hours.

Activity: Testing techniques

Using a series of games, websites and apps, the tutor demonstrates the following testing techniques: compatibility, functionality, accessibility, usability, load testing, localisation, security, soak and regression testing.

Learners form groups and each group takes one testing technique and prepares a short presentation to the rest of the class to explain the techniques, and why and where it is used. Each group delivers their presentation and answers questions from the rest of the class to clarify the nature and purpose of each technique.

Suggested time: about 8 hours.

Activity: Test plans

Short video demonstrations of each testing technique could be made available to learners throughout this activity, as an aide-memoire.

Tutor shows the class a digital media product that is about to enter the post-production testing phase. In groups, learners discuss the most appropriate testing techniques to use in both the alpha and beta phase and discuss how the techniques can be tailored to the product they have been shown. One group member moves to another group to explain their decisions, gaining feedback from that group before returning to their original group to discuss if any revisions are required.

Tutor-led discussion on the feedback gained from the groups and using this to identify the best approaches and how to tailor them to this specific product.

Suggested time: about 6 hours.

Activity: Bugs

Tutor demonstration of how to look for bugs, errors and faults in different digital media products, highlighting different types of bug and how to search for them.

In groups, learners produce a checklist of different types of bugs and faults to use when testing.

Learners practise looking for different bugs, errors and faults in different types of digital media products and discuss how to categorise the bugs, errors and faults they find.

Tutors demonstrate how to look for less obvious bugs, using unpredictable or unusual user behaviour.

Suggested time: about 8 hours.

Activity: Bug reports

Tutor demonstration modelling how to report bugs and faults clearly, accurately and in detail.

In groups, learners produce a bug report for a specific digital media product, which is circulated to other groups for feedback on strengths and areas for improvement, i.e. where the bug report lacks detail and clarity.

Suggested time: about 4 hours.

UNIT 3: DIGITAL TESTING

Essential resources

For this unit, learners will need access to:

- appropriate testing software
- examples of bug reports.

Links to other units

This unit has strong links to:

- Unit 4: Digital Games Production
- Unit 9: 3D Modelling.

Employer involvement

This unit would benefit from employer involvement that could be in the form of:

- a masterclass from a games or app tester exploring how different techniques and procedures are used to test games or apps. They should ensure they reflect industry practice and give guidance to learners on how to work through the different issues and problems encountered when testing and how to record and present issues
- local businesses providing feedback and developmental advice to learners as they develop the skills needed to test digital products and produce and interpret bug reports. This would help to ensure that the techniques taught effectively mirror those currently used in the creative media industry.

Unit 4: Digital Games Production

Level: **2**

Unit type: **Mandatory**

Assessment type: **Internal**

Guided learning hours: **60**

Unit in brief

Learners develop the understanding of digital games processes, skills and techniques to produce a digital games product in response to a client brief.

Unit introduction

Did you know that the digital games market in the UK now makes more money than films at the box office? Digital games have become, in a very short time, highly significant in mainstream media and likewise as a global industry. Recent advancements in technology have meant that high-quality digital games are available across a number of platforms, from home consoles and PCs to mobile devices. There is an industry push towards online features, multiplayer gaming, social network integration, and many free games and demos as phone apps, web and console downloads.

In this unit, you will take an initial idea and turn it into a 2D or 3D game. You will create visuals to show what your game will look like, as well as a detailed document that explains all aspects of your game and what the player actually does. You will then create the component assets to be placed in a games engine and the animation and interaction to make a playable game level.

With many of the UK's manufacturing industries moving overseas to maintain tight cost margins, the creative industries remain one of the few industries in which the country can compete on a global scale. Therefore it is vital that the UK bring new young talent into the games industry as level designers, concept artists, model makers and programmers games testers.

Learning aims

In this unit you will:

- A** Prepare for a digital game production
- B** Produce a digital game environment for a specific platform
- C** Code and publish a digital game level for a specific platform.

Unit summary

Learning aim	Key teaching areas	Summary of suggested assessment evidence
A Prepare for a digital game production	A1 Designing a 2D or 3D game level A2 Planning and sourcing assets for a digital game	Appropriate visual ideas generation for a 2D or 3D game. Game design document. A final scripted game level.
B Produce a digital game environment for a specific platform	B1 Editing and importing assets B1 Producing an environment within a digital game	
C Code and publish a digital game level for a specific platform	C1 Adding scripts to create interactivity C2 Testing and publishing a digital game level	
Key teaching areas in this unit include:		
Sector skills	Knowledge	Transferable skills/behaviours
<ul style="list-style-type: none"> • Visualising concept art • Pre-production skills, including generating a games design document • Generating visual assets • Recording audio assets • Using level design tools within 2D or 3D games engine • Using a games scripting language • Publishing games level 	<ul style="list-style-type: none"> • Considerations of games level design • Legal and ethical considerations including copyright and Creative Commons attributions • Scripting interactivity in a games engine • File formats and types 	<ul style="list-style-type: none"> • Thinking skills/adaptability • Problem solving • Managing information

Unit content

Knowledge and sector skills

Learning aim A: Prepare for a digital game production

A1 Designing a 2D or 3D game level

Presentation and layout of a games design document that gives everyone working on the development of the game the knowledge of what that game is about. It should include:

- information about the avatar used by the player, e.g. character, vehicle, cursor
- what the game is about (story or context)
- objectives
- maps of the levels:
 - encounters
 - navigation
 - pickups
- details of the gameplay (what the player actually does):
 - goals, e.g. what the player needs to achieve in the game
 - challenges, e.g. what the player must overcome
 - rewards, e.g. what the player will receive for completing goals or challenges
 - player actions, e.g. run, jump
 - rules, e.g. valid moves, how high the player can jump
 - game mechanics, e.g. inventory, scoring, win condition.

A2 Planning and sourcing assets for a digital game

Planning assets for primary elements of the game, e.g. character, locations, vehicles, creatures, etc. Learners may source appropriate third party assets and edit them as necessary or create assets themselves, which may be linked with another appropriate unit.

- Researching different visual and audio styles used in different games.
- Creating an assets list.
- Experimenting with a variety of visual styles for primary assets to produce a visual concept for the game. The types of visual assets produced will vary depending on the type of game and the intended platform, and will depend on whether your game is to be 2D or 3D. To include:
 - 2D games:
 - sprites (characters/avatar)
 - matt paintings or pixel tiles for background
 - sprites (buildings and organic environment assets)
 - graphics for interactive objects, e.g. doors, pickups, buttons, lifts, etc.
 - 3D games:
 - 3D character models
 - 3D environment art assets – buildings, organic, e.g. trees, rocks
 - interactive objects, e.g. doors, vehicles, buttons/lifts, etc.
 - textures for 3D assets and environment.
- Sound assets:
 - ambient sound
 - music
 - sound effects.
- Animated assets:
 - animated sprites, walk cycles.
- Consideration of copyright and attribution for third party assets.

Learning aim B: Produce a digital game environment for a specific platform

Learners will import their planned assets into an engine and create the environment for a game level aimed at a specific audience and with a particular purpose.

B1 Editing and importing assets

- Edit assets as appropriate to game and platform.
- Appropriate file size and poly/pixel counts (target platform specifications).
- Appropriate file types: jpeg, psd, bmp, ase, obj, wav, mp3.
- Appropriate naming conventions (each game engine will have specific rules on naming your files).
- Alpha channels for textures and sprites (correctly rendered).
- Checking normals for 3D models (correct direction), for 3D engines only.
- Importing assets into the engine: 2D engines, e.g. Flash, RPG maker, IWGame and 3D engines, e.g. UnrealSDK, Unity, CryEngine.

B2 Produce an environment within a digital game

Production – although 2D and 3D games will require different methods to create the game environment, the basic production process is the same and should include the following stages:

- setting up the level:
 - initial settings (screen resolution/FPS (frames per second)/world size/additive or subtractive 3D world)
- creating the environment:
 - 2D engines – interface, background imagery, e.g. fixed appearance, side scrolling
 - 3D engine – BSP (binary space partitions), grey box
 - lighting, e.g. 2D transparency effects, 3D light placement, lighting effects
 - atmospheric/decorative animation, e.g. swaying foliage, water surfaces, weather effects, fire and smoke, computer screens and machinery.

Learning aim C: Code and publish a digital game level for a specific platform

Learners will use scripts to create animation and interaction for a game level aimed at a specific audience and with a particular purpose. They will publish in an appropriate format for a specified platform.

C1 Adding scripts to create interactivity

- Scripted animation, e.g. cursor animation.
- Adding triggers and events.
- Scripted movers, e.g. animating doors, platforms.
- Scripting buttons, e.g. actions, settings.
- To provide information, e.g. to obtain facts and statistics/interactive characters and dialogue/cursor information, mouse rollover states.
- Movement, e.g. navigation keys, steering, weapon movement, player actions, e.g. run, jump.
- Using colliders as triggers.
- Text instructions, e.g. 'walk north', 'get key'.
- Pickups.
- Scripting game mechanics, e.g. inventory, scoring, win condition.

C2 Testing and publishing a digital game level

- Testing the scripts, interactivity and gameplay function properly in an engine.
- Making any necessary changes.
- Optimising settings and publishing the level for a specific platform, e.g. as an app for mobile, .exe for PC etc.

Transferable skills

Thinking skills/adaptability

- Undertaking pre-production planning and preparation of assets for a digital game level.

Problem solving

- Demonstrating skills in using digital tools to create visual and sound assets, and to create and test a digital game level.

Managing information

- Managing assets and files in the production of a digital game level.

Assessment criteria

Pass	Merit	Distinction
Learning aim A: Prepare for a digital game production		
A.P1 Produce an appropriate game design document for a digital game level.	A.M1 Produce creative concepts for audio and visual assets and a detailed game design document for a digital game level.	A.D1 Produce detailed and imaginative concepts for audio and visual assets and a comprehensive game design document for a digital game level.
A.P2 Produce appropriate concepts for visual and audio assets within a digital game level.		
Learning aim B: Produce a digital game environment for a specific platform		
B.P3 Edit and import assets into a games engine appropriately.	B.M2 Use digital game engine tools and imported assets competently to develop a creative game environment.	B.D2 Use digital game engine tools and imported assets confidently and effectively to develop a detailed and imaginative game environment.
B.P4 Use digital game engine tools to develop an appropriate game environment for a 2D or 3D game.		
Learning aim C: Code and publish a digital game level for a specific platform		
C.P5 Demonstrate appropriate use of scripts to produce interactivity within a digital game level.	C.M3 Demonstrate competent and creative use of scripting to produce interactivity within a published digital game level that meets the platform's specifications.	C.D3 Demonstrate confident, imaginative and effective use of scripting to produce interactivity within a published digital game level that fully meets the platform's specifications.
C.P6 Test and publish a 2D or 3D game level that adequately meets the platform's specifications.		

Essential information for assessment decisions

Learning aim A

For distinction standard, learners will:

- experiment with visual styles to produce detailed and imaginative concepts for visual assets that clearly fit a theme, and will evidence detailed planning for corresponding audio assets
- produce a game design document that is comprehensive in giving detailed information relating to the avatar used by the player, the game's story or context, objectives and gameplay. Where appropriate, learners will include detailed navigation maps of the level showing all encounters and pickups.

For merit standard, learners will:

- produce creative concept sketches for key visual assets with appropriate consideration of associated audio assets
- produce a game design document that explains most of the necessary relevant information, including objectives and gameplay.

For pass standard, learners will:

- produce visual concept sketches appropriate to the theme of the game and make reference to ideas for audio assets
- produce a game design document that outlines the level objectives and gameplay.

Learning aim B

For distinction standard, learners will:

- use digital game engine tools confidently and effectively to create an effective and consistent game environment containing a comprehensive set of visual and audio assets. The environment will clearly follow a theme and style appropriate to the game concept and will show both skill and creativity in its production. This will include the use of more sophisticated and imaginative environment elements, e.g. atmospheric/decorative animations.

For merit standard, learners will:

- use digital game engine tools competently to produce a creative game environment. Asset sets used will be mostly complete, i.e. containing all necessary visual and audio assets, and well produced, e.g. smooth sprites for a 2D character, or well-textured 3D assets.

For pass standard, learners will:

- use digital game engine tools to develop an appropriate 2D or 3D game environment. The asset sets may not be complete and may lack creativity, and visual assets used may be repetitive or lack consistency, but will be generally appropriate and functional for the game theme and audience. Audio assets will be present but may be limited, e.g. to a looping background music track, or may not be fully synchronised with other environmental elements.

Learning aim C

For distinction standard, learners will:

- produce effective scripts to allow fully functional interactivity, permitting players to accomplish at least one working objective through a series of interactions, e.g. to get from A to B faster than X, find X by following the clues, organise these objects in X time. Though scripts may be based on pre-existing 'off-the-shelf' code, they will have been significantly customised by learners to effectively facilitate the requirements of their game level and will demonstrate confident use of the scripting language or tools. The level will be published so as to fully meet the specifications of a target platform, e.g. a Nintendo 3DS adventure game that uses screen sizes in a Flash project that match the 3DS's specifications (400 × 256p top screen, 320 × 256 interactive screen), or a set of 3D models in UnrealSDK for the PSVita that correspond with suggested texture sizes and onscreen polygon counts.

For merit standard, learners will:

- produce competent scripts to allow interactivity, permitting players to meet a simple objective. Though scripts may be based on pre-existing 'off-the-shelf' code, they will have been customised by learners to facilitate the requirements of their game level, and this customisation will move beyond simply changing the asset names or setting values within the scripts. The level will operate correctly and will be published to meet the specifications of a target platform.

For pass standard, learners will:

- use scripts to create interactivity but this likely to be basic. Though 'off-the-shelf' scripts must have been customised by learners, this customisation is likely to be limited to changing the asset names or setting values within the scripts. The level will be playable and free of any major flaws but may be constructed in such a way that players may not be able to achieve a specific game objective. The game level will be published to operate adequately on a specific platform but may not fully meet the platform's specifications, e.g. graphics may not be optimised correctly for the appropriate screen size.

Assessment activity

The summative assessment activity takes place after learners have completed their formative development. The activity should be practical, be set in a realistic scenario and draw on learning from the unit, including the transferable skills. You will need to give learners a set period of time and number of hours in which to complete the activity. *Section 6* gives information on setting assignments and there is further information on our website.

A suggested structure for summative assessment is shown in the *Unit summary* section, along with suitable forms of evidence. This is for illustrative purposes only and can therefore be adapted to meet local needs or to assess across units where suitable opportunities exist. The information in the *Links to other units* section will be helpful in identifying opportunities for assessment across units.

The following scenario could be used to produce the required evidence for this unit. Centres are free to use comparable scenarios or other forms of evidence, provided that they meet the assessment requirements of the unit.

Suggested scenario

You are a level designer on a small development team. You will create a demo level for a 'future fantasy' game in a 3D games engine to be used on a target platform.

If a retake is necessary, an alternative example must be used. The following is an example of a retake assessment activity.

You are a level designer on a small development team. You will create a demo level for a puzzle game in a 2D games engine to be used on a target platform.

Further information for tutors and assessors

Delivery guidance

The following are examples of practical activities and workshops that tutors could use when developing sector and transferable skills in the delivery of this unit. Wherever possible, practical activities should be used to help learners develop both personal and sector skills in preparation for the final assessment. These suggestions are not intended as a definitive guide to cover the full GLH of the unit.

<p>Introduction to unit Introduction to the learning that will take place in the unit and how it will be assessed. This is a good opportunity to show examples of the work of previous learners. Suggested time: about 1 hour.</p>
<p>Activity: The development of visual ideas and concepts Learners attend a workshop to brainstorm and create visuals for characters and backgrounds. Suggested time: about 4 hours.</p>
<p>Activity: The development of a game design document Learners attend a workshop to develop a game design document for a given theme. Suggested time: about 4 hours.</p>
<p>Activity: Sourcing and recording sound assets Practical workshop for learners to record sound, e.g. sound effects and edit digitally. Discussion about what other sound assets may be needed and where they may be sourced (incorporating copyright discussions). Suggested time: about 3 hours.</p>
<p>Activity: Creating 2D or 3D visual assets Practical workshop for learners to create visual assets for a given theme. NB The skills to create 2D or 3D assets may be learned in another unit. Suggested time: about 3 hours.</p>
<p>Activity: Importing and organising assets and using game level design tools This will introduce learners to the practical use of games level tools to create an environment including animation, lighting etc. Suggested time: about 10 hours.</p>
<p>Activity: Scripting interactivity This will introduce learners to the generation and use of scripts to create interactivity within a games engine. Suggested time: about 10 hours.</p>
<p>Activity: Testing and publishing the game level design Guidance on the factors that must be considered when testing and publishing the game level design, e.g. optimising graphics for a specific platform. Suggested time: about 2 hours.</p>

UNIT 4: DIGITAL GAMES PRODUCTION

Essential resources

For this unit, learners will need access to:

- games production software
- examples of games.

Links to other units

This unit has strong links to:

- Unit 3: Digital Testing
- Unit 9: 3D Modelling.

Employer involvement

This unit would benefit from employer involvement that could be in the form of:

- a masterclass from a games developer exploring how different techniques and equipment are used to produce games. They should ensure they reflect industry practice and give guidance to learners on how to work through the different issues and problems encountered when producing a game
- work experience, which will expose learners to developing their skills and knowledge within a games production business
- sharing of real work-related productions and materials such as digital games design documents, e.g. design ideas on avatars and navigation maps.

Unit 5: Narrative for Digital Media

Level: **2**

Unit type: **Mandatory**

Assessment type: **Internal**

Guided learning hours: **30**

Unit in brief

Learners plan and prepare a digital narrative for use in a digital media production for specific media sectors, such as moving image, audio or games production.

Unit introduction

Storytelling is an integral part of the creative media industry, capturing the audience's imagination and inviting them into a world that you have created. A good story can provide interest and entertainment, so it's important to develop creative ideas to engage your target audience.

In this unit, you will plan and draft a digital narrative for use in your creative media production work. You will devise a story or concept and plan how to make it come to life in the context of a moving image, audio or games production. You will need to work within the conventions of your chosen medium to produce appropriate pre-production documentation from which to work.

The skills you gain will allow you to work in a pre-production context within a range of media sectors. The unit will enable you to progress to further media training opportunities, helping you to visualise ideas and concepts, and bring them to production.

Learning aims

In this unit you will:

- A** Plan a digital narrative for a creative digital media product
- B** Create a digital narrative for a creative digital media product.

Unit summary

Learning aim	Key teaching areas	Summary of suggested assessment evidence
A Plan a digital narrative for a creative digital media product	A1 Developing ideas for digital media products A2 Identifying the audience or consumer	Research notes from which ideas are developed to generate materials that may be suitable for a digital media product. Draft materials for completed scripts, storyboards and creative materials.
B Create a digital narrative for a creative digital media product	B1 Draft a digital narrative B2 Create a digital narrative	
Key teaching areas in this unit include:		
Sector skills	Knowledge	Transferable skills/behaviours
<ul style="list-style-type: none"> • Research skills • Planning content • Drafting content • Creating content for different sectors 	<ul style="list-style-type: none"> • How to research and plan content • Drafting and redrafting • Written communication skills 	<ul style="list-style-type: none"> • Thinking skills/adaptability • Managing information • Self-management and development

Unit content

Knowledge and sector skills

Learning aim A: Plan a digital narrative for a creative digital media product

A1 Developing ideas for digital media products

Learners will develop ideas for a digital media product by researching existing media products relevant to their own product idea.

- Developing ideas for a digital media product, to include:
 - producing mind maps
 - developing mood boards
 - producing annotated screenshots of existing products
 - producing scanned material
 - taking and using appropriate photographs
 - using audio clip techniques.
- Sectors on which to base an idea, to include:
 - moving image, e.g. to be distributed as film, TV, video, DVD, internet streaming, downloads accessible on devices such as mobile phone, handheld device, tablet, computer
 - audio, e.g. podcast, radio broadcast, soundtrack, CD, soundscape
 - digital games, e.g. instructional, simulation, quiz-based, social, accessible on, e.g. consoles, PCs, handheld device, mobile, tablet.

A2 Identifying the audience or consumer

Learners will identify the potential audience for their product by conducting relevant research, to include:

- audience definitions – profiles, demographics
- using relevant research methods to identify consumer audiences, to include:
 - questionnaires
 - surveys
 - interviews
 - focus groups
 - vox pops.

Learning aim B: Create a digital narrative for a creative digital media product

B1 Draft a digital narrative

Learners will include evidence of the development of the creative aspects of their narrative. This will be sector specific, to include:

- moving image, e.g. storyboard, script
- audio, e.g. dialogue/sound script
- digital games, e.g. design document (game outline, storyboard), functioning demo.

B2 Create a digital narrative

Learners will finalise their digital narrative from their draft materials, with the final narrative being a working pre-production document that can be used to create a digital media product, to include:

- moving image – producing storyboard and scripts
- audio – producing scripts, sound scripts and running orders
- digital games – producing game outlines, storyboards and scripts.

Transferable skills

Thinking skills/adaptability

- Using preparation and organisational skills to plan content.
- Using research skills to identify appropriate audiences.
- Making use of relevant pre-production documentation to create a narrative.

Managing information

- Structuring and storing research and proposed content.
- Drafting and redrafting content and using it to inform future practice.

Self-management and development

- Developing written communication skills, correct use of spelling, grammar and punctuation when creating scripts.
- Making correct use of pre-production paperwork in a production context.
- Using correct techniques and terminology in the creation of pre-production paperwork.

Assessment criteria

Pass	Merit	Distinction
Learning aim A: Plan a digital narrative for a creative digital media product		
A.P1 Plan the content of a digital narrative.	A.M1 Produce a plan with appropriate content for a digital narrative, giving consideration to the target audience.	A.D1 Produce a creative plan with detailed content for a digital narrative, giving clear consideration to the target audience.
A.P2 Identify the target audience of a digital narrative.		
Learning aim B: Create a digital narrative for a creative digital media product		
B.P3 Produce an adequate draft digital narrative for a selected media product using relevant pre-production documentation.	B.M2 Produce an effective draft and appropriate digital narrative for a selected media product using pre-production documentation.	B.D2 Produce a creative draft and detailed digital narrative for a selected media product using pre-production documentation.
B.P4 Produce an adequate digital narrative for a selected media product using relevant pre-production documentation.		

Essential information for assessment decisions

Learning aim A

For distinction standard, learners will:

- produce a plan of work to develop a detailed creative digital narrative that is creative and imaginative, and may also be unconventional
- plan in a variety of forms, e.g. mind maps, mood boards, annotated screenshots of existing products, scanned material, photographs and/or audio clips
- show clear vision and direction in all aspects of their work
- produce a plan of a creative concept for a digital media product, with sound use of relevant stylistic conventions that enhance and complement the products
- show clear and thoughtful consideration of the target audience throughout their planning materials.

For merit standard, learners will:

- produce a plan of work to develop an effective digital narrative that shows appropriate planning, likely to be conventional in nature
- plan in a variety of forms, e.g. mind maps, mood boards, annotated screenshots of existing products, scanned material, photographs and/or audio clips, although some aspects may be overlooked or lacking in content
- produce a plan of a creative concept for a digital media product with some use of stylistic conventions
- show some consideration of the target audience in their planning materials.

For pass standard, learners will:

- carry out planning work to develop an adequate digital narrative that will meet the conventions of the chosen medium
- produce a plan that may consist of, e.g., mind maps, mood boards, annotated screenshots of existing products, scanned material, photographs and/or audio clips, although content will be limited in detail and will not be fully and effectively annotated
- produce a concept for a digital media product with limited use of stylistic conventions
- acknowledge the target audience in their planning materials.

Learning aim B

For distinction standard, learners will:

- draft and create pre-production materials that are creative in engaging the audience
- produce written materials, such as scripts, that read well and are creative and expressive, include a good range of vocabulary and use appropriate written techniques, such as the correct conventions for the medium and style of narrative
- demonstrate highly creative skills in realising their ideas and representing the content of the narrative
- produce effective working documents that can be used for production purposes.

For merit standard, learners will:

- draft and create pre-production materials that are effective in engaging the audience
- produce written materials, such as scripts, that read well and are often expressive, include a range of vocabulary and use some appropriate written techniques, such as the correct conventions for the medium and style of narrative, most of the time
- demonstrate creative skills in realising their ideas and representing the content of the narrative
- produce good working documents that can be utilised for production purposes.

For pass standard, learners will:

- draft and create pre-production materials that may be adequate in engaging the audience
- produce written materials, such as scripts, that may often lack expressive content or a range of vocabulary and may contain a few appropriate written techniques, such as some of the correct conventions for the medium and style of narrative, some of the time
- demonstrate some creative skills in realising their ideas and representing the content of the narrative
- produce completed working documents that should be able to be utilised for production purposes.

Assessment activity

The summative assessment activity takes place after learners have completed their formative development. The activity should be practical, be set in a realistic scenario and draw on learning from the unit, including the transferable skills. You will need to give learners a set period of time and number of hours in which to complete the activity. *Section 6* gives information on setting assignments and there is further information on our website.

A suggested structure for summative assessment is shown in the *Unit summary* section, along with suitable forms of evidence. This is for illustrative purposes only and can therefore be adapted to meet local needs or to assess across units where suitable opportunities exist. The information in the *Links to other units* section will be helpful in identifying opportunities for assessment across units.

The following scenario could be used to produce the required evidence for this unit. Centres are free to use comparable scenarios or other forms of evidence, provided that they meet the assessment requirements of the unit.

Suggested scenario

You have been employed to work as part the development team for a new game/moving image/audio product that covers the topic of cyberbullying. The company wants you to develop the narrative for the product and show them how you have developed your ideas for the target audience of 14–16 year olds.

Your digital narrative should be exciting and engaging, and use the conventions of your chosen medium.

If a retake is necessary, an alternative example must be used. The following is an example of a retake assessment activity.

You have been employed to work as part of the development team for a new game/moving image/audio product in the sci-fi/fantasy genre. The company wants you to develop the narrative for the product and show them how you have developed your ideas for the target audience of 16–18 year olds.

Your digital narrative should be exciting and engaging, and use the conventions of your chosen medium.

Further information for tutors and assessors

Delivery guidance

The following are examples of practical activities and workshops that tutors could use when developing sector and transferable skills in the delivery of this unit. Wherever possible, practical activities should be used to help learners develop both personal and sector skills in preparation for the final assessment. These suggestions are not intended as a definitive guide to cover the full GLH of the unit.

Introduction to unit

Learners are introduced to writing digital narratives and the skills and techniques required to create content for a digital media product, including:

- areas of inspiration for written work
- introduction to research and planning of ideas
- how to source and produce planning materials, such as:
 - mind maps
 - mood boards
 - annotated screenshots of existing products
 - scanned material
 - photographs
 - audio clips.

Learners will take part in practical activities:

- reviewing existing products for inspiration
- drafting scripts
- editing and redrafting scripts
- drafting and creating storyboards (as applicable)
- drafting and creating sound scripts and running orders (as applicable).

Suggested time: about 4 hours.

Activity: Planning content and audience

Learners carry out planning activities relating to assessment. They complete planning and research for content of the digital narrative, including:

- ideas and inspiration
- reviewing similar work in chosen area
- creating and sourcing planning materials
- storing sourced materials.

Learners carry out research into audience and potential reception:

- identifying potential audiences
- carrying out primary audience research and gaining feedback
- carrying out secondary audience research.

Suggested time: about 6 hours.

Activity: Drafting content

Learners carry out the preparation of drafting content for production. They should consider:

- drafting scripts, storyboards and running orders
- checking through content for correct use of spelling, grammar and punctuation
- gaining feedback on content and carrying out editing
- redrafting and discarding information
- experimenting with digital formats.

Suggested time: about 8 hours.

Activity: Finalising content

Learners complete written work for inclusion in a digital media product:

- finalising scripts:
 - proofreading
 - correcting errors
 - checking readability and mode of address
 - correct use of fonts and font size
- finalising storyboards:
 - checking timings
 - edits
 - camera direction
 - pictorial content
 - directions
- finalising running orders:
 - In and Out points
 - order of appearance
 - timings
 - final edit.

Suggested time: about 8 hours.

Activity: Review and feedback

Learners carry out individual and peer reviews of completed digital narratives to help identify any potential issues and assess suitability:

- compared to original intentions
- compared to requirements of the brief
- matching audience and audience expectations
- undertake final revisions and amendments
- sort and present all materials appropriately.

Suggested time: about 4 hours.

Essential resources

For this unit, learners will need access to exemplar pre-production documentation.

Links to other units

This unit has strong links to:

- Unit 2: Animation for Digital Media
- Unit 4: Digital Games Production
- Unit 6: Digital Production Project
- Unit 7: Digital Audio.

Employer involvement

This unit would benefit from employer involvement that could be in the form of:

- a games company for learners to present their narratives to, detailing what they did and explaining their ideas. The company can then provide feedback to contribute to the assessment decisions from a real industry perspective
- visits to a digital marketing company to develop the skills for communicating narrative information to a target audience, e.g. developing ideas with mood boards, mind maps and annotated screenshots
- work experience, which will expose learners to the development of narrative skills for digital media. This may include employment within a digital media marketing team to gain experience of communication techniques
- working with an industrial partner to develop a range of case studies to aid the delivery and assessment of the unit. Case studies should be varied and detail the different stages of a creative media process development.

Unit 6: Digital Production Project

Level: **2**

Unit type: **Mandatory**

Assessment type: **External**

Guided learning hours: **90**

Unit in brief

Learners use their understanding of media processes, skills and techniques to create a product in response to a client brief.

Unit introduction

Media products are normally constructed in relation to a client brief. A successful product is one that fulfils the brief and appeals to the intended audience.

In this unit, you will use the production processes that are involved in creating a product in response to a brief, including researching, creating and developing ideas into a final product. You will have the opportunity to develop a digital media product from one of the following sectors: moving image, audio, digital publishing, interactive and digital games. In order to create an effective final product, you will need to apply the processes, skills and techniques relating to your chosen sector that you have developed throughout the qualification.

Media industries want employees who are capable of generating ideas and creating products that meet the requirements of a client brief. This unit will provide a creative context for learners wanting to develop the necessary skills, knowledge and understanding of the production process to find employment in the creative industries.

Summary of assessment

This unit is assessed using a task, set and marked by Pearson. The task is worth 72 marks.

The final portfolio for submission will be completed in a 20-hour supervised assessment period.

All final work will be submitted in a format specified by Pearson. The assessment is available once a year in a timetabled period. The first assessment is available in June 2018.

Sample assessment materials will be available to help centres prepare learners for assessment.

UNIT 6: DIGITAL PRODUCTION PROJECT

Assessment outcomes

AO1 Select and present research in relation to a client brief

AO2 Develop a proposal and creative response

AO3 Apply understanding of media production processes, skills and techniques

AO4 Develop a final product that meets the requirements of a client brief and appeals to the target audience

Essential content

The essential content is set out under content areas. Learners must cover all specified content before the assessment.

A Researching the brief

Learners will explore the processes and techniques used to carry out the research necessary to prepare to respond to a brief.

A1 Deconstructing a client brief

Learners will explore and understand how client briefs establish the context for a project and contain essential information, including:

- information about the client – learners must be clear about who they are working for
- the aim or purpose of the project – to establish what the client is trying to achieve
- target audience – information about the intended audience(s)
- requirements – to clarify the specifics of the brief, e.g. number of pages, running time, technical information such as colour mode, file format and page size
- initial insights – learners will need to interpret the information contained in the brief to devise a possible strategy or approach to the project
- design challenge – learners should summarise the ‘knowns’ and ‘unknowns’ of the project to establish the project’s possibilities and boundaries.

A2 Research

Learners will explore research methods and how to apply them to elements of a brief.

- Research methods:
 - primary, including questionnaires, online surveys, interviews, focus groups, vox pops, textual analysis
 - secondary, including gathering information from secondary sources, such as the internet, books, journals, magazines, archives, media packs, statistics, e.g. box office, sales figures, ratings, circulation, web hits.

Learners will need to understand how to apply research into:

- the target audience/users:
 - to define the target audience/user – demographics, audience profiles, lifestyle
 - to understand the audience’s current media consumption, habits, preferences
- the codes and conventions of existing products in the chosen sector:
 - mainstream popular products
 - innovative, alternative or niche products
- current trends in the chosen sector
- audience response to existing products in the chosen sector
- the resources available:
 - equipment, technology, e.g. hardware and software packages
 - existing media production skills – skills audit.

A3 Selecting information

Learners will explore ways to use stimulus information, such as images, data and ideas. Using this information, together with their research findings, learners will need to be able to:

- interpret data to help establish the context of the project
- select key information to provide a possible focus for the project
- justify selection of ideas, concepts and material based on the client brief.

B Defining a response to the client brief

B1 Generating and selecting ideas in response to a client brief

Learners will look at methods involved in generating and selecting ideas in response to a client brief by:

- formulating and recording ideas:
 - visually, e.g. sketches
 - in writing, e.g. mind maps
 - verbally, e.g. discussions
- considering different ideas and approaches
- selecting an idea – communicating the selection and rejection of ideas.

B2 Conceptualising an idea for a media product

Learners will explore the available ways to document and conceptualise an idea as appropriate to their chosen media sector.

- Moving image – storyboard and script.
- Audio – dialogue/sound script.
- Digital publishing – sketches, mock-ups, style guides/tiles.
- Interactive – sketches, mock-ups, wireframes, style guides/tiles.
- Digital games – outline, storyboard, rules, demo.

B3 Writing a proposal for a media product

Learners will need to provide a clear idea of their proposed product, its purpose and audience through a proposal. Learners need to understand:

- the conventions of a media proposal:
 - report style writing – use of headings, sub-headings, bullet points, tables, images, diagrams, illustrations, footnotes
 - consistency – structure, fonts, use of language, specialist terminology.

Learners will need to produce a proposal, including:

- working title
- product outline – a short description of the nature of the proposed product and its purpose
- target audience/user
- rationale – summary of research findings
- overview of content and style:
 - moving image – synopsis, treatment, structure, style, conflict and resolution
 - audio – synopsis, presenters, delivery style, items, features
 - digital – publishing, e.g. flat plans, articles, interactivity, images, house style
 - interactive – interactivity, features, assets, images, style
 - games – outline, levels, rules, interactivity, features
- technical considerations – format, size/duration, resources.
- legal and ethical considerations as regards copywritten material.
- timescale – scheduling.

C Developing a digital media product

C1 Experimenting with practical media production skills and techniques

Learners will experiment with media production skills and techniques in their chosen sector in order to make decisions about the content, style and design of their project.

- Moving image: shooting footage in different locations, shot composition, framing, angle, camera movement, continuity shots, lighting set-up
- Audio: recording audio in a studio and on location, acoustics, ambient sound, microphones, interview technique, recording levels
- Digital publishing: writing copy, typography, colour, manipulating images, graphics
- Interactive: creating banners, crop, resize and optimise images, graphics and icons, typography, colour, manipulating images, forms, buttons
- Digital games: collect and prepare assets, e.g. 3D models, objects, sprites, sounds, and features, e.g. levels, scoring systems, events, controls, actions, 3D objects, props and models, create, import and apply textures, develop backgrounds and scenery, lighting.

C2 Developing and refining media products

Learners will need to explore methods to shape and refine content.

- Moving image: editing audio and video together, transitions, visual effects.
- Audio: editing audio, mixing, transitions, audio effects.
- Digital publishing: page layout and design, e.g. columns, white space, style sheets, text wrap, incorporating interactive features.
- Interactive: HTML code to structure pages, CSS style sheets to style and position content, JavaScript to add interactivity, e.g. image gallery, tabbed content, validation on forms, links.
- Digital games: sound properties, e.g. effects, type, use, trigger sound effect on game event, objects, e.g. visibility, solidity, depth, rotation, scale, select game events associated with game objects, trigger events associated with mouse/keyboard, effects, levels, backgrounds, manipulate assets in 3D space, e.g. position, scale, rotate, movement.

C3 Reflecting on creative outcomes

Learners should explore different ways to gather feedback and reflect on progress and make improvements as part of the production process.

- Review or test their product in terms of continuity, audio levels, proofreading, legibility or functionality testing depending on suitability to the sector.
- Conduct audience/user testing, e.g. interest, challenge.
- Assess the product's fitness for purpose: self-assessment, client and expert feedback.
- Make revisions, refinements and improvements based on the review/testing feedback.

C4 Maintaining a record of the production process

Learners will explore how to keep a record of the production process to illustrate the production processes, skills and techniques that they have adopted and to account for their creative decisions.

- Selecting materials to demonstrate the development of the process.
- Presenting materials to demonstrate the development of the process.
- Use of skills and techniques:
 - annotated screenshots
 - narrated screen recordings
 - annotated sketches, drafts, mock-ups
 - audio-visual commentaries.
- Fitness for purpose:
 - reflection on creative outcomes.

D Delivering the final product

D1 Producing a final product

Learners will look into and experiment with the elements that need to be considered during the final iteration of the product, as appropriate to the chosen media sector.

- Consistent in terms of audio levels, formatting, style, as appropriate to the sector.
- Accessible in terms of use of language, readability, colour scheme, captioning, as appropriate to the sector.
- Useful in terms of fulfilling its purpose.
- Understandable, through:
 - use of established codes and conventions – repetition and difference
 - use of design principles such as balance, emphasis, repetition, as appropriate to the sector
 - visual hierarchy such as scale, colour, contrast, alignment, proximity, as appropriate to the sector.

D2 Distribution and exhibition

Learners will need to know how to make their product suitable for distribution and exhibition, as appropriate to the sector.

- Understanding the industry standard file formats and quality requirements, as appropriate to the sector.
- Applying compression techniques, as appropriate, such as:
 - rendering audio and video
 - file optimization.
- Exporting in appropriate file formats.
- Testing on different platforms – web browsers, image viewers, audio programmes.

Grade descriptors

To achieve a grade learners are expected to demonstrate these attributes across the essential content of the unit. The principle of best fit will apply in awarding grades.

Level 2 Pass

Learners will select information from their research activity as the basis for exploring different ideas, which demonstrate an appropriate understanding of the client brief. Learners will select a suitable idea and write a proposal that makes appropriate use of conventions, such as structure, specialist terminology and the use of diagrams, and demonstrate a clear link to the requirements of the client brief. Learners will select and use appropriate equipment, technology and software tools to shape and refine a media product through the application of relevant production skills, processes and techniques. Learners will describe the creative decisions and revisions made during the creation of a final product that is technically competent, shows a clear relationship to the target audience and client brief, and is suitable for distribution.

Level 2 Distinction

Learners will select key information from their research activity as the basis for exploring imaginative ideas, which demonstrate a comprehensive understanding of the client brief. Learners will be able to select an idea that responds to the potential of the brief. They will write a proposal that makes effective and consistent use of conventions and demonstrates a creative and sustained link to the requirements of the client brief. Learners will effectively select and use appropriate equipment, technology and software tools to shape and refine a media product through the application of highly effective production skills, processes and techniques. Learners will create a final product that is technically efficient, shows a clear and imaginative relationship to the target audience and client brief, and is ready for distribution.

Key words typically used in assessment

The following table shows the key words that will be used consistently by Pearson in our assessments to ensure learners are rewarded for demonstrating the necessary skills.

Please note: the list below will not necessarily be used in every paper/session and is provided for guidance only.

Command or term	Definition
Communicate	Learners share ideas using an appropriate format, which could include visual, written or other media.
Creative	Learners use the imagination or original ideas to create something new.
Demonstrate	Learners give a practical exhibition of their ability to perform tasks or use equipment.
Explore	Learners search for possibilities and potential within resources or techniques.

Links to other units

This unit draws on all knowledge and skills-based units across the qualification.

Employer involvement

This unit would benefit from employer involvement that could be in the form of work experience at a relevant media company to observe and experience the production process in a real industry scenario. This would provide an opportunity for learners to gain knowledge of how to apply the skills they have developed in a vocational context.

Unit 7: Digital Audio

Level: **2**

Unit type: **Optional**

Assessment type: **Internal**

Guided learning hours: **60**

Unit in brief

Learners develop the skills needed to record, edit and mix digital audio for media products.

Unit introduction

Digital audio is used in a wide variety of media products, including film, radio, television, websites and games. The audio could include speech, such as interviews or dialogue, music or background sound, including sound effects and Foley sound. This audio can often be recorded in different environments, for example in studios or out on location.

In this unit, you will explore the techniques and equipment involved in recording audio in different environments. You will develop skills in using software to edit and apply effects to the different types of audio to make them suitable for media products. You will learn how to combine and mix different audio and share it in a suitable manner for use in media products. Media products could include podcasts, websites, films and games.

Media companies need employees who can work with digital audio for their products. The skills you develop in this unit will support your progression to roles such as post-production mixer for film and television, radio engineer or boom mic operator.

Learning aims

In this unit you will:

- A** Carry out the recording of different types of audio
- B** Apply editing techniques to digital audio
- C** Produce a final mixed audio product.

Unit summary

Learning aim	Key teaching areas	Summary of suggested assessment evidence
A Carry out the recording of different types of audio	A1 How audio is used in media products A2 Equipment and techniques for recording audio	A final mixed audio product. Screen recording/annotated screenshots of the process.
B Apply editing techniques to digital audio	B1 Reasons for editing audio B2 Techniques and software B3 Practical audio editing	
C Produce a final mixed audio product	C1 Techniques and software C2 Practical mixing	
Key teaching areas in this unit include:		
Sector skills	Knowledge	Transferable skills/behaviours
<ul style="list-style-type: none"> • How to record audio • How to edit and apply effects to audio • How to balance different pieces of audio and share 	<ul style="list-style-type: none"> • Types of audio • Types of equipment • Types of software function • Types of audio used in media 	<ul style="list-style-type: none"> • Communication • Problem solving • Managing information • Self-management and development

Unit content

Knowledge and sector skills

Learning aim A: Carry out the recording of different types of audio

Learners will understand the context of audio in the media sector and explore ways to capture a range of audio types in different settings. This should include studio and location environments.

A1 How audio is used in media products

- Types of audio in the context of different media products.
- Purpose of audio in the context of different media products.
- Uses of audio across digital media.
- Types of digital audio file.

A2 Equipment and techniques for recording audio

- Types of microphone and their use.
- Portable digital audio recorders and their use.
- Desktop recorders and their use.
- Multitrack recorders and their use.
- Recording procedures:
 - equipment set-up
 - monitoring levels
 - sound check
 - storing audio.

Learning aim B: Apply editing techniques to digital audio

Applying a range of audio-editing techniques to achieve a variety of specified results.

B1 Reasons for editing audio

- Making audio fit with images.
- Removal of unwanted material.
- Maintaining continuity.
- To fit running time.
- Restoration.

B2 Techniques and software

- PC and Mac sound editing platforms.
- Components of digital audio editors.
- Cutting, joining, fading.
- Removing clicks, breathing sounds.
- Inserting ambience and silence.
- Adding effects to audio.

B3 Practical audio editing

- Converting digital audio files.
- Editing from a pre-recorded audio file.
- Synchronising audio with an image.

Learning aim C: Produce a final mixed audio product

Applying a range of mixing techniques to create final balanced audio files containing different recordings.

C1 Techniques and software

- Components of multichannel mixing software.
- Mixing and balancing the differing levels of lip-synched dialogue with other sounds.
- Mixing and balancing relative levels of speech and dialogue from different recorded sources.
- Mixing relative levels of speech, dialogue, music, sound (effects), ambient backgrounds.
- Mixing pre-recorded ambient background sounds to enhance existing background sounds.
- Mixing in pre-recorded music.
- Mixing in pre-recorded spot sound effects.

C2 Practical mixing

- Organising sound types (dialogue, music, effects) for mixing on individual tracks.
- Adjusting audio level, pan position, and fade in/out points for each audio clip to achieve a balanced mix.
- Ensuring cross-fades are accurate and balanced.
- Trimming running times of sound clips to fit the soundtrack.
- Adding appropriate effects to the mix.
- Exporting the final mix to an appropriate form for playback.

Transferable skills**Communication**

- Providing accurate instructions to individuals or groups during the recording process, applying appropriate tone of voice, responding to communication from participants.

Problem solving

- Responding to resolve problems when editing and mixing audio.

Managing information

- Managing audio files and project folders.

Self-management and development

- Managing own time, planning sessions, developing professional skills in working with audio.

Assessment criteria

Pass	Merit	Distinction
Learning aim A: Carry out the recording of different types of audio		
A.P1 Use appropriate equipment and techniques to make digital audio recordings.	A.M1 Produce effective and clear digital audio recordings for media products in different acoustic environments, using equipment and techniques competently.	A.D1 Produce creative and clear digital audio recordings for media products in different acoustic environments, using equipment and techniques imaginatively and confidently.
A.P2 Produce adequate and clear digital audio recordings for media products in different environments.		
Learning aim B: Apply editing techniques to digital audio		
B.P3 Edit different pieces of digital audio adequately for media products, using appropriate techniques and software.	B.M2 Edit different pieces of digital audio effectively for media products, using techniques and software competently.	B.D2 Edit different pieces of digital audio creatively for media products, using techniques and software imaginatively and confidently.
Learning aim C: Produce a final mixed audio product		
C.P4 Produce adequate mixes of digital audio for media products, using appropriate techniques and software.	C.M3 Produce effective mixes of digital audio for media products, using techniques and software competently.	C.D3 Produce creative mixes of digital audio for media products, using techniques and software imaginatively and confidently.

Essential information for assessment decisions

Learning aim A

For distinction standard, learners will:

- produce recordings in two different locations that are clearly discernible and meet the needs of the products. The recorded sounds will be audible, with a consistently suitable signal level, and will contain no errors
- demonstrate inventive use of equipment and techniques to create a recording that shows imagination in meeting the needs of the product.

For merit standard, learners will:

- produce recordings in two different locations that are easily identifiable and suitable for the purpose. The recorded sounds will be audible, with a consistent signal level, but will contain minor errors such as clipped distortion and/or unwanted background noise
- demonstrate secure use of equipment and techniques to create a recording that is efficient in meeting the needs of the product.

For pass standard, learners will:

- produce recordings that are identifiable and can be used for the intended purpose. The recorded sounds will be audible but may be inconsistent in signal level and will contain minor errors such as clipped distortion and/or unwanted background noise
- demonstrate use of equipment and techniques that are suitable for the intended recording.

Learning aim B

For distinction standard, learners will:

- apply necessary editing techniques and effects to the audio in an inventive manner, which enhances the original audio and are suitable in relation to the media products
- demonstrate an awareness of what is achievable through the software and techniques, using them in artistic as well as functional ways.

For merit standard, learners will:

- apply necessary editing techniques and effects to the audio in a suitable manner and with no obvious imperfections
- demonstrate secure use of equipment and techniques to edit recordings in a way that is efficient in meeting the needs of the product.

For pass standard, learners will:

- apply necessary editing techniques and effects to the audio in a manner that is in keeping with the brief but may contain minor editing imperfections such as noticeable cuts and cross-fades or clipped sounds
- demonstrate use of editing equipment and techniques that are suitable for the intended product.

Learning aim C

For distinction standard, learners will:

- produce mixes of audio for media products that are well balanced with all elements audible. The mix will be consistent and display an inventive use of effects and audio placement, such as panning or automation, in a manner that is suitable for the type of product
- demonstrate an awareness of what is achievable through the software and techniques, using them in artistic as well as functional ways.

For merit standard, learners will:

- produce mixes of audio for media products that are well balanced with all elements audible. The mix will be consistent with the necessary parts in the foreground and background, as suitable for the product
- demonstrate secure use of equipment and techniques to mix recordings in a way that is efficient in meeting the needs of the product.

For pass standard, learners will:

- produce mixes of audio for media products that are reasonably balanced, with all elements audible. The mix may lack cohesion and consistency, e.g. some elements of the background may be too loud or elements of speech too quiet
- demonstrate use of mixing equipment and techniques that are suitable for the intended product.

Assessment activity

The summative assessment activity takes place after learners have completed their formative development. The activity should be practical, be set in a realistic scenario and draw on learning from the unit, including the transferable skills. You will need to give learners a set period of time and number of hours in which to complete the activity. *Section 6* gives information on setting assignments and there is further information on our website.

A suggested structure for summative assessment is shown in the *Unit summary* section, along with suitable forms of evidence. This is for illustrative purposes only and can therefore be adapted to meet local needs or to assess across units where suitable opportunities exist. The information in the *Links to other units* section will be helpful in identifying opportunities for assessment across units.

The following scenario could be used to produce the required evidence for this unit. Centres are free to use comparable scenarios or other forms of evidence, provided that they meet the assessment requirements of the unit.

Suggested scenario

You work for a production company that has been approached by an advertising agency and asked to produce a short, one-minute road safety advert. The agency has provided a script and wants some background sounds to put it in context and make it memorable. You will need to record a voice-over and other appropriate location sound. You will need to edit the recordings and produce a final mix of the advert.

If a retake is necessary, an alternative example must be used. The following is an example of a retake assessment activity.

In another scenario, your company has been commissioned to create the audio track for a television nature documentary. You will need to record the voice-over and suitable Foley sound for the given scene before editing and mixing the track.

Further information for tutors and assessors

Delivery guidance

The following are examples of practical activities and workshops that tutors could use when developing sector and transferable skills in the delivery of this unit. Wherever possible, practical activities should be used to help learners develop both personal and sector skills in preparation for the final assessment. These suggestions are not intended as a definitive guide to cover the full GLH of the unit.

Introduction to unit

Tutor-led discussions about the different types of audio in the media sector and how they are used. There will also be an introduction to the equipment involved. Learners take part in activities and discussions where they have to identify audio examples and suggest how they were made. In groups, learners research and present examples of what they perceive as effective audio tracks.

Suggested time: about 3 hours.

Activity: Studio recordings

Learners engage in workshops where they work in small groups to record a variety of different sound in a studio environment. They should be encouraged to experiment with different types of microphone and position. They should record both voice and object (such as props for a radio play).

Suggested time: about 6 hours.

Activity: Location recordings

Learners engage in workshops where they work in small groups to record a variety of different sound in a location environment. They should be encouraged to experiment with different types of equipment. They should record both voice and background location sound.

Suggested time: about 6 hours.

Activity: Editing

Learners are introduced to editing software. They will engage in workshop sessions where they are given different pieces of audio and then given specific editing instructions to complete under tutor supervision.

Suggested time: about 8 hours.

Activity: Mixing

Learners are introduced to mixing software. They follow a set of given instructions to create a mix of given audio tracks. They then discuss, as a group, the different mixing options before being given another set of audio tracks to experiment with and create their own mix.

Suggested time: about 6 hours.

UNIT 7: DIGITAL AUDIO

Essential resources

For this unit, learners will need access to:

- a range of microphones
- digital audio workstation (DAW) software
- portable recording equipment.

Links to other units

This unit has strong links to:

- Unit 1: Planning and Pitching a Digital Media Product
- Unit 6: Digital Production Project
- Unit 8: Digital Editing for Moving Image.

Employer involvement

This unit would benefit from employer involvement that could be in the form of a local production company providing the brief for learners to respond to when recording, editing and mixing their audio evidence for assessment. The brief should be realistic and reflect genuine industry practice, which will enable learners to understand industry standards.

Unit 8: Digital Editing for Moving Image

Level: **2**

Unit type: **Optional**

Assessment type: **Internal**

Guided learning hours: **60**

Unit in brief

Learners develop skills in using editing tools and techniques to produce a final, edited sequence.

Unit introduction

Did you know that editing is regarded as one of the most important roles in terms of moving image? It is said that editing can make or break a production. It is the part of the moving image process where the meaning or intention of the director is realised. Editors work closely with directors and cinematographers to produce a product that maximises all their skills. Digital editing is the process of taking the raw footage and arranging it to create meaning so that it is clear and creates the desired effect. Editors decide what to keep and what to remove from the raw footage (rushes), in what order the footage is to be seen and how it will be joined together through a variety of techniques to make sense to the viewer.

In this unit, you will explore the different ways that editors join the shots so that they make sense, convey meaning and create audience response. This may include conveying a mood, tone, atmosphere or dramatic effect onscreen. You will learn how to digitally edit a sequence, trailer or short film/video so that it presents a series of shots that the audience can understand, meeting the brief of the director or client.

As editing is central to creating effective moving image productions, there is a strong demand in the job market for editors with appropriate technical, creative skills and knowledge of editing software. Entry positions include assistant editors who have the ability to use digital editing software to digitise (log and capture) footage in preparation for the edit, and freelance editors looking for their first professional production to cut. The skills you develop in this unit can be applied to edited sequences for a range of different purposes. The sequence you produce for this unit can form part of a digital portfolio of work for progression to employment.

Learning aims

In this unit you will:

- A** Prepare to edit moving image footage
- B** Apply the conventions used in digital editing for moving image
- C** Use digital tools to edit and export a moving image sequence.

Unit summary

Learning aim	Key teaching areas	Summary of suggested assessment evidence
<p>A Prepare to edit moving image footage</p>	<p>A1 Considerations when editing moving image sequences A2 Preparing to edit a moving image sequence</p>	<p>Appropriately logged footage selection and planning for an edited moving image sequence. A final edited and exported moving image sequence for a specified purpose.</p>
<p>B Apply the conventions used in digital editing for moving image</p>	<p>B1 Using continuity editing B2 Using alternative editing styles</p>	
<p>C Use digital tools to edit and export a moving image sequence</p>	<p>C1 The editing process C2 Using editing tools C3 Exporting the final sequence</p>	
<p>Key teaching areas in this unit include:</p>		
Sector skills	Knowledge	Transferable skills/behaviours
<ul style="list-style-type: none"> • Pre-production skills for moving image (selecting rushes etc.) • Using digital tools to edit a moving image sequence • Publishing a digital moving image sequence 	<ul style="list-style-type: none"> • Considerations when producing an edited moving image sequence • Different conventions of continuity and alternative editing styles • File formats and types 	<ul style="list-style-type: none"> • Communication • Managing information • Self-management and development

Unit content

Knowledge and sector skills

Learning aim A: Prepare to edit moving image footage

A1 Considerations when editing moving image sequences

Editors employ a different editing style and a different approach to editing depending on the format selected. Learners should be aware of the typical editing conventions in each moving image format and prepare to edit a moving image sequence using the appropriate styles and conventions. They should focus on no more than two of the following.

- Music video:
 - the images are cut to the music
 - the music track dictates the rhythm and timing of the edit
 - edits are on the beat
 - style – continuity, montage, surreal
 - edits are usually short (quick cuts).
- Documentary film:
 - unstructured internal editing based on real material/footage (no scenes/not scripted or partially scripted)
 - edits that are usually long (in duration) to capture realism
 - cutaways and sound bridges
 - style – continuity
 - communicating the message of the film will be paramount.
- TV current affairs/factual programme/news slot (if this format is part of an intended/ existing series then the edit will have a structure that repeats or which can be repeated in each episode):
 - structured format, e.g. introduction by presenter, VT inserts (on location or outside broadcast), a 'narrative' arc, conclusion by the presenter
 - structured running time established at the outset
 - style – continuity
 - common editing techniques: interviews (noddies, shot-reverse-shot), cutaways, sound bridges.
- Narrative film:
 - structured external edit, based on a script
 - unstructured running time
 - style – continuity techniques are important but their use will be determined by the selected genre.
- TV advert:
 - pre-determined running time
 - styles – continuity/montage/surrealism
 - end shot is typically prolonged for promotion of product.

A2 Preparing to edit a moving image sequence

Learners will understand how to prepare footage for editing, including:

- understanding the brief (requirements of the client/director/audience)
- organisation of timescale/schedule/deadline
- working to a script or storyboard
- viewing the rushes (raw material)
- reasons for selection of footage (lighting, continuity, appropriate angles, etc.)
- logging of scenes/shots/takes, e.g. clapperboard (scene/shots), time code, onscreen, on paper
- storing, filing and labelling original and master material.

Learning aim B: Apply the conventions used in digital editing for moving image**B1 Using continuity editing**

Learners will explore the practical use of continuity techniques to ensure the viewer does not consciously notice the change from one shot to another. These may include:

- the 180-degree rule
- the 30-degree rule
- match on action
- eyeline match
- cutaway
- shot-reverse-shot.

B2 Using alternative editing styles

Learners will explore the practical use of alternative editing conventions and techniques. These may include:

- montage editing
- jump cuts
- superimposition
- split-screen editing
- breaking the 180-degree rule
- slow motion
- speeded-up shots
- freeze frames
- visual effects.

Learning aim C: Use digital tools to edit and export a moving image sequence

C1 The editing process

- Rough cut, e.g. rough edit of entire product/narrative to ensure all scenes are working and no omissions.
- External cutting (cutting or moving scenes around in narrative order).
- Internal cutting (cutting or changing shots within scenes).
- Pick-ups (extra footage needed to make the edit work).
- Fine cut (attention to detail, trimming shots to complete the edit).

C2 Using editing tools

- Setting up a sequence.
- Using multiple video and audio tracks.
- Specifying start and end points of clips.
- Inserting and overwriting clips.
- Nesting sequences.
- Transitions, e.g. dissolve to indicate the passing of time, fade-in and fade-out to indicate the end/beginning of a scene.
- Adding effects.
- Adding sound.
- Adding titles/captions.

C3 Exporting the final sequence

- Final render.
- Checking final edit.
- Exporting in appropriate format (file format, quality, size, codec).

Transferable skills

Communication

- Undertaking pre-production planning for a digitally edited moving image sequence.

Managing information

- Managing footage, sequences and tracks in the production of a digital moving image sequence.

Self-management and development

- Demonstrating skills in using digital tools to edit a moving image sequence.

Assessment criteria

Pass	Merit	Distinction
Learning aim A: Prepare to edit moving image footage		
A.P1 Select footage for a moving image production appropriately.	A.M1 Make effective preparations to edit a moving image production, describing related considerations.	A.D1 Make creative and detailed preparations to edit a moving image production, explaining related considerations.
A.P2 Prepare to edit a moving image production, identifying related considerations.		
Learning aim B: Apply the conventions used in digital editing for moving image		
B.P3 Apply editing conventions adequately in a moving image sequence for a specified format.	B.M2 Apply editing conventions effectively in a moving image sequence for a specified format.	B.D2 Apply editing conventions creatively in a moving image sequence for a specified format.
Learning aim C: Use digital tools to edit and export a moving image sequence		
C.P4 Use digital editing tools and processes adequately to edit a moving image sequence.	C.M3 Use digital editing tools and processes effectively to edit and export an effective moving image sequence.	C.D3 Use digital tools and processes creatively to edit and export an imaginative moving image sequence.
C.P5 Export an appropriate digital moving image sequence.		

Essential information for assessment decisions

Learning aim A

For distinction standard, learners will:

- make effective and detailed preparations for the edit, which will allow the editing to proceed in a highly organised way. All aspects of the brief will be considered and those supplying the footage will have been fully consulted about what they expect from the edit
- carry out logging and preparation that is consistent and comprehensive. The selection of footage will be creative, with clear evidence and consideration of all necessary factors when making selections. Footage will be organised methodically into scenes or similar categories, which makes finding shots efficient.

For merit standard, learners will:

- make competent preparations for the edit, which will allow the editing to proceed in an organised way. The brief will be considered and those supplying the footage will have been consulted about what they expect from the edit
- carry out logging that is consistent but one or two steps may be missed, e.g. reviewing rushes/agreeing a deadline. The selection of footage will be competent, with some indexing or organisation of shots evident.

For pass standard, learners will:

- make adequate preparations for the edit, which will allow the editing to proceed with some level of organisation
- carry out logging that may be inconsistent or two or three steps may be missed, e.g. reviewing rushes, outlining a schedule/deadline for completion, but the selection of footage will be done adequately.

Learning aim B

For distinction standard, learners will:

- apply editing conventions to a moving image production creatively, whereby the intention of the edit is clear and itself adds meaning to the production. There will be variation in the use of editing conventions, which makes the production engaging and creative, e.g. in a music video this may be the synergy between the internal cuts and the beat. In a continuity sequence, the seamless nature of the sequence will aid narrative and allow for viewer immersion in the piece.

For merit standard, learners will:

- apply editing conventions to a moving image production to an effective standard, whereby the intention of the edit is easy to interpret and the external editing has equal competency with internal editing. There will be some variation in the use of editing conventions and the editing style will be appropriate to the intended format, e.g. continuity editing in a short TV drama or sequence/alternative editing techniques for a TV advert or music video.

For pass standard, learners will:

- apply appropriate editing conventions to a moving image production so that the intention of the edit is apparent. There will be many 'one shot' scenes and not a lot of variation of conventions but the editing style will be appropriate for the intended format, e.g. short cuts on the beat for a music video.

Learning aim C

For distinction standard, learners will:

- produce a creative and well-designed moving image sequence. A variety of digital editing tools will be used resourcefully and with proficiency, e.g. to apply transitions, effects, text, etc. The production process and editing will be well organised. The final edited sequence will be published in an appropriate file format, with consideration of purpose and published file size.

For merit standard, learners will:

- use digital editing tools effectively to produce a moving image sequence that meets the requirements of the brief. Production and editing will be well prepared and there will be evidence of organisation. The completed moving image sequence will be exported in a suitable file format.

For pass standard, learners will:

- use digital editing tools to produce a moving image sequence. Techniques will generally be used appropriately but the range of techniques used may be limited and repetitive, or learners may apply effects or transitions with no obvious purpose. The use of digital tools will lack proficiency but will be adequate to fulfil their purpose. Production and editing will not be particularly well prepared but there will be some evidence of organisation. The completed moving image sequence will be published, although the file format may lack consideration of factors such as file size.

Assessment activity

The summative assessment activity takes place after learners have completed their formative development. The activity should be practical, be set in a realistic scenario and draw on learning from the unit, including the transferable skills. You will need to give learners a set period of time and number of hours in which to complete the activity. *Section 6* gives information on setting assignments and there is further information on our website.

A suggested structure for summative assessment is shown in the *Unit summary* section, along with suitable forms of evidence. This is for illustrative purposes only and can therefore be adapted to meet local needs or to assess across units where suitable opportunities exist. The information in the *Links to other units* section will be helpful in identifying opportunities for assessment across units.

The following scenario could be used to produce the required evidence for this unit. Centres are free to use comparable scenarios or other forms of evidence, provided that they meet the assessment requirements of the unit.

Suggested scenario

The Cutting Room, a post-production company, has commissioned you to edit a music video production. You will prepare the footage and edit it within a given deadline.

If a retake is necessary, an alternative scenario must be used. The following is an example of a retake assessment activity.

A mobile phone company has asked you to undertake the editing for an advert for its latest smartphone.

Further information for tutors and assessors

Delivery guidance

The following are examples of practical activities and workshops that tutors could use when developing sector and transferable skills in the delivery of this unit. Wherever possible, practical activities should be used to help learners develop both personal and sector skills in preparation for the final assessment. These suggestions are not intended as a definitive guide to cover the full GLH of the unit.

Introduction to unit

Introduction to the learning that will take place and how it will be assessed. This is a good opportunity to show examples of the work of previous learners.

Suggested time: about 1 hour.

Activity: Considerations when producing different styles of moving image sequence

Group discussion of what learners need to consider when producing different styles of moving image sequence, using examples for learners to discuss.

Suggested time: about 3 hours.

Activity: Selecting and logging footage

Learners attend a workshop to introduce them to selecting appropriate footage when working to a script or storyboard, and to the necessary logging documentation.

Suggested time: about 3 hours.

Activity: Using digital editing conventions and tools

This activity forms the main element of learning and introduces learners to the conventions of continuity and alternative editing, and to different editing tools, by means of a number of practical editing tasks in workshop format.

Suggested time: about 20 hours.

Activity: Publishing the final moving image sequence

Tutors guide learners on the factors to consider when exporting the final moving image sequence in different formats, e.g. file size.

Suggested time: about 2 hours.

Essential resources

For this unit, learners will need access to:

- editing software
- examples of edited material.

Links to other units

This unit has strong links to *Unit 1: Planning and Pitching a Digital Media Product*.

Employer involvement

This unit would benefit from employer involvement that could be in the form of a masterclass from a post-production technician exploring how different editing techniques are used. They should ensure they reflect industry practice and give guidance to learners on how to work through the different issues and problems encountered during an edit.

Unit 9: 3D Modelling

Level: **2**

Unit type: **Optional**

Assessment type: **Internal**

Guided learning hours: **60**

Unit in brief

Learners will develop ideas to create exciting 3D models that can be used for a range of 3D gaming platforms.

Unit introduction

Have you ever wondered how digital 3D images are created? Have you ever played a game that has used a 3D character, or have you thought of a better one yourself? 3D models are at the centre of most 3D games. They can include buildings, streets in a world, the objects within them, and the sky above. 3D artists spend a lot of time constructing these objects, and this unit will enable you to understand what they are and how to make them.

In this unit, you will plan ideas for your own models, creating and texturing them before setting them up within a 3D game engine. When producing 3D models, it is important that you carefully plan your ideas and create depth and appropriate texture. Realism, and the smooth transition of movement, can create excitement and interest from those who enjoy playing games on 3D game engines. By developing and importing models into a game engine, you can check that they look and function effectively, and are ready for play by the target audience.

This unit will give you some of the key skills needed to progress directly to employment within the games sector, for example as a 3D game artist. The work you produce can form part of your portfolio for progression to employment or to a further education study programme.

Learning aims

In this unit you will:

- A** Produce ideas for the production of 3D models
- B** Create and texture 3D models for use in a 3D game engine
- C** Set up 3D models in a 3D game engine.

Unit summary

Learning aim	Key teaching areas	Summary of suggested assessment evidence
A Produce ideas for the production of 3D models	A1 Research visual sources for 3D models A2 The development of ideas and concepts A3 Develop texture materials	Portfolio of the development of ideas and models with annotations. A final textured 3D model set up in a 3D games engine.
B Create and texture 3D models for use in a 3D game engine	B1 Use 3D modelling tools to create 3D models B2 Apply materials to 3D models	
C Set up 3D models in a 3D game engine	C1 Set up 3D models in a 3D game engine	
Key teaching areas in this unit include:		
Sector skills	Knowledge	Transferable skills/behaviours
<ul style="list-style-type: none"> • Research and visual recording of ideas • Developing texture materials • Using 3D modelling tools • Setting up 3D models in a 3D game engine 	<ul style="list-style-type: none"> • Considerations when producing 3D models • File formats and types 	<ul style="list-style-type: none"> • Thinking skills/adaptability • Managing information • Self-management and development

Unit content

Knowledge and sector skills

Learning aim A: Produce ideas for the production of 3D models

A1 Research visual sources for 3D models

- Internet photographs and printed materials.
- Screenshots of comparable games.
- Own photographs.

A2 The development of ideas and concepts

- Considering context – client brief.
- Generating initial ideas:
 - mind map
 - initial sketching.
- Considering legal and ethical issues:
 - copyright
 - representation
 - decency.
- Development drawings.
- Scale drawings from top, front and side.
- Technical requirements of game engine.

A3 Develop texture materials

- Self-created textures:
 - drawn
 - photographed
 - digitally created.
- Library textures.
- Obtaining permissions.

Learning aim B: Create and texture 3D models for use in a 3D game engine

B1 Use 3D modelling tools to create 3D models

- Understanding geometry:
 - orthographic views, perspective
 - plane
 - axis
 - parameters.
- Importing and setting up reference images.
- Creating geometry:
 - polygons
 - primitives
 - mesh, ploy patch
 - freeform.

UNIT 9: 3D MODELLING

- Editing geometry:
 - transform, scale
 - rotate
 - extrude, chamfer
 - spline-based modelling, e.g. lathe, loft.
- Checking scale to match the 3D engine.

B2 Apply materials to 3D models

- Brush, paint, colour.
- Aligning and scaling texture.
- Texture maps:
 - diffuse and specular maps
 - roughness and metalness maps
 - normal maps
 - lightmaps
 - rendering.

Learning aim C: Set up 3D models in a 3D game engine**C1 Set up 3D models in a 3D game engine**

- Checking naming conventions, e.g. UCX_.
- Checking pivot points.
- Exporting with appropriate file type, e.g. .fbx.
- Importing meshes and textures to the engine.
- Setting up and checking materials.
- Checking lightmapping.

Transferable skills**Thinking skills/adaptability**

- Researching and developing ideas, preparing textures for 3D models, preparing 3D models for games engines.

Managing information

- Managing assets and files in the production of 3D models for games engines.

Self-management and development

- Demonstrating personal skills to manage digital tools to develop textured 3D models.

Assessment criteria

Pass	Merit	Distinction
Learning aim A: Produce ideas for the production of 3D models		
A.P1 Produce appropriate ideas for 3D models in response to a brief.	A.M1 Produce effective ideas and developed visuals for textured 3D models in response to a brief.	A.D1 Produce creative ideas and detailed visuals for imaginative 3D models in response to a brief.
A.P2 Gather appropriate assets for 3D models.		
Learning aim B: Create and texture 3D models for use in a 3D game engine		
B.P3 Use 3D modelling tools to produce appropriate 3D models.	B.M2 Use 3D modelling tools to effectively produce textured 3D models in response to a brief.	B.D2 Use 3D modelling tools to produce creative textured 3D models in response to a brief.
B.P4 Apply appropriate textures to 3D models.		
Learning aim C: Set up 3D models in a 3D game engine		
C.P5 Set up 3D models appropriately in a 3D game engine.	C.M3 Set up 3D models effectively in a 3D game engine.	C.D3 Set up creative 3D models with accuracy in a 3D game engine.

Essential information for assessment decisions

Learning aim A

For distinction standard, learners will:

- produce highly detailed ideas and visuals for a set of 3D models, imaginatively exploring more than one idea or concept thoroughly, with detailed annotated visual research. They will provide accurately scaled developmental drawings from top, side and front views. When gathering textures for use with models, learners will explain any legal and ethical considerations.

For merit standard, learners will:

- produce detailed ideas and visuals exploring more than one idea or concept thoroughly, with annotated visual research. They will provide developmental drawings from top, side and front views. When gathering textures for use with models, learners will describe any legal and ethical considerations.

For pass standard, learners will:

- produce ideas for at least two 3D models, which may be in the form of annotated sketches and may lack detail. Learners will gather appropriate textures and reference their sources, although legal and ethical considerations may not be outlined fully.

Learning aim B

For distinction standard, learners will:

- create a comprehensive set of 3D models to be used in a 3D game engine, e.g. if a level is set outside a rural building, learners may generate models for the building itself; a cart or wagon and farm equipment such as a pitchfork, spade and bucket. Learners will use a variety of 3D modelling tools and techniques effectively to generate the models, and textures will be well applied and aligned properly.

For merit standard, learners will:

- create a set of 3D models to be used in a 3D game engine. Learners will use different 3D modelling tools and techniques in a capable and efficient way to generate the models, and textures will be well applied.

For pass standard, learners will:

- create at least two 3D models to be used in a 3D game engine, using a limited range of 3D modelling tools and techniques. Models are likely to be constructed from basic primitive shapes. Models will be adequately textured, although the scale and alignment of textures may not be fully appropriate.

Learning aim C

For distinction standard, learners will:

- set up 3D models to display and function effectively in a 3D game engine. Scaling will be correct, naming conventions will be accurate, and all pivot points, materials and lightmaps will function effectively in the engine.

For merit standard, learners will:

- set up 3D models competently in a 3D game engine. Scaling and naming conventions will be accurate, and all materials will display properly in the engine.

For pass standard, learners will:

- set up 3D models adequately in a 3D game engine, although naming conventions may not always be accurate. Model scaling and materials will display adequately in the games engine, although these may not always be fully effective.

Assessment activity

The summative assessment activity takes place after learners have completed their formative development. The activity should be practical, be set in a realistic scenario and draw on learning from the unit, including the transferable skills. You will need to give learners a set period of time and number of hours in which to complete the activity. *Section 6* gives information on setting assignments and there is further information on our website.

A suggested structure for summative assessment is shown in the *Unit summary* section, along with suitable forms of evidence. This is for illustrative purposes only and can therefore be adapted to meet local needs or to assess across units where suitable opportunities exist. The information in the *Links to other units* section will be helpful in identifying opportunities for assessment across units.

The following scenario could be used to produce the required evidence for this unit. Centres are free to use comparable scenarios or other forms of evidence, provided that they meet the assessment requirements of the unit.

Suggested scenario

An independent games company has commissioned you to produce and texture 3D models for an historical game based around a local castle or landmark.

If a retake is necessary, an alternative scenario must be used. The following is an example of a retake assessment activity.

An independent games company has commissioned you to produce textured 3D models for a children's learning game about the solar system.

Further information for tutors and assessors

Delivery guidance

The following are examples of practical activities and workshops that tutors could use when developing sector and transferable skills in the delivery of this unit. Wherever possible, practical activities should be used to help learners develop both personal and sector skills in preparation for the final assessment. These suggestions are not intended as a definitive guide to cover the full GLH of the unit.

Introduction to unit

Introduction to the learning that will take place in the unit and how it will be assessed. This is a good opportunity to show examples of the work of previous learners.

Suggested time: about 1 hour.

Activity: Researching and developing visual ideas and textures

Learners attend a workshop to brainstorm and create visuals for 3D models. These can include developmental scale drawings from top, side and front views from source photographs, and sourcing textures and digitally applying them to drawings.

Suggested time: about 5 hours.

Activity: Using 3D modelling tools to create and texture 3D models

This activity will form the main element of learning and will introduce learners to the practical use of 3D modelling tools and techniques, e.g. creating and editing geometry, texturing models.

Suggested time: about 20 hours.

Activity: Setting up 3D models in a 3D game engine

Tutors guide learners on the factors that must be considered when setting up 3D models in a 3D game engine, e.g. naming conventions, materials, pivot points, lightmaps.

Suggested time: about 4 hours.

Essential resources

For this unit, learners will need access to:

- 3D games
- 3D modelling software.

Links to other units

This unit has strong links to:

- Unit 2: Animation for Digital Media
- Unit 4: Digital Games Production
- Unit 10: Digital Graphics.

Employer involvement

This unit would benefit from employer involvement in the form of:

- a masterclass from a games designer exploring how different techniques are used to create different 3D models for games engines. They should ensure they reflect industry practice and give guidance to learners on how to work through the different issues and problems encountered when creating 3D models for games
- working with an industrial partner to develop a range of case studies to aid the delivery and assessment of the unit. Case studies should be varied and detail the different stages of constructing a 3D textured model
- assessment support, by giving learners access to work areas that need modelling development, e.g. producing development drawings, sketching, and digital creations. This will enable learners to see a 'real world' impact of their new skills.

Unit 10: Digital Graphics

Level: **2**

Unit type: **Optional**

Assessment type: **Internal**

Guided learning hours: **60**

Unit in brief

Learners develop an understanding of the tools and techniques used in the creation of 2D digital graphics for use in media products.

Unit introduction

Digital graphics play an ever-increasing role in corporate identity, advertising, video games, onscreen television idents and social network branding. More than ever before, digital graphics are all around us in 2D and motion graphics on our TV and computer screens, phone screensavers, mobile phone apps, computer games, digital magazines, ebooks and digital newspapers, and logos on websites. The aim of a graphic designer is to grab a reader's attention by using communication techniques in the form of text and images. By using well-designed and eye-catching graphics, the audience can be drawn to the product and may use it to identify the brand it advertises.

In this unit, you will gain an understanding of how to plan digital graphics using typography, colour and composition effectively. You will develop both digital and traditional drawing skills to produce design ideas, and then use appropriate digital software tools to refine and complete your digital graphics for a media product.

In the creative media sectors, employees work both individually and collectively to produce graphic designs for digital media products. Job roles include junior graphic designer, web designer and motion graphics designer, to name but a few. This unit will enable you to apply the skills you've gained to produce work that will form part of a digital portfolio of work for your progression to employment.

Learning aims

In this unit you will:

- A** Develop graphic design ideas for a media product
- B** Use digital tools and techniques to develop digital graphics for a media product
- C** Produce a finished graphic product for a specific purpose.

Unit summary

Learning aim	Key teaching areas	Summary of suggested assessment evidence
A Develop graphic design ideas for a media product	A1 Develop design ideas A2 Use drawing techniques	Portfolio of ideas generation and development. Final digital graphics incorporated into a finished graphics product.
B Use digital tools and techniques to develop digital graphics for a media product	B1 Bitmap graphics B2 Vector graphics B3 Output graphics	
C Produce a finished graphic product for a specific purpose	C1 Technical elements C2 Produce a finished graphic product	
Key teaching areas in this unit include:		
Sector skills	Knowledge	Transferable skills/behaviours
<ul style="list-style-type: none"> • Visual recording and visualising using drawing skills • Using digital graphics tools • Producing finished digital graphics 	<ul style="list-style-type: none"> • Different purposes of digital graphics • How technical elements communicate meaning in digital products • Export formats and colour modes 	<ul style="list-style-type: none"> • Problem solving • Managing information

Unit content

Knowledge and sector skills

Although digital graphics skills can be applied across media sectors, learners may specialise in the production of digital graphics for a specific sector.

Learning aim A: Develop graphic design ideas for a media product

A1 Develop design ideas

- Learners will need to consider the purpose of the graphics they will create:
 - reviewing client brief when creating a design
 - the context in which the product will be used
 - target audience of the product
 - what it is marketing or selling
 - the message to be communicated
 - style and tone of product delivery, e.g. humorous, formal, classic, youthful.
- Learners will develop their ideas using traditional drawing and recording skills to produce visuals for digital graphics, to include creating:
 - logos
 - buttons and menus
 - graphs/charts
 - title designs
 - appropriate illustrations.
- Learners research sources of information to develop initial design drawings, to include:
 - primary sources, e.g. observation drawings, varied textures, patterns, use of photography
 - secondary sources, e.g. books, magazines, internet imagery.
- Learners must develop ideas for how these will be used in final graphic design products or 2D digital publishing graphics, e.g. emagazines, DVD covers, promotional materials:
 - moving image – motion graphics, e.g. title sequences for films, television
 - websites, e.g. educational, corporate, entertainment
 - digital 2D game, e.g. titles sequences, interface design for PC, handheld, consoles or mobile gaming.

A2 Use drawing techniques

Learners explore traditional drawing techniques and mark-making skills, to include:

- using lines in a design
- inserting different shapes
- form and appearance of the design
- using rendering techniques
- adding shading to a design
- using colour to enhance a design
- creating an appropriate scale and perspective of design
- using appropriate proportions to show visual relationships
- creating focal points.

Learning aim B: Use digital tools and techniques to develop digital graphics for a media product

Learners will use digital tools and techniques to create graphics for a digital media product. Learners will use both bitmapped and vector images in their digital graphics.

B1 Bitmap graphics

- Using scanning techniques and importing drawings to illustrate a digital media product.
- Importing photographs to illustrate a digital media product.
- Using bitmapped image manipulation techniques, to include:
 - selecting, e.g. marquee, lasso, magic wand, save selections
 - copy, paste, drag and drop techniques
 - inserting colour
 - paintbrushes, bucket, opacity/transparency of colours and/or images
 - making effective adjustments to images
 - transforming images
 - layers and layer modes of designs
 - image filters
 - image cropping techniques
 - history of graphic use
 - flattening and merging layers of a graphical design.

B2 Vector graphics

Using vector image manipulation tools, to include:

- drawing tools, e.g. pen
- inserting text
- using vector shapes
- using paths to make shapes
- outlining images
- transformation of images
- layering multiple images
- using different image effects
- paintbrushes, bucket, opacity/transparency of images.

B3 Output graphics

Output graphics in appropriate format, e.g. for print, screen or world wide web. To include:

- compression of redundant information: lossy, lossless
- creating appropriate image sizes
- creating appropriate image resolution
- using different colour modes, e.g. RGB, CMYK
- using file extensions, e.g. bmp, png, gif, tif, jpg, psd, ai, swf, flv.

Learning aim C: Produce a finished graphic product for a specific purpose**C1 Technical elements**

- Learners will apply techniques to construct a product that appeals to a target audience, to include:
 - developing the product composition and layout
 - using text (columns, typography, font, leading, baseline, letterforms, text wrap)
 - using titles (master head, headings, sub-headings)
 - appropriate use of images, scans, photos, graphic art
 - application of branding
 - using colour to enhance product
 - use of space
 - use of lines and shapes
 - providing a focal point
 - balance and placement of elements of the design
 - grid structure and product organisation
 - legibility and readability.
- For motion graphics, this would also include (in addition to the above):
 - pace and timing of motion
 - animation and transitions
 - using effects and presets
 - compositing with video and photography and chroma keying.
- For web design graphics, to include (in addition to the above):
 - local site and remote site folders
 - image folders with web ready images
 - using code for web design
 - navigation throughout a web application
 - inserting media objects, to include:
 - flash movies
 - sound files
 - movies
 - video files
 - using Cascading Style Sheets (CSS)
 - using tables and forms
 - inserting frames, framesets
 - web design graphic behaviours, e.g. play sound, pop-ups, rollovers
 - opportunities for interactivity: dynamic or static content.

C2 Produce a finished graphic product

- Learners will use the graphics they have created in a digital media product, such as:
 - advert (print or TV)
 - web page
 - magazine cover or page
 - DVD, CD or digital game cover or poster
 - TV, film or digital game titles.
- Interpretation of the brief for a digital media product:
 - conveying meaning and message
 - appropriateness for target audience.

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- Output final digital media product, e.g. for print, screen or world wide web:
 - compression – lossy, lossless
 - using an appropriate output method, e.g. print, screen
 - using file extensions, e.g. psd, pdf, indd, swf, flv, mp4, mpeg, mov, avi, html, htm, xhtml, css.
- For screen-based products:
 - preview in browsers, e.g. Safari®, Firefox®, test hyperlinks, interactivity.

Transferable skills

Problem solving

- Demonstrating skills in using digital tools to create digital graphics and incorporating them into finished graphic products.

Managing information

- Undertaking pre-production, planning and preparation for digital graphics.
- Managing assets and files in the production of digital graphics.

Assessment criteria

Pass	Merit	Distinction
Learning aim A: Develop graphic design ideas for a media product		
A.P1 Use research sources adequately to develop ideas for digital graphics for a media product.	A.M1 Use drawing techniques effectively to develop ideas for digital graphics from primary and secondary research sources.	A.D1 Use drawing techniques confidently to develop imaginative ideas for digital graphics that are clearly influenced by primary research.
A.P2 Use drawing techniques adequately to develop ideas for digital graphics.		
Learning aim B: Use digital tools and techniques to develop digital graphics for a media product		
B.P3 Use digital tools adequately to create bitmap graphics for a media product.	B.M2 Use digital tools competently to create creative bitmap and vector graphics for a media product.	B.D2 Use digital tools confidently to create imaginative bitmap and vector graphics for a media product.
B.P4 Use digital tools adequately to create vector graphics for a media product.		
Learning aim C: Produce a finished graphic product for a specific purpose		
C.P5 Produce an appropriate finished digital graphic product for a specific purpose.	C.M3 Produce a creative finished digital graphic product, using technical elements effectively.	C.D3 Produce an imaginatively finished digital graphic product, using technical elements confidently and consistently.
C.P6 Use appropriate technical elements in a digital graphic product.		

Essential information for assessment decisions

Learning aim A

For distinction standard, learners will:

- demonstrate imaginative and confident use of both primary and secondary sources to inform their ideas. Primary sources are used extensively to directly influence creative ideas for digital graphics for a specific media product
- show creative use of traditional drawing and mark-making techniques in the initial designs for digital graphics. Creative drawing will show skilful use of techniques, which will be employed with imagination and confidence.

For merit standard, learners will:

- use both primary and secondary sources to effectively inform their ideas for digital graphics. There should be clear linkage between the influences of a range of sources
- create sketches that demonstrate competent application of a range of mark-making and drawing techniques. Their ideas and sketches may lack some imagination or confidence in their execution.

For pass standard, learners will:

- use primary and secondary sources adequately to inform their ideas for digital graphics
- rely heavily on secondary sources but they will be appropriate and relevant to the brief and demonstrate some, if limited, linkage to the ideas generation process
- create sketches that demonstrate adequate application of mark-making and drawing techniques, although experimentation may be limited
- demonstrate limited drawing skills in their sketches but must communicate the intended ideas clearly.

Learning aim B

For distinction standard, learners will:

- demonstrate use of a diverse range of digital tools and techniques confidently and consistently to create both bitmap and vector graphics. The graphics produced will demonstrate imagination in meeting the brief's intentions and be suitable for the media product and target audience. Graphics will be exported in the most appropriate format for the intended purpose, with consideration of file format, size, colour mode, etc.

For merit standard, learners will:

- demonstrate effective and purposeful use of a range of digital tools and techniques to create both bitmap and vector graphics. The graphics produced will meet the brief's intentions, with clear consideration of the intended media product and the target audience. Graphics will be exported in an appropriate format for the intended purpose, but may not fully consider all relevant factors.

For pass standard, learners will:

- use digital tools and techniques to adequately create both bitmap and vector graphics. The range of tools will be limited and the final graphics, although fit for purpose, may evidence a lack of skill or confidence in their execution, e.g. they may appear raw and unrefined. Learners will demonstrate some consideration of the intended media product, the target audience or export factors, but may not fully meet some of the requirements relating to these areas.

Learning aim C

For distinction standard, learners will:

- produce a final graphic product that demonstrates imaginative consideration of composition, use of type, colour, etc. and that consistently and clearly conveys the meaning or messages projected in the piece. The final graphic product will demonstrate imagination in meeting the brief's intentions and will effectively appeal to the target audience. Files will be exported or structured in the most appropriate format for the intended purpose.

For merit standard, learners will:

- produce a final graphic product that demonstrates effective consideration of composition, use of type, colour, etc., and conveys the meaning or messages projected in the piece. The final graphic product will meet the brief's intentions, with clear consideration of the intended media product and the target audience. Files will be exported or structured in an appropriate format for the intended purpose, e.g. web pages will be easily accessed on the internet (or intranet) with all links, rollovers etc. working properly.

For pass standard, learners will:

- produce a final graphic product that is complete but may lack consideration of composition or use of type. Choice of colour and font will have some connection to the meaning or message to be conveyed. Learners will demonstrate some consideration of the intended media product, the target audience and platform, but may not fully meet some of the requirements relating to these areas, e.g. a web page will be mostly functional but some images may take an unduly long time to load and some links may not work correctly when exported.

Assessment activity

The summative assessment activity takes place after learners have completed their formative development. The activity should be practical, be set in a realistic scenario and draw on learning from the unit, including the transferable skills. You will need to give learners a set period of time and number of hours in which to complete the activity. *Section 6* gives information on setting assignments and there is further information on our website.

A suggested structure for summative assessment is shown in the *Unit summary* section, along with suitable forms of evidence. This is for illustrative purposes only and can therefore be adapted to meet local needs or to assess across units where suitable opportunities exist. The information in the *Links to other units* section will be helpful in identifying opportunities for assessment across units.

The following scenario could be used to produce the required evidence for this unit. Centres are free to use comparable scenarios or other forms of evidence, provided that they meet the assessment requirements of the unit.

Suggested scenario

Channel 4 is launching a new 16–21 youth TV channel called 4Urban. The focus of the channel is on new music, new architecture and new fashion. 4Urban is looking to use digital technologies to raise awareness in the target audience. To promote this new channel, the producers would like a TV, web and poster campaign, and it is your job to design graphics for the campaign that convey the dynamism of the new channel.

You must generate ideas for graphics, e.g. logo, illustrations, background graphics, that can be used across the campaign materials and use digital tools to create them as bitmap and vector graphics in a style that conveys a suitable mood for the target audience. You must then use them in one of the finished graphic products, e.g. poster, TV ident, web page.

If a retake is necessary, an alternative scenario must be used. The following is an example of a retake assessment activity.

You are asked to create a logo for Brit Films, a film production company specialising in low budget, small, independent British films. The logo will eventually be used in all marketing material, and you must initially incorporate it into one of the following finished graphic products – trailer, poster or web-based promotional page.

Further information for tutors and assessors

Delivery guidance

The following are examples of practical activities and workshops that tutors could use when developing sector and transferable skills in the delivery of this unit. Wherever possible, practical activities should be used to help learners develop both personal and sector skills in preparation for the final assessment. These suggestions are not intended as a definitive guide to cover the full GLH of the unit.

Introduction to unit

Introduction to the learning that will take place in the unit and how it will be assessed. This is a good opportunity to show examples of the work of previous learners.

Suggested time: about 1 hour.

Activity: Using drawing and mark-making techniques to develop ideas from primary visual research

Learners attend workshops that introduce them to a variety of drawing and mark-making techniques, e.g. charcoal, crayon, crosshatching with pen, paint, with a focus on the different moods and meaning the techniques create. Learners should be encouraged to find their own appropriate primary visual research as directed study.

Suggested time: about 6 hours.

Activity: Using digital bitmap drawing, painting and image manipulation tools

Learners attend workshops that introduce them to the use of different bitmap tools.

Suggested time: about 6 hours.

Activity: Using digital vector tools

Learners attend workshops that introduce them to the use of different vector tools.

Suggested time: about 6 hours.

Activity: Exporting the final manipulated image for different media purposes

Tutors guide learners on the factors that must be considered when exporting the final image in different formats, e.g. file size, colour modes.

Suggested time: about 2 hours.

Activity: Using digital tools to produce a final digital product

Workshops should focus on the tools used to import digital graphics and use them in one type of final digital product, e.g. e-publishing, motion graphics, web page. Guidance should also be given on the factors that must be considered when exporting or organising files for the final product.

Suggested time: about 6 hours.

UNIT 10: DIGITAL GRAPHICS

Essential resources

For this unit, learners will need access to digital graphics software.

Links to other units

This unit has strong links to *Unit 2: Animation for Digital Media*.

Employer involvement

This unit would benefit from employer involvement that could be in the form of:

- employers from the creative media sector giving masterclasses to share insight into the tools and techniques used by the organisation to produce 2D digital graphic products. They could talk about the process from developing design ideas to drawing and creating bitmap and vector images right through to the finished graphic product
- working with an industrial partner to develop a range of case studies to aid the delivery and assessment of the unit. Case studies should be varied and detail processes in realistic scenarios to ensure they reflect industrial practice
- local businesses providing feedback and developmental advice to learners as their skills develop. This would help to ensure that the techniques taught effectively mirror those in current use in industry.

4 Planning your programme

Is there a learner entry requirement?

As a centre, it is your responsibility to ensure that recruited learners have a reasonable expectation of success on the programme. There are no formal entry requirements but we expect learners to have qualifications at or equivalent to Level 1.

Learners are most likely to succeed if they have:

- three or four GCSEs at intermediate grades and/or
- BTEC qualification(s) achieved at least at Level 1
- at least Level 1 equivalent achievement in English and mathematics through GCSE or Functional Skills.

Learners may demonstrate ability to succeed in various ways. For example, learners may have relevant work experience or specific aptitude shown through diagnostic tests or non-education experience.

What is involved in becoming an approved centre?

All centres must be approved before they can offer this qualification – so that you are ready to assess learners and so that we can provide the support needed. Further information is given in *Section 8 Administrative arrangements*.

What level of sector knowledge is needed to deliver this qualification?

We do not set any requirements for tutors but expect centres to assess the overall skills and knowledge of the teaching team to ensure that they are relevant and up to date with current industry practice. This will give learners a rich programme to prepare them for progression.

What resources are required to deliver this qualification?

As part of your centre approval, you will need to show that the necessary material resources and workspaces are available to deliver the qualification. For some units, specific resources are required.

What makes good vocational teaching?

The approach to vocational teaching must be led by what is right for the particular sector. Therefore, each unit includes delivery guidance and suggested assessment tasks. Using the delivery guidance and suggested assessment tasks and our additional free delivery guidance and assignment briefs, you can build a course that contextualises learning in real-life and/or employment scenarios. This will draw in naturally the kind of broader attributes valued in the sector, for example creativity in media, as well as the more general skills needed in work that fit well with project-based learning, for example teamwork, independent learning.

What are the requirements for meaningful employer involvement?

This qualification has been designed as a Technical Certificate qualification and as an approved centre you are required to ensure that during their study, every learner has access to meaningful activity involving employers. See *Section 2 Structure* and *Section 9 Quality Assurance* for the requirements for employer involvement.

Support for employer involvement

It is important that you give learners opportunities that are of high quality and that are directly relevant to their study. We will support you in this through guidance materials and by giving you examples of best practice. See *Section 11 Resources and support* for details of the support available, including the Work Experience Toolkit.

What support is available for delivery and assessment?

We provide a wealth of support materials, including schemes of learning, delivery plans, assignment briefs, additional papers for external assessments and examples of marked learner work.

To support you with planning your assessments, you will be allocated a Standards Verifier early in the planning stage. There will be extensive training programmes and support from our Subject Advisor team.

For further details see *Section 11 Resources and support*.

How will my learners become more employable through this qualification?

Learners will be acquiring the key technical and sector knowledge, and practical and technical skills that employers need. Employability skills, such as teamwork and communication, and completing realistic tasks have been built into the design of the learning aims and content. This gives tutors the opportunity to use relevant contexts, scenarios and materials to enable learners to develop a portfolio of evidence that demonstrates the breadth of their skills and knowledge in a way that equips them for employment.

5 Assessment structure

The Pearson BTEC Level 2 Technical Diploma in Digital Games Production is assessed using a combination of *internal assessments*, which are set and marked by tutors, and an *external assessment*, which is set and marked by Pearson.

We have taken great care to ensure that the assessment method chosen is appropriate to the content of the unit and is in line with requirements from employers.

In developing an overall plan for delivery and assessment for the programme, you will need to consider the order in which you deliver units, whether delivery is over short or long periods and when assessment can take place.

One externally-assessed unit in the qualification is defined as synoptic (see *Section 2 Structure*). A synoptic assessment is one that a learner should take later in a programme and in which they will be expected to apply learning from a range of units. As such, you must plan the assignments so that learners can demonstrate learning from across their programme.

We have addressed the need to ensure that the time allocated to final assessment of internally- and externally-assessed units is reasonable so that there is sufficient time for teaching and learning, formative assessment and development of transferable skills.

In administering internal and external assessment, the centre needs to be aware of the specific procedures and policies that apply, for example to registration, entries and results. An overview with signposting to relevant documents is given in *Section 8 Administration arrangements*.

6 Internal assessment

This section gives an overview of the key features of internal assessment and how you, as an approved centre, can offer it effectively. The full requirements and operational information are given in the *Pearson Quality Assurance Handbook* available on our website. All members of the assessment team need to refer to this document.

For this qualification, it is important that you can meet the expectations of stakeholders and the needs of learners by providing a programme that is practical and applied. You can tailor programmes to meet local needs and use links with local employers and the wider vocational sector.

When internal assessment is operated effectively, it is challenging, engaging, practical and up to date. It must also be fair to all learners and meet national standards.

Principles of internal assessment

Our approach to internal assessment for this qualification offers flexibility in how and when you assess learners, provided that you meet assessment and quality assurance requirements. You will need to take account of the requirements of the unit format, which we explain in *Section 3 Units*, and the requirements for delivering assessment given in *Section 8 Administrative arrangements*.

Operating internal assessment

The assessment team

It is important that there is an effective team for internal assessment so that all assessment is planned and verified. For this qualification, it is likely that the team will be small but it is still necessary to ensure that the assessment process is followed. Full information is given in the *Pearson Quality Assurance Handbook*.

The key roles are:

- the Lead Internal Verifier (Lead IV) for the qualification has responsibility for the planning, record keeping and standard setting for the qualification. The Lead IV registers with Pearson annually and organises training using our support materials
- Internal Verifiers (IVs) check that assignments and assessment decisions are valid and that they meet our requirements. In a small team, all people will normally be assessors and IVs. No one can verify their own actions as an assessor
- assessors set or use assignments to assess learners to national standards.

Planning and record keeping

The Lead IV should make sure that there is a plan for assessment of the internally-assessed units and maintain records of assessment undertaken. The key records are:

- verification of assignment briefs
- learner authentication declarations
- assessor decisions on assignments, with feedback given to learners
- verification of assessment decisions.

Examples of records and further information are given in the *Pearson Quality Assurance Handbook*.

Effective organisation

Internal assessment needs to be well organised so that learners' progress can be tracked and so that we can monitor that assessment is being carried out in line with national standards. We support you through, for example, providing training materials and sample documentation. Our online myBTEC service can help support you in planning and record keeping. Further information on using myBTEC can be found in *Section 11 Resources and support* and on our website.

It is particularly important that you manage the overall assignment programme and deadlines to make sure that learners are able to complete assignments on time.

Learner preparation

To ensure that you provide effective assessment for your learners, you need to make sure that they understand their responsibilities for assessment and the centre's arrangements.

From induction onwards, you will want to ensure that learners are motivated to work consistently and independently to achieve the requirements of the qualification. Learners need to understand how assignments are used, the importance of meeting assignment deadlines and that all the work submitted for assessment must be their own.

You will need to explain to learners the requirements of assessment and the expected standard that they need to achieve to attain a grade, how assessments relate to the teaching programme and how they should use and reference source materials, including what would constitute plagiarism. You should also set out your approach to operating assessment, such as how learners must submit work and request extensions.

You are encouraged to employ a range of formative assessment approaches as part of teaching and learning before assessing the units summatively. Formative assessment supports teaching and learning, and should be ongoing throughout the learning process. It enables tutors to enhance learning by giving learners constructive feedback so that they can identify their strengths and weaknesses, and to put measures in place to target areas that need work. To ensure that learners progress, formative assessment approaches that incorporate reflective learning and regular skills assessment are important in encouraging self-development and reflective practice. You can give feedback on the following:

- technique and skills development
- identifying stretch and challenge.

Setting assignments

For internally-assessed units, an assessment task is defined as the independent production of evidence, by the learner, during a set period. The format of assessment tasks can include practical, written and observed activities.

An assignment provides the context for assessment tasks and should be issued to learners as a vocational scenario with a defined start date, a completion date and clear requirements for the production of evidence. A valid assessment task will enable a clear, summative assessment of outcomes based on the assessment criteria.

An assessment task in an assignment must be a distinct activity, completed independently by learners. It is a separate, more formal activity but can follow on from teaching activities that learners complete with direction from tutors.

When setting your assignments, you need to work with the information given in the *Essential information for assessment* decisions and the *Assessment activity* sections of the units. You can choose to use the suggested scenarios or to adapt them to take account of local circumstances, provided that assignments are verified.

In designing your own assignment briefs you should bear in mind the following points.

- A learning aim must always be assessed as a whole.
- Assessment tasks in assignments must be structured to allow learners to demonstrate the full range of achievement at all grade levels. All learners need to be treated fairly by being given the opportunity to achieve a higher grade if they have the ability.
- Learners should be given clear tasks, activities and structures for evidence, the criteria should not be given as tasks.
- Assessment tasks in assignments provide a final summative assessment of a learning aim.
- You must ensure that assignments for synoptic assessment are designed to enable learners to draw on the specific units identified and demonstrate that they can identify and use effectively an appropriate selection of skills, techniques, concepts, theories and knowledge in an integrated way. Assignments for the synoptic unit will be monitored at programme level as part of the standards verification process to ensure that they encourage learners to select and apply their learning from across the qualification in an integrated way.
- Where there is a requirement for assessment to be conducted in the real work environment (mandatory work placement), assignments must be designed to facilitate this. Where there is no mandatory requirement for workplace assessment but learners will be in work placement or work experience settings as a part of the programme, then it would be worthwhile if these assignments were also designed for completion in the real work environment. You must ensure that the work placement or work experience setting gives learners the opportunity to achieve at all grade levels.
- Assessment tasks will draw on the specified range of teaching content for the learning aim. The specified teaching content is compulsory. The evidence for assessment need not cover every aspect of the teaching content as learners will normally be given particular examples, case studies or contexts in their assignments. For example, if a learner is carrying out a practical performance, then they must address all the relevant range of content that applies in that instance.

An assignment brief should have:

- a vocational scenario or context that motivates the learner to apply their learning through the assignment
- an audience or purpose for which the evidence is being provided
- clear instructions to the learner about what they are required to do, normally set out through a series of tasks.

Forms of evidence

The units allow for a variety of forms of evidence to be used, provided that they are suited to the type of learning aim and the learner being assessed. For most units, the practical demonstration of skills is necessary. The units give you information on suitable forms of evidence that would give learners the opportunity to apply a range of transferable and sector skills. Centres may choose to use different suitable forms for evidence to those proposed. Overall, learners should be assessed using varied forms of evidence.

The main forms of evidence include:

- observation and recordings of practical tasks or performance in the workplace with
- supporting evidence
- projects
- recordings of role play, interviews and other types of simulated activities
- oral or written presentations with assessor questioning
- work logbooks and reflective journals.

It is important to note that an observation record is a source of evidence and does not confer an assessment decision. It must be sufficiently detailed to enable others to make a judgement about the quality and sufficiency of the performance and must document clearly the rationale for the assessment decision. Observation records should be accompanied by supporting evidence, which may take the form of videos, audio recordings, photographs, preparation notes, learner logs and other similar types of record.

The form(s) of evidence selected must allow:

- the learner to provide all the evidence required for the learning aim(s) and the associated assessment criteria at all grade levels
- the learner to produce evidence that is their own independent work
- a verifier to independently reassess the learner to check the assessor's decisions.

Centres need to take particular care in ensuring that learners produce independent work.

Making valid assessment decisions

Assessment decisions through applying unit-based criteria

Assessment decisions for this qualification are based on the specific criteria given in each unit and set at each grade level. The way in which individual units are written provides a balance of assessment of sector-specific knowledge, technical and practical skills, and transferable skills appropriate to the purpose of the qualification.

Pass, Merit and Distinction criteria all relate to individual learning aims. The assessment criteria for a unit are hierarchical and holistic where, in satisfying the M criteria, a learner would also have satisfied the P criteria. The unit assessment grid shows the relationships of the criteria so that assessors can apply all the criteria to the learner's evidence at the same time.

Assessors must show how they have reached their decisions using the criteria in the assessment records. When a learner has completed all the assessment for a unit then the assessment team will give a grade for the unit. This is given according to the highest level for which the learner is judged to have met all the criteria. Therefore:

- to achieve a Distinction, a learner must have satisfied all the Distinction criteria (and all the Pass and Merit criteria)); these define outstanding performance across the unit as a whole
- to achieve a Merit, a learner must have satisfied all the Merit criteria (and all the Pass criteria) through high performance in each learning aim
- to achieve a Pass, a learner must have satisfied all the Pass criteria for the learning aims, showing coverage of the unit content and therefore attainment at Level 2 of the national framework.

The award of a Pass is a defined level of performance and cannot be given solely on the basis of a learner completing assignments. Learners who do not satisfy the Pass criteria should be reported as Unclassified.

Making assessment decisions using criteria

Assessors should review authenticated learner work and make judgements on standards using the assessment criteria and the supporting information provided in units and training materials. The evidence from a learner can be judged using all the relevant criteria at the same time. The assessor needs to make a judgement against each criterion that evidence is present and sufficiently comprehensive.

Assessors should use the following information and support in reaching assessment decisions:

- the *Essential information for assessment decisions* section in each unit
- your Lead IV and assessment team's collective experience, supported by the standardisation materials we provide.

Once the team has agreed the outcome, a formal assessment decision is recorded and reported to learners. The information given:

- must show the formal decision and indicate where criteria have been met
- may show where attainment against criteria has not been demonstrated
- avoid giving direct, specific instructions on how the learner can improve the evidence to achieve a higher grade.

Authenticity of learner work

Assessors must ensure that evidence is authentic to a learner through setting valid assignments and supervising them during the assessment period. Assessors must take care not to provide direct input, instructions or specific feedback that may compromise authenticity.

Once an assessment has begun, learners must not be given feedback that relates specifically to their evidence and how it can be improved, learners must work independently.

An assessor must assess only learner work that is authentic, i.e. learners' own independent work. Learners must authenticate the evidence that they provide for assessment through signing a declaration stating that it is their own work.

Assessors must complete a declaration that:

- the evidence submitted for this assignment is the learner's own
- the learner has clearly referenced any sources used in the work
- they understand that false declaration is a form of malpractice.

Centres can use Pearson templates or their own templates to document authentication.

During assessment, an assessor may suspect that some or all of the evidence from a learner is not authentic. The assessor must then take appropriate action using the centre's policies for malpractice. Further information is given in *Section 8 Administrative arrangements*.

Resubmission of improved evidence

The final assessment of evidence for the relevant learning aims is normally the final assessment decision, except where the Lead IV approves one opportunity to resubmit improved evidence based on the completed assessment.

The Lead IV has the responsibility to make sure that resubmission is operated fairly. This means:

- checking that a learner can be reasonably expected to perform better through a second submission, for example that the learner has not performed as expected
- making sure that giving a further opportunity does not give an unfair advantage over other learners, for example through the opportunity to take account of feedback given to other learners
- checking that the learner will be able to provide improved evidence without further guidance and that the original evidence submitted remains valid.

Once an assessment decision has been given to the learner, the resubmission opportunity must have a deadline within 15 working days in the same academic year. However, we recognise that there are circumstances where the resubmission period may fall outside of the 15-day limit owing to a lack of resources being available, for example where learners may need to access a performance space or have access to specialist equipment. Where it is practical to do so, for example evaluations, presentations, extended writing, resubmission must remain within the normal 15-day period.

For assessment to be fair, it is important that learners are all assessed in the same way and that some learners are not advantaged by having additional time or the opportunity to learn from others. Therefore, learners who did not complete assessment tasks by the planned deadline or by an authorised extension deadline (if one was given for specific circumstances), may not have the opportunity to subsequently resubmit. Similarly, learners who submit work that is not their own should not be given an opportunity to resubmit.

The outcome of any resubmission of the assessment task by the learner is then recorded as the final decision.

A learner who has not achieved their expected level of performance in the relevant learning aims **after resubmission** of an assessment may be offered a single retake opportunity using a new assessment task. The highest grade that may be awarded is a Pass.

The Lead IV must authorise a retake with a new assessment only in exceptional circumstances and where it is necessary, appropriate and fair to do so. For further information on offering a retake opportunity please refer to the *BTEC Centre Guide to Internal Assessment* available on our website. There is information on writing assignments for retakes on our website, see www.btec.co.uk/keydocuments.

7 External assessment

A summary of the type and availability of external assessment for this qualification is given below. This external assessment assesses a unit that is 25% of the total qualification GLH and is weighted to contribute the same proportion of the overall qualification grade using a points scale.

See the units and sample assessment materials for more information.

Unit	Type	Availability
Unit 6: Digital Production Project	<ul style="list-style-type: none"> • A task set and marked by Pearson and completed under supervised conditions. The set task is issued in January. • The supervised period is 20 hours during the period specified by Pearson. • Digital portfolio. • 72 marks. 	Once a year. First assessment June 2018.

For *Unit 6*, we will issue a different task each year. Learners can complete the task at any time during the timetabled period. The duration and control of the assessment is the same whenever it is completed within the timetabled period and learner evidence can be submitted to Pearson for marking at any time, up to the scheduled end of the task period. We will issue results for each task after the marking period for that task.

We will provide annually, in our *Information Manual*, a detailed timetable for entries, assessment and results. Resits cannot be scheduled until a learner's result has been issued.

Learners must be prepared for external assessment by the time they undertake it. In preparing learners for assessment, you will want to take account of required learning time.

Units

The externally-assessed unit has a specific format, which we explain in *Section 3 Units*. The content of the unit will be sampled across external assessments over time through appropriate tasks. The ways in which learners are assessed are shown through the assessment outcomes and grading descriptors.

Sample assessment materials

Each externally-assessed unit has a set of sample assessment materials (SAMs) that accompanies the specification. The SAMs are there to give you an example of what the external assessment will look like in terms of the feel and level of demand of the assessment.

The SAMs show the range of possible activity types that may appear in the actual assessments and give you a good indication of how the assessments will be structured. While SAMs can be used for practice with learners, as with any assessment, the content covered and specific details of the activities will vary in each assessment.

These sample assessments can be downloaded from our website.

Conducting external assessments

Centres must make arrangements for the secure delivery of external assessments. You need to ensure that learners are aware that they need to work independently and that they are aware of the requirements for any external assessment.

Each external assessment has a defined degree of control under which it must take place. We define degrees of control as follows.

Medium control

This is completion of assessment, usually over a longer period of time, which may include a period of controlled conditions. The controlled conditions may allow learners to access resources, prepared notes or the internet to help them complete the task. This applies to task-based assessments.

Further information on responsibilities for conducting external assessment is given in the document *Instructions for Conducting External Assessments*, available on our website.

8 Administrative arrangements

Introduction

This section focuses on the administrative requirements for delivering a BTEC qualification. It will be of value to Quality Nominees, Lead IVs, Programme Leaders and Examinations Officers.

Learner registration and entry

Shortly after learners start the programme of learning, you need to make sure that they are registered for the qualification and that appropriate arrangements are made for internal and external assessment. You need to refer to our *Information Manual* for information on making registrations for the qualification and entries for external assessments.

Learners can be formally assessed only for a qualification on which they are registered. If learners' intended qualifications change, for example if a learner decides to choose a different pathway specialism, then the centre must transfer the learner appropriately.

Access to assessment

Both internal and external assessments need to be administered carefully to ensure that all learners are treated fairly and that results and certificates are issued on time to allow learners to progress to chosen progression opportunities.

Our equality policy requires that all learners have equal opportunity to access our qualifications and assessments, and that our qualifications are awarded in a way that is fair to every learner. We are committed to making sure that:

- learners with a protected characteristic (as defined by the Equality Act 2010) are not, when they are undertaking one of our qualifications, disadvantaged in comparison to learners who do not share that characteristic
- all learners achieve the recognition they deserve for undertaking a qualification and this achievement can be compared fairly to the achievement of their peers.

Further information on access arrangements can be found in the Joint Council for Qualifications (JCQ) document *Access Arrangements, Reasonable Adjustments and Special Consideration for General and Vocational Qualifications*.

Administrative arrangements for internal assessment

Records

You are required to retain records of assessment for each learner. Records should include assessments taken, decisions reached and any adjustments or appeals. Further information can be found in our *Information Manual*. Records must be maintained as specified as we may ask to audit them.

Reasonable adjustments to assessment

To ensure that learners have fair access to demonstrate the requirements of the assessments, a reasonable adjustment is one that is made before a learner takes an assessment. You are able to make adjustments to internal assessments to take account of the needs of individual learners. In most cases, this can be achieved through a defined time extension or by adjusting the format of evidence. We can advise you if you are uncertain as to whether an adjustment is fair and reasonable. You need to plan for time to make adjustments if necessary.

Further details on how to make adjustments for learners with protected characteristics are given on our website in the document *Supplementary guidance for reasonable adjustment and special consideration in vocational internally assessed units*.

Special consideration

Special consideration is given after an assessment has taken place for learners who have been affected by adverse circumstances, such as illness. You must operate special consideration in line with our policy (see previous paragraph). You can provide special consideration related to the period of time given for evidence to be provided or for the format of the assessment if it is equally valid. You may not substitute alternative forms of evidence to that required in a unit or omit the application of any assessment criteria to judge attainment. Pearson can consider applications for special consideration only in line with the policy.

Appeals against assessment

Your centre must have a policy for dealing with appeals from learners. These appeals may relate to assessment decisions being incorrect or assessment being conducted unfairly. The first step in such a policy could be a consideration of the evidence by a Lead IV or other member of the programme team. The assessment plan should allow time for potential appeals after assessment decisions have been given to learners. If there is an appeal by a learner you must document the appeal and its resolution. Learners have a final right of appeal to Pearson but only if the procedures that you have put in place have not been followed. Further details are given in our policy *Enquiries and appeals about Pearson Vocational Qualifications*.

Administrative arrangements for external assessment

Entries and resits

For information on the timing of assessment and entries, please refer to the annual examinations timetable on our website. Learners are permitted to have one resit of an external assessment.

Access arrangements requests

Access arrangements are agreed with Pearson before an assessment. They allow learners with special educational needs, disabilities or temporary injuries to:

- access the assessment
- show what they know and can do without changing the demands of the assessment.

Access arrangements should always be processed at the time of registration. Learners will then know what type of arrangements are available in place for them.

Granting reasonable adjustments

For external assessment, a reasonable adjustment is one that we agree to make for an individual learner. A reasonable adjustment is defined for the individual learner and informed by the list of available access arrangements.

Whether an adjustment will be considered reasonable will depend on a number of factors to include the:

- needs of the learner with the disability
- effectiveness of the adjustment
- cost of the adjustment; and
- likely impact of the adjustment on the learner with the disability and other learners.

Adjustment may be judged unreasonable and not approved if it involves unreasonable costs, timeframes or affects the integrity of the assessment.

Special consideration requests

Special consideration is an adjustment made to a learner's mark or grade after an external assessment to reflect temporary injury, illness or other indisposition at the time of the assessment. An adjustment is made only if the impact on the learner is such that it is reasonably likely to have had a material effect on that learner being able to demonstrate attainment in the assessment.

Centres are required to notify us promptly of any learners who they believe have been adversely affected and request that we give special consideration. Further information can be found in the special requirements section on our website.

Dealing with malpractice in assessment

Malpractice means acts that undermine the integrity and validity of assessment, the certification of qualifications, and/or that may damage the authority of those responsible for delivering the assessment and certification.

Pearson does not tolerate actions (or attempted actions) of malpractice by learners, centre staff or centres in connection with Pearson qualifications. Pearson may impose penalties and/or sanctions on learners, centre staff or centres where incidents (or attempted incidents) of malpractice have been proven.

Malpractice may arise or be suspected in relation to any unit or type of assessment within the qualification. For further details regarding malpractice and advice on preventing malpractice by learners, please see Pearson's *Centre Guidance: Dealing with Malpractice*, available on our website.

The procedures we ask you to adopt vary between units that are internally assessed and those that are externally assessed.

Internally-assessed units

Centres are required to take steps to prevent malpractice and to investigate instances of suspected malpractice. Learners must be given information that explains what malpractice is for internal assessment and how suspected incidents will be dealt with by the centre. The *Centre Guidance: Dealing with Malpractice* document gives full information on the actions we expect you to take.

Pearson may conduct investigations if we believe that a centre is failing to conduct internal assessment according to our policies. The above document gives further information, examples and details the penalties and sanctions that may be imposed.

In the interests of learners and centre staff, centres need to respond effectively and openly to all requests relating to an investigation into an incident of suspected malpractice.

Externally-assessed units

External assessment means all aspects of units that are designated as external in this specification, including preparation for tasks and performance. For these assessments, centres must follow the JCQ procedures set out in the latest version of *JCQ Suspected Malpractice in Examinations and Assessments Policies and Procedures* (www.jcq.org.uk).

In the interests of learners and centre staff, centres need to respond effectively and openly to all requests relating to an investigation into an incident of suspected malpractice.

Learner malpractice

Heads of Centres are required to report incidents of any suspected learner malpractice that occur during Pearson external assessments. We ask that centres do so by completing a *JCQ Form M1* and emailing it and any accompanying documents (signed statements from the learner, invigilator, copies of evidence, etc.) to the Investigations Team at pqsmalpractice@pearson.com. The responsibility for determining appropriate sanctions or penalties to be imposed on learners lies with Pearson.

Learners must be informed at the earliest opportunity of the specific allegation and the centre's malpractice policy, including the right of appeal. Learners found guilty of malpractice may be disqualified from the qualification for which they have been entered with Pearson.

Teacher/centre malpractice

Heads of Centres are required to inform Pearson's Investigations Team of any incident of suspected malpractice by centre staff, before any investigation is undertaken. Heads of Centres are requested to inform the Investigations Team by submitting a *JCQ Form M2(a)* with supporting documentation to pqsmalpractice@pearson.com. Where Pearson receives allegations of malpractice from other sources (for example Pearson staff or anonymous informants), the Investigations Team will conduct the investigation directly or may ask the head of centre to assist.

Incidents of maladministration (accidental errors in the delivery of Pearson qualifications that may affect the assessment of learners) should also be reported to the Investigations Team using the same method.

Heads of Centres/Principals/Chief Executive Officers or their nominees are required to inform learners and centre staff suspected of malpractice of their responsibilities and rights; see 6.15 of *JCQ Suspected Malpractice in Examinations and Assessments Policies and Procedures*.

Pearson reserves the right in cases of suspected malpractice to withhold the issuing of results and/or certificates while an investigation is in progress. Depending on the outcome of the investigation, results and/or certificates may be released or withheld.

We reserve the right to withhold certification when undertaking investigations, audits and quality assurances processes. You will be notified within a reasonable period of time if this occurs.

Sanctions and appeals

Where malpractice is proven, we may impose sanctions or penalties.

Where learner malpractice is evidenced, penalties may be imposed such as:

- mark reduction for external assessments
- disqualification from the qualification
- being barred from registration for Pearson qualifications for a period of time.

If we are concerned about your centre's quality procedures, we may impose sanctions such as:

- working with you to create an improvement action plan
- requiring staff members to receive further training
- placing temporary blocks on your certificates
- placing temporary blocks on registration of learners
- debarring staff members or the centre from delivering Pearson qualifications
- suspending or withdrawing centre approval status.

The centre will be notified if any of these apply.

Pearson has established procedures for centres that are considering appeals against penalties and sanctions arising from malpractice. Appeals against a decision made by Pearson will normally be accepted only from heads of centres (on behalf of learners and/or members or staff) and from individual members (in respect of a decision taken against them personally). Further information on appeals can be found in our *Enquiries and Appeals* policy, which is on our website. In the initial stage of any aspect of malpractice, please notify the Investigations Team by email via pqsmalpractice@pearson.com who will inform you of the next steps.

Certification and results

Once a learner has completed all the required units for a qualification, even if final results for external assessments have not been issued, then the centre can claim certification for the learner, provided that quality assurance has been successfully completed. For the relevant procedures please refer to our *Information Manual*. You can use the information provided on qualification grading to check overall qualification grades.

Results issue

Results for external assessment will be issued once marking is complete.

Qualification results will be issued once a learner has completed all components of the qualification and you have claimed certification. The result will be in the form of a grade. You should be prepared to discuss performance with learners, making use of the information we provide and post-results services.

Post-assessment services

Once results for external assessments are issued, you may find that the learner has failed to achieve the qualification or to attain an anticipated grade. It is possible to transfer or reopen registration in some circumstances. Our *Information Manual* gives further information.

Changes to qualification requests

Where a learner who has taken a qualification wants to resit an externally-assessed unit to improve their qualification grade, you firstly need to decline their overall qualification grade. You must decline the grade before the certificate is issued. For a learner receiving their results in August, you should decline the grade by the end of September if the learner intends to resit an external assessment.

Additional documents to support centre administration

As an approved centre, you must ensure that all staff delivering, assessing and administering the qualifications have access to this documentation. These documents are reviewed annually and are reissued if updates are required.

- *Pearson Quality Assurance Handbook*: this sets out how we will carry out quality assurance of standards and how you need to work with us to achieve successful outcomes.
- *Information Manual*: this gives procedures for registering learners for qualifications, transferring registrations, entering for external assessments and claiming certificates.
- *Lead Examiners' Reports*: these are produced after each series for each external assessment and give feedback on the overall performance of learners in response to tasks or questions set.
- *Instructions for the Conduct of External Assessments*: explains our requirements for the effective administration of external assessments, such as invigilation and submission of materials.
- *Regulatory policies*: our regulatory policies are integral to our approach and explain how we meet internal and regulatory requirements. We review the regulated policies annually to ensure that they remain fit for purpose. Policies related to this qualification include:
 - adjustments for candidates with disabilities and learning difficulties, access arrangements and reasonable adjustments for general and vocational qualifications
 - age of learners
 - centre guidance for dealing with malpractice
 - recognition of prior learning and process.

This list is not exhaustive and a full list of our regulatory policies can be found on our website.

9 Quality assurance

Centre and qualification approval

As part of the approval process, your centre must make sure that the resource requirements listed below are in place before offering the qualification.

- Centres must have appropriate physical resources (for example, equipment, IT, learning materials, teaching rooms) to support the delivery and assessment of the qualification.
- Staff involved in the assessment process must have relevant expertise and/or occupational experience.
- There must be systems in place to ensure continuing professional development for staff delivering the qualification.
- Centres must have in place appropriate health and safety policies relating to the use of equipment by learners.
- Centres must deliver the qualification in accordance with current equality legislation.
- Centres should refer to the teacher guidance section in individual units to check for any specific resources required.

Continuing quality assurance and standards verification

On an annual basis, we produce the *Pearson Quality Assurance Handbook*. It contains detailed guidance on the quality processes required to underpin robust assessment, internal verification and planning of appropriate employer involvement.

The key principles of quality assurance are that:

- a centre delivering BTEC programmes must be an approved centre, and must have approval for the programmes or groups of programmes that it is delivering
- the centre agrees, as part of gaining approval, to abide by specific terms and conditions around the effective delivery and quality assurance of assessment; it must abide by these conditions throughout the period of delivery
- Pearson makes available to approved centres a range of materials and opportunities, through online standardisation, intended to exemplify the processes required for effective assessment, and examples of effective standards. Approved centres must use the materials and services to ensure that all staff delivering BTEC qualifications keep up to date with the guidance on assessment
- an approved centre must follow agreed protocols for standardisation of assessors and verifiers, for the planning, monitoring and recording of assessment processes, and for dealing with special circumstances, appeals and malpractice.

The approach of quality-assured assessment is through a partnership between an approved centre and Pearson. We will make sure that each centre follows best practice and employs appropriate technology to support quality-assurance processes, where practicable. We work to support centres and seek to make sure that our quality-assurance processes do not place undue bureaucratic processes on centres. We monitor and support centres in the effective operation of assessment and quality assurance.

The methods we use to do this for BTEC Technical Certificate and Diploma qualifications include:

- making sure that all centres complete appropriate declarations at the time of approval
- undertaking approval visits to centres
- making sure that centres have effective teams of assessors and verifiers who are trained to undertake assessment
- undertaking an overarching review and assessment of a centre's strategy for ensuring sufficient and appropriate engagement with employers at the beginning of delivery of any BTEC programme(s)
- undertaking a review of the employer involvement planned at programme level to ensure its appropriateness at a time when additional activities can be scheduled where necessary
- assessment sampling and verification, through requested samples of assessments, completed assessed learner work and associated documentation
- an overarching review and assessment of a centre's strategy for delivering and quality assuring its BTEC programmes.

Centres that do not fully address and maintain rigorous approaches to delivering, assessing and quality assurance cannot seek certification for individual programmes or for the BTEC Technical Certificate and Diploma qualifications. An approved centre must make certification claims only when authorised by us and strictly in accordance with requirements for reporting.

Centres that do not comply with remedial action plans may have their approval to deliver qualifications removed.

10 Understanding the qualification grade

Awarding and reporting for the qualification

This section explains the rules that we apply in providing an overall qualification grade for each learner. The final grade awarded for a qualification represents a holistic performance across all of the qualification. As the qualification grade is an aggregate of the total performance, there is some element of compensation in that a higher performance in some units will be balanced by a lower outcome in others.

Eligibility for an award

In order to be awarded the qualification, a learner must complete all units and achieve a Pass or above in all units. See *Section 2 Structure* for full details.

To achieve the qualification grade, learners must:

- achieve and **report a grade** (D, M or P) for all units within a valid combination
- achieve the **minimum number of points** at a grade threshold.

Where there are optional units in a qualification, it is the responsibility of the centre to ensure that a correct unit combination is adhered to. Learners who do not pass all the required units shown in the structure will not achieve the qualification. For example, learners who have not passed the required external unit/s or who have not taken enough mandatory or optional units will not achieve that qualification even if they have enough points.

Calculation of the qualification grade

The final grade awarded for a qualification represents an aggregation of a learner's performance across the qualification. As the qualification grade is an aggregate of the total performance, there is some element of compensation in that a higher performance in some units may be balanced by a lower outcome in others.

In the event that a learner achieves more than the required number of optional units (where available), the mandatory units along with the optional units with the highest grades will be used to calculate the overall result, subject to the eligibility requirements for that particular qualification title.

The qualification is awarded at the grade ranges shown in the table below.

Qualification	Available grade range
Diploma	PP to DD

The *Calculation of qualification grade* table, which appears later in this section, shows the minimum thresholds for calculating these grades. The table will be kept under review over the lifetime of the qualification. In the event of any change, centres will be informed before the start of teaching for the relevant cohort and an updated table will be issued on our website.

Learners who do not meet the minimum requirements for a qualification grade to be awarded will be recorded as Unclassified (U) and will not be certificated. They may receive a Notification of Performance for individual units. Our *Information Manual* gives full details.

Points available for internal units

The table below shows the number of **points** available for internal units. For each internal unit, points are allocated depending on the grade awarded.

	Unit size	
	30 GLH	60 GLH
U	0	0
Pass	8	16
Merit	12	24
Distinction	16	32

Points available for the external unit

Raw marks from the external unit will be awarded by a **points scale** based on performance in the assessment. The range of points scores available for the external unit at each grade are as follows.

	Unit size
	90 GLH
U	0
Pass	24-35
Merit	36-47
Distinction	48

We will automatically calculate the points for the external unit once the external assessment has been marked and grade boundaries have been set. For more details about how we set grade boundaries in the external assessment please go to our website.

Claiming the qualification grade

Subject to eligibility, we will automatically calculate the qualification grade for your learners when the internal unit grades are submitted and the qualification claim is made. Learners will be awarded qualification grades for achieving the sufficient number of points within the ranges shown in the relevant calculation of qualification grade table for the cohort.

Calculation of qualification grade table

Diploma	
Grade	Points threshold
PP	96
MP	112
MM	128
DM	152
DD	176

The table is subject to review over the lifetime of the qualification. The most up-to-date version will be issued on our website.

Examples of grade calculations based on table applicable to registrations from September 2017

Example 1: Achievement of a Diploma with a PP grade

Unit	GLH	Type	Grade	Points
1	30	Internal	Pass	8
2	60	Internal	Pass	16
3	30	Internal	Merit	12
4	60	Internal	Pass	16
5	30	Internal	Pass	8
6	90	External	Pass	24
7	60	Internal	Merit	24
	360		PP	108

The learner has achieved a Pass or above in all units.

The learner has sufficient points for a PP grade.

Example 2: Achievement of a Diploma with a DD grade

Unit	GLH	Type	Grade	Points
1	30	Internal	Distinction	16
2	60	Internal	Distinction	32
3	30	Internal	Merit	12
4	60	Internal	Distinction	32
5	30	Internal	Merit	12
6	90	External	Distinction	48
7	60	Internal	Distinction	32
	360		DD	184

The learner has sufficient points for a DD grade.

Example 3: Achievement of a Diploma with an Unclassified result

Unit	GLH	Type	Grade	Points
1	30	Internal	Merit	12
2	60	Internal	Pass	16
3	30	Internal	Unclassified	0
4	60	Internal	Pass	16
5	30	Internal	Pass	8
6	90	External	Distinction	48
7	60	Internal	Pass	16
	360		U	116

The learner has a U in Unit 3.

The learner has sufficient points for an M/MP but has not met the requirement for a Pass, or above, in all units.

11 Resources and support

Our aim is to give you support to enable you to deliver Pearson BTEC Level 2 Technicals with confidence. You will find resources to support teaching and learning, assessing, and professional development on our website.

Support for setting up your course and preparing to teach

Schemes of Learning

Our free Schemes of Learning give you suggestions and ideas for how to deliver the units in the qualifications, including opportunities to develop employability skills, tips on embedding mathematics and English, and how to link units through holistic assessments.

Delivery planner

High-level models showing how the course can be delivered over different timescales, for example six months, one year, two years.

myBTEC

myBTEC is a free, online toolkit that lets you plan and manage your BTEC provision from one place. It supports the delivery, assessment and quality assurance of BTEC qualifications in centres and supports teachers with the following activities:

- checking that a programme is using a valid combination of units
- creating and verifying assignment briefs (including access to a bank of assignment briefs that can be customised)
- creating assessment plans and recording assessment decisions
- tracking the progress of every learner throughout their programme.

To find out more about myBTEC, visit the myBTEC page on the support services section of our website.

Support for teaching and learning

Work Experience Toolkit

Our free Work Experience Toolkit gives guidance for tutors, assessors, work-based supervisors and learners on how to make the most of work placements and work experience.

Pearson Learning Services provides a range of engaging resources to support BTEC qualifications. Teaching and learning resources may also be available from a number of other publishers. Details of Pearson's own resources and of all endorsed resources are on our website.

Support for assessment

Sample assessment materials for externally-assessed units

Sample assessment materials (SAMs) are available for externally-assessed units and can be downloaded from the Pearson Qualifications website. An additional set of sample assessment materials for externally-assessed units will also be available, giving your learners further opportunities for practice.

Sample assessment materials for internally-assessed units

We do not prescribe the assessments for the internally-assessed units. Rather, we allow you to set your own, according to your learners' preferences.

We provide assignment briefs approved by Pearson Standards Verifiers.

Sample marked learner work

To support you in understanding the expectation of the standard at each grade, examples of sample marked learner work will be made available on our website.

Training and support from Pearson

People to talk to

There are lots of people who can support you and give you advice and guidance on delivering your Pearson BTEC Level 2 Technicals. They include the following.

- Standards Verifiers – they can support you with preparing your assignments, ensuring that your assessment plan is set up correctly, in preparing learner work and providing quality assurance through sampling.
- Subject Advisors – available for all sectors. They understand all Pearson qualifications in their sector and so can answer sector-specific queries on planning, teaching, learning and assessment.
- Curriculum Development Managers (CDMs) – they are regionally based and have a full overview of BTEC qualifications and of the support and resources that Pearson provides. CDMs often run network events.
- Customer Services – the 'Support for You' section of our website gives the different ways in which you can contact us for general queries. For specific queries, our service operators can direct you to the relevant person or department.

Training and professional development

We provide a range of training and professional development events to support the introduction, delivery, assessment and administration of the Pearson BTEC Level 2 Technicals.

These sector-specific events, developed and delivered by specialists, are available both face to face and online.