

# Unit 38: Mixed Media Image Making

<b>Unit code:</b>	<b>M/502/5253</b>
<b>QCF Level 3:</b>	<b>BTEC National</b>
<b>Credit value:</b>	<b>10</b>
<b>Guided learning hours:</b>	<b>60</b>

## ● Aim and purpose

This unit is designed to develop learners' skills in creative and experimental use of non-traditional graphic media and methods in their design work. Learners will gain an understanding of the potential use of graphic media and the range of skills needed in order to exploit these forms effectively.

## ● Unit introduction

The range and scope of graphic media products is wider than it has ever been. As the media and communications industries expand, the demand for versatile, creative designers is stronger than ever. Despite the largely digital or electronic nature of most vocational practice in graphic media, designers need to be able to use a wide variety of practices, tools and materials in order to meet the need for original, inventive design. Designers need these abilities and skills to compete and succeed in the industry.

The use of the term 'mixed media image making' in this unit is intended to convey the use of a range of materials and processes not conventionally associated with graphic design processes in order to inspire creativity and innovation in design and concept generation.

This unit is designed to encourage learners to be creative and experimental in their approach and broaden their experience of using non-traditional media and methods in their design work. Through completion of this unit, learners will gain an understanding of the varied nature of graphic media and the range of skills needed to exploit these forms effectively.

Learners need to gain a good knowledge of reproduction methods along with an understanding of ways in which to implement these processes.

## ● Learning outcomes

**On completion of this unit a learner should:**

- 1 Be able to use experimental and non-traditional graphic media techniques and processes
- 2 Be able to use mixed media in producing graphic image outcomes
- 3 Be able to select reproduction techniques towards graphic image outcomes.

## Unit content

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### 1 Be able to use experimental and non-traditional graphic media techniques and processes

*Experimental and non-traditional graphic media:* combined media eg collage, cut-outs, wax resist, masking, sketching; lens-based media eg photography, video, animation; digital media eg drawing, illustration, image manipulation, moving image, 3D modelling; 3D media eg paper, card, papier, mache, textiles, thread, modelling plaster, clay, wire

### 2 Be able to use mixed media in producing graphic image outcomes

*Mixed media:* combinations eg materials, processes, formats, techniques, application, products

*Graphic image outcomes:* editorial design eg magazines, newspapers; advertising eg posters, press advertisements; information graphics eg maps, instructive diagrams; packaging eg labels, boxes, wrappers; publicity eg promotions, posters, leaflets, storyboards, moving image products; identity design eg logos, symbols, corporate identity; illustration

### 3 Be able to select reproduction techniques towards graphic image outcomes

*Reproduction techniques:* print production techniques eg screen printing, lithography; lens-based techniques eg photography, moving image; digital techniques eg scanning, sampling, DVD production, web production

## Assessment and grading criteria

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

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
<b>P1</b> use experimental and non-traditional graphic media techniques and processes [IE, CT, RL, TW, SM]	<b>M1</b> explore coherently, experimental and non-traditional graphic media	<b>D1</b> explore independently, diverse experimental and non-traditional graphic media
<b>P2</b> use mixed media in producing graphic image outcomes [IE, CT, RL, TW, SM, EP]	<b>M2</b> design an effective graphic media product which uses experimental and non-traditional graphic media practices	<b>D2</b> design an innovative graphic media product independently, which uses experimental and non-traditional graphic media practices
<b>P3</b> select reproduction techniques towards graphic image outcomes. [IE, CT, RL, TW, SM, EP]	<b>M3</b> explain, with reference to well-chosen examples, reproduction techniques used towards graphic image outcomes.	<b>D3</b> evaluate, with reference to detailed examples, reproduction techniques used towards graphic image outcomes.

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

<b>Key</b>	IE – independent enquirers CT – creative thinkers	RL – reflective learners TW – team workers	SM – self-managers EP – effective participators
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# Essential guidance for tutors

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## Delivery

This unit is designed to encourage learners to be creative and experimental in using non-traditional graphic media and methods in their design work. Learners will gain an understanding of the potential use of graphic media and the range of skills needed in order to exploit these forms effectively.

The nature of this unit requires an approach focused on experimentation and development of skills, largely through practical application. However, learners need careful guidance both in the methods of manipulating and using materials to their best potential, as well as the safety considerations necessary when using such media.

Workshop-based delivery may prove an effective way of introducing mixed media techniques and processes to learners, starting with a demonstration and guidance session followed by an experimentation opportunity within a studio. Learners should have access to support and guidance when working at this stage and be encouraged to gain assistance. An ongoing sketchbook or folder storing their work as they progress would be advisable. This work can then be collated and presented as developmental work, and assessed against the criteria on submission. Some delivery teams may find it useful to run this unit alongside other graphics based units, allowing learners to work on existing pieces, building new mixed media techniques into ongoing or completed projects.

For learning outcome 1, learners need to explore and experiment with a wide range of different graphic media, concentrating particularly on the effects of combining such media. They need to gain an understanding of how these media can be used and implemented. Learners need to document their own experiments and exploration of techniques and processes, but may choose a variety of forms to meet this requirement. The use of video, audio or photo diaries might be appropriate, as might web-logs of progress, annotated portfolios or presentations, explaining the techniques and processes used. Within the evidence formulated for this element of the unit, there must be clear indication of the creative process learners have gone through: the methods they employed when using materials and techniques and, more crucially, their findings when combining or mixing these elements.

For learning outcome 2, learners need to apply the knowledge gained from experimenting with, and exploring the possibilities of, non-traditional media to the production of a defined outcome. Learners need to be aware of planning and production procedures in line with professional practice in the field of design.

Learning outcome 1 focuses on encouraging experimentation and investigation and learning outcome 2 focuses on applying the knowledge gained in this process to a product. Learners should have clear intentions, which may well be modified through their experimental or unconventional use of mixed media techniques. The aim of the unit is to develop learners' ability to apply their knowledge and understanding through exploring the potential of mixed media towards a planned goal. Tutors should monitor learners' progress throughout the creation of their product.

Tutor observation sheets could be used to evidence this element, detailing which learners require assistance on a regular basis and which are able to apply their skills largely independently.

For learning outcome 3, learners are required to look carefully at methods of reproducing graphic media products, particularly those with mixed media elements. Delivery should cover both the creative possibilities opened up by the use of varied reproduction methods and the technical and practical requirements involved in each method. Opportunities to view and experiment with equipment involved in these varied processes would be ideal, as would provision of examples of materials reproduced using a range of methods. Learners could produce fact sheets about each of the methods covered or work on case studies selecting appropriate methods for fictional products to consolidate this knowledge. Finally, learners have to select a method suitable for reproducing their chosen piece. Those of higher ability should use their knowledge of the differing methods to explain or even justify their choice.

## Outline learning plan

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

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

Topic and suggested assignments/activities and/assessment
<p>Introduction to the brief/explore aims and requirements of the unit.</p> <p>Project launch and suggested breakdown of tasks for a graphics brief.</p> <p><b>Assignment 1:</b> Urban Scene</p> <p>Explore and experiment with approaches to recording and developing elements of urban scene to produce final series of mixed media image making.</p> <ul style="list-style-type: none"> <li>• Planning the development of the brief.</li> <li>• Considering: constraints, potential, message or communication of idea, possible outcomes and interim production.</li> </ul>
<p>Learner initiated image exploration from the local environment including:</p> <ul style="list-style-type: none"> <li>• learner initial experimental mixed media work for urban scene brief</li> <li>• developing imagery using traditional graphic mixed media</li> <li>• analysis and refinement of imagery</li> <li>• evaluating early work with peers and tutorial.</li> </ul>
<p>Investigating relevant contexts and other sources:</p> <ul style="list-style-type: none"> <li>• researching information from internet, selected textbooks and magazines magazine articles about mixed media image creation in graphic design</li> <li>• visiting graphic design galleries and workshops</li> <li>• extracting relevant information about circumstances, mood, frame of reference for contextual relationships between selected graphic designers approaches to image creation for different purposes</li> <li>• using research to inform/inspire practical developments, experiments, trials and tests.</li> </ul>
<p>Learner initiated exploration and testing a range of appropriate mixed:</p> <ul style="list-style-type: none"> <li>• media image creation techniques, materials, processes and media.</li> </ul> <p>Learners explore further and make more images from the environment:</p> <ul style="list-style-type: none"> <li>• experiment further with traditional and unusual combinations of mixed media image creation techniques</li> <li>• explore potential of digital working: scanning and computer manipulation in appropriate software program</li> <li>• evaluate potential use and suitability of selected approaches.</li> </ul>

## Topic and suggested assignments/activities and/assessment

Producing mixed media image creation work including:

- analysing print-outs and experimental boards
- exploring ideas further through selecting different techniques and processes
- analysing and selecting best ideas for refinement, adaptation and modification
- meeting creative intentions outlined in plan or proposal
- keeping records of plans, ideas, experiments and developments using files, sketchbooks with supporting notes, annotations and evaluations.

Developing work to produce outcomes, including:

- analysing results and critically evaluating aesthetic and technical qualities
- re-working ideas with consideration for improving qualities of visual language skills to meet the learner's intention and the intended audience
- producing final experimental mixed media image.

Selecting reproduction methods and presenting ideas and final imagery including:

- researching and selecting reproduction method
- collating completed images to meet the brief and supporting work such as storyboards, interim pieces, computer print-outs
- planning, and creating a presentation of the work as a whole
- presenting appropriately to different audiences.

Independent working expected throughout the brief to total time.

Review of unit and assessment.

## Assessment

For P1, learners should show evidence of experimentation and exploration with mixed media techniques, materials and processes. Work produced should evidence learners' manipulation of mixed media materials towards creating their own images. This should be demonstrated in examples of planned practical activities and relevant application of techniques. Comment, either verbal or written, should accompany the work explaining how the processes used operate and the effects that were or could be achieved.

For P2, learners need to produce a resolved graphic mixed media image of their choice, which uses one or more of the non-conventional methods explored for P1. Evidence of learners' understanding of their brief and how they have achieved their intentions might be shown in their final work and in their worksheets, sketchbooks, samples, test pieces and digital saves or print-outs. They need to show how they have incorporated non-conventional or experimental methods into their designs in an appropriate way. Annotated sketches, worksheets, print-outs and interim evaluative statements will provide evidence of learners' ability to plan and develop their ideas towards their final images. Pass level learners may require regular support and assistance to evidence their understanding and tutor observation evidence sheets could be provided to document this.

For P3, learners to select an appropriate method for potential reproduction of their finished piece and describe the method they have chosen. At pass level, learners will tend to use descriptive rather than analytical terms in evidencing their understanding of their selection.

For M1, learners need to show a purposeful, coherent approach to experimentation and exploration with mixed media techniques, materials and processes. There should be evidence of individual and effective practical activities and purposeful application of techniques showing some independent development and investigation. Thoughtful comment, either verbal or written, should accompany the work detailing how the processes used operate and the effects that were or could be achieved. Merit level learners will use both descriptive and analytical language in communicating their understanding of exploratory investigations into mixed media, materials and processes.

For M2, there should be evidence of effective experimental and exploratory studies in mixed media and at this level learners should evidence their understanding of the methods, techniques and materials employed and the qualities they have achieved. When planning and working, learners should show a clear sense of direction which should be reflected in an effective design. Evidence for this criteria should take the forms stated previously, and learners should demonstrate effective communication skills in their annotations, notes and evaluative comments. Where necessary, tutor observation evidence sheets could support learners' evidence.

For M3, learners must evidence a coherent rationale for their selection of methods for reproducing their work. Learners must evidence how the process works in some detail and make coherent comments on the reasons for selecting this method and the potential creative benefits it brings.

For D1, there should be evidence of diverse experimental practical activities and the application of mixed media techniques, in innovative ways. An ability to independently develop skills, push the limitations of existing methods and use materials and tools in an innovative manner should be clear in the work produced. Insightful comment, either verbal or written, should accompany the work explaining how the processes used operate and the effects that were or could be achieved. Learners at this level should discuss their experiences of the materials and processes learned and show knowledge of the way media interacts with other elements. The terminology used, the definitions provided and the benefits of such methods should be informed and comprehensively covered.

For D2 there should be evidence of an excellent level of originality in the learners' exploration of mixed media in developing their mixed media image. Their product must show informed planning and independent working, which will be evidenced in a creative and innovative final design. At this level learners should rarely require assistance, and may be capable of working without support when completing this piece. Tutor observation evidence could be provided to document this.

For D3, learners should evidence perceptive selection of potential methods for the reproduction of their work. Learners should use informed analytical and critical vocabulary in giving reasons, both practical and aesthetic, for their selection and to explain in detail how the process works.

## Programme of suggested assignments

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

Criteria covered	Assignment title	Scenario	Assessment method
PI, P2, P3, M1, M2, M3 D1, D2, D3	<b>Assignment 1:</b> Urban Scene	Designer briefed to use mixed media imagery to accompany regeneration report.	Portfolio of evidence consisting of research and experimentation, development of ideas, final work including presentation sheets and evaluation  Witness statements.  Reports of progress from work experience placements.  Learner's own ongoing review of progress and self-evaluation evidenced through statements, notes and annotated sketchbooks/ worksheets.

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

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

Level 1	Level 2	Level 3
Introduction to Graphic Materials, Techniques and Processes	2D Visual Communication	Computers in Art and Design
Creative Use of Materials, Techniques and Processes	3D Visual Communication Working with Interactive Media Briefs	Words and Images in Graphic Design
Explore Mixed Media	Using Ideas to Explore, Develop and Produce Art and Design	Graphic Image Making

## Essential resources

Learners need access to experimental and non-traditional graphic media materials and media in order to fulfil the experimentation element of this unit.

These should include combinations of the following media:

- 2D: collage, drawing/painting and lens-based
- 3D: modelling, carving, moulding material
- Digital: computers with appropriate design software for 2D and 3D mixed media image making.

They also require access to design and studio facilities in order to use these materials effectively. Whilst there is no requirement for all of the examples of media listed in the *Unit content* to be covered, a range of media must be available for learners to experiment with and use in production.

Facilities with both specialist and general learning support materials, including books, journals and periodicals, are vital for research purposes. Computers with appropriately updated design software are required to support learners' digital ideas, technical development and expertise. Access to the internet is essential for historical, cultural and contemporary contextual research.

## Employer engagement and vocational contexts

Centres should develop links with practising graphic designers to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – [www.vocationallearning.org.uk](http://www.vocationallearning.org.uk)

Business and finance advice:

- local and regional Business Link – [www.businesslink.gov.uk](http://www.businesslink.gov.uk)

Assignments should be vocationally relevant; centres should consider the delivery of 'live projects' for example to support the vocational content of the unit and programme.

Creative and Cultural Skills ([www.ccskills.org.uk](http://www.ccskills.org.uk)), the Sector Skills Council for Arts, Crafts and Design have launched the web portal Creative Choices ([www.creative-choices.co.uk](http://www.creative-choices.co.uk)). This portal has a range of information about careers in the arts, crafts and design sector, including job descriptions.

Skillset, the Sector Skills Council for Creative Media ([www.skillset.org](http://www.skillset.org)), provides details ([www.skillset.org/careers](http://www.skillset.org/careers)) on careers and the industry and has plus a regularly updated news and events page.

## Indicative reading for learners

### Textbooks

Chen Design Associates – *Fingerprint: The Art of Using Hand-Made Elements in Graphic Design* (How, 2006)  
ISBN 978-1581808711

Dabner D – *Design and Layout: Understanding and Using Graphics* (BT Batsford, 2003)  
ISBN 978-0713488388

Dabner D – *Graphic Design School: The Principles and Practices of Graphic Design* (Thames Hudson, 2004)  
ISBN 978-0500285268

Grabowski B and Fick B – *Printmaking: A Complete Guide to Materials and Processes* (Laurence King, 2009)  
ISBN 978-1856696005

Fletcher A – *The Art of Looking Sideways* (Phaidon Press, 2001) ISBN 978-0714834498

Noyce R – *Printmaking At The Edge* (A & C Black, 2009) ISBN 978-0713667844

Mason D and Fawcett-Tang R – *Experimental Formats and Packaging: Creative Solutions for Inspiring Graphic Design* (RotoVision, 2004) ISBN 978-2880467999

Millman D – *The Essential Principles of Graphic Design* (How, 2008) ISBN 978-1600610479

Oldach M – *Creativity for Graphic Designers* (North Light Books, 2000) ISBN 978-1581800555

Samara T – *Making and Breaking the Grid: A Graphic Design Layout Workshop* (Rockport, 2005)  
ISBN 978-1592531257

Taylor B – *Mixed Media Explorations* (Quilting Arts, 2006) ISBN 978-0976692829

### Journals

*a-n* – The Artists' Information Group

*Art Monthly*

*Art Review*

*Artists and Illustrators*

*Blueprint*

*Computer Graphics World*

*Contemporary*

*Crafts Magazine*

*Creative Review*

*Dazed and Confused Magazine*

*Design*

*Dynamic Graphics*

*I.D. Magazine*

*Novum: World of Graphic Design*

## Websites

[www.allposters.co.uk](http://www.allposters.co.uk)

[www.artjournal.co.uk](http://www.artjournal.co.uk)

[www.computerarts.co.uk](http://www.computerarts.co.uk)

[www.creativehandbook.co.uk](http://www.creativehandbook.co.uk)

[www.davidcarsondesign.com](http://www.davidcarsondesign.com)

[www.design-council.org.uk](http://www.design-council.org.uk)

[www.designmuseum.org](http://www.designmuseum.org)

[www.desktoppublishing.com/design.html](http://www.desktoppublishing.com/design.html)

[www.graphicdesign.about.com/arts/graphicdesign](http://www.graphicdesign.about.com/arts/graphicdesign)

[www.graphicssoft.about.com/library/course/bllps5out.htm](http://www.graphicssoft.about.com/library/course/bllps5out.htm)

[www.linotype.com](http://www.linotype.com)

[www.portfolios.com](http://www.portfolios.com)

[www.tate.org.uk](http://www.tate.org.uk)

[www.vam.ac.uk](http://www.vam.ac.uk)

Poster and print store

Online guide to art books and exhibitions

Computer art news and tips

Showcasing designers etc and artistic design

David Carson design

Design Council

Design Museum

Link to graphic design sites

About.com graphic design

About.com graphic software

linotype

Showcasing graphic designers

Tate galleries

V & A Museum

## Delivery of personal, learning and thinking skills

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

Skill	When learners are ...
<b>Independent enquirers</b>	using a range of experimental and non-traditional graphic media techniques and processes using mixed media in producing effective graphic image outcomes selecting appropriate reproduction techniques to suit their graphic image outcome
<b>Creative thinkers</b>	using a range of experimental and non-traditional graphic media techniques and processes using mixed media in producing effective graphic image outcomes selecting appropriate reproduction techniques to suit their graphic image outcome
<b>Reflective learners</b>	using a range of experimental and non-traditional graphic media techniques and processes using mixed media in producing effective graphic image outcomes selecting appropriate reproduction techniques to suit their graphic image outcome
<b>Team workers</b>	using a range of experimental and non-traditional graphic media techniques and processes using mixed media in producing effective graphic image outcomes selecting appropriate reproduction techniques to suit their graphic image outcome
<b>Self-managers</b>	using a range of experimental and non-traditional graphic media techniques and processes using mixed media in producing effective graphic image outcomes selecting appropriate reproduction techniques to suit their graphic image outcome
<b>Effective participators</b>	selecting appropriate reproduction techniques to suit their graphic image outcome using mixed media in producing effective graphic image outcomes.

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

Skill	When learners are ...
<b>Independent enquirers</b>	<ul style="list-style-type: none"> <li>researching the brief and selecting contexts and sources for recording</li> <li>exploring experimental approaches to mixed media image-making</li> <li>originating and developing experimental approaches in creating mixed media imagery</li> <li>reviewing and refining ideas towards completed work</li> <li>planning and preparing presentations of final graphic designs</li> </ul>
<b>Creative thinkers</b>	<ul style="list-style-type: none"> <li>recording from sources and contexts in different creative ways</li> <li>using mixed media, materials and processes experimentally and imaginatively</li> <li>originating and developing creative mixed media imagery</li> <li>working on final graphic design ideas</li> <li>presenting work to different audiences creatively and imaginatively</li> </ul>
<b>Reflective learners</b>	<ul style="list-style-type: none"> <li>evaluating the different stages of project development</li> <li>reviewing research material and ideas and receiving feedback at tutorials and crit sessions</li> <li>presenting experimental mixed media graphic imagery to different audiences</li> </ul>
<b>Team workers</b>	<ul style="list-style-type: none"> <li>working with the group to analyse the brief and develop plans for research and ideas for development</li> <li>using some materials, media or technology that require co-operation with others and planning regarding usage and assisting each other</li> <li>group evaluations and feedback sessions</li> <li>working on final displays or exhibitions and presentations</li> </ul>
<b>Self-managers</b>	<ul style="list-style-type: none"> <li>working independently to further their research studies</li> <li>planning the development of their work to meet the project brief</li> <li>researching the contexts surrounding their ideas and use of experimental media</li> <li>developing ideas and regularly reviewing their progress</li> <li>selecting best ideas and deciding on ways forward</li> <li>planning and preparing presentations</li> </ul>
<b>Effective participators</b>	<ul style="list-style-type: none"> <li>participating in group discussions and evaluations</li> <li>working on group projects</li> <li>taking part in presentations.</li> </ul>

## ● Functional Skills – Level 2

Skill	When learners are ...
<b>ICT – Use ICT systems</b>	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	scanning and digitally developing experimental approaches to mixed media graphic imagery using software to develop experimental mixed media imagery researching contextual and other information for the development of ideas for a mixed media brief
Use ICT to effectively plan work and evaluate the effectiveness of the ICT system they have used	planning project briefs and where and how ICT software might be used when appropriate evaluating outcomes and the appropriateness of medium
Manage information storage to enable efficient retrieval	researching from internet sources; downloading information; creating folders for storage and retrieval
<b>ICT – Find and select information</b>	
Select and use a variety of sources of information independently for a complex task	researching internet sources for contexts surrounding their graphic ideas and use of media; selecting from their research, developing own response informed by research
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	researching information for different briefs and activities evaluating results of using digital research methods
<b>ICT – Develop, present and communicate information</b>	
Enter, develop and format information independently to suit its meaning and purpose including: <ul style="list-style-type: none"> <li>• text and tables</li> <li>• images</li> <li>• numbers</li> <li>• records</li> </ul>	designing digitally using scanners inputting and formatting information from sources
Bring together information to suit content and purpose	developing mixed media graphic design ideas and imagery digitally importing visual and textual information relevant to brief/activity using digital means to plan, create and give presentations to different audiences
Present information in ways that are fit for purpose and audience	using digital means to plan, create and give presentations to different audiences
Evaluate the selection and use of ICT tools and facilities used to present information	assessing their progress and commenting on the appropriateness of their selection of ICT tools and facilities eg use of software

Skill	When learners are ...
<b>Mathematics</b>	
Understand routine and non-routine problems in a wide range of familiar and unfamiliar contexts and situations	<ul style="list-style-type: none"> <li>recording visually: scaling, timing, measuring</li> <li>using perspective and other methods of projection</li> </ul>
Identify the situation or problem and the mathematical methods needed to tackle it	<ul style="list-style-type: none"> <li>using measuring and ratios of chemicals used for experimental effects in image creation</li> <li>using software to observe and modify experimental approaches</li> </ul>
Select and apply a range of skills to find solutions	presenting methods and media using calculation of measurements and mixing of precise amounts
Draw conclusions and provide mathematical justifications	presenting methods and media using calculation of measurements and mixing of precise amounts
<b>English</b>	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	<ul style="list-style-type: none"> <li>discussing the project brief</li> <li>describing the physical characteristics of different photographic materials and processes</li> <li>contributing to group discussions and the sharing of ideas</li> <li>evaluating own and others' designs and finished work</li> <li>presenting to target audiences</li> <li>presenting their selection of reproduction method to the group</li> </ul>
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	<ul style="list-style-type: none"> <li>researching, reading, selecting text and images annotating, commenting and comparing</li> <li>using contextual texts and images to relate to own ideas</li> <li>preparing information regarding non-conventional and experimental methods, materials and techniques</li> </ul>
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	<ul style="list-style-type: none"> <li>evaluating results of designs to meet the brief</li> <li>analysing and evaluating selected artists' images for the purpose of developing own work, using personal judgements and relating research to own ideas</li> <li>preparing presentations of final work.</li> </ul>