

Unit 18: Producing Print-Based Media

Unit code:	K/600/6663
QCF Level 3:	BTEC National
Credit value:	10
Guided learning hours:	60

● Aim and purpose

The aim of this unit is to develop learners' understanding of the print production techniques and technology used in the print-based media industries, allowing them the opportunity to demonstrate learning through a range of practical activities.

● Unit introduction

The products that are created within the print-based media industries vary enormously and include books, newspapers, magazines, packaging, advertising and other publicity material. Understanding the particular needs of print based media production is still vital as techniques and technologies continue to develop.

The print-based media industries have continued to embrace digital technology in their production processes, though mechanical presses are still used in a significant number of companies, with traditional hand processes now serving only a very small niche market.

Learners will be expected to research and recognise the differences in application and 'fitness for purpose' of a range of processes both in terms of aesthetic sensitivity and logistical analysis such as meeting deadlines and budgetary restraints. Learners will be introduced to ways of developing ideas for print products. The unit will involve practical work giving learners the opportunity to develop skills in designing and preparing material for print production.

● Learning outcomes

On completion of this unit a learner should:

- 1 Understand print-based media production techniques and technology
- 2 Be able to develop ideas and originate designs for print-based media products
- 3 Be able to produce print-based media products
- 4 Be able to reflect upon own print-based media production work.

Unit content

1 Understand print-based media production techniques and technology

Techniques and technology: offset, flexography, mechanical, letterpress, gravure, screen process, digital, photocopying, laser printing, inkjet, desktop publishing (DTP), digital screen printing; ink types; embossing; colour mode; resolution; folding and binding; stock

Recognise differences: with reference to copy; image; materials; print run; cost

Uses: newspaper, magazine, book, posters, flyers, packaging; in-house, commercial printers

Advantages and disadvantages: skills and knowledge required; costs; speed; aesthetic considerations; technical considerations

2 Be able to develop ideas and originate designs for print-based media products

Ideas generation: creative thinking, eg mind-mapping, brainstorming, group discussion; research, eg past and current commercial practice; responses to the brief; feedback collection; ideas presentation; recording ideas, eg notes, sketches, collages, trial prints, flat, dummy run

Design origination: initial planning, eg thumbnails, ideas sheets; concept drawings, eg using text, typography, illustration, line, tone, colour; awareness of hand, mechanical and digital means

Products: eg newspaper production, magazine production, publicity material, packaging, books, fine art print

Considerations: costs; available resources; quantity; audience; target market; quality factors; legal and ethical issues

Pre-press preparation: eg, page assembly, proofing, pre-press

On press: eg paper, ink, chemicals

Print finishing: eg, folding, binding, laminating, embossing

3 Be able to produce print-based media products

Digital: to originate text; image; photographic material for pre-press; proof and print; one-off or multiple form, eg photocopying, laser printing, desktop publishing

Mechanical: eg screen process, offset lithography, online, flexography, letterpress

Preparation: setting up, eg of image carrier, the press; selection, eg stock, ink, colour(s), mixing inks, registration; health and safety

Uses and products: suitability for purpose, eg print runs, page extent; range, eg newspaper production, magazine production, publicity material, packaging, books, flyers, posters, cartoons, fine art print

4 Be able to reflect upon own print-based media production work

Visual language: composition (juxtaposition, association); image construction, eg form, texture, shape, pattern, line, tone, colour; representation, eg symbols, metaphor, semiotics, connotation

Audiences: eg social group, gender, peer group, occupational, political

Historical and cultural context: eg social, religious, political, economical, art and design references, popular culture

Finished products: realisation of intentions; fitness for purpose; responding to feedback; technical qualities; aesthetic qualities; skills, knowledge and understanding gained

Production processes: technical competencies; creative ability; time management

Sources of information: self-evaluation; documentation, eg ideas notes, production logs, sketches, trial prints, notes on commercial or professional producers and print products; comments from others, eg audiences, peers, tutors, clients

Assessment and grading criteria

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

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 describe different forms of print-based media production techniques and technology. with some appropriate use of subject terminology [IE]	M1 explain different forms of print-based media production techniques and technology with reference to detailed illustrative examples and with generally correct use of subject terminology	D1 comprehensively explain different forms of print-based media production techniques and technology with elucidated examples and consistently using subject terminology correctly
P2 produce ideas and originate designs for print-based media products working within appropriate conventions and with some assistance [CT]	M2 produce ideas and originate effective designs for print-based media products to a good technical standard, showing some imagination and with only occasional assistance	D2 produce ideas and originate designs for print-based media products to a technical quality that reflects near-professional standards, showing creativity and flair and working independently to professional expectations
P3 produce print-based media products using appropriate technology and processes, working within appropriate conventions and with some assistance [TW, SM]	M3 produce print-based media products to a good technical standard, showing some imagination and with only occasional assistance	D3 produce print-based media products to a technical quality that reflects near-professional standards, showing creativity and flair and working independently to professional expectations
P4 comment on own print-based media production work with some appropriate use of subject terminology. [RL]	M4 explain own print-based media production work with reference to detailed illustrative examples and generally correct use of subject terminology.	D4 critically evaluate own print-based media production work in the context of professional practice, with elucidated examples and consistently using subject terminology correctly.

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

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

Essential guidance for tutors

Delivery

Some learners will be new to the use of the various print processes, techniques and technologies. If that is the case, this unit should be seen as an introduction to a range of possibilities for experimentation and application. Learners should undertake research into a variety of print processes and link this to the range of print-based media products available. Initial sessions could encourage learners to identify for themselves, or through group discussion, the vast range of different types of products available and, in particular, the ones which they may either subscribe to or use most regularly.

Learners should be asked to keep a record to provide further evidence of understanding and creative control. Tasks to create awareness of compositional elements, aesthetics and contextual issues, such as representation and semiotics, should be introduced alongside technical tasks, offering clear aims for the production of specific work.

Print work will need to be deconstructed using media language, analysing the proportion of verbal to visual information, the suggested audience or consumer and the likelihood of products being successful in meeting, in this case, the aims of the producer or product as well as the target audience. Learners should be able to refer to their experiences in other parts of the programme, through the ability to analyse media texts. In this way learners should develop a thoughtful and well-informed response to the print items that surround them.

Knowledge gained from researching and analysing print processes, techniques and technologies will enable learners to apply a greater understanding to the production of their own range of practical examples.

Learners should be encouraged to present evidence in an appropriate form to support their research and evaluation. Examples of existing, print-based media products could be collected and annotated with relevant production process information. Centres are encouraged to explore accessible methods alongside more traditional methods such as reports and essays and consider selecting methods to suit the specific needs of both the individual learner and the assessment criteria. Centres should not allow technical issues to prevent clear presentation of evidence of understanding from individual learners.

Learners will need guidance on print processes and should experiment with techniques. It is important also that learners have access to digital print production equipment and learn the appropriate techniques of this vocationally relevant field. Centres must ensure that learners understand professional approaches to production, and can provide evidence of consideration and creative and technical control of each stage of product development.

There should be plenty of opportunities within any centre for learners to produce print products for real purposes and to realistic and tightly specified briefs. Examples here would include items such as price lists or menus for the school or college eating facilities, posters and flyers for in-house exhibitions or performances and the design and creation of new logos for the learner union or sports teams. A school or college newspaper or magazine is often an ideal way of enabling learners to experience vocational relevance through a sustainable project which would also allow for work to expand and develop over time. Where possible, learners should progress through realistic stages of working on a brief, such as conducting research, meeting the client and presenting drafts, conducting focus groups, responding to a range of feedback and monitoring the development of their work and progress.

The assignments set should focus on the suitability of the technical process (for example, availability of technology, the paper types most suitable for the work, the inks to be used, the print run, deadlines and health and safety issues). By the end of this unit learners should have a sound understanding of how an idea can be taken through from origination to finished product, and should be familiar with the ways in which a variety of text and imagery can be printed and processed.

Outline learning plan

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

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

Topics and suggested assignments and activities
Introduction to unit and unit assessment.
Group exercise – investigation and analysis of a range of print-based media products.
Overview of different printing techniques and technology: <ul style="list-style-type: none">• traditional hand methods• mechanical processes• digital.
Experimenting with different printing techniques and technology that is available within the centre supplemented by visits to media companies that use print technology.
Assignment 1 – Investigating Print-Based Media Production Techniques and Technology <p>A brief from a trade website to produce a feature on the main print production techniques and technology used in the industry.</p> <p>Learners will:</p> <ul style="list-style-type: none">• receive assignment overview• research and investigate the main print production techniques and technology used in the industry• write the feature.
Group work – exploring ideas for print-based products.
Assignment 2 – Developing Ideas <p>A brief from a media production company to develop a series of ideas and originate designs for a range of print-based products.</p> <p>Learners will:</p> <ul style="list-style-type: none">• receive assignment overview• develop ideas and originate designs• produce log/report and collate portfolio.
Whole class session looking at selection of ideas and what printing processes and techniques could be used to take them into production.
Assignment 3 – Using Print Technology <p>The same media production company commissions the production of the series of print-based products, using digital and mechanical processes.</p> <p>Learners will:</p> <ul style="list-style-type: none">• receive assignment overview• use existing designs from Assignment 2 and develop new ideas and originate new designs as required• prepare relevant material to be ready for print• print products using both digital and mechanical processes• produce log/report and collate portfolio.

Topics and suggested assignments and activities

Whole class session looking at a selection of the work produced.

Whole class session looking at techniques and methods for evaluating work undertaken and presenting final report.

Assignment 4 – Review of Own Work

The media production company requests a report reviewing and evaluating the work, considering audiences, the historical and cultural context, the finished products and the production processes undertaken.

Learners will:

- receive assignment overview
- gather relevant material and feedback and evaluate the work undertaken
- write the report.

Assessment

Evidence for assessment

Evidence for assessment of this unit should be generated through research, pre-production activities, practical examples and evaluation. The range of final print products should be fully supported by clear planning material and concept sheets, with a rationale for the selection of techniques and technologies.

At this level learners may well be working as a production team and when that is the case it is vital that all individuals realise the importance of producing and developing their own specific contribution to the evidence required to meet all the assessment criteria for this unit.

Evidence for the achievement of learning outcome 1 might be a case study, presentation or written report although any suitable way to present evidence could be considered, such as audio or audio-visual recordings or presentations, an annotated portfolio, sketchbook, blog, video or photographic diary detailing their activities. Presentations must be recorded for the purposes of internal and external verification.

Evidence for the achievement of learning outcomes 2 and 3 will be prepared design ideas and the actual print products selected for production using appropriate technology and processes. These may be developed from learners' existing work or originated from a series of briefs specially devised for this unit and presented in various formats such as sketchbooks, notebooks, developmental images and thumbnails. Evidence of independent or autonomous work could be provided in the form of a tutor observation record or learner diary, or reflected upon and recorded in feedback to learners during assessment. This could be also evidenced through a record of discussions between tutor and learner, or audio-video recordings of learner presentations regarding the thought processes behind their work.

Evidence for the achievement of learning outcome 4 might be presented as a case study, presentation or written report although any suitable way to present evidence could be considered, such as audio/visual recordings or presentations.

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

Application of grading criteria

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

Pass

To achieve a pass grade, learners must achieve all the criteria at pass level. For each of the criteria learners must present evidence that addresses each italicised sub-heading of the content for the learning outcome.

P1: learners will give accurate and substantially complete descriptions of print-based media production techniques and associated technology. It is important that a range of appropriate techniques and technology is referred to and learners have been able to offer basic examples for the areas covered. Studies should be centred on actual print products. Learners will not have explored, through comparison, advantages or disadvantages of different methods.

P2: learners will show evidence of ideas generation and origination of designs for print based media with adequate application of conventions.

P3: the products created will not fully realise what was intended but will show evidence that the activity was purposeful, with the result that the outcome has some sense of design and the deliberate application of some relevant techniques and processes behind it. These should include the application of different methods and show control through the production of more than one copy of a particular print. Learners will need to keep all associated supporting work, perhaps building a development portfolio, which should show the different stages of progress.

P2 and P3: when engaged in practical activities, learners will need frequent assistance and support, though they will take note of and make use of this help when it is given. If they are in frequent need of such help but fail to make positive use of it they should not be considered for a pass grade for this unit. In terms of the aesthetic or imaginative qualities of their work, they will not move beyond the conventional, but the conventions applied will be appropriate to the form or genre within which they are working.

P4: descriptions of print-based media production work may be undeveloped with learners using basic but appropriate media language when referring to their own work. If the learner's practical examples are limited to a certain range, the associated descriptions therefore may also be restricted. A learner may note, 'I am pleased with the page I produced, but I could have chosen a better font'. Such a statement is a basic, descriptive comment as required. It expresses an issue identified by the learner using vocational terminology in an appropriate, if not wholly evaluative, manner.

P1 and P4: evidence will show a basic understanding of technical terminology but learners will generally be unsure about this vocabulary and will make fairly frequent mistakes when they do use it.

Merit

To achieve a merit grade, learners must achieve all the pass and all the merit grade criteria. For each of the criteria learners must present evidence that addresses each italicised sub-heading of the content for the learning outcome.

M1: explanations of different forms of print-based media production techniques and technology should refer to a range of methods. There should be evidence of a range of detailed illustrative examples in each case. For this grade, learners are required to show that they are able to explain procedures, techniques and materials in such a way as to show how or why they are used.

M2: a sense of some control and confidence should be explicit within the production of a range of original designs. Supplementary material will include a detailed exploration of ideas using sketchbooks, notebooks, developmental images and thumbnails. There should be explicit evidence that the work has been approached methodically and with adequate preparation, and that the ideas are worked out and presented neatly.

M3: appropriate technology and processes will have been selected in each case and applied with facility and some confidence to achieve a good technical standard. Learners may still require some assistance and support. However, a degree of autonomy will have been witnessed whilst the actual work produced will show some sense of control and confidence, that it has been undertaken with thought, care and with adequate preparation, and that the ideas are worked out and presented neatly.

M2 and M3: when engaged in practical activities, learners will need occasional support, particularly when dealing with more complex technology or trying to apply more sophisticated techniques. Like the pass grade learner, they will benefit from it. Learners will still be working within recognisable generic conventions, but there will be some imaginative thought behind the work so that technical skills and codes and conventions will be employed with some inventiveness.

M4: learners will offer clear explanations of their print-based media production work, applying appropriate language and technical terminology accurately. For this grade, learners are required to evidence that they are able to explain procedures, techniques and materials in such a way as to show how or why they have been used. A merit grade learner might write, 'Because I was using a DTP package I needed to use a flatbed scanner to get a digital version of my images.'

M1 and M4: learners will use technical vocabulary for the most part correctly, but may make mistakes or be unsure about usages at times.

Distinction

To achieve a distinction grade, learners must achieve all the pass, all the merit and all the distinction grade criteria. For each of the criteria learners must present evidence that addresses each italicised sub-heading of the content for the learning outcome.

D1: learners will justify the points they make, providing clear and accurate rationales for the use of different forms of print production techniques and technologies. They will develop ideas critically (ie, compare, assess and discriminate) and draw out of an example precisely what it is about it that exemplifies the point it illustrates. A learner might note, 'Whilst I liked the effects that could be achieved using linocut methods, it isn't suitable for producing mass print media. Other processes such as digital print methods allow you to do large print runs easily and give more reliable results'. Learners will present evidence effectively, whether in written form or through recorded presentations using audio-visual technology.

D2: learners will typically have the confidence to explore independently a range of effective and well thought out original ideas and designs for production. Examples will show a high technical standard as well as creativity and flair resulting in preparatory material which closely reflects industry conventions for the presentation of work. The production of a presentation portfolio online for showing to a client would be indicative of reaching these standards. Learners will be aware of the need to present work effectively, possibly further demonstrating their print production skills in the manner in which they choose to display work.

D3: practical print-based media production work will reflect the high standard of designs and preparation work completed for learning outcome 2. Learners will show that there has been a clear progression from original designs to their production work, which itself evidences creativity and flair within a range of effective print products. Independent application of high quality technical skills will produce a portfolio of near-professional standard.

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

it carefully for themselves. Distinction grade learners will apply their technical skills not just with imagination but with ingenuity and even elegance, and codes and conventions will be used with occasionally surprising results.

D4: learners will produce a comprehensive and fluent explanation of their own work that has well-considered justifications for the choices made. They will make an accurate and critically objective assessment of their own achievement with detailed reference to elucidated examples taken from that work, such as, 'The text at the top of page four was not justified when I aligned it. This created a slightly uneven edge to the text on the page which gave the whole the appearance of a piece of cheap or careless work.' Learners will make critical comparisons of their own work with current or past practice in a relevant area (that is, the same genre or format as they have worked in). A learner might note, 'I think my advert is effective but when compared to others from current media products it is clear that it needed more colour because it will fail to catch the reader's eye amongst all the other material on the page competing for attention.'

D1 and D4: technical vocabulary will be secure and used correctly and confidently at all times.

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 Pearson assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, M1, D1	Assignment 1 – Investigating Print-Based Media Production Techniques and Technology	A brief from a trade website to produce a feature on the main print production techniques and technology used in the industry.	<ul style="list-style-type: none"> Research notes. Summary of research. Written feature.
P2, M2, D2	Assignment 2 – Developing Ideas	A brief from a media production company to develop a series of ideas and originate designs for a range of print-based products.	<ul style="list-style-type: none"> Log of developmental stages undertaken. Portfolio of pre-production ideas and originations. Report on skills developed.
P3, M3, D3	Assignment 3 – Using Print Technology	A brief from a media production company to produce a series of print-based products using digital and mechanical processes.	<ul style="list-style-type: none"> Log of production process. Completed products. Feedback from client. Tutor observation and notes.
P4, M4, D4	Assignment 4 – Review of Own Work	A brief from the media production company to review and evaluate the work undertaken for them.	<ul style="list-style-type: none"> Review of own work. Tutor observation and notes.

Links to other BTEC units

This unit forms part of the BTEC Creative Media Production suite. This unit has particular links with the following units in the BTEC Creative Media Production suite:

Level 2	Level 3
	Factual Writing for Print
	Page Layout and Design
	Writing Copy

Essential resources

Learners should have access to digital camera equipment, software for image manipulation, computers, scanners, photocopiers and colour printers. It would be advantageous to allow access to a range of cameras and related equipment, including 35mm SLR cameras and lenses, medium or large format cameras, darkroom facilities, and a range of film stock including black and white, and colour.

Learners will also need access to both mechanical and digital print production equipment.

Employer engagement and vocational contexts

Centres should develop links with appropriate local media providers who are willing to come in and talk about the way in which written copy is used within their products.

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 ...
Independent enquirers	analysing and evaluating information, judging its relevance and value when describing different forms of print-based media production techniques and technology planning and carrying out research, appreciating the consequences of decisions when identifying material for their print-based media products
Creative thinkers	trying out alternatives or new solutions and following ideas through, adapting ideas as circumstances change when producing ideas and originating designs for print-based media products trying out alternatives or new solutions and following ideas through when adapting ideas for their print-based media products as circumstances change
Reflective learners	assessing themselves and others, identifying opportunities and achievements when reviewing own work setting goals with success criteria for their development and work when reviewing and evaluating their own work and the work of other learners
Team workers	reaching agreements, managing discussions to achieve results when working with a group to produce print-based media products collaborating with others to work towards common goals when sourcing and preparing material when working in a group
Self-managers	organising time and resources and prioritising actions when producing print-based media products working towards goals, showing initiative, commitment and perseverance when sourcing and preparing material.

● Functional Skills – Level 2

Skill	When learners are ...
ICT – Use ICT systems	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	designing a layout for a print-based media product according to a given brief
Use ICT to effectively plan work and evaluate the effectiveness of the ICT system they have used	creating an action plan reviewing end products
Manage information storage to enable efficient retrieval	working on creating products
Follow and understand the need for safety and security practices	
Troubleshoot	
ICT – Find and select information	
Select and use a variety of sources of information independently for a complex task	sourcing and creating materials for a production brief and adapting them for use
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	
ICT – Develop, present and communicate information	
Enter, develop and format information independently to suit its meaning and purpose including: <ul style="list-style-type: none">• text and tables• images• numbers• records	presenting production plans and proposals designing pages and mock ups
Bring together information to suit content and purpose	creating print-based media products, combining image and text, for a specific target audience to a given brief
Present information in ways that are fit for purpose and audience	
Evaluate the selection and use of ICT tools and facilities used to present information	reviewing and evaluating own work
Select and use ICT to communicate and exchange information safely, responsibly and effectively including storage of messages and contact lists	communicating and sharing information with other members of a production group

Skill	When learners are ...
Mathematics	
Understand routine and non-routine problems in a wide range of familiar and unfamiliar contexts and situations	using estimation and calculation to plan the layout of a print-based media product
Identify the situation or problem and the mathematical methods needed to tackle it	using calculation when working out scaling and image resolutions
Select and apply a range of skills to find solutions	
Use appropriate checking procedures and evaluate their effectiveness at each stage	
Interpret and communicate solutions to practical problems in familiar and unfamiliar routine contexts and situations	
Draw conclusions and provide mathematical justifications	
English	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	developing ideas for print-based media products
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	researching material for a print-based media production assignment
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	describing print-based media production techniques.