

UNIT 11: PRINT PRODUCTION TECHNIQUES (ADVANCED)

ABOUT THIS UNIT

This unit will enable you to develop your understanding of print media through studying print production techniques and undertaking practical print production work. You will gain an insight into traditional and new technologies and processes used to produce printed materials and investigate the ways in which different print techniques are used for a variety of purposes. You will also investigate the changes taking place within the print industry, particularly with the impact of new technology, and the effect that these changes have on career opportunities. This unit focuses on printing methods. You will learn about:

- print production techniques and processes
- design and layout
- using traditional and new technology
- commercial and non-commercial practices
- the impact of new technology.

This unit builds on what you learned in Unit 2: Skills development (Advanced) and extends your work in Unit 4: Produce a media product (Advanced). It would also complement Unit 22: Design for advertising (Advanced), as well as linking with the Advanced VCE in Art & Design. It may also provide a solid foundation for employment within the print industry. There are progression opportunities to level 4 qualifications in Graphic Design and Media.

This unit will be assessed through your portfolio work only. The grade awarded will be your grade for the unit.

WHAT YOU NEED TO LEARN

Print production techniques and processes

You will need to know and understand both traditional and new approaches to print production techniques as they relate to print and other industries. You will need to gain practical experience of at least one method of printing, gaining first-hand knowledge of how products are produced in multiple form. You will use digital technology (computers, scanners, etc) and become familiar with appropriate software packages used in the design and layout of print products.

You need to learn about the range of print production techniques you could use and understand how to select a method in terms of suitability for purpose and cost. You should do this by:

- using technology to explore print processes creatively
- understanding the differences between various print processes (eg intaglio, pressure, planographic and relief)
- finding out how artwork, text and images are converted into print
- understanding digital print technology.

You need to understand the work of print professionals and the range of printed material. You need to investigate:

- publications (eg newspapers, magazines, books)
- packaging material
- promotional material (eg posters, flyers)
- the print industry (eg commercial studios, specialist print shops).

You must be aware of the changes that are taking place in the print industry, particularly the effect of electronic means of producing printed products, and the increasing use of the Internet for distribution of print material. You should understand the effect that this has on career opportunities.

Developing ideas for print production

You may develop ideas for print production through linking with other units, or you may be asked to respond to a client brief. Alternatively, you may receive artwork from fellow students as the basis of your material. You will need to generate a proposal which takes account of the requirements of the product, and the resource implications. You will consider the audience or target market for your product and take account of this in deciding the quality threshold against cost and print run. You will also take account of appropriate finishing processes (eg binding, laminating, folding, etc). The production of printed material is by its very nature about making multiple copies and you should be aware of the ways in which these copies can be made. You should concentrate on generating a product that is capable of being mass-produced rather than a product that is a one-off.

You need to:

- identify your print product (eg poster, magazine page, flyer)
- demonstrate awareness of print techniques and technology
- generate ideas and present them appropriately (eg concept drawings, thumbnails, ideas sheets)
- produce a proposal for your print product
- present the proposal to a client (eg teacher, peer group, outside agency).

Once your proposal has been agreed you must undertake the production of your print product.

Using technology and developing skills

You need to be able to understand:

- the range of ways in which to prepare material for print
- theories of line, half-tone and colour separation.

You will need to develop your skills in print production by:

- selecting an appropriate print process
- preparing material ready for printing
- preparing and setting up reproduction equipment
- using digital technology for the inputting and manipulation of text and images
- producing multiple copies
- knowing and following safe working practices.

Evaluating your work

You should be able to review and monitor your print production skills. Opportunities to discuss your work and to monitor progress will help you to identify potential problems and to take action. Being able to present your work to a client or an audience will help you to evaluate your work effectively. This will involve commenting on:

- the different skills and techniques you have developed
- the ways in which professionals use print techniques and technology
- the criteria upon which you have selected your print process
- what you can do to improve your skills and the quality of your work.

You should use appropriate print production language when commenting on and discussing your work.

ASSESSMENT EVIDENCE

You need to produce a completed printed product and associated drafts and trial work that demonstrate your understanding and skill in print production. These should show:

- understanding of industrial working practices through notes, thumbnails, concept sheets and application of appropriate procedures
- understanding of traditional techniques and technology. Evidence may be in the form of a written account, or practical examples of traditional techniques
- use of digital techniques and technology.

To achieve a grade E your work must show:	To achieve a grade C your work must show:	To achieve a grade A your work must show:
<ul style="list-style-type: none"> • investigation of a range of print products • understanding of the range of print processes available within the print industry • understanding of how new technology is impacting upon the print industry • understanding of selection of appropriate print processes to suit the purpose • selection and use of appropriate equipment and software • understanding of and adherence to safe working practices • reflection on your print production investigations and skill developments. 	<ul style="list-style-type: none"> • ability to select print processes, taking account of fitness for purpose and budgetary considerations • controlled use of equipment, software and consumables • application of problem-solving skills throughout the print production process • demonstration of controlled use of selected techniques • clear understanding of the changes within the print industry, particularly in terms of new technology and electronic production and distribution methods • critical self-assessment of process and outcome with recommendations for improvement. 	<ul style="list-style-type: none"> • thorough analysis of the needs of client and/or audience balanced against resource constraints • a high level of technical skill and innovation in the finished product • reflection of industrial practices • ongoing review and modification of the production process as appropriate • critical analysis of your own performance and of the quality of your final outcome, measured against the aesthetic and technical qualities of similar professional products.

ESSENTIAL INFORMATION FOR TEACHERS

Teaching strategies

Students should have the opportunity to experiment with different print techniques in order to gain the breadth of understanding, and experience, expected to achieve this unit. The work they do should in part be experimental and involve both traditional and digital print processes. Students should be encouraged to develop print products that may be useful in other units, for example, producing an insert sheet for a video case for Unit 15: Corporate & promotional video (Advanced) that would be suitable for mass production.

Students must appreciate that print is about producing multiple copies of the same thing. In traditional print processes, it may be beneficial for students to have direct experience of using simple print forms, such as relief printing or screen printing, to produce multiple copies. The opportunity to print from wooden or metal type, or linocut, or some other form of block cut would provide suitable initial experience of relief printing. Printing simple stencil designs cut from newsprint, or designs painted directly onto the screen with a resistant material, would provide suitable experience of screen printing.

Photographic stencil techniques using light-sensitive film or emulsion, although expensive would, if available, provide students with suitable experience and high-quality outcomes. However, it is quite possible to meet the demands of this unit without that degree of sophistication.

Within digital print processes students should gain experience of using available software to generate text. They should explore the advantages, and disadvantages, of using different fonts and styles of type for different purposes. They should be able to recognise the suitability of different typefaces for display, headlines, subheadings and body copy. Experiments with scale in the use of type, and combining type with imagery, should also form part of their experience within this unit. Different imagery could be explored and manipulated by students; this could include photographs, cartoons, original designs, logo types, etc. Staff might wish to identify a link at this stage between the work undertaken in the traditional and the digital print processes. For example, the work made using relief or screen printing techniques could be scanned and text added to it.

Students should gain an appreciation of the whole print process from design generation to finished printed material. It is important for them to know how print techniques are used in industry; visits to see the way a printer, or a local newspaper, operates would provide valuable experience for this unit. Contemporary print products should also be studied – a notebook collection of examples may be appropriate for this. This should demonstrate students' understanding of line, half-tone, single and multiple colour usage in material printed for different purposes. They should be asked to identify, and comment upon, both successful and unsuccessful examples of the use of word and image in creating visual impact. They should also look at the way in which illustration, photography and typography are combined to create logos, packaging, technical information, advertising, newspapers and magazines.

Links

This unit should be seen as part of an integrated approach to production work. There are links to Unit 2: Skills development (Advanced), Unit 4: Produce a media product (Advanced) and production units such as Unit 22: Design for advertising (Advanced).

Resources

Students should have access to a print workshop with:

- relief (flat bed) presses
- screen process presses
- wooden or metal type
- linocutting material
- stencil cutting equipment
- photo stencil material.

These facilities would be suitable for students experimenting with traditional print techniques. However, if this is not available, print experience can be gained with access to rollers, inks, paper, and the use of various forms of applied pressure to gain imprints.

Students must have access to appropriate multimedia computers and software for digital print experience.

These include programmes such as:

- Freehand
- PageMaker
- Photoshop
- QuarkXpress

or their equivalents, which should be available together with scanners and printers, preferably with colour facilities.

Assessment strategies

The focus of assessment in this unit is on how well students have developed the skills and understanding needed to work successfully with print production skills and techniques. Evidence of breadth may come from taught workshops, set or student-initiated investigative activities. Depth may best be demonstrated through an integrated approach to assignments.

Students who have achieved the outcomes required in the assessment evidence will have passed the unit at Grade E. Students may be awarded a higher grade if the quality of their work meets the criteria listed.

Grades C and above are based on:

- an increased independence and innovative approach to work
- consistent reviewing and monitoring leading to valid work
- use of analytical skills
- technical skills and understanding
- use of appropriate language
- identification of strengths and weaknesses of own work.

When grading student evidence you should consider the following general qualities that distinguish between the three grades:

- increasing depth and breadth of understanding
- increasing coherence, evaluation and analysis
- increasing independence and originality
- increasing objectivity and critical understanding.

Type and amount of evidence

Evidence should be presented in the form of investigative notes on print techniques and technology, the use of printed material and the potential printed product. This could take the form of comments on a range of printed material, examples of print products with written comments or presentations in an appropriate form. Examples of printed material should show both traditional and digital techniques. The finished print product should demonstrate competence in print production using either traditional or digital technology. Evaluation should be presented in an appropriate form, demonstrating understanding of the investigations undertaken and skills developed.

Indication should be made of individual contribution to the completed work if it is undertaken as a team, with minutes of meetings identifying team roles and the contribution of team members to the finished sound recording.

Grade descriptors

Grade E

Students will have a basic understanding of print production processes. They will be able to demonstrate understanding of the ways in which professionals use print techniques and technology. They will be able to produce printed material that demonstrates their use of a range of techniques and technology. Practical work will show the selection and correct use of equipment and materials, working methodically and safely, under instruction. Students will show some understanding of the potential effects and limitations of print production in relation to client briefs and audience needs. Some guidance will be required in organising print production work, investigating production techniques, and developing responses or ideas. Students will be able to reflect, make some value judgements about technical and aesthetic factors, and develop their skills.

Grade C

Practical work will show skill and control in developing appropriate print production skills. Experimentation will show a degree of consistency and will be mainly independent, well ordered and wide ranging. There will be evidence of the application of underlying concepts, in particular the link between design and print production. Discussion and records will show the students' ability to express clearly their analytical skills and independent thinking. Students will make correct use of technical language in commenting on the techniques used and the printed product produced. They will be able to make reasoned judgements about their work. They will also be able to identify potential changes to their work and make accurate predictions about how these might be achieved.

Grade A

Practical work will demonstrate creative and technically excellent print production skills. Preparatory work will show a clear development of print production skills with evidence of ongoing monitoring and review. There will also be clear use of reflective skills to develop ideas, pursue lines of enquiry and improve skills. Discussion and records will show the students' ability to express with clarity their critical awareness of their own and others' use of print production skills. Students will display analytical skills and show seamless use of technical language, informed by clear understanding of the underlying concepts of print production. They will be able to make and articulate judgements about the technical and aesthetic quality of their work.

Key Skills

This guidance highlights the most relevant Key Skills opportunities in this unit. It contains suggestions only. You will need to check that students have produced all the evidence required to meet part A **and** part B of the Key Skills specifications. Students may need to develop additional evidence elsewhere to meet fully the requirements of the Key Skills specifications.

Guidance is referenced in two ways:

K – keys to attainment

These are Key Skills or aspects of Key Skills which students should achieve as they meet the vocational requirements of the units. Only part B of the Key Skill is highlighted – you will need to check that students achieve part A.

S – signposting

These are opportunities that can be incorporated naturally into the learning programme.

COMMUNICATION, LEVEL 3		Key Skills Reference
When students are:	They should be able to develop the following Key Skills evidence:	
<ul style="list-style-type: none"> researching into printed materials 	C3.2 Read and synthesise information from two extended documents about a complex subject. One of these documents should include at least one image.	S
<ul style="list-style-type: none"> experimenting with typefaces and type; combining type with images 	C3.3 Write two different types of documents about complex subjects. One piece of writing should be an extended document and include at least one image.	S
INFORMATION TECHNOLOGY, LEVEL 3		Key Skills Reference
When students are:	They should be able to develop the following Key Skills evidence:	
<ul style="list-style-type: none"> planning the use of computer software in printing 	IT3.1 Plan, and use different sources to search for, and select, information required for two different purposes.	K
<ul style="list-style-type: none"> using appropriate software, scanners, printers to develop printed material 	IT3.2 Explore, develop, and exchange information and derive new information to meet two different purposes.	K
<ul style="list-style-type: none"> producing printed products, producing rough notes, diagrams, records of meetings, a print production log book 	IT3.3 Present information from different sources for two different purposes and audiences. Your work must include at least one example of text, one example of images and one example of numbers.	K

