Unit Title: **3D Visual Communication**

Unit Credit Value: 5
Unit Level: Two
Unit Guided Learning Hours: 30
Ofqual Unit Reference Number: R/502/4824
Unit Review Date: 31/12/2018
Unit Sector: 9.2 Crafts, Creative Arts and Design

**Unit Summary**
The aim of this unit is to enable learners to learn about three dimensional (3D) visual communication techniques, through processes such as construction, modelling, carving and casting.

It is recommended that learners are introduced to 3D materials, for example wood, metal, ceramics, plaster, glass, plastics and card, and techniques and processes through an individual workshop induction. The induction could be followed by assignments that allow the application of skills to design, construct and produce 3D pieces. These could include automata, mobiles, packaging, flexigons, paper manipulation, wire or card constructions, installations made from cardboard that use tessellation, and pop-up books.

Learners will need to be made aware of the health and safety issues associated with the techniques and processes in this unit, for example safe workshop practices. The appropriate Control of Substances Hazardous to Health (COSHH) guidance should be followed at all times.

**Unit Information**
It is expected that before the unit is delivered, the tutor will have read the Qualification Specification to ensure all conditions regarding Rules of Combination, delivery, assessment and internal quality assurance are fulfilled. Additional guidance is available below as Assessment Guidance for Learning Outcomes and Assessment Criteria in **bold**.

**This unit has 3 learning outcomes**

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<th>LEARNING OUTCOMES</th>
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<td>The learner will:</td>
<td>The learner can:</td>
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<td>1. Be able to use 3D making techniques</td>
<td>1.1. Demonstrate use of 3D making techniques safely when working from primary and secondary sources</td>
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LEARNING OUTCOMES

The learner will:

2. Be able to communicate design ideas using 3D visual communication techniques

3. Be able to use formal elements in 3D visual communication

ASSESSMENT CRITERIA

The learner can:

2.1. Communicate design ideas using 3D visual communication techniques

3.1. Use formal elements in 3D visual communication

Assessment Guidance

Evidence should include a range of studies and samples that have been chosen to show how skills have developed, together with an awareness of safe working practices. Learners will need evidence of working from both primary and secondary sources and should use both in the development of their work. Work from primary sources may be more limited in that conditions on location or from short poses give limited time for learners to create considered work but it is often more immediate and exciting than that produced from secondary sources. Learners are expected to show some skill in the use of various techniques, with some grasp of the distinctive visual vocabulary relevant to specific disciplines.

The correct terms for techniques and reference to formal elements should be evidenced in learners’ work; this can be presented in a variety of ways, for example presentation to the group, annotations inside a sketchbook or evaluation report.

Learning Outcome 1

Use 3D making techniques:

3D making techniques: for example cutting, joining, shaping, forming, carving, weaving, 3D digital techniques etc.

Recording: to consider from primary sources, natural environment, made environment, secondary sources etc.

Health and safety: to consider for example Health and Safety Act 1974, COSHH guidance on material and workshop practice.

Learning Outcome 2

Communicate design ideas using 3D visual communication techniques:

Communicate ideas: to consider for example response to themes, assignment briefs etc.
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Design ideas: for example card models, maquettes, test pieces, experiments, materials etc.

Final design ideas: for example finished sculptures, models, artefacts, digital files etc.

Learning Outcome 3
Use formal elements in 3D visual communication:
Formal elements: for example line, colour, form etc.

Use formal elements: e.g. line (wire sculpture), colour (glazes, stained glass), form (pinch pots) etc.

Materials: for example 3D non-resistant materials e.g. wet plaster; 3D resistant materials e.g. hard woods etc.

Techniques: for example cutting, carving, forming etc.

3D visual communication: for example spatial, sound absorption, tactile quality etc.

Delivery
This unit gives learners the opportunity to work with a wide range of 3D materials for the purpose of experimenting with, developing and producing 3D pieces.

This unit should be delivered in the most appropriate workshops: for example, wood, metal and ceramics, with an induction schedule that covers the use of equipment with reference to materials, techniques and health and safety. This unit should be linked with the others in the qualification to provide underpinning problem-solving and construction skills that can be extended in a broad range of disciplines; whether delivery is on its own or combined, it is important that attention is given to the content of the learning outcomes.

Learning Outcome 1 will be delivered through specialist workshops (wood, metal, and ceramics); learners should be given the opportunity to experience a broad selection of appropriate and accessible techniques through which they can develop transferable skills. Learners should be taught to take into account health and safety procedures with reference to 3D processes specific to relevant workshops, for example, wood, metal and ceramics.

Assignments should stimulate and interest learners, as well as giving them the opportunity to develop 3D skills with reference to materials and techniques.

Learning Outcome 2 will be delivered in workshops, using the appropriate machinery, tools, techniques and processes with reference to materials, for example wood. Learners will need
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to understand how to generate and develop ideas using 3D processes acquired for learning outcome 1, and communicate them appropriately, for example maquettes, sketch models, scale models and final pieces.

Learners are encouraged to explore and experiment with the potential of 3D materials and to consider their source or manufacture, appropriate to the tasks set for induction and assignment briefs.

Learning Outcome 3 will be delivered by applying 3D skills to design ideas and finished pieces. During this process it is essential that learners demonstrate an understanding of formal elements with reference to work produced, for example size, shape, form, function, pattern, including drawing for design, mood boards, working drawings, measuring and the technical language appropriate to the processes and techniques.

Learners should be encouraged to document, discuss and present their opinions on the use of formal elements, materials, techniques and processes with reference to their own work (development and final pieces).

Reference to the following will need to be made:
- formal elements
- design ideas
- materials
- techniques
- final pieces
- evaluation.

For the successful delivery of this unit it is recommended that the integration of 2D drawing skills are included.

Inviting design practitioners in specialist fields to discuss their working methods with learners will put this unit into a vocational context.

Centres should develop links with practising craftspeople and designers to provide assignments or work experience. A lecture or visit by a designer, craft worker or practitioner local to the centre may provide useful and pertinent information on working practice.

Vocational learning support resources:
- Learning and Skills Network – www.vocationallearning.org.uk

Creative and Cultural Skills, the Sector Skills Council for design, has launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.
Skillset, the Sector Skills Council for creative media, provides details on its website about careers and the industry (www.skillset.org) and has a regularly updated news and events page.

**Evidence Requirements**
Evidence of practical ability must be demonstrated.

**Resources**
Learners will need to have access to a range of materials, techniques and processes relevant to 3D.

Workshops might include facilities for working with wood, ceramics and metal, depending on the specialist areas available.

A studio space for experimentation and development of ideas is essential. Adequate space for the storage of work in progress and completed pieces should be made available.

Learners should have access to a learning resource centre (for example a library), providing research materials such as books, publications and the internet.

**Books**


Hosaluk M — *Scratching the Surface: Art and Content in Contemporary Wood* (North Light Books, 2002)


Merrifield M P — *Light and Shade: A Classic Approach to Three Dimensional Drawing* (Dover, 2005)

Triplett K — *Handbuilt Ceramics* (Lark Books, 2008)
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**Websites**

[www.designfactory.org.uk](http://www.designfactory.org.uk) A crafts and design development agency based in the East Midlands

[www.designnation.co.uk](http://www.designnation.co.uk) The website of the Design Trust

[www.ecodesign.co.uk](http://www.ecodesign.co.uk) Architecture practice specialising in low energy design

[www.henry-moore-fdn.co.uk](http://www.henry-moore-fdn.co.uk) The Henry Moore Foundation

[www.huddersfield3d.co.uk](http://www.huddersfield3d.co.uk) A design exhibition centre for product and transport design students