

## **Teacher Guide: Artefact**

This section incorporates a series of handout for students to help introduce Artefact in Extended Project and these can be used to supplement information from the Extended Project guides from AQA, Edexcel and OCR.

### **Handout 1: What is an artefact?**

This handout provides a definition of the term 'artefact' and illustrates the wide range of types of outcome from an Artefact project. It presents some possible starting points for Artefact projects, but these are only suggestions.

Also, draw students attention to the note on 'extending yourself'. The project should bring in ideas from other subject areas and show that students have developed a range of skills and not solely focus of design and make aspects.

It would also be useful for students to read and discuss reports of previous Artefact Extended Projects e.g. from the Edexcel website,

<http://www.edexcel.com/quals/project/level3/Pages/p304-exemplars.aspx>

or projects from your own previous students.

### **Handout 2: The design framework**

Provides a framework for planning and organising an Artefact project.

### **Handout 3: Design and communication**

Draws attention to some methods of design and communication that are particularly relevant to Artefact projects. Reference is made to computer-aided design (CAD), and this handout could be used to accompany some teaching of CAD.

### **Handout 4: Production**

Provides general notes on production. However, it does not go into any detail of techniques, and students should receive practical instruction and guidance in any techniques that are required for their projects.

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### Artefact projects

These lessons focus on case studies of Artefact projects that can be used as a starting for discussion. You might like to set students the tasks outlined, in which case you will need several sessions for each stage. The activities presented address some generic skills relating to Artefact projects.

#### 1. At the museum

This lesson will illustrate some characteristics of a commission for a commercial product. If students carry out the project themselves, they should develop an understanding of visual language and the critical analysis of images and objects, and learn how to make visual records.

##### **Case study: At the museum (15 min)**

This case study draws students attention to the use of the design framework (see Handout 2: The Design Framework). Also point out that this project offers scope for students to demonstrate that they have explored a range of issues beyond designing and making an object (see Handout 1: What is an Artefact).

The following notes are particularly relevant if students are to be asked to carry out the tasks themselves – in which case you will need to allow at least one session for each task.

##### ***Design brief and specification***

This activity involves students in making an analysis of the visual characteristics of the art and culture of an historical period. This may be from the distant past and from non-western cultures such as Egyptian or Assyrian or the Chinese Empires or from twentieth century European movements in art and design such as Art Nouveau, The Arts and Crafts Movement, Pop Art or Art Deco.

##### ***Analysis and research***

Students will need to develop understanding of visual language and the critical analysis of images and objects and make visual records of these. Some understanding of historical context and style will also be helpful.

They need to develop skills in drawing from observation when working from the natural forms suggested and be able to make visualisations of 3D geometric forms from both observation and imagination. Ideally, they will be able to relate the forms and structures of these two sources and use them to produce inventive combined or 'hybrid' forms as a basis for their artefact ideas.

Visits to museums and an opportunity to study objects and images at first hand will provide students with good opportunities for analytical study that cannot be achieved by study from photographic and secondary sources.

Extended study could involve looking at other cultures that share some of the visual characteristics of the selected period or movement.

##### ***Ideas and development***

Working from the observational and analytical studies made in Activity 1 students should produce design ideas for a range of artefacts as described in the brief. They will need to develop skills in visualising forms in 3D and building maquettes using simple materials such as card, paper or wire. They should also consider more substantial or permanent materials that the final artefact will be made from and the processes involved.

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Students should be encouraged to produce alternative ideas, building on previous experiences before selecting those that have potential for the most appropriate artefact. Some consideration should be given to the potential client group that the artefact is intended for and what qualities it should have to meet the requirements of the brief.

### ***Production planning and realisation***

This will help build the skills of review and reflective practice. Discussing other products and the work of designers will help to provide awareness of design criteria and the specialist language used in art and design criticism.

Students will find it beneficial to revisit the earlier stages of their project work, making interim notes on the strengths and weaknesses of the work and identifying what can be done to improve and develop the work.

Group discussions, criticisms and peer review at this stage can provide the students with other opinions on their work that they can evaluate.

Students will need appropriate skills in the production of their chosen artefact and this will depend on the specific processes and materials to be used.

They should be encouraged to develop the highest levels of skill and craftsmanship and be aware of relevant health and safety practice.

### ***Evaluation***

Students should present their work in the most appropriate manner and make a final presentation and evaluation using the skills acquired in the earlier phases of the project.

## **On the market**

The Museum project illustrates an important aspect of many Artefact projects: the need to satisfy a client who may have commercial interests. Activity 1 explores this further.

### **Activity 1: On the market (25 min + homework)**

#### **Student instructions**

Look at a range of artefacts and identify the artists, craftspeople and designers intention. Who do you think is the intended client? What is the market that the work is designed or made for?

Find out what you can about the professional practice involved in the making and selling of a range of artefacts.

#### **Teacher guidance**

In this activity, students need to consider commercial aspects of producing and marketing artefacts. A consideration of specific examples will help focus the discussion.

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### 2. Stadium

This lesson is designed to illustrate some characteristics of a major construction project and to develop skills of graphic communication. If students carry out the project themselves, they will develop an understanding of some of the disciplines involved in such a project.

#### **Case study: Stadium (15 min)**

Draw students' attention to the use of the design framework (see Handout 2: The Design Framework). Also, Figure 1 exemplifies how a high-quality project extends over a wide range of subject areas and addresses wider issues around designing and making an artefact (see Handout 1: What is an Artefact).

The following notes are particularly relevant if students will carry out the tasks themselves – in which case you will need to allow at least one session for each task.

#### ***Design brief, analysis and research***

Students should hold a group discussion to identify the factors involved in designing facilities for different sports. By extension this project could be for any building that serves a particular purpose that follows a student's interest – medical surgery, retail store for mountaineering or sports goods, crèche, common room etc.

Notes should be made of this discussion and used to frame an outline brief and later contribute to a project proposal or statement of intent.

#### ***Specification, ideas and development***

Introduce some awareness of the different disciplines that complement the design process, for example:

- Construction methods – building and construction, architecture and engineering
- Environmental considerations – geography, social science
- Health and safety – legal and planning regulations
- Design and aesthetics – history and appreciation of art, design, architecture,
- Comparison of sports facilities – history, politics
- Sporting facilities – sports science, physiotherapy

#### ***Production plan***

Students will need to develop skills in drawing and design for three-dimensional forms, the use of perspective and other drawing conventions. Skills in computer design such as *Sketchup* or other drawing programmes would be useful.

They should be aware of the construction and aesthetic properties of some commonly used building materials and also be introduced to innovative techniques in engineering and construction.

#### ***Realisation and evaluation***

Students will need model making and construction skills appropriate to produce a scale model of their proposed building.

They will need to present a coherent and organised body of written and visual work together with an evaluation of the project process and the finished design.

#### **Communication**

Emphasise the importance of effective communication in construction projects, both between the various professionals involved, between professionals and clients, and with the general public.

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<p>Extended Project route:</p> <p>Complementary to principal learning</p>	<p><b>Project proposal: Artefact</b> Design a stadium or sports facility (By extension this could be any building which serves a particular purpose)</p> <p>Evidence: design ideas, drawings, development of design, tests of materials and structures, models of proposed design solutions, photographs</p> <p>Learners need to ensure they have adequate knowledge and skills to complete the project</p>	<p>Areas of research:</p> <p>Construction methods (building systems, materials, scale)</p> <p>Environmental considerations (planning, impact on local area, travel to the stadium, transport links, parking)</p> <p>Health and safety (evacuation planning, lighting)</p> <p>Aesthetics and design (study of other designs, both contemporary and historical)</p> <p>Sporting facilities (grounds, training facilities, physiotherapy and medical)</p> <p>Retail potential (sports shops, food outlets, hospitality)</p> <p>History of football and other sports stadiums (their role in politics, propaganda and power, e.g. Olympics, Hitler)</p>	<p>Complementary disciplines:</p> <p>Building and construction</p> <p>Geography, social science</p> <p>Legal and planning regulations</p> <p>Art, craft and design/architecture, history and appreciation of art and design</p> <p>Sports science, physiotherapy</p> <p>Marketing</p> <p>History, politics</p>
<p>Extended Project route:</p> <p>Progression: not linked to current study, but providing a basis for future work/study</p> <p>Alternative routes might be playing football at a high level, sports science, design, etc. architecture etc.</p>			

Figure 1: Outline plan of a project to design a stadium

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### Activity 2: The journey home (10 min)

One possible outcome of this activity is to illustrate the superiority of graphic, as opposed to verbal, communication. However, some students will prefer one style, some the other. A key message is that effective communication might involve several different styles.

### Activity 3: Looking at graphics (15 min + homework)

In this activity, encourage students to express their opinions the effectiveness of the graphic design in the examples they discuss, and to support those opinions with well-reasoned argument. The ability to present a reasoned case will enhance the discussion/analysis section of their projects.

## 3–6. Mini projects

These mini projects are designed to help the students to decide on a suitable practice project, to develop skills and processes appropriate to the project and to practise presenting the outcomes. Each of these practice projects will need about a week. The following timetable is suggested:

Decide on the practice project, get started	1 lesson
Developing ideas	1 lesson + homework
Producing a prototype	2 lessons
Presenting outcomes	1 lesson

You will need to decide with each student a simple practice project that they can do in about a week. This practice exercise should include some research and analysis skills, graphic communication, and production skills. Students should not regard this as a complete project, but a practice of some project elements. They should also present what they have done to the class, as practice.

A list of sample 3D and photographic projects is given below. You will probably be able to generate other suitable practice projects e.g. technology or media projects.

#### Project 1: 3D design

The goal here is to explore the use of plane surfaces to construct 3D forms.

#### Project 2: Space frame

The purpose of this project is to give some experience in the creative and sensitive manipulation of form and space. The project should encourage the awareness of three-dimensional relationships of proportion, line, plane, surface and spatial dynamics.

#### Project 3: Packaging

The purpose here is to explore the use of plane surfaces to construct three-dimensional geometric forms and to apply designs exploring shape and ground using a limited tone range.

#### Project 4: Photographic essay

The goals of this project are:

- to produce a series of photographs that have a strong narrative or documentary quality;
- to use visual language to express and communicate a particular point of view;
- to develop skills in taking and processing black and white photographs.