

Unit 4: Artefact

Introduction

The unit requires learners to plan, research, develop and evaluate the production of an artefact.

The artefact may take many forms, including a finished working prototype, a model, artwork or design. The way the artefact is presented will depend on the ideas and intentions of the learner and the form it takes: a sculpture may be intended for a specific site; an engineering model may require to be demonstrated in action to highlight its function; a website's purpose may be reflected through its use of colour, layout and form of navigation.

There are no expectations of size limits for the artefact. The size should be appropriate to the intention. Supporting evidence may be in any suitable form such as writing, illustrations, technical drawings, video or interactive media.

Learners begin by identifying a brief for their artefact and making a project plan. They will then research potential materials, information and techniques. They will apply these in as part of the developmental process, which involves generating ideas, trying out different ideas, choosing the best solution, refining and adapting the idea, and handing over the finished artefact to the teacher-assessor. They then evaluate their project and present the outcomes of the project to an audience.

Learners are required to provide written evidence to accompany the project. It is estimated that this will be between 1500-3000 words. Learners will not be penalised for producing work outside the suggested word count, but they should ensure their word count allows them to meet the assessment objectives.

Learning outcomes

On completion of this unit a learner should:

- 1 Be able to identify, plan and manage the production of an artefact or design
- 2 Be able to research and select appropriate techniques and materials
- 3 Be able to produce an artefact or design, using appropriate techniques and materials
- 4 Be able to present project outcomes and an evaluation to an audience.

The assessment evidence presented by the learner must evidence all the above outcomes

QCF unit summary

Outcome Number	Learning Outcome The learner will:	Assessment The learner can:
1	Be able to identify, plan and manage the production of an artefact or design	identify the main objectives for the project provide an appropriate plan use organisational skills and strategies appropriately
2	Be able to research and select appropriate techniques and materials	research materials, techniques and processes select appropriate materials, techniques and processes relate investigated processes to the project
3	Be able to produce an artefact or design, using appropriate techniques and materials	create an artefact or design with appropriate materials, techniques and processes show development of ideas and consideration of alternative designs acknowledge creative influences
4	Be able to present project outcomes and an evaluation to an audience.	review and evaluate the project and own learning present the project outcomes in an organised manner, engaging with audience and responding to questions.

Unit content

1. Be able to identify, plan and manage the production of an artefact or design

Identifying and planning the project

The artefact should be created against a specific brief. This could be developed by the learner themselves, or in consultation with a third party such as an employer.

As part of their proposal, learners must complete the Project Proposal Form (Annexe B). This must be signed off by the teacher-assessor before any further work can be carried out. For further information, see pages 56-57). The title/topic must be considered suitable by the teacher-assessor, and suitable in size and scale to be completed in the time available.

Completed project proposal forms should include objectives and a rationale for their choice of topic/title. They should identify the proposed activities that they will need to undertake, for example:

- Background reading and research
- Researching potential materials and techniques
- Developing ideas and experimenting with possible solutions
- Producing and presenting the artefact
- Evaluating the project and own learning
- Preparing for the presentation.

Plans should also include the resources that they will require and an attempt to prepare for contingencies.

Managing the project

During the course of the project, learners must keep individual ‘project activity records’ which document its progress, the activities undertaken and decision-making process, eg by means of a diary, IT logging system or records of periodic reviews with the teacher-assessor.

Learners should monitor their own progress, adapting their plan and adjusting their timelines where necessary; where this occurs, this should be recorded in the project activity records.

Summary of evidence required from learner

- The project proposal form
- Project activity records.

2. Be able to research and select appropriate techniques and materials

Learners should demonstrate that they have conducted adequate research. This may involve primary and secondary sources, as appropriate. The learner should show that they have investigated a range of techniques and materials, showing connections and links between ideas, information, sources, etc.

The research required will depend upon the brief and type of artefact to be produced, but examples could include:

- Understanding the needs of a client and the context in which the artefact will be used
- The learner's analysis of existing artefacts that the learner is hoping to improve upon
- Other people's analyses of existing artefacts
- Other people's attempts to solve a similar problem
- A historical survey of how a particular artefact has developed
- The skills and resources that will be required in the creation of the learner's artefact
- Possible techniques and processes that could be used
- Possible raw materials that could be used.

Learners should assess the usefulness of their sources, making use of a consistent system of referencing for any sources used. There should also be a bibliography which uses an appropriate and consistent format.

Summary of evidence required from learner

- Research carried out and resources selected. This could be kept with the project activity records.

3. Be able to produce an artefact or design, using appropriate techniques and materials

Learners should apply the research that has been carried out in producing their artefact.

During the development process the learner will need to take decisions about the use of materials and techniques. Learners will need to use a range of skills to solve problems, produce their artefact and achieve their planned outcomes.

The development process could involve the following stages:

- Generating ideas
- Trying out different ideas, materials, techniques, etc
- Choosing the best solution
- Refining and adapting the idea and producing the artefact, returning to earlier stages of the development process if necessary
- Presenting the finished artefact.

The finished artefact should be presented to the teacher-assessor in an appropriate format. For example, this could include a display, a piece of writing accompanied by drawings, a demonstration, or a combination of approaches.

The artefact should be accompanied by supporting information which records the development process, the activities undertaken and the evolution of ideas. This should make it clear what has been done and why.

Summary of evidence required from learner

- Evidence of the development process. This could be kept with the project activity records.
- The artefact. Appropriate evidence of this (eg photos) should be included with the rest of the evidence submitted.

4. Be able to present project outcomes and an evaluation to an audience

The evaluation

Learners must produce an evaluation of the project.

The evaluation should aim to address the following areas:

- The extent to which they achieved what they set out to achieve
- How well the artefact meets the original brief
- How well they managed at different stages of the project
- What they would do differently next time and why
- What they have learned about producing an artefact and how useful this has been to them
- What they have learned about their own strengths and weaknesses and how they could make use of this in the future.

The presentation

The results of the project should be presented to an audience. This should summarise what the project is about, what was done, and how the artefact works.

It must be appropriate to the selected audience, in terms of length, language used, room selected and conditions, and also any handouts and ICT used.

The presentation must demonstrate the use of appropriate communication skills and the learner should be able to respond to questioning from the audience in a capable manner.

Further information about the presentation is given on pages 53-54.

Summary of evidence required from learner

- The evaluation
- The presentation and any supporting material.

Mark grid for Artefact
Artefact -AO1 - Manage

Band 1	Band 2	Band 3	
The topic and brief are identified and developed with a lot of guidance, support and assistance from the teacher-assessor.	The project plan gives objectives for the project and a brief rationale. Most of the main tasks to be completed are provided in an appropriate order. Some potential problems are identified and there are basic ideas for how to overcome them.	The project plan gives clear objectives for the project and a clear rationale. All of the main tasks to be completed are provided in an appropriate order and described . The plan includes information on how learners will organise their time in order to meet the project objectives. Potential problems are described and there are realistic and convincing ideas for to overcome them.	The learner shows high levels of organisational ability and time management skills when managing the project. The learner maintains clear records of activities undertaken during the project, including problems encountered and steps taken to overcome them . Progress is monitored against the original plan.
1-3 marks	4-6 marks	7-9 marks	See pages 51-52 for guidance on how to allocate marks

Artefact -AO2 - Use resources		Band 2	Band 3
Band 1	<p>Some possible materials and techniques have been investigated.</p> <p>From the research carried out, information and resources have been selected for use in the project although some of this may not be directly relevant. Information has been collated in reference to the project. There are attempts to establish links between the research carried out and the project, although some of these may be tenuous.</p> <p>Some understanding of the less complex areas of the resources and research required for the development and production of the artefact has been shown.</p>	<p>A range of different types of materials and techniques have been investigated.</p> <p>From the research carried out, appropriate information and resources have been selected for use in the project. Information has been analysed in reference to the project. The learner has established clear links between the research carried out and the project.</p>	<p>A wide range of different types of possible materials and techniques have been thoroughly investigated.</p> <p>From the research carried out, appropriate information and resources have been selected for use in the project. Information has been analysed and synthesised in reference to the project. Clear, concise and detailed links and have been established between the research carried out and the project.</p>
Band 2	<p>There is some referencing of sources and a bibliography is included, listing most of the sources.</p> <p>1-4 marks</p>	<p>A reasonable understanding of the complexities of the resources and research required for the development and production of the artefact has been shown.</p> <p>Sources are referenced appropriately and a bibliography is included, listing the sources in an appropriate format.</p> <p>5-8 marks</p>	<p>A thorough understanding of the complexities of the resources and research required for the development and production of the artefact has been shown.</p> <p>Sources are referenced appropriately and consistently and a bibliography is included, listing the sources in an appropriate and consistent format.</p> <p>9-12 marks</p>
See pages 51-52 for guidance on how to allocate marks			

Artefact - AO3 - Develop and realise

Band 1	Band 2	Band 3
An attempt has been made to structure the supporting information that relates to the development process. The information contained within it is generally presented in a logical order, although some of this may not be wholly relevant.	The learner demonstrates limited understanding of the developmental process. There is some evidence of development of ideas and that alternative ideas and approaches have been considered , with some attempt to explain the decisions taken, eg relating to choosing the most appropriate materials, processes, techniques, design.	<p>The supporting information that relates to the development process is structured and presented clearly. The information contained within it is generally clear and relevant.</p> <p>Learners demonstrate a thorough understanding of the developmental process. There is clear evidence of development of ideas and that alternative ideas and approaches have been considered carefully and evaluated, with a well thought out and well argued explanation of the decisions taken, eg relating to choosing the most appropriate materials, processes, techniques, design.</p>
	<p>There is some evidence that the artefact has been refined during the developmental process. Resources and skills are applied with some success in creating the artefact. The artefact goes some way towards fulfilling the original brief.</p> <p>1-8 marks</p>	<p>There is clear evidence that the artefact has been carefully and perceptively refined during the developmental process, showing innovation. Resources and skills are applied consistently successfully in creating the artefact. The artefact is highly successful at fulfilling the original brief.</p> <p>9-16 marks</p> <p>17-24 marks</p>

See pages 51-52 for guidance on how to allocate marks

Artefact - AO4 - Review

Band 1	<p>Overall the learner shows some self-awareness when evaluating the project and the extent to which they have achieved their aims and met the original brief. The learner attempts to identify their own strengths and weaknesses in the project generally and those of the finished artefact in particular. However these may not always correspond with other evidence seen by the teacher-assessor as part of the project. The learner describes identifies some basic ideas for what they could do differently next time. They have drawn basic conclusions about the process of putting on a performance that could help them in future.</p>	<p>The presentation is structured so that the audience can see that there has been some attempt to organise it logically. If an oral presentation is given, it is generally audible, although it is likely that the learner relies heavily on supporting materials, eg notes or cue cards. Where visual aids are used, these attempt to support the presentation, although they may not be clearly visible to the audience and may contain too much information.</p>	<p>Some questions are answered and the learner shows reasonable subject knowledge.</p>	<p>1-3 marks</p>
Band 2	<p>Overall the learner shows good insight and self-awareness in evaluating the project and the extent to which they have achieved their aims met the original brief. The learner is generally successful at identifying and explaining their own strengths and weaknesses in the project generally and those of the finished artefact in particular. These correspond well with other evidence seen by the teacher-assessor as part of the project. The learner explains and justifies ideas for what they could do differently next time. They have drawn clear and perceptive conclusions about the process of putting on a performance that could help them in future.</p>	<p>The presentation is structured so that it is reasonably clear to the audience how the different parts link together. If an oral presentation is given, it is audible, although it is likely that the learner relies on supporting materials, eg notes or cue cards, but the presentation is not simply read aloud. Where visual aids are used, these are relevant and are consistently effective at supporting the presentation. They show reasonable clarity and design.</p>	<p>Questions are answered reasonably clearly and effectively and the learner shows reasonable subject knowledge.</p>	<p>4-6 marks</p>
Band 3	<p>Overall the learner shows a high level of insight and self-awareness in evaluating the project and the extent to which they have achieved their aims met the original brief. The learner is highly adept at identifying and analysing in detail their own strengths and weaknesses in the project generally and those of the finished artefact in particular. These correspond well with other evidence seen by the teacher-assessor as part of the project. The learner explains and justifies ideas for what they could do differently next time. They have drawn clear and perceptive conclusions about the process of putting on a performance that could help them in future.</p>	<p>The presentation is clearly and logically structured so that it is completely clear to the audience how the different parts link together. If an oral presentation is given, it is clearly audible throughout. The learner may make some use of supporting materials, eg notes or cue cards, but the presentation is not simply read aloud. Where visual aids are used, these are relevant and are consistently effective at supporting the presentation. They are clearly visible to the audience, are well designed and do not contain too much information.</p>	<p>The learner handles questions calmly and confidently. Questions are answered clearly and insightfully and the learner shows good subject knowledge.</p>	<p>7-9 marks</p>