

## **Unit AD1          Undertake analysis and interpretation**

### **Elements**

- AD1.1   Confirm requirements for analysis and interpretation**
- AD1.2   Carry out agreed programme of analysis and interpretation**
- AD1.3   Prepare and submit reports**

### **Unit Commentary**

This unit is for archaeologists who undertake the analysis and interpretation of archaeological material and data. This work may be undertaken as part of a research project or be guided by a research framework but it is also relevant to any other circumstances where analysis and interpretation of archaeological material and data are required. It will cover data sets such as primary excavation records or SMR records and materials including historic documents, artefacts, and palaeoenvironmental assemblages.

Analysis and interpretation should be undertaken to an agreed programme of work that specifies the objectives of the analysis, methods to be employed, the content of any reports and a timetable for the programme.

This unit does not set standards for the wide range of scientific procedures which may be relevant to analysis, for example the chemical and physical analysis of materials. These will be normally carried out by laboratory technicians to standards defined by the ST+M Council. The task of the archaeologist in this situation is to specify the tests and interpret the results.

## AD1 Undertake analysis and interpretation

### AD1.1 Confirm requirements for analysis and interpretation

#### Performance Required

*This will involve:*

- a) accurately identifying requirements for **analysis and interpretation**
- b) analysing and assessing the accuracy, currency and completeness of data and identifying any additional data and material requirements
- c) where appropriate, obtaining additional data and material from **relevant sources**
- d) selecting, proposing and agreeing appropriate **methods** for analysis and interpretation
- e) estimating resource requirements for analysis and interpretation using agreed methods
- f) presenting proposals for analysis and interpretation to interested parties in a format to assist decision making and in accordance with organisational procedures

#### Occupational Context

##### 1 Analysis and interpretation (may apply to):

- data sets
- documents and records
- finds and artefacts
- sites
- structures
- landscapes

##### 2 Relevant sources

- original source
- associated research
- commissioned research

##### 3 Methods

- statistical
- comparative
- scientific (e.g. chemical analysis, dating techniques)
- visual

##### 4 Resource requirements

- data
- personnel
- finance
- equipment
- accommodation
- time

#### Knowledge Requirements

*You need to know and understand how to:*

- Carry out analysis and interpretation

*You need to know about:*

- Data protocols
- Types of analysis and interpretation
- Types of method

## **AD1 Undertake analysis and interpretation**

### **AD1.1 Confirm requirements for analysis and interpretation**

#### **Required Skills**

*You should demonstrate:*

- How to identify requirements for data,
- How to analyse and assess data and material
- The identification of additional data requirements
- The preparation of a method statement

#### **Evidence Required**

*You must provide evidence proving that you understand the procedures for confirming requirements for analysis and interpretation.*

The candidate should be questioned, based upon the documentation provided, to explore how they:

- identify requirements for data, data accuracy and data outputs for different surveys
- analyse and assess the accuracy, currency and completeness of existing materials and identify additional data requirements
- having investigated the site, appraise and record potential survey requirements
- develop and agreed with the client A clear and accurate method statement, programme budget and specification of data outputs and format for the survey
- obtain necessary permissions to carry out the survey
- identify and implement project quality assurance and safety requirements
- plan and schedule the site survey
- take expert advice where necessary

#### **Evidence Rules**

- The candidate should have been involved in at least 2 substantive projects.

## AD1 Undertake analysis and interpretation

### AD1.2 Carry out agreed programme of analysis and interpretation

#### Performance Required

*This will involve:*

- a) ensuring that **analysis and interpretation** is conducted efficiently and systematically and in accordance with the **method** statement
- b) adapting procedures and practices appropriately to allow for different circumstances and conditions
- c) ensuring that observations and measurements are accurate and fully meet data requirements
- d) consulting expert advice in instances where additional, specialist information is required which is relevant to analysis and interpretation
- e) advising **interested parties** promptly of potentially critical findings and constraints arising during the programme
- f) identifying and recording data and material which may require more detailed investigation
- g) clearly and accurately recording data and storing it securely

#### Occupational Context

##### 1 Analysis and interpretation (may apply to):

- data sets
- documents and records
- finds and artefacts
- sites
- structures
- landscapes

##### 2 Methods

- statistical
- comparative
- scientific (e.g. chemical analysis, dating techniques)
- visual

##### 3 Interested parties

- team members
- client (who may be internal or external)
- funding body
- specialists
- statutory authorities

#### Knowledge Requirements

*You need to know and understand how to:*

- Conduct analysis and interpretation
- Obtain specialist information and advice
- Observe and measure accurately
- Adapt analysis and interpretation procedures and practices to suit different conditions
- Record and store analysis and interpretation data

*You need to know about:*

- Types and modes of analysis and interpretation
- Sources of expert advice and specialist information
- Circumstances and conditions which can affect analysis and interpretation activities
- Data protocols used in different analysis and interpretation methods

## **AD1 Undertake analysis and interpretation**

### **AD1.2 Carry out agreed programme of analysis and interpretation**

#### **Required Skills**

*You should demonstrate:*

- How to carry out analysis and interpretation
- How to maintain the integrity of data and material
- How to identify and follow safe working practices
- How to observe, measure and record accurately
- How to adapt analysis and interpretation procedures and practices to suit different conditions

#### **Evidence Required**

*You must provide performance evidence proving that you understand the procedures for carrying out an agreed programme of analysis and interpretation.*

The candidate should be questioned, based upon the documentation provided, to explore their approach to analysis and interpretation

#### **Evidence Rules**

- The candidate should have been involved in at least 2 substantive projects.

## AD1 Undertake analysis and interpretation

### AD1.3 Prepare and submit reports

#### Performance Required

*This will involve:*

- a) **presenting** the results of the work clearly in a manner appropriate to its **audience**
- b) qualifying research findings where data are insufficient or potentially unreliable
- c) acknowledging appropriately all sources of information
- d) submitting the results of the work to **relevant people** for peer review and responding to suggestions
- e) protecting confidential information in accordance with agreements and procedures

#### Occupational Context

##### 1 Presentation (may be):

- Unpublished reports
- Published reports in academic journals
- 'Popular' publications
- Private and public presentations
- Exhibitions
- Web-based resources

##### 2 Audience (may be):

- Clients (internal/external)
- Professional colleagues
- Experts
- Amateurs
- The public (adults and children)

##### 3 Relevant people

- Professional colleagues
- Academics in related disciplines

#### Knowledge Requirements

*You need to know and understand how to:*

- Communicate with different audiences
- Acknowledge and cite sources of information

*You need to know about:*

- The appropriate format and medium for reporting different types of research
- An ability to summarise the results of relevant research
- An understanding of copyright and other relevant legislation
- The procedures for peer review

## **AD1 Undertake analysis and interpretation**

### **AD1.3 Prepare and submit reports**

#### **Required Skills**

*You should demonstrate:*

- Report construction and presentation

#### **Evidence Required**

*You must provide performance evidence proving that you can prepare and submit reports on analysis and interpretation.*

The candidate should be questioned, based upon the documentation provided

#### **Evidence Rules**

- The candidate should have been involved in at least 2 substantive projects.