



HLF/IFA Workplace Learning Bursary funded training placement

ARCHAEOLOGY DATA SERVICE/ INTERNET ARCHAEOLOGY Digital Archaeology

Training Plan

Introduction

This document sets out the background to the placement, its desired outcomes and the skills it offers set against the National Occupational Standards in Archaeological Practice.

The Archaeology Data Service (ADS) supports research, learning and teaching with high quality and dependable digital resources. It does this by preserving digital data in the long term, and by promoting and disseminating a broad range of data in archaeology. The ADS promotes good practice in the use of digital data in archaeology, it provides technical advice to the research and professional archaeological community, and supports the deployment of digital technologies.

Internet Archaeology is the first fully refereed e-journal for archaeology and publishes articles of a high academic standing which utilise the potential of electronic publication. Internet Archaeology is published by the Council for British Archaeology and hosted by the Department of Archaeology at the University of York. International in scope, all journal content is subject to rigorous peer-review. Articles make use of the huge potential of internet publication to present archaeological research in unique and exciting ways, such as full colour images, photographs, searchable data sets, visualisations and interactive mapping. The journal employs an Editor and shares offices, technical and administrative support with the ADS.

The Archaeology Data Service and Internet Archaeology are each based within the University of York's Department of Archaeology. The Department is housed within the historic King's Manor campus, in the centre of York. The Department has an established international reputation in the teaching and research of archaeological information science in Archaeology, including a well-founded Masters programme. It has excellent computer facilities and support staff. The University of York is in the foremost group of universities in the UK, with an outstanding record of teaching, research and training. The University is consistently ranked amongst the top universities in the UK.

This placement will directly address the training priority for skills needed to meet the recommendations of the Southport report focussing on ensuring maximum public benefit from developer funded historic environment work: creating, promoting and using accessible archives; and ensuring that archaeologists have the skills necessary to work effectively in integrated, multi-disciplinary teams.

Over the year, the placement holder will acquire the following key skills:



- A clear understanding of the context and processes involved in digital preservation of archaeological archives
- An ability to follow the archiving process through the OAIS reference model from negotiation to release
- An ability to edit and create content within a complex wiki based online dissemination service
- An ability to understand and use a Content Management System for the management of archaeological data
- An understanding of the data and metadata standards in use in digital archiving in the archaeological domain and more generally
- An ability to negotiate with depositors and authors regarding the accessioning and/or publication of their content
- An ability to copy edit and mark-up journal articles for publication in an online journal
- An understanding of the archival needs of online journals and an ability to migrate article content to a digital repository

Supporting staff

The trainee will work under the line management and supervision of the Deputy Director (Access) of the ADS, and will be supervised by the Editor of Internet Archaeology, for the IA components of the placement. Although all members of ADS staff (except developers) will play some role in supervising and training the placement on various tasks, the ADS Digital Archivist, has been assigned as mentor/buddy for the placement and will directly monitor their progress as well as supporting them in achieving the placement goals.

The trainee will be encouraged to participate fully in the formal and informal research activities of the ADS as well as relevant research opportunities (seminars etc.) offered by the Department of Archaeology.

Outcomes

At the end of the 12 month bursary the trainee will be able to:

- Assess and accession a digital archive comprising complex digital objects.
- Follow a deposited archive through the ADS Collection Management System and understand the Open Archival information System (OAIS) archival process.

- Prepare an archive for dissemination, this will require acquiring basic database, HTML, Javascript and Cold Fusion skills, as well as various applications (e.g. Acrobat, Corel)
- Negotiate with depositors regarding the form, structure and timescale of their deposit
- Assess and respond to queries on content and access directly via email in response to ADS Helpdesk queries
- Independently organise and manage a workload comprising a significant number of differing projects and tasks
- Create and edit wiki based the content for the ADS website
- Assess, prepare and accession copy for IA articles (text, images, tables, data, other dynamic elements), negotiating with authors where appropriate
- Mark-up a complex article strictly following IA housestyle
- Recognise the linkages between archival material and published material and identify opportunities for rich/deep linking (e.g. LEAP project exemplars)

Activities

Training is grouped under the main elements with reference to the Learning Goals (LG) listed in the table above.

Proposed learning goals	National Occupational Standards (NOSs) to be met	Learning activities and tasks	Who will support the bursary holder with this goal?
1. Classify, compile and maintain data on the material remains of past communities	AF3	Assess and accession material for digital archiving. Understand the Open Archival information System (OAIS) archival process. Assess and accession copy for IA articles, including negotiation with authors where appropriate.	Deputy Director (Access) and Editor of Internet Archaeology
2. Provide information on the material remains of past communities to	AF4	Respond to queries on access and archived material usage via the ADS Helpdesk and follow a deposited	Director (Access) and Editor of Internet Archaeology

others		archive through the ADS Collection Management System. Create and edit wiki based the content for the ADS website.	
3. Assess items and collections for their contribution to the organisation	AG3.2	Negotiate with a depositor/author regarding their preservation policy and proposed material/ article content.	Director (Access) and Editor of Internet Archaeology
4. Initiate procedures for acquisition and disposal of items and collections	AG3.3	Negotiate with a depositor and follow a deposited archive through the ADS Collection Management System and understand the Open Archival information System (OAIS) archival process. Disposal is unlikely to be directly relevant, there is currently no de-accessioning process at the ADS.	Director (Access)
5. Negotiate the transfer of rights over items and collections	AG3.4	Negotiate with a depositor/author regarding their preservation policy and understand the ADS/IA terms and conditions and access agreement.	S. Jeffrey, Judith Winters Director (Access) and Editor of Internet Archaeology
6. Plan and deliver interpretative activities and materials	AH4	In partnership with the depositor. Prepare an archive/journal article for dissemination, mindful of its intended audiences and HE uses. Recognise the linkages between archival material and published material and identify opportunities for rich/deep linking. Participate in the notification/promotion procedures to release an archive or an article. Mark-up an IA article copy strictly following IA house style.	Director (Access) and Editor of Internet Archaeology
7. Learn how to operate safely and follow Health and Safety and security procedures in the	AJ10	Completion of Health and Safety Checklist, completion of risk assessments; receive training in organisation's Health and Safety	Director (Access)

workplace; to be able to respond to emergencies and assist in the security of the workplace.		procedures	
8. Develop your own resources and protect the interests of others	AK3	Independently organise and manage a workload comprising a significant number of differing projects and tasks. Maintain a good record of developed working practices and progress against identified learning objectives. Meet regularly with line managers/supervisors to discuss project against the WLB as well as against allotted tasks.	Director (Access) and Editor of Internet Archaeology

Training Elements and Allocated Timings

The post will be one year in length, over a period of 220 working days plus holidays and bank holidays. The placement will spend approximately 50% of their time with ADS and 50% with Internet Archaeology. The nature of the placement means that many training elements will overlap and intersect rather than follow on from each other. The bursary holder will be located at the same desk/workstation for each part of the placement and will not have to move.

1. A full staff induction will take place on commencement of work by the successful candidate. This will include an introduction to the company's systems (including fire safety and health and safety at work, risk assessments), administrative housekeeping, staff introductions, talks on company culture and expectations. This will also provide an opportunity for the trainee to discuss their own aspirations for the placement and review the training plan with line manager and training supervisor. A substantial proportion of this element of the placement will be familiarisation with ADS/IA technical systems and setting up appropriate access accounts. **10 days**
2. A significant benefit of this placement is discretionary attendance (without assessment) at Archaeological Information Systems Masters modules. These include modules directly relevant to the proposed learning objectives of the placement, such as:
 - Digital publication and web technologies
 - Analysis and visualisation
 - Working on the web

- Database design and implementation
- GIS
- Virtual reality modelling

30 days

3. One to one training in archive and accessioning procedures using the Open Archival information System (OAIS) archival process. Training will cover accessioning, mounting, and indexing of data collections, validation of data and conversion into preferred formats; curation and migration of digital collections; design and development of user interfaces; and discussion and data audits with data depositors. The candidate will receive training on each functional element of the OAIS reference model and will be able given the opportunity to follow data from ingest to release with the objective of being able to take responsibility for and manage an allocated deposit (most likely IA content) through the entire process for themselves.

55 days

4. One to one training in e-journal production will be provided by the IA Editor using active journal content as the learning environment. Once the basic skills have been mastered, the trainee will be able to work on their own under regular monitoring. The basic training will cover file management, mark-up (XHTML, CSS), usability, accessibility, web design, journal housestyle, writing for the web (including copy-editing and good use of English), raster image file manipulation, metadata creation and negotiation with authors where appropriate. Advanced training in skills will then cover elements of working in a Unix environment, developing vector and other dynamic images for publication and managing journal content for preservation

55 days

5. Handling and taking responsibility for queries on access and archived material usage via the ADS Helpdesk (ad hoc)

5 days

6. Respond to queries to Internet Archaeology (access, submission procedures, editorial queries, author licences) (ad hoc)

2 days

7. Create and edit wiki-based the content for the ADS website.

15 days

8. Develop and edit wiki-based content for the internal Internet Archaeology manual

5 days

9. Develop an understanding of ADS/IA terms and conditions and access agreements and negotiate with a depositor/author regarding their preservation policy and proposed material/ article content.

10 days

10. Participate in the notification/promotion procedures to release a specific ADS archive or IA article

5 days

11. Participate in other promotional activities for the organisations using media including Facebook/Twitter, writing press releases and prepare promotional



material for circulation at other targeted events such as relevant conferences

8 days

12. Identify, create and develop opportunities for rich/deep linking between archival material on ADS and published material in IA as well as appropriate external organisations

10 days

13. Independently organise and manage a workload comprising a significant number of differing projects and tasks. Maintain a good record of developed working practices and progress against identified learning objectives. Meet regularly with line managers/supervisors to discuss project against the WLB as well as against allotted tasks.

10 days

14. Participate in tasks for European Union and Nationally funded projects relating to archaeological data set interoperability, automated accessioning etc. This participation is necessarily contingent on the placement's ability to acquire the appropriate technical skills/understanding, but the opportunity to play a role in these projects will be offered.