

Assignment 1: HPAR7007 Archaeological Specialist Practice

INTRODUCTION

As a community archaeologist with DigVentures, the projects I am involved with delivering must be targeted to maximise public impact and produce social benefit. Whilst limited industry recognised reference resources and guidance exists regarding community archaeology, useful resources external to the sector including social deprivation indices (Ministry of Housing, 2019; Scottish Government, 2020; Welsh Government, 2019) help us to maximise the benefit that archaeology can bring to a community, tailoring a project to the community's real needs. These indicators are key to delivering effective community archaeology that maximises public impact and social benefit.

Additionally, the fieldwork focus of my role as a community archaeologist regularly involves developing project designs, assessment reports and other outputs for community projects. Reference and data resources such as ClfA standards and guidance, historic environment record (HER) databases and the Archaeology Data Service (ADS) are key to ensuring my work is properly informed. Therefore, these resources must be accessible, current, reliable and relevant.

This report will critically evaluate the above reference and data resources based on their accessibility, currency, reliability and relevance. It is structured as four sections, each focussing on one resource and beginning with an overview of how it is essential to keep my work and the work of other specialists properly informed. Four sub-sections then follow evaluating how accessible, current, reliable and relevant each resource is. The report concludes with an overall summary of the findings regarding the reference and data resources discussed.

1. SOCIAL DEPRIVATION INDICES

The English Indices of Deprivation (Ministry of Housing, 2019a) are a series of documents and data files freely available for download on the government's website (<https://bit.ly/2IAZLQV>).

They consist of a full technical and research report, a summarised version with an infographic and fourteen data files containing the survey results. The indices themselves measure relative deprivation in small areas of England.

This provides invaluable measures by which to identify areas of the country where community archaeology could serve to make a positive social impact; for example, where education is considered to be in a more deprived decile. Targeting project designs towards the specific needs of each community maximises the chances of increasing social benefit. Additionally, when used as a measure combined with DigVentures post-project public impact evaluation process (for example; section 9 of Casswell *et al.*, 2021), a sense of the social value the project delivered can be obtained. Results demonstrating this from the Pontefract Castle community archaeology project can be seen in Wilkins *et al.* (2021a).

1.1 Accessibility

The data itself is freely downloadable as Microsoft Excel .xlsx and CSV files. The availability of both a summarised output and a detailed technical research report allows flexibility regarding the level of granularity required when accessing the results. The survey was conducted for the whole of England and similar surveys exist conducted by the devolved parliaments of Scotland (Scottish Government, 2020), Wales (Welsh Government, 2019) and Northern Ireland (NISRA, 2017). This allows complete nationwide access to the levels of social deprivation throughout the UK.

1.2 Currency

The English Indices of Deprivation are four years old at the time of writing and whilst previous versions were published every four to five years since the year 2000, a recent governmental consultation (Department for Levelling Up, 2022) concluded with no plans to update them in the immediate future. With the indices now four years old and with no apparent prospect for imminent renewal, this presents a potential problem for using them going forward as a current measure for planning and delivering targeted community archaeology projects, maximising public impact and understanding a completed project's social value contribution.

Without an update soon, it is likely that other more current social indicators, such as Office for National Statistics (ONS) regular surveys on unemployment rates, education and crime (for example; ONS, 2023) will need to be adopted in the meantime.

1.3 Reliability

The English Indices of Deprivation were commissioned by the government to act as the official most comprehensive measure of deprivation in England (Ministry of Housing, 2019b), making it one of the most reliable data resources of its type available. It uses 39 separate indicators across seven different categories of deprivation, each with different weightings. This established methodology has remained the same over multiple iterations of the indices, originating in the 1970's, and as such provides a reliable comparison of results over time.

The seven categories of deprivation consist of income, employment, education, health, crime, barriers to housing and the living (including outdoor) environment. Almost all of these are factors that can be either directly or indirectly improved by community archaeology. This provides a reliable way to create a tailored project design that produces social value relevant to the target community and measure the impact created by the project during the post-delivery evaluation stage.

1.4 Relevance

By providing relative measures of deprivation for social categories such as education, the English Indices of Deprivation are directly relevant to specific factors that community archaeology can improve. For example, aim five of the Pontefract Castle community archaeology project (Casswell *et al.*, 2021, pp. 6) was designed specifically to target improving opportunities for education and learning in the local community. This was as a direct result of the social deprivation index identifying specific educational needs in the area, with 18% of the local population living within the most deprived 10% decile in the country (Casswell, *et al.*, 2021, pp. 54).

With 68% of volunteers indicating the most important part of their time participating in the project was the experience of learning about archaeology, the project was able to positively contribute towards the educational needs of the local community (Casswell, *et al.*, 2021, pp. 57). This positive impact was only possible because of the direct relevance of the English Indices of Deprivation as a measure and method of implementing targeted community archaeology projects that deliver social value.

2. ClfA STANDARDS AND GUIDANCE

All 3,100 ClfA accredited members and 82 registered organisations (ClfA, 2022a, pp. 5) are required to follow and uphold ClfA standards and Guidance as part of their professional membership and status (ClfA, 2023a). Therefore, these documents are an essential foundation and basic framework for specialists including myself to ensure their work is informed by and meets an expected standard.

The following sub-sections will critically evaluate how accessible, current, reliable and relevant ClfA standards and Guidance are as a reference resource to help keep my work properly informed and held accountable to a high standard.

2.1 Accessibility

ClfA standards and guidance, alongside their supporting toolkits and other regulatory documents, are linked from the homepage of the ClfA website and freely available for anyone to download in PDF format (<https://bit.ly/2Kmery8>). Concerning usability and readability, using ClfA Standards and Guidance for Archaeological Excavation (ClfA, 2014a) as an example, the document is structured in detail with easily referable numbered paragraphs and contains a very formal text style highlighting its specialist purpose as a technical standard. This makes it easy for me to refer to when constructing method statements as part of a WSI or project design. Whilst it is formal and structured, it is also concise and does not use unnecessary technical language or jargon. This makes it more readable and accessible to a diverse range of specialist fieldwork practitioners. It is also easier for me to explain the principles of good

practice during excavation to a non-professional or public audience in a community archaeology context where relevant.

2.2 Currency

All of the standards and guidance currently in issue by ClfA (<https://bit.ly/2Kmery8>) were published in December 2014. Since then, most documents have been subject to at least one update in October 2020, mostly for minor changes such as formatting. Whilst it is nine years old at the time of writing, the standard for archaeological excavation is far from outdated due to its function as an overarching principle rather than a detailed set of requirements (ClfA, 2014a, pp. 3). It remains a document I use regularly due to its long-standing and well-established fundamental principles.

However, there are some issues with their age; primarily concerning more recently published industry-recognised guidance I rely heavily upon as part of my role not being referenced. For example, MoRPHE (Historic England, 2015) is not mentioned in section 3.2 of ClfA (2014a) standards and guidance for archaeological excavation; a key section of the document specifically dedicated to standards for briefs, written schemes of investigation and project designs. ClfA has recognised the need to update their standards and guidance documents, aiming to refresh the full range as part of their 2021-2030 strategic plan (ClfA, 2021). Consultation on revisions for the first of these, including the standard for archaeological excavation, has already been completed and the new documents aim to not only refresh content, but to increase accessibility to new audiences and improve their relevance to a broader range of users (ClfA, 2023b).

2.3 Reliability

In a self-regulating profession seeking to hold itself to the highest level of accountability, standards and guidance should not be dictated by the elite few but issued by the profession itself (Geary, 2020). All ClfA standards and guidance documents are initially produced by a panel of fully accredited ClfA members and professional practitioners from across a broad range of heritage specialisms (ClfA, 2023b). They are then subject to a consultation and

review process where the draft is circulated to the wider ClfA membership, giving them a chance to provide feedback and comment on the content before final publication. This rigorous process essentially represents a form of peer-review and gives all accredited members the chance to have their say on what is considered best practice in their area of expertise. This two-stage process provides an excellent opportunity for broad input and consensus across the profession, representing a reliable reflection of what the current collective of heritage professionals as a whole considers to be best practice in their specialism.

2.4 Relevance

Thirteen different standards and guidance documents are currently in issue that are relevant to a broad range of specialisms in the profession. However, with new specialisms such as community archaeology consistently emerging, more standards and guidance continues to be required. This has resulted in projects such as the Community Archaeology Toolkit currently being developed in partnership with DigVentures (ClfA, 2022b), demonstrating a response to the increasing need for advice relevant to a growing range of new and diverse specialisms. ClfA also recognises that existing guidance should be updated whenever necessary so it remains relevant. For example, ClfA (2014a, pp. 3) standards and guidance for archaeological excavation acknowledges that the continual development of new research techniques and methodologies may require that updates are made periodically and welcomes comments or recommendations at any time. The forthcoming updated standards and guidance for archaeological excavation, amongst others, (ClfA, 2023b) shows that efforts to keep existing advice relevant and up to date are genuine.

3. HISTORIC ENVIRONMENT RECORD (HER)

The HER databases that exist throughout the country are an important data resource and access point to existing knowledge that helps inform my assessment and interpretation of an archaeological site or landscape as part of a current piece of work. However, whilst they are an invaluable resource in this regard, there are some systemic issues, particularly regarding funding and investment, that present difficulties for users.

The following sub-sections will critically evaluate how accessible, current, reliable and relevant HER services are as a data resource to help keep my work properly informed.

3.1 Accessibility

Some of the difficulties in accessing HER records are well documented. For example, Illsley (2019, pp. 126) identifies problems such as lack of funding, type of user, poor inter-regional cohesion and a failure to understand user requirements as the main factors that impact the accessibility of HER data. Evans (2013, pp. 31-32) argues that the fragmentation of the regional HER system and the lack of a consolidated national system inhibits the accessibility and effective usefulness of the HER to users. Most of the above issues seem to relate ultimately to a lack of funding and investment for both local services and at a national level.

Whilst Illsley (2019) identifies that commercial clients of HER services are the most prioritised user group because they are fee-paying, such fees only cover the costs of the search itself. They do not represent an investment in the HER to improve its long-term accessibility, interoperability and cohesiveness that would benefit not just professionals, but also less prioritised non-fee-paying public users who find it more difficult to access HER data.

3.2 Currency

HER services have struggled for many years with a backlog of data from research conducted in the historic environment not yet added to their databases. A 2010 study on the Wiltshire and Swindon Historic Environment Record estimated that it would take approximately three years to clear their backlog of data (Henry, 2018). A more recent survey by Historic England (2022) found that 91% of the 83 HER services across the country reported backlogs, suggesting the problem appears to not be improving.

In order to make the most informed professional interpretations and decisions in my research regarding the historic environment, the information I receive from the HER database needs to be as current and up to date as possible. With evidently such a significant backlog of data still to be added by HER services, it is clear that some important information is likely to be

missing. Practitioners, including myself, must increasingly look for additional methods of gathering information; such as communicating with local academics, specialists, research groups and commercial organisations who may be more informed.

3.3 Reliability

There is an argument that if 91% of HER services across the country have a backlog, then those incomplete databases cannot be a fully reliable reflection of what is currently known about the historic environment. However, leaving aside the overarching systemic backlog issue, the reliability of the data that has already been input to the HER databases should also be evaluated.

One element of the Deep Time project, carried out by DigVentures in partnership with ArchAI (Wilkins *et al.*, 2021b), involved a quality audit of an existing data subset in the County Durham and Darlington HER. A total of 3,925 sites were audited and the sample was found to be 88.71% accurate. Another element to the project was able to improve the dataset accuracy to 94.32% through crowdsourced manual augmentation using a bespoke GIS-based platform (Wilkins *et al.*, 2021b, pp. v).

As an indicative result from a data subset, nearly 89% reliability of the current data within a HER is perhaps not as bad as expected given the systemic funding and backlog issues raised previously. However, perhaps the more interesting insight from the results of the Deep Time project is the potential that the reliability of the HER data could be increased indicatively to nearly 95% if appropriate investment was made.

3.4 Relevance

There is no doubt that HER databases are most relevant to users from the development-led commercial archaeology sector because of National Planning Policy Framework (NPPF) requirements. The NPPF requires as a minimum that the HER database be consulted when considering the heritage implications of a planning application (Historic England, 2019, pp. 5). Whilst this has led to 36% of all users coming from the commercial sector, other user groups

such as academic researchers are also very close at 34% and non-commercial public use at 14% (Illsley, 2019, pp. 118). This suggests that HER databases still remain relevant to other user groups despite the previously discussed issues of accessibility, currency and reliability. This indicates that the value of the knowledge gained from data retrieved as part of HER database searches by these user groups still outweighs the problems associated with it.

4. ARCHAEOLOGY DATA SERVICE (ADS)

The ADS is a key source of digital archaeological data from past projects that specialists including myself use to acquire information to inform their research. How that data is stored, managed and formatted is often crucial to its usefulness during reuse. Benchmarks such as the FAIR principles (Wilkinson *et al.*, 2016), which advocate a focus on how findable, accessible, interoperable and reusable digital data is, are useful measures of good data management. The ADS has a commitment statement that demonstrates how it applies the FAIR principles (ADS, 2023a).

The following sub-sections use measures such as the FAIR principles to critically evaluate how accessible, current, reliable and relevant the ADS is as a data resource to help keep my work properly informed.

4.1 Accessibility

The ADS produces human and machine-readable metadata through open licensing, persistent identifiers, linked data and common vocabularies amongst others (ADS, 2023b) to maximise accessibility. Cohesive interoperability with other services such as ARIADNE, MEDIN and NERC (ADS, 2023c) also allows the data to be accessed, re-used and shared across multiple platforms. These measures increase the likelihood of data being findable and accessed by specialists who need it to make sure their work is informed.

However, the deposition of digital data generated by projects with the ADS remains far from standard practice (Richards, 2021) and data that remains unarchived clearly cannot be classed as freely and readily accessible. Therefore, improving accessibility to digital data within the

ADS must target an increase in the rates of projects archived. A study conducted by Beagrie and Houghton (2013) concluded that research and investment in promoting the understanding of both the economic and social value of digital archiving could improve uptake in the process.

4.2 Currency

Perhaps a better judge of currency would be an evaluation of the ADS standards and guides to good practice, rather than how current and complete the data it holds is, given that depositing digital data is not yet deemed standard practice.

In 2011, the ADS guides for good practice were updated in collaboration with the Digital Antiquity initiative (Niven, 2011). Since then, a number of additional guides have been added, such as for dendrochronology (Brewer and Jansma, 2016) five years later. Whilst the main components of the guide were last updated twelve years ago at the time of writing, this does not necessarily mean they are outdated. The guides have all been rigorously produced in chapters each authored by specialists in their subject area and they are also currently recognised by other industry bodies. For example, ClfA standards and guidance for archaeological archives (ClfA, 2014b, pp. 4) states that the document should be used in conjunction with the guidelines issued by the ADS. Furthermore, the addition of new guidance for specialisms as they are needed, such as Brewer and Jansma (2016), shows a response to the growth and change in new and current requirements for digital data archiving.

4.3 Reliability

Marlet and Rodier (2021) argue that reusable archaeological data complying with the FAIR principles is only meaningful if it is also reliable. The authors suggest that the traceability of archived data back to the primary field record is a good measure to assess its reliability. This would ensure that those reusing archived archaeological data are ultimately being informed by the most reliable original source data.

The overall archival strategy of the ADS (ADS, 2023d) relies on a migration model, where data is prepared according to a standardised set of archiving requirements allowing it to be migrated into the overall repository in a 'preservation format.' This allows the data stored to be interoperable with the rest of the repository but may require alterations that could degrade the 'original format' of the dataset. It is for this reason that the ADS archives both the preservation format and the original format of the dataset, ensuring that access to the original primary record of the data is also maintained. This dual approach allows access to the original and most reliable source of data for reuse, whilst also staying true to other elements of the FAIR principles, such as interoperability.

4.4 Relevance

The concept of traceability also applies to the relevance of archaeological digital data. Understanding where the dataset has come from and how it has been used before will help those looking to reuse it appreciate how relevant it is for their purposes. Barbuti (2021) argues that the Re-usable (R) element of the FAIR principles should be expanded to include the relevance of digital archaeological data. The author suggests that dataset relevance can be observed by users through the creation and archiving of descriptive metadata that shows how the dataset has been used over time.

ADS guidance requires the submission of descriptive metadata at a project level in the metadata hierarchy (ADS, 2023e). According to this guidance, project metadata should include an element titled 'Relations,' which is specifically designed to describe how the data has been used before, including if the dataset has been derived from previously published and archived datasets. This allows someone looking to potentially reuse any given dataset to refine how relevant it may be by observing how it has been used before or where it derives from.

CONCLUSION

This report has critically evaluated the accessibility, currency, reliability and relevance of four of the key reference and data resources that I use as part of my specialist role as a community archaeologist, with a focus on excavation and fieldwork, to keep my work informed.

The English Indices of Deprivation provide reliable measures that are directly relevant to planning and delivering targeted community archaeology projects that deliver social value. Full and abbreviated reports and datasets relating to the whole country are freely accessible for download. Until recently, they have been regularly released every four to five years, keeping them relatively current. However, no plans are currently in place for an imminent update.

ClfA standards and guidance, whilst formatted very formally, maintains accessibility by not using overly technical language and by existing as an overarching principle rather than as a prescribed set of detailed technical requirements. Such an approach also keeps the standard from becoming outdated, as does the upcoming release of new and updated guidance. This, combined with the fact that all guidance is ratified through a process of consultation by professional peers, keeps these documents both reliable and relevant.

Systemic issues such as underinvestment and a backlog of data yet to be entered into HER databases can present difficulties for prospective users. Accessibility can be difficult and delayed due to a lack of resources and poor cohesion between fragmented regional databases, especially with fee-paying commercial users given priority over others. The existence of a substantial backlog also creates obvious issues for the currency and reliability of the data. However, research indicates up to 89% reliability of HER data and a high proportion of non-fee-paying users, suggesting that HER services are still very relevant to many non-commercial users despite the above issues.

The ADS exhibits numerous elements of the FAIR data principles that emphasise its accessibility as a data resource, despite digital data archiving still not being considered standard practice throughout the profession. The principles of ADS guides to good practice

are considered to be current and the dual approach to the migration strategy of digital archiving keeps the data held reliable. Lastly, the descriptive project metadata detailing how a dataset has been used in the past can inform potential users of its relevance to their work.

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