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IMPLEMENTATION STORIES

Bridging the support services gap for social science, arts and humanities researchers

Authors
Angus Whyte and Ryan O'Connor, Digital Curation Centre, University of Edinburgh

From interviews with
Dr. Lisa Otty, Manager of the Centre for Data, Culture & Society (CDCS), University of Edinburgh

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Introduction

Delivering support for researchers in social sciences, arts, and humanities disciplines to undertake data-driven research is the primary role of the Centre for Data, Culture & Society, based at the University of Edinburgh. Acting as a connection between researchers in these disciplines and the university's central services encourages researchers to engage more actively with the services available to them to manage their data and make it more FAIR. Building local communities of researchers within the University in these disciplines also allows the centre to act on their behalf in discussions about new service developments by the university.

FAIRsFAIR recommendation

"Develop models for collaboration between research support roles to support the creation and management of FAIR data"

FAIRsFAIR Recommendations on practice to support FAIR principles

Establishing the Centre for Culture, Data & Society

▪ CDCS

The Centre for Culture, Data & Society (CDCS)[1] was established in 2019. Based at the University of Edinburgh, CDCS sits within the College of Arts, Humanities and Social Sciences (CAHSS), and grew out of an initiative to support digital scholarship in the college and ensure that researchers were accessing and engaging with information services. This laid the groundwork for the CDCS and created a network of people interested in using digital methods in research. The Centre is part of the Edinburgh Futures Institute[2], and is headed by Dr. Melissa Terras.

CDCS's mission is to help the research community at the university manage data and overcome challenges in the move toward data-led and computational research. CDCS has a disciplinary focus on Social Sciences, Humanities and Arts, and as part of EFI sees itself as aligned to attempts to highlight the societal and economic benefits of these disciplines, referred to by the acronym SHAPE (Social sciences, Humanities and Arts for People and the Economy)[3].

The Centre's approach is based on an organisation model that develops research and research-support networks closer to academic life than the university's central services are able to provide, while connecting researchers to those services including the core Research Data Management team. Academically, the university is divided into three colleges, with 21 schools in total. CDCS sits at college-level and works closely with the schools within that structure, alongside Edinburgh College of Art and a Centre for Open Learning. From this college-level vantage point it seeks to address the issues faced by the researchers within individual schools and across multiple schools. Sitting at college- rather than school-level also means that it is well positioned to bridge the gap between researchers and central service providers.

The CDCS's 'offering' and strategic priorities are coordinated with the university's and reflect its focus on data. Though it has its own activities and research programmes, CDCS is not a typical research centre, with its main focus being on providing support functions to researchers. CDCS Centre Manager Dr. Lisa Otty sees her and her colleagues' role as maintaining an overview of relevant services and support available across the university and providing SHAPE researchers in the college with information and support.

CDCS promotional image CC-By Robert Bye https://www.cdcs.ed.ac.uk/image-credits

1. https://www.cdcs.ed.ac.uk/
2. https://efi.ed.ac.uk/
3. https://thisisshape.org.uk/

Establishing the Centre for Culture, Data & Society

CDCS aims to build connections between the Centre and SHAPE researchers in four main ways:

- Modelling and advising (that is, putting existing data to use in different contexts and upskilling researchers to do this; a key aspect of this is keeping an overview of SHAPE-relevant data held by the University and by other institutions)
- Embedding training and practice
- Developing researcher networks and supporting project development
- Bringing researcher feedback and data to central services

CDCS also works on early-stage facilitation, where researchers approach the Centre at early stages of their work, often due to a desire to be affiliated with the Centre in some capacity or to enquire about funding. The Centre currently has 21 PhD affiliates from within the university and a handful of external affiliates, all of whose research interests align with the Centre's focus on data-driven and computational research.

Linking to central services

University of Edinburgh central Information Services

The University of Edinburgh central Information Services address core needs for a large multi-disciplinary institution spread across multiple campus sites, and across it's diverse colleges, schools and central services. Communication across the institution can be challenging, impacting the ease with which SHAPE researchers can engage with data-driven approaches to their work, especially considering the development of interdisciplinary work in this area. Information coming from central services is often perceived to be rooted in disciplines with stronger traditions of data-intensive work, despite the recognition that the needs of researchers in, for example, chemistry, may be very different to the needs of researchers in, for example, the School of Literatures, Languages and Cultures.

CDCS aims to adopt a research perspective to its connections with the university's central Information Services, rooted in the needs of data science and scholarship, including digital humanities, rather than on the performance of the central services that is a more critical concern of the central services. CDCS is in an informed position to identify gaps in service provision, and the need for new services that may need to be developed. Like their colleagues in different domains, SHAPE researchers are time pressured and are driven to achieve what the research needs rather than what the organisation needs, and so providing feedback to the central services tends not to be their priority.

This makes the connective role of CDCS all the more important in Lisa's view, especially to encourage SHAPE researchers to engage with the FAIR principles. There are financial drivers as well; CAHSS as a college brings in income that goes toward paying for services that are more widely used in STEM subjects. CDCS is keen to have a say in how services are developed and how they can be adapted to fit SHAPE researcher needs.

Another important aspect of the support CDCS provides is in their 'translation' role - helping researchers to articulate what they need and match with what is available. Having people on the CDCS support team who understand what the researcher is trying to do and step back and understand that from a more general perspective is important. Those in support roles do not necessarily need to have discipline-specific knowledge, but an understanding of the context of the research and an appreciation of what researchers in the area typically need. SHAPE researchers' needs may be translated into requirements for central University of Edinburgh services, or for services provided externally.

Linking to central services

Among the University of Edinburgh central Information Services provided by the Research Data Management team, CDCS actively promotes the DataShare institutional data repository. This includes Economics, Law, Business, and Psychology among its subject headings. DataShare hosts a community specifically for outcomes of CDCS research, and holds significant humanities data collections.[4]

From the central service provider's point of view it can nevertheless be challenging to deal with the wide variety of needs coming from projects. As Lisa points out, CDCS can recommend services outside the university that may be more relevant to the research requirement. These include major Research Infrastructures and EOSC Clusters, as well as domain-specific repositories. For example, the Archaeological Data Service (ADS) is a trustworthy repository that collects digital data of the historic environment of the UK.[5] CDCS can explain to researchers with this focus that the ADS repository should be a priority, as well as the university's central data repository DataShare.

Engaging SHAPE researchers

Engaging SHAPE researchers

The question of how to engage SHAPE researchers in data-driven research is fundamental to the work CDCS does. Those engaging with data-driven research in SHAPE subjects (in the arts and humanities in particular) are often in earlier stages of their careers, with less experience of navigating through the university's complex institutional structure to access relevant RDM support and services. In this regard, CDCS looks more familiar to SHAPE researchers than central services does and can seem a more approachable space for researchers. As Lisa says:

> *"We are run by researchers, each school has a lead within our team, we speak the language of SHAPE research, and we create a space in which researchers from different disciplines can engage with one another."*

The team at CDCS have focused on engaging with SHAPE researchers early on in both their careers and in their projects. Lisa makes the point that at the outset of the Centre's work, researchers initially sought assistance on more project management-type issues, for example in relation to grants where researchers had promised digital outputs and needed support to deliver, or had ideas they wanted to pursue but were intimidated by DMP requirements. In these cases, the Centre refers people to central services for DMP support. More recently, CDCS has also been approached more by researchers who have a good grounding in data-driven approaches and want to take their work to the next level.

The Centre still encounters situations where support is sought toward the end of a project or after funding has finished. A typical example is for CDCS to assist in archiving a website, breaking it down into datasets that can be stored elsewhere. For these sorts of 'rescue mission scenarios', CDCS usually connects back to IT teams in schools with responsibility for data. However, sometimes costs rule out doing this type of work. Another example highlighted concerned a project involving a web archive which needed its hosting transferred and longer term maintenance plan put in place. This is now being looked after by one of the school IT teams, and CDCS was a key connector in making that happen.

4. https://datashare.ed.ac.uk/handle/10283/928
5. https://archaeologydataservice.ac.uk/

Engaging SHAPE researchers

Lisa addressed the topic of data stewardship at a presentation at the DCC's Research Data Management Forum 21 (RDMF21) event back in July 2021, and how these types of roles can foster researchers' engagement with the centre.[6] Though support staff at CDCS do not see themselves as typical data stewards, CDCS shares many of the same concerns; that is, to promote best practice in data-led research, make the resulting data FAIR, and to ensure the data is taken care of. As Lisa puts it:

> *"We [at CDCS] are not data stewards, but our work intersects with data stewards in a number of ways, supporting connections across the community and with [University of Edinburgh] central services."*

In a previous role in the university's central Information Services division, Lisa led a research facilitation team and sees aspects of her role at CDCS as congruent with those from her former position. CDCS's role in stewardship is primarily a research engagement one. The Centre works closely with the university's digital library and has purchased extensive datasets from commercial data providers, which it also needs to be able to manage effectively on behalf of those researchers who may need it.

Other practical ways that the Centre has used to engage researchers include a series of events and small funding calls. One of these, for example, involves collaboration with Creative Informatics,[7] a research and development programme based in Edinburgh. Prior to the pandemic, CDCS also organised informal, coffee-morning style events each month, where researchers, CDCS personnel and central services staff were invited to exchange information on the work they were doing. Researchers were free to ask for advice or suggestions on any aspects of their work, and support staff could get to know the issues facing researchers on a day-to-day basis.

Covering costs of support

The Centre is funded by its own budget through CAHSS, and is free at the point of use for affiliated researchers. In the interest of cost transparency to researchers there have been discussions around how the support the centre offers may be written into funding bids.

However, this may not be straightforward. Although Lisa points out this development is at an early stage, writing the support for projects to make their outputs FAIR is a priority for CAHSS, in line with its own strategy and participation in the Data Driven Innovation programme.[8] The CDCS however does not have a standard or model for costing their support into research projects, usually working in tandem with the university's digital research services team to determine what support can be given to projects.[9]

That being said, the SHAPE researchers that CDCS supports are not typically dealing with very costly datasets; they normally fit within the free-at-point-of-use limits of the services offered by the university. In addition, CDCS has space available for researchers in DataShare, the University of Edinburgh's institutional data repository, above the allocation typically given to researchers for their personal use.

6. https://www.dcc.ac.uk/blog/data-stewardship-current-international-activities-and-national-challenges
7. https://creativeinformatics.org/about/
8. https://ddi.ac.uk/
9. https://www.digitalresearchservices.ed.ac.uk/

Impacts and success

Based on its position as a bridge between SHAPE researchers and University of Edinburgh central services, CDCS was instrumental in channelling feedback from researchers on the need for a Text Encoding Initiative (TEI) service at the university.[10] CDCS provided small grant funding to the TEI By Example initiative, enabling an upgrade to its training materials and website infrastructure in Summer 2020. The TEI service is now offered at college-level for the schools within the College of Arts, Humanities & Social Sciences, with further success in that CDCS now has a large grant coming out of this TEI work.

Text mining is another area where CDCS's role is growing. CDCS has a text mining platform that sits within the Edinburgh Parallel Computing Centre (EPCC), with CDCS facilitating researchers' use of that. CDCS has been running a competition with an open call and pays for time of the developer for the successful applicants (this work is done with the EPCC team) to engage with large-scale digital datasets that can be analysed more effectively using high-performance computing (HPC) facilities.[11] CDCS is still some way from achieving its ambitions in this area as it requires investment in interface building and staffing. The prospects are promising, as there is a shared interest with other units in the university looking to establish services through a Data Driven Innovation programme.

Having other colleagues at college-level who can get to know and speak to and work with researchers while liaising with central services is hugely positive, according to Lisa, in terms of offering an integrated data support service. Being immersed within the research environment and being invested in researchers' work helps to build the trust needed.

10. https://www.cdcs.ed.ac.uk/news/tei-example-tutorials-hosted-university-edinburgh
11. https://www.cdcs.ed.ac.uk/TDMLab

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