DCC

The Digital Curation Centre:
A new phase, a new perspective

Because good research needs good data

JISC

Do more with your data

You work hard to get results – make sure that your data do just as much for you in return

Embarking upon a research project is no small task. Considerable investment of time and resources is required to even lift an idea off the ground. Some £3 billion of public money is invested annually in research in the UK alone, yet the results of all of this effort are seldom as visible as they might be.

Few higher education institutions in the UK are currently set up to benefit fully from the digital data produced by their research – or to safeguard it for future use. By learning how to share and preserve data effectively, you will maximise the impact of your research team's hard work – and inspire confidence among the research councils and funding bodies that invest in your projects.
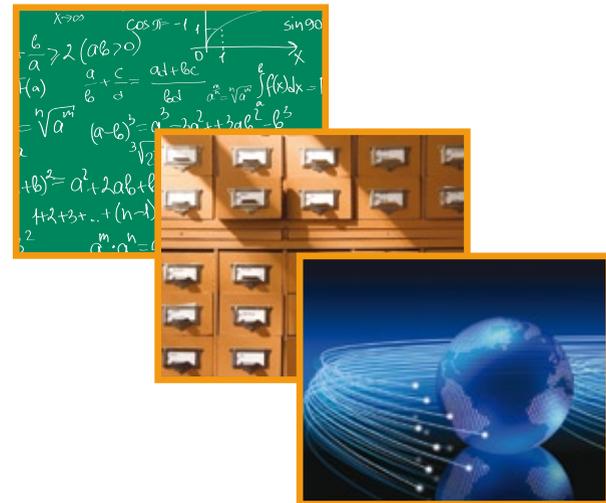
Data custodians in search of guidance can turn to the Digital Curation Centre, the UK's leading centre of expertise in the field. Now that we've completed our own cycle of research and development, we're eager to share our knowledge for the benefit of the HE sector. To do this, the DCC will embark upon a fresh, new, three-year programme of work in March 2010. Our help isn't just limited to expert advice. We also offer a full range of technical solutions, learning resources and tools specifically designed to help data custodians build capacity for data curation.

Why is data curation so crucial?
Sound research must be backed up by verifiable data – which in turn may lead to new knowledge and further research. Some data are unique and cannot be replaced if destroyed or lost. What's more, your research community may be legally required, or implicitly obliged, to manage some or all of the data that you hold.

Digital curation allows you to protect all of your digital data for future use by managing the risks that threaten their safety. But preservation is only one benefit of curation. Effectively curated data can also be shared among the UK research community as a whole. As well as reducing duplication of effort in data creation and enhancing the long-term scientific value of existing data, sharing data may prompt the development of further high quality research.

Such is the potential for digital curation to add value at every stage of the data lifecycle, the practice is fast becoming a requirement of successful funding bids – irrespective of project size or duration. Approaching the DCC for help in building your capacity for data curation now may save your research team from missing out on vital funding in the future.

New phase, new perspective

Establishing good data curation practice within the UK higher education sector won't happen overnight. An organisation the size of the DCC can't possibly hope to change the habits of more than 100,000 UK researchers on its own. It's not just the researchers who need to learn new skills either. In order to properly implement everyday data curation routines, research support staff also require training.

By focusing first and foremost on supporting data custodians as we enter the third phase in our life, the DCC hopes to build firm foundations for good data curation practice across the HE sector. A specially devised DCC training programme can then be rolled out across individual institutions to encourage the transfer of knowledge and best practice among data custodians, producers and users.

Whether your role is data scientist, data manager, informatician, data librarian or research assistant, the DCC can help you to build your research team's capacity and capability for data curation. Because we also help to put like-minded practitioners in touch with one another, you will benefit from being part of a self-sustaining community where ideas can be exchanged, knowledge shared and data pooled.

How we can help you

The DCC can assist data custodians working in all disciplines by:

- providing free access to curation tools and resources

- delivering at-cost training and network-building events

- fostering the identification and sharing of best practice by establishing communities of data curators

- consolidating and expanding existing data curation efforts

- contributing towards the development of new and innovative standards, tools and practices

- providing ongoing support in the form of an evolving range of learning resources to continually update curation skills and knowledge

- offering fee-based consultancy services to those seeking more specific guidance and advice.

Most research teams know about data curation and its many benefits, but few have so far managed to address the issue practically and effectively in a working environment. We hope that our range of capacity-building products and services will go some way towards bridging this gap. At the same time, the DCC's continued support of JISC – particularly its Research Data Management Programme – will further help to promote the importance of data curation throughout the HE sector.

If you're already familiar with the work of the DCC, you'll notice that the launch of our third phase marks a significant change in direction for the organisation. Our switch from project leader to service provider is reflected by changes to our identity and structure. We're more streamlined, dynamic and flexible than ever before, all of which adds up to an even better service for you.

Our products and services

Because we can't speak directly to each and every data custodian who belongs to the UK research community, the DCC instead aims to spread the word about data curation through our new and improved website. Visit **www.dcc.ac.uk** to bookmark the page today.

Data curation resources

With just a few clicks, you can access all of the data curation resources collected by the DCC since we opened our doors in 2004. Using our comprehensive and easily accessible online library, you can evaluate curation techniques and find out how to implement those most suited to your research project and its funding requirements. Resources are regularly reviewed, updated and added to as new initiatives bring further resources to light.

The range of high quality resources that the DCC makes available online includes:
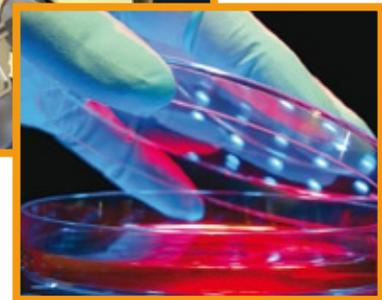
- **'How to' curation guides** – we regularly publish best practice guides that link to elements of the DCC's Digital Curation Lifecycle Model, plus briefing papers, use cases and technology watch papers. Together these resources can help you to address the broad spectrum of technology development, socio-legal issues and institutional practice relating to data curation.

- **International Journal of Digital Curation** – our highly regarded digital journal featuring general articles and peer reviewed papers will continue to serve as an invaluable channel for the sharing of good practice and experience. Two editions of the journal, which has already been cited in *Nature*, are published by the DCC each year.

- A comprehensive **Curation Reference Manual** (currently known as the Digital Curation Manual) containing advice, in-depth information and criticism on current techniques and best practice. Contributions are made by our extended network of specialist partners and associates.

- Our suite of **curation tools** will be maintained and improved, with stacks of existing DCC and external tools bundled together for use by targeted research communities in the development and testing of curation workflows.

- **Data Management Plan** templates and guidance, based on the guidance issued by UK funding bodies. Each year we aim to release a data management plan template that incorporates advice on the type of information to be included under each field. In addition, particular fields will be pre-populated with the information required by specific funding bodies.

Advocacy services

Successful data curation requires a greater awareness of the various data management challenges that exist across strategy, policy, planning and operational contexts. To stimulate knowledge sharing across the UK research community, the DCC will co-ordinate a range of advocacy services. Good practice in data management will also be promoted within institutions, in particular among data custodians, producers and users. At the same time, we'll assess the effectiveness of different curation techniques, helping to ensure that only the best solutions are used and endorsed by data custodians.

Advocacy services to be made available by the DCC in this new phase will include:

- **Regional Data Roadshows** – throughout the year, the DCC will stage regional roadshows at which best practice is presented and new tools and resources are showcased. These roadshows will be followed up via in-depth regional training courses.

- **Workshops** – a series of workshops targeting specific professional groups such as the RLUK/SCONUL, UCISA and UUK communities. The series will include one workshop aimed at developing the UK CODATA community, and further workshops may be developed in response to demand from data custodians or to address new JISC Research Data Management Programme measures.

- **Help Desk** – our call management system ensures that all enquiries made to our Help Desk are directed to the most appropriate expert within the DCC. So if you can't find the information that you need on our new website, the answer to your query is only a phone call away on **0131 651 1239.**

- A network of **research data champions** from UK higher education institutions will be established to create an influential and active community with direct access to data producers and users.

Community development initiatives

When you encounter a problem or enjoy a success, it's only natural to want to share it with like-minded people. It's the reason why the DCC has devised a series of community development initiatives to help create a self-sustaining network of data practitioners. This close-knit community will provide channels for you to share and exchange knowledge – all the while attracting new members and growing in size and reach.

Community development initiatives run by the DCC will include:

- **Research Data Management Forum** – intimate and highly interactive workshops for no more than 50 people. Topics under consideration for future workshops include 'Data and the Research Excellence Framework' and 'Socio-legal and ethical data challenges: managing confidentiality, anonymity, privacy and consent'.

- **International Digital Curation Conference** – an annual conference focusing on policy and practice with a strong emphasis on the sharing of best practice globally. The 2010 Conference will be hosted by the Graduate School of Library and Information Science at the University of Illinois, Chicago.

- Identification of the most appropriate **social networks** for increasing engagement between practitioners. Platforms will subsequently be developed by the DCC around the selected networks.

- Targeted **JISC support** – by providing targeted support to the JISC Executive, JISC programmes and, specifically, JISC data projects, the DCC will contribute towards the establishment of a significant core of good practice across key HE institutions. Our emphasis will be on facilitating and learning from emerging innovations, all the time helping to push boundaries and develop practice through working with this programme community. By taking this approach, we will ensure that new JISC activity feeds into the advice and guidance that the DCC helps to consolidate.

Training programme

Our focus is currently on equipping data custodians with the necessary skills to share and preserve data effectively. But the DCC mission doesn't end there. To help more data practitioners to develop enhanced curation skills, we will roll out a training programme that aids learning among data custodians, producers and users. In this way, you can share both your skills and the responsibility for data curation with others on your research team.

The elements of training to be delivered by the DCC are:

- **Digital Curation 101 (DC 101)** – an intensive three-day course designed to meet the specific needs of data custodians. The DCC will also promote DC 101 Lite, an introductory course that distils the content of DC 101 into half a day, providing complete beginners with the ideal starting point to commence learning about data curation.

- **Tools of the Trade** – half-day, hands-on courses for data curation practitioners that focus on making use of curation tools such as DRAMBORA and DAF. A particular aim of these courses is to offer practical instruction on the use of bundled tools and to introduce possible workflows.

- **Train the Trainer** – in an effort to build capacity and aid continuing professional development, the DCC will run two Train the Trainer courses each year. These will be open to members of higher education staff development services and to those who deliver career development and transferable skills courses for PhD programmes.

- **Curation curricula** – the DCC will monitor and contribute towards the development of curation curricula at postgraduate level. As we continue to participate in international working groups for the development and implementation of curation curricula, we will periodically refine our training courses to reflect developments in formal curation programmes. This will help to ensure that current curation practitioners maintain a competitive edge, even as professional curators emerge.

- **Online modules for self-teaching** – these will be produced to complement our DC 101 and Tools of the Trade courses. In close cooperation with the Digital Preservation Coalition (DPC) and the organisers of the Digital Preservation Training Programme (DPTP), we will investigate the possibility of also producing high quality online learning modules relating to DC 101 and DPTP, targeted to specific audiences.
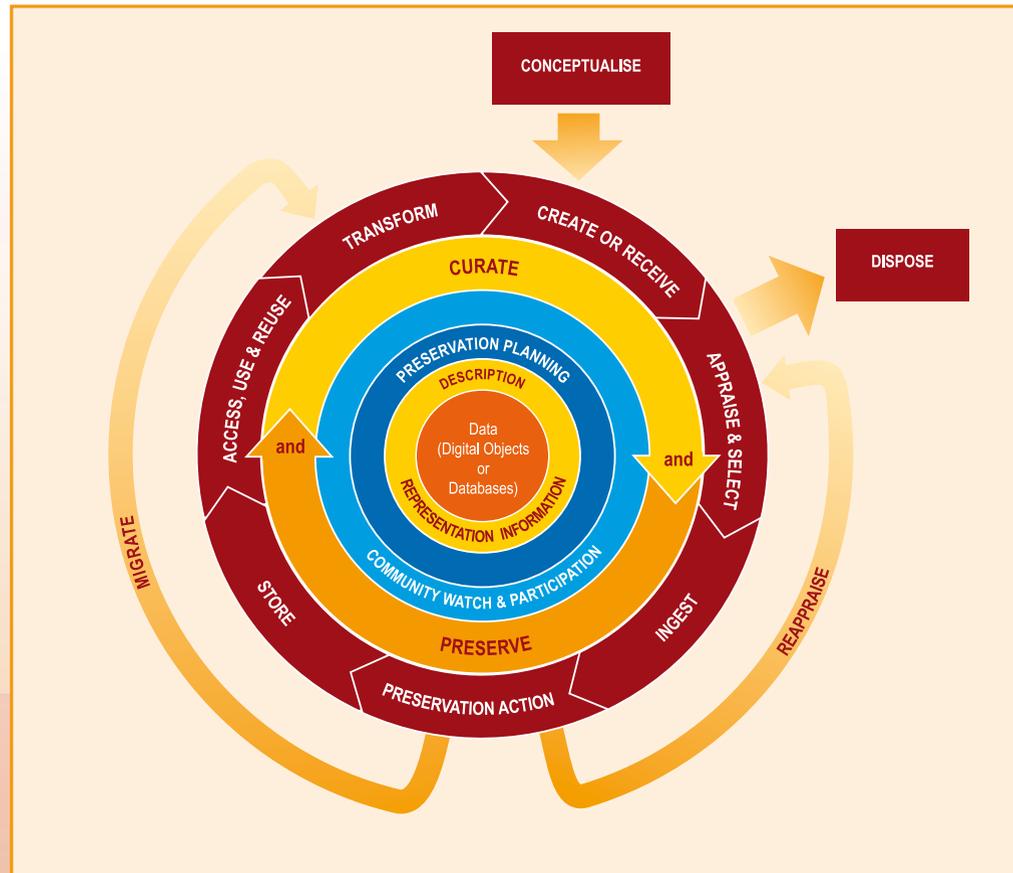
You've put in the hard work to collect your data. Now put in a little extra effort to make sure that your results get the full attention they deserve. Through our online resources, advocacy services, community development initiatives and training programme, the Digital Curation Centre can help you to share and preserve your data effectively, now and in the future.

The Digital Curation Lifecycle Model

Our Digital Curation Lifecycle Model provides a graphical, high-level overview of the stages required for successful curation and preservation of data from initial conceptualisation or receipt. The model can be used to plan activities within an organisation or consortium to ensure that all of the necessary steps are covered – and that the process is completed in the correct order.

The model enables granular functionality to be mapped against it: to define roles and responsibilities, and build a framework of standards and technologies to implement. It can be used to help identify additional steps that may be required – or actions not required by certain situations or disciplines – and ensure that processes and policies are adequately documented.

For more information about the DCC and how to access our products and services, visit **www.dcc.ac.uk**

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