

<b>Institution: University College London</b>
<b>Unit of Assessment: 36 - Communication, Cultural and Media Studies, Library and Information Management</b>
<b>a. Context</b>

UCL's Department of Information Studies (DIS) covers the widest disciplinary range of any UK DIS, comprising: archives and records management, library and information studies, publishing studies, digital humanities, and knowledge representation and information organisation. Our research enables non-academic audiences to engage actively with cultural heritage and information objects. Our four principal audiences are: **professional practitioners in the information and cultural heritage sectors** within and beyond the UK; **policy-makers**; international **educational professionals**; and **the public**. These audiences benefit from our transfer to them of specialist knowledge, expertise and skills. Benefits to heritage sector practitioners include their **enhanced capacity to curate cultural heritage objects** and an improved understanding of the needs of users, visitors and their communities. Our research creates **new ways for the public to interact with content**, especially in digital form, enhancing the quality of the visitor experience to cultural institutions. In archives and records management, our research has **improved finding aids and digital content delivery** by archivists, and **informed policy on community participation in archives** (Shepherd, Yeo, Flinn). Our research on knowledge organisation and representation **helps information professionals and the public organise and find information more effectively**, and has **improved machine and web intelligence** through work on logic-based reasoning and the Semantic Web (Broughton, Bikakis, Miller). Our work in digital humanities has **helped field archaeologists understand how best to use digital technologies** to record excavations and **informed the design of digital resources for cultural heritage** to best suit user needs (Warwick, Terras). International professional educational impacts have been delivered via **curriculum reviews and the production of textbooks and learning resources** on archives & records management, library classification & cataloguing and digital humanities (Shepherd & Yeo, Welsh, Broughton, Terras, Warwick), vital to curriculum development across the EU, in North and South America, Australia, sub-Saharan Africa, Iran and South Korea.

<b>b. Approach to impact</b>
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**Maintaining industry links:** DIS research engages with the changing needs of cultural industries and professional practice. **All staff have worked as, or collaborate actively with, information and cultural heritage professionals.** We work with nearly 200 external organisations and institutions, including the BBC, Faber and Faber, The National Gallery, Lambeth Palace Library, Cambridge University Press and the Royal Botanic Gardens, Kew (<http://bit.ly/1hmmaYm>). These sorts of relationships help us to ensure the continuing relevance and utility of our research through our work placement schemes, invited talks and collaborative PhD projects. Our MA student work placement schemes (127 different hosts) enable knowledge exchange and network building for staff as well as students, and often give rise to dissertation research linked to industry practices. We frequently invite members of the professions to share their expertise with us to help ensure synergy between our research and the professions, **hosting on average 90 speakers per year.** Since 2008 we have also successfully sought and managed 5 **PhD studentships in collaboration with external partners:** three AHRC Collaborative Doctoral Awards, jointly supervised with The National Archives (2) and The Wellcome Library (1); a UCL Impact Studentship (funded by UCL and industry) with British Library and National Library of Wales; a studentship funded by the Worshipful Company of Stationers. We have also co-supervised 3 EPSRC-funded Eng-D studentships.

Often, external speakers and work placement hosts are departmental alumni. In 2012 we instituted an annual summer **event for alumni and professional colleagues**, to maintain existing relationships and develop new collaborations with non-academic partners; each attracts over 100 participants. Staff also engage with industry and practitioners by **running and contributing to professional and community conferences**, such as ISKO, IFLA, Digital Humanities, Online, Umbrella, Museum Next, IRMS and Community Archives. We have capitalised on the support offered by UCL Enterprise to extend the range and reach of our contributions to industry through consultancy to organisations such as Europeana, The Wellcome Trust, The British Library, Office of National Statistics, International Records Management Trust, CUP and other publishers.

## Impact template (REF3a)

**Providing forums for academic-professional discussion:** Since 2009 the UCL Centre for Digital Humanities has run a programme of **knowledge exchange events** - including invited seminars and lectures - to facilitate interaction with digital humanities practitioners and professionals in cultural heritage institutions such as the British Museum and British Library. Examples include Digital Excursions, in which UCL staff and students visit a service with specialist digital equipment and expertise; and our discussion group Decoding Digital Humanities London (10-12 events per year, 10-50 attendees). Our archives and records research centre, ICARUS, supports The Cardigan Continuum (founded 2011) which meets monthly in person and on Twitter, for professional/academic discussion; the Archives and Society seminar series (average 10-15 attendees), co-organised with The National Archives, the Wellcome Library and others; and 21<sup>st</sup> Century Curation seminar series (3 events annually 2006-2009, 20-40 attendees) which engaged practitioners and international speakers. The Digital Publishing Forum, co-organised with the Publishers' Association (founded 2011) allows professional publishers, academics and students to share ideas, at around 6 events per year (60 attendees each). These activities enable knowledge exchange between academics, professionals and industry, help us to communicate important research findings beyond academia, and allow us to be responsive to the changing needs and interests of core groups of non-academic research users.

**Sharing expertise with policy-makers:** Our staff make a significant contribution to national and international public policy by transferring specialist expertise to policy-makers, including via **membership of advisory bodies**. For example, Dillon's expert advice to ICANN, facilitated by UCL Enterprise since 2011, informs decisions about assigning new top level internet domain names in languages other than English. Flinn provided advice on diversity and inclusion in archives to the Mayor of London's Heritage Diversity Task Force in 2008-9, and was chair/vice-chair of the Community Archives and Heritage Group. Duke-Williams' work on statistical demography has been used as the basis for important contributions to debates about the future of the UK Census. He submitted evidence to the Public Administration Select Committee (2009) and the Science and Technology Select Committee (2011), and since 2001 has sat on the ONS Census Output working group. Recommendations made in 2007 as a result of research on the use of digital resources for the humanities and cultural heritage now informs digital resource funding choices for JISC and the AHRC (Warwick, Terras).

**Novel methods of public engagement:** Warwick and Terras have employed novel methods to enable public audiences in the UK and beyond to understand and engage with cultural heritage. For example, research on 3D scanning, interactive digital labels, the Internet of Things and social media has been used in **collaborative work** with the Science Museum, British Museum and Imperial War Museums to enhance visitor experience by enabling new modes of interaction with objects. Research on digital crowdsourcing techniques (Terras) and participatory archival and heritage practice (Flinn) allow individuals and community groups to interact with heritage materials, texts and archaeological excavations in ways previously only available to archival professionals and academics. Broughton's work on faceted classification improves web search engines, perhaps the most commonly used digital resource for the general public (see case study UCL36-BRO). Our staff have used the support offered by UCL's **Public Engagement Unit (PEU)**, a Beacon for Public Engagement in projects such as QRator, Our History in Our Hands (Beacon funding, 2009 & 2011) and Dig Where We Stand skills for HLF-funded community groups (2012 & 2013). DIS staff and students have also taken part in PEU activities, including public exhibitions at the UCL Art Museum (Welsh, Word minus Image; Terras, Digital Art, over 100 visitors); the academic stand-up comedy show Bright Club (Bloomsbury and the V&A, Beavan, Canty, Welsh, audiences of 200-350 people); and UCL Lunch hour public lectures (for around 150-200 people, Warwick, Terras, Stevenson, Flinn).

**Engaging and benefitting research users through social media:** The use of social media, which itself underpins some of our research, has been central to our approach to fostering relationships with and delivering benefits to our non-academic research users. We have responded to increasing interest in social media communications among those users, especially in the museums and cultural heritage sector, by promoting our work through both DIS and individual researcher blogs, Twitter and Facebook (Twitter followers @melissaterras: 5155; @uclhdh: 2800; @clhw1 (Warwick): 1970; 7 others over 500; <http://melissaterras.blogspot.co.uk/>: 100,000 readers pa). These provide important new channels to increase awareness of our work, maintain

## Impact template (REF3a)

relationships with current beneficiaries, and forge new research collaborations. We also continue to use more traditional forms of media engagement: Stevenson's research on the history of communication, for example, was presented via the 15-part BBC radio series 'The People's Post', for which he was a consultant (broadcast in 2011: average listening figures, 963,000 per episode).

Success in well-established areas or with long-standing external partners generates new opportunities to deliver benefits to non-academic users and demonstrates the sustainability of our impact. In 2008, for example, we were invited to work with field archaeologists on the Silchester Town Life dig following the dissemination of results of our research on the use of digital resources on the AHRC-funded LAIRAH project (2005-7). Contacts in museums connected to the LinkSphere project in 2010 led to new collaborations with the British Museum, and Grant Museum of Zoology, where work on the QRator project proved the value of its funding from UCL Beacon. Widespread press coverage and personal contacts in museums led to further invitations to work with the Imperial War Museums and Museum of Brands (funded by NESTA Digital R&D fund, and ACE), and have made our work available to wider audience.

### c. Strategy and plans

The activities we have undertaken since 2008 have coalesced into a successful, sustainable model for achieving impact. To ensure the future impact of our work we will maintain close relationships with information and cultural heritage professionals, the publishing industry, and our alumni, and continue to **employ staff with strong links** to, or a background in, professional practice. This will facilitate further knowledge exchange and new collaborative research development. We will continue to **encourage colleagues to serve on advisory bodies** in the information and cultural heritage sectors and to contribute to international standards and governance organisations such as ISO and ICANN. We will maintain, and where possible **increase, our provision of expert advice to policy makers and professional bodies** both nationally and internationally.

We will maintain contact with professional colleagues through **continued participation in and organisation of professionally-orientated conferences**, such as ISKO and Museums and the Web. We will also continue to **make effective use of social media**, particularly Twitter, blogs, crowd sourcing and Internet of Things applications, and of new digital platforms and technologies, as a means to engage the widest possible global audiences with our research, including professionals, industry and the public.

The reach of our research impacts beyond academia will be extended through **further collaboration with UCL PEU and UCL Enterprise**. By 2015, for example, we aim to develop at least two new research collaborations involving the PEU, one on the co-creation of knowledge and research questions by the public, and a second with academic researchers in museums and community archives. We will also apply for two more Collaborative Doctoral or Impact Awards by 2016, to foster industry engagement with doctoral research.

### d. Relationship to case studies

All three case studies demonstrate the importance of **employing staff with previous experience in relevant professions**. Flinn was a practicing archivist, Broughton a senior librarian and Ross (RA on QRator) a museum professional whose previous work in the Geovor Tin Mine Museum was funded by a Knowledge Transfer partnership with another HEI. Their awareness of the priorities, needs and concerns of professional colleagues has driven their research plans, and those of the research teams with which they collaborate. This allows us to ensure that the potential for impact on the public and our professions is at the centre of our research design.

The **use of social media** is vital to the success of the QRator Project and of Transcribe Bentham (UCL36-WAR) as the channel by which engagement between the public and cultural heritage materials is achieved. This case study demonstrates the potential of such channels to create wide societal impact, whether in a physical museum such as Imperial War Museums or globally via the internet, and has informed the emphasis in our future strategy on the use of social media as a means of maintaining our contribution to such external audiences.

The types of relationship underpinning the impacts described in our case studies have been instituted and maintained via DIS's encouragement of and support for staff presenting at professionally-orientated conferences, and **maintaining links with advisory and public policy bodies**. Work on all three case studies has been presented at such conferences, and they have informed public policy and international standards development.