**Educating information management professionals – the Glasgow perspective.**

Michael Moss, Professor of Archival Studies
Humanities Advanced Technology and Information Institute (HATI)
George Service House
11 University Gardens
Glasgow G12 8QQ
Scotland
e-mail: m.moss@hatii.arts.gla.ac.uk

Seamus Ross
Director of Humanities Computing & Information Management
Professor - Humanities Informatics and Digital Curation
HATII
Office: 501
George Service House
11 University Gardens
Glasgow
G12 8QQ
e-mail: s.ross@hatii.arts.gla.ac.uk

**Abstract**

This paper explores the approach to the education of information professionals in the digital environment that has been developed by the Information Management and Preservation (IMP) MSc programme at the University of Glasgow. Using Nancy van House and Stuart Stutton's paper of 1996 as a starting point, we agree that the balance of any programme of study should be tilted firmly towards the professional knowledge base and away from the traditional 'tools and service' model that are inextricably linked to institutions. We explore some of the intellectual issues surrounding digital content that we introduce throughout the course, for example the implications of the audit culture and accompanying management of risk that dominates on either side of the Atlantic in the both the private and public sectors and the ever-present danger of a collapse into relativism. We explain how in achieving this goal we adopt a trans-disciplinary perspective, drawing ideas and perspectives about information from across the disciplines. We argue that students are not only stimulated by such an approach, but grasp its relevance to the 'tools and service' aspects of the course. We are convinced that by giving students a strong grounding in the knowledge base, they are equipped to think strategically and gain respect of management in the work place.

**Acknowledgements**

We would like to thank all our colleagues who deliver the IMP programme of study and our visiting lecturers, but above all we wish to acknowledge the debt we owe to the three successive classes of students in extending our knowledge base and perspectives and giving us the confidence to develop a distinctive approach to LIS education.

Nancy van House and Stuart Sutton wrote a paper on LIS education in 1996 which sets the parameters for developing masters programmes, such as ours at the University of Glasgow (van House and Sutton, 1996). They had two strands to their argument to reverse the sharp decline in LIS programmes and enrolments, as pronounced in the United Kingdom as in the US, ecology theory and the sociological theory of professions of Pierre Bourdieu. Drawing on the thinking of Andrew Delay Abbott, they insisted that 'the tools and service models of a profession are instantiations of its knowledge base designed for specific environments' and need to be replaced as the external environment changes. They wholeheartedly agreed with Abbott that over concentration on tools and service models, characteristic of many LIS programmes, 'leaves the student with no ability to extend the underlying knowledge base to new members'. They developed this perspective by exploring Bourdieu's analysis of the habitus (the matrix of perceptions, appreciation, and actions) of professions. Questioning the continuing close connection between LIS education and libraries whose future is anyway in doubt, they suggested that 'abstraction, reduction, and the creation of new knowledge to address new information problems are necessary fro LIS to adaptive radiation into new areas'. Although we were unaware of this article when we launched our new course in Information Management and Preservation (IMP) at Glasgow three years ago, it mirrored much of our thinking, which has been reinforced by the experience of each years teaching. In the United Kingdom most archival and records management programmes and even many LIS equivalents are closely aligned to a 'tools and service' model and rarely address the knowledge base required to work in an environment increasingly dominated by the digital, where content is problematized by post-modern thinking and issues of governance and where, as van House and Sutton forecast, territory is being contested and often lost to other disciplines, not just information science.

It would be insincere to claim that at the outset we planned to address these challenges, but at least we recognised them. We designed the course to strike a balance between the 'knowledge base' and 'tools and service' with at first a tilt towards the latter. This has changed and the balance has shifted decidedly in the other direction. There are several reasons for this alteration in approach. As a teaching team with a strong trans-disciplinary flavour, we have become more confident about our ability to explore theoretical perspectives and to our surprise we have found students engage with them. I say surprise because in the United Kingdom history, the discipline from which traditionally records and information managers have been drawn, has been resistant to theory and certainly anything that smacks of post-modernism. Archivists and librarians, just as in the US, have become increasingly pre-occupied with service delivery in a managerial culture that has occluded the scholar, who just survives in an academic context and in the national institutions. This tension is evident both in our own programme and amongst our core teaching team. Fortunately within the academy we are helped in the UK by our periodic research assessment exercise (RAE) that requires academic units to contribute actively to the knowledge base and the information professions have come, albeit reluctantly, to recognise this imperative if they wish their discipline to continue to have a place in the curriculum. A high score in the RAE brings with it financial security whereas a low score can presage closure.

The timing of the beginning of our course could not have been more propitious in terms of the external environment. Information and information management issues have dominated the public agenda with high profile issues of the evidence for weapons of mass destruction in the decision to declare war on Iraq, the war on terror following 9/11 (more of a concern in the US than the UK), the introduction of Freedom of Information in

the United Kingdom, the rapidly tightening compliance environment and the corresponding extension of audit to embrace risk management that impacts directly on information. Even as we prepare this contribution, the former head of the UK civil service has roundly attacked the Chancellor of the Exchequer, Gordon Brown, widely tipped to be the next Prime Minister, for his abuse of information – 'There has been an absolute ruthlessness with which Gordon has played the denial of information as an instrument of power' (*Financial Times*, 2007). It would be irresponsible to teach a course in information management that did not directly address these issues, which in any event attracted our research interests. Michael Moss explored the inadequacy of government record keeping in the UK that was revealed when the emails, other correspondence and papers leading up to the declaration of war on Iraq were made public during the Hutton Inquiry into the death of Dr David Kelly, the weapons expert, and extended this analysis more generally in a paper 'Archivist: Friend or Foe' (Moss 2005:1, 2). The concepts of the audit culture enabled by ICT, contingent liability residing in records, risk management and the fiduciary responsibility of the archive are themes that we return to regularly in our research and teaching and draws us firmly into the knowledge base of the information professions and away from their institutional expressions (Power, 1994, Strathern, 2000).

The inauguration of our programme has also coincided with the emergence of Google as the dominant search technology with profound ramifications for established approaches to finding aids and cataloguing, along with utilities that facilitate the formation and substance of web-based communities (Battelle, 2005). Taken together these quickly proved attractive to genealogists', the largest single user group of analogue archives and one of the largest users of the web. These communities, epistemic in character, largely lack the intermediation of the print culture. They have come to assume a more or less cult status with exaggerated claims being made for them within our contemporary culture that resonate with post-modern pre-occupation with the 'other' (*Time Magazine*, 2006). As a phenomena, they present the information professions with challenges that compromise the knowledge base of the print culture and pose questions about the production of knowledge itself. ICT not only enables the audit culture but also its antithesis. Richard Holbrook, the US diplomat, asked 'How can a man in a cave out-communicate the world's leading communications society' (Dunne, 2007). According to Faisal Devji, writing from a post-modern perspective, it is because al-Qaeda is 'a network of contingent relations that has had transformative effects on the West and on traditional structures of Muslim authority' (2005), but 'men in caves' disturbed and even destroyed developed societies long before the invention of the internet. At another level it has given individuals access to information that was previously privileged to a very few who deployed it to maintain their authority. This feature of what was private being made accessible and public is most pronounced in blogs. These developments in modes of communicating information have excited interest in many disciplines, often not previously considered to be in any sense engaged with the information sciences, such as sociology, ethnography and anthropology.

Of most relevance to the information science knowledge base has been the work of the distinguished Swiss sociologist Helga Nowotny in articulating the changing power relations that are encouraged by easy access across the internet to information that was previously privileged. Helga Nowotny, who chairs the European Research Advisory Board of the European Commission, was able to observe that:

> The unprecedented level of education in our societies, the pervasiveness of modern information and communication technology, the realization that the

> production of uncertainty is an inherent feature of the co-evolutionary process mean that Society is moving into a position where it is increasingly able to communicate its wishes, desires and fears to Science.

These conjunctions, she argues, are transforming the epistemology of the sciences from one based 'on a very clear separation of science from society' (Mode-1) - a one-way communication with science speaking to society - towards one (Mode-2) - in which society is speaking to science as much as science is speaking to society - that 'makes it harder to say where science ends and society begins'. She and her collaborators see the result of this transgression as the opening of 'science to a flow of reverse communications'; 'this is what we meant in Re-Thinking Science, by contextualisation'.

> The single epistemological ideal of a neutral 'view from nowhere' has been replaced by multiple views, with each situated somewhere. The research process can no longer be characterised as an 'objective' investigation of the natural [or social] world, or as a cool and reductionist interrogation of arbitrarily defined 'others'. Instead it has become a dialogic process, an intense [and perhaps endless] 'conversation' between research actors and research subjects ... (Nowotny, 2007).

Charles Leadbetter in his experimental book, *We think: Why mass creativity in the next best thing*, that he has posted to the internet before publication for comment sets this new paradigm in the context of the internet and let his enthusiasm carry him much further:

> Thanks to the relatively low cost of technology many consumers can become producers at least some of the time. Good ideas will come from amateurs as well as professionals. Innovation will not just flow down a pipeline, from experts working in their labs and studios, to passive consumers waiting in the line. Innovation is a social, cumulative and collaborative activity; ideas will flow back up the pipeline from consumers and they will share them amongst themselves. That is why the next big thing will be us: our power to share and develop ideas, without having to rely on formal organisations to do it for us.

If this true and there is some evidence to suggest it is (Strathern, 2004), it represents an epistemological shift for the information sciences and raises important and intellectually exciting questions about the appraisal of internet content from such 'multiple' sites of production, its cataloguing and long term preservation.

Directly related is the ontological status of such content that is more akin to unique manuscripts than to objects in the print culture which by their very nature exist in multiple copies. This is contested territory that leads towards convergence of the curatorial professions in a digital environment, but is resisted by those who wish to preserve the boundaries established in the analogue, perhaps fearful that we must all be 'librarians' now (Carr, 2006). Such resistance precludes serious consideration of the phenomenal characteristics of digital objects, what in the case of archives Sarah Tyacke has called the 'recordness of the record' (Tyacke, 2002). Debate invites comparison with the analogue and opens up avenues into the literature of 'diplomatics' that Luciana Duranti has made very much her own and into the development of the institutional structures that differentiate the curatorial professions. This leads naturally to the exploration of the ways in which knowledge has been organized, privileged and accessed have changed over time, sometimes radically as in Western cultures during the contingency of the

invention of printing and the Reformation and the Enlightenment (Burke, 2002, Headrick, 2000). By taking a long review it becomes possible to set the so-called contemporary 'information revolution' in context and discuss what if any features live up to such descriptions. Deconstruction of the digital allows the information professions to contribute their experience built up over hundreds of years of managing information in the analogue and cautioning that concepts that are assumed to be features of 'new' technologies can equally well be applied to old technologies. Selection of content for preservation, for example, is not new, neither are the problems associated with cataloguing terms that must inevitably be to some extent socially constructed.

These are some of the contexts in which we believe the education of information management professionals at the beginning of the twenty-first century must be set. Because they focus on the knowledge base and strategic concerns of the profession, they are intellectually exciting and what is interesting chime with much of the innate understanding of the digital environment our students inhabit. This year for the first time we started the session with an open ground debate with the question 'The text - what stops this Space from being effective?' With little preparation or prompting, apart from some who had read David Levy *Scrolling Forward* (2001), we concluded with six priorities: access; context; cultural understanding, subjectivity and interpretation; trust; technology, space and the environment. Few seasoned information campaigners could complain about such an agenda for research. We need to do more to build on such comprehension of the information culture amongst our students that probably reflects their decision to enrol in our programme, but it serves to illustrate that the public knowledge base is much more perceptive and reflective than we might expect. If this is the case, it is not difficult to understand why many students might fail to engage with LIS programmes that are dominated by a 'tools and service' approach that is inextricably linked to institutions. From the moment our students engage with us we emphasize that the critique of information has a very long pedigree that extends back far beyond post-modern pre-occupations and indeed informs them. Over three years our understanding of the centrality of information and information flows across the human and physical sciences has deepened with our interaction with disciplines and search for philosophical and theoretical underpinnings that can help us to interpret what we can observe in the contemporary information environment. In trying to understand, for example, the affirmation of individual identity in much internet content, we have borrowed from the concern of subaltern studies with what Ranajit Guha calls 'The Small Voices of History' 'that are otherwise drowned in the cacophony of statist commands'. Practitioners claim that: 'Nothing – not elite practices, state policies, academic disciplines, literary texts, archival sources, language - was exempt from the effect of subalternity' (Bhadra, 1999). We have used the cultural theorist Homi Bhaba's ideas of 'hybrid' histories to explain the pre-occupation with family histories and its relation to the whole (Bhaba, 1994).

Both these examples reflect the most difficult and intractable problems surrounding internet content that no information science programme can avoid – the ever present danger of a collapse into relativism or meaningless collectivism (Larnier, 2006). Neither of these problems is new, but they are writ large on the internet. Given that, however tempting, there is no retreat into a positivist past, students need to understand the characteristics of a relativist outlook, how it meshes with a post-modern perspective that embraces the 'other', and its impact on our information environment that is constrained at a corporate level by the audit culture where only the information the auditors need is either collected or retained. These are complex iterations that may seem a long way from a 'tools and service' modality, but are remarkably germane to it. Richard Cox

agonises about the role of the information professional working within a corporate setting 'What intrigues me is how the individual functioning as an archivist or records manager can work in the corporate environment in any realistic way, adhering to any sense of professional ethics or mission' (Cox, 2005). This ethical challenge does not simply apply to archivists but to all employees and only the brave or the foolhardy risk disclosure or whistle blowing. If this is the case then the exaptive or loose ends to be found in blogs and other internet content become vital records from a cultural or historical perspective. And yet these are just the records that embody the relativist trap; the blogs from servicemen in Iraq are an excellent example. From a different perspective much the same applies to the war of words about Wikipedia. There are those, such as John Larnier, who dismiss it and its approach out of hand as the meaningless wisdom of crowds, while others who have studied the behaviour of contributors are more positive (Viégas, 2006). Susan Bryant and her colleagues found for example that 'For experts or Wikipedians, the Wikipedia as whole becomes more important than any single article or set of articles. . . In the move from novice to Wikipedian, goals broaden to include growing the community itself and improving the overall quality and character of the site' (Bryant, 2005). Far from rejecting such challenging concepts and perspectives as irrelevant, our students, not only embrace them, but also develop them through their own reading and explorations.

This grounding in theory drawn widely from across the disciplines equips students to approach the 'tools and service' elements within the course much more critically and with a mind set that will stimulate exciting and innovative questions in their dissertations. It gives them the skills and confidence to think strategically when they enter the workplace and the flexibility to find employment is different parts of the information economy and to move into analogous areas, such as risk management or the fields of arts and the heritage. The content and structure of the course will continue to develop and change in response to student demand (already we are receiving applications from those who only wish to work digitally) and to the growing body of literature and our own research interests and pre-occupations. So far we have achieved our goal of making information management and preservation intellectually challenging (it makes our heads hurt) by extending our knowledge base through interaction with our students. We have on the whole ceased to be a 'sage on a stage' to being 'a guide on the side' in our virtual learning environment (Beaudoin, 2006). It has been a stimulating and productive experience. Testimony to our success is a steady stream of students who wish to pursue doctoral studies at a time when most LIS programmes in the UK report the reverse. In looking to the future, we are convinced that for the discipline to develop, given the small numbers in most schools, there needs to be much greater international collaboration in the classroom that can now be achieved with the help of ICT. This session we have started a weekly seminar with Chapelhill, which UCLA and the University Maryland will join next year. We are associates of the ambitious Interfaculty Initiative on Information in the University of Tokyo with which we also hope to begin joint seminars

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