



More Information, smarter Society?

COLICO Lecture 2010 delivered by Brian Trench, School of Communications, Dublin City University, at the Annual Joint Conference of the Library Association of Ireland and CILIP at The Maldron Hotel Dublin on 23rd April 2010.

For nearly two decades now, we have been shunting notions of information and knowledge together with society and economy, reflecting a conviction that the rapid development and pervasive use of information and communications technologies were affecting the basic social fabric. As information workers, you as librarians and I as a former journalist and now a teacher, specifically in communications, have been at the centre of the often confusing but also challenging debate around these notions.

As more and more information of more and more types from more and more sources becomes directly available to more and more citizens in more and more media, clearly our traditional roles as gatekeepers, guardians and curators are no longer as important as they were. Many people find what they need, or believe they need, without our assistance. Most of what I want to say further concerns a reflection on the needs of information users and on the redefinition of the professional roles of information professionals. But, first, a few remarks on the wider context.

In Ireland, the discussion of information and knowledge in social contexts has run on very narrow paths. Very frequently, policy-making and public debate on what was called the 'information society' was reduced to matters of telecommunications networks, implementation of ICTs in enterprises, and business opportunities in information services and technologies. The social and even more the cultural dimensions of information society were always under-developed. The shift in terminology to knowledge society appeared to move the emphasis to learning, reflection and investigation. But, if anything, this phase of the public and policy discussion was even more resolutely focused on the economic dimension.

In my own research on public discourses of the knowledge society I have noted the strong emphasis on competitiveness, technology and enterprises and found that references to knowledge economy

or knowledge-based economy greatly outnumber those to knowledge society. This is not the case, at least not the same degree, in many other EU countries. Until the economy itself came to be an object of critical scrutiny, because of the evident failure of central policies, the 'knowledge economy' was very little questioned as a central plank of public policy, or even unpicked to figure out what exactly it meant. There are still plenty of examples of conflation of information and knowledge, where both really seem to stand for data; the Knowledge Society Strategy of the Department of Energy, Communications and Natural Resources is, in fact, about development of higher-capacity data networks. This is undoubtedly an important issue, not least for the functioning of libraries, media companies and higher education institutions, but hardly one that is appropriately labelled as representing knowledge society. How we name things of this kind, how we frame them, how we talk about them are important matters.

In the present phase, the guiding idea of policy-making is the smart economy. And perhaps it was a smart move in itself to adopt a smaller, more flexible word. But, internationally as well as in Ireland, we are trying to make this five-letter word stand for a great many things, from cards with chips, to strategic planning with specific and measurable goals, to software for managing information resources, to tagging books with radio frequency IDs, and even to labelling libraries and economies as fit for purpose in the 21st century. So, why shouldn't I ask as I do in my title whether there is a relationship between the amount of information available and the smartness of a society? If a society can be smart, then it can be smarter, but this exercise merely draws attention to the risks of such verbal stretching.

In the present phase of the smart economy, public discourse on these matters remains predominantly economic and technocratic. You have to dig deep in the formal statements of policy to find references to the contributions of knowledge other than the knowledge that can be turned into innovation. Sometimes the single reference to arts, humanities or social sciences reads as an add-on. You have to dig deep to find the few references there are to learning and other cultural institutions as spreading various kinds of knowledge and building various kinds of capacity, including those of analysis, critique and creativity.

The emphasis of public policy on the content of education is on promoting mathematical skills and the uptake of science and engineering courses and this is supported by reference to the demands of international high-tech companies. In this context, the examples given of successful information-based enterprises with a stake in Ireland frequently refer to Google. Yet Google's most senior representative in Ireland has several times said the kinds of graduates they seek are more likely to come from humanities and social sciences, and have well-developed critical and creative capacity. Google's offices in Dublin with their colourful decor and multi-lingual atmosphere look much more like the creative space of a design studio or a publishing house than that of a science lab or engineering workshop.

I make these remarks not in order to re-ignite a tired debate about the two cultures of sciences and humanities. As someone who has specialised for 15 years in science communication, I have a strong interest in interdisciplinary collaboration, more than that, a conviction that the big issues – or 'grand

challenges', as they are often called – that face national and global communities at the present time require high levels of co-operation between knowledge professionals of various kinds. It is precisely with that bigger picture in mind that I lament the narrow range of so much of the public and policy discourse around information and knowledge. Also with that bigger picture in mind I believe we can successfully redefine and resituate the work of information workers to enhance their relevance and role.

Journalists have not on the whole adapted well to the changes in their environment. The established professionals tend to be sceptical about notions of citizen journalism, or about blogs as vehicles of journalism, or about other social media as sources of valid and useful information. The boundaries of journalism are being blurred, the distinction between journalism and non-journalism is becoming ever more difficult to make. Many media users are also media producers and those that don't actively produce still have the means to access information from sources other than those controlled by journalists.

Journalists are no longer the indispensable intermediaries they may once have been but the majority in the profession cling very largely to established professional values and unchanging role-definitions. They respond reluctantly to demands that they should work simultaneously on various media platforms and engage minimally with the interactivity that media technologies facilitate. There are notable practitioners of new modes of journalism and there are active advocates for rethinking journalism, though the more shrill they are, the less effective they may be.

Teachers in schools and universities are also slow to adapt, sometimes only doing so when a crisis forces them to respond. And we are undoubtedly facing a crisis in respect of plagiarism in higher education, perhaps also in second-level education. While there may be many economic, psychological and other social factors driving learners to take such short-cuts, the ready availability through the internet of 'answers' to just about any conceivable question presents the temptation right there at the finger-tips on the desk top.

I had a recent experience of how a laptop in class can be used. I had set first-year students an exercise in vocabulary, giving them a dozen words which they were required to write into phrases to show they understood their meaning and use. It was informal, unassessed, they worked in pairs, I had not specified they should not use reference sources and one of the returned hand-written sheets contained a sentence so perfectly constructed that it stood out. It took me seconds to find its source – Wikipedia. When I reported this to the class the following week, I had the distinct impression that many in the class half-admired the 'cheaters' for their cheek. Tackling plagiarism requires cultural change; it is not amenable to a technical or organisational fix. A ban on using Wikipedia is likely to be counter-productive and is, in any case, depriving learners of a frequently valuable resource; the emphasis has to be on training people in its use.

Providing this first-year course is part of a still-inadequate adaptation to the changing information environment. It also involves the library at DCU where staff have been redefining their roles over the best part of a decade. They have stepped out from behind their desks to engage actively with library-users, training them and guiding them in the use of the ever-more diverse and numerous

information sources at their disposal. To support this new emphasis, the library has developed an online information skills tutorial, LETS. For some of the first-year students, this has all been a revelation. I asked them to write a reflective account of their first semester's learning experience and these have included remarks like these:

I have also learnt the library is an invaluable source of knowledge. I use it for academic research, as a quiet place to work and for Internet and computer access. Before university I dismissed libraries but now I am aware of their endless uses.

It was very helpful to attend information sessions on subjects such as how to make the best use of the library, this helped me to feel less overwhelmed when dealing with the vast resources available at DCU, and the library is now a place where I can work easily rather than the confusing place I had first viewed it to be.

The library has proved to be the most helpful place for me on campus, providing a great source for information and a wonderful learning environment. The library online tutorial 'LETS' also allows you to learn how to sift through the masses of information available in order to find the most relevant to your chosen subject. I had expected a huge building filled with masses and masses of reading material, however the library here on campus has much more to offer

From the very start of semester one I discovered that the library was an invaluable resource for material that could help me greatly throughout my college life. I have used the library continually for help and guidance when working on projects or essays.

One site that helped me immensely was the library's LETS tutorial. It was so easy to use and I found the advice invaluable. The "lets find" section was particularly helpful, and I learned a great deal about sourcing material. It helped me to get to grips with finding articles in academic journals and using the databases to do relevant and effective searches ... Testing my knowledge at the end of each LETS section allowed me to see exactly what I had learned and gave me confidence that I could improve my research and my assignments.

These testimonials, which I am willing to accept as largely authentic, say something not only about the role of librarians – offering guidance and help both face-to-face and online – but also about the physical space of the library. A century ago, hundreds of public libraries were being built in Britain, Ireland and the United States with the financial support of Andrew Carnegie. One of the requirements of a Carnegie library was that the librarians' desk should be centrally placed in the library and easily accessible. Sometime we can find the inspiration or support for redefining working roles in much earlier discussions of innovation and change.

Carnegie supported the development of functional and social literacy in the late 19th and early 20th centuries. Now, we are required to think again of new and various kinds of literacy. The course on which I and my librarian colleagues collaborate concerns in part the development of learners' information literacy. This has been variously defined, including by a subject expert Christine Bruce of Queensland University of Technology in these terms:

The ability to access, evaluate, organise and use information in order to learn, problem-solve, make decisions in formal and informal learning contexts, at work, at home and in educational settings.

Referring to students, she goes beyond functional effectiveness:

The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.

Librarians internationally have been active advocates of programmes to promote information literacy. In a meeting supported by Unesco, the US National Commission on Libraries and Information Sciences and the International Federation of Library Associations and Institutions, it was declared:

Information Literacy empowers people in all walks of life to seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goals. It is a basic human right in a digital world and promotes social inclusion of all nations.

Information Literacy extends beyond current technologies to encompass learning, critical thinking and interpretative skills across professional boundaries and empowers individuals and communities.

Combining these two sets of quoted definitions you will note that ethical, legal, social and philosophical issues and competence are all involved. The programme we need has to be ambitious and broad in scope. With the emphasis restated, we can reintegrate the technological dimension, that is, the awareness of by what means, under whose auspices, with what resources, for whose intended benefit, new information platforms are developed and what shape they may take in the future. Because there is more at stake than the information itself but who generated it and how it is disseminated it appears appropriate to recast literacy as plural, thus literacies, and as concerning the means of delivery, thus media.

A project at University of Southern California and MIT advocates the development of 'new media literacies' in the context of an increasingly participatory culture that is itself facilitated and driven by the development of information and communication technologies. Among the skills the project researchers identify as necessary to function effectively in the new media environment are those of judgement, negotiation, appropriation, navigation and play, or experiment. (Play, but for serious even commercial purposes, is what goes on in Google's Dublin offices.)

Henry Jenkins, who leads the USC-MIT project has written that the new literacies "almost all involve social skills developed through collaboration and networking". Among the things students need to know, he argues, are how to make sense of scientific visualisations; to grasp what kinds of information are being conveyed by various systems of representation; to understand the relations between different media systems; to navigate across social communities. But he also says that some traditional research skills "assume even greater importance as students venture beyond collections that have been screened by librarians and into the more open space of the web".

A report prepared in 2007 by researchers in DCU and DIT chose the term Critical Media Literacy to encompass the critical assessment of information from various sources and competence in understanding how various kinds of media content are produced. That report was focused on the need for change at second level, with the support of external stakeholders in statutory agencies and media, to incorporate such learning into the curriculum.

Amalgamating these several, compatible proposals we can set out the pillars of a programme for which information professionals need to come out from behind the desks and down from the stage to promote among learners and citizens the capacity to

- frame questions in a way that is likely to yield meaningful answers and to assess critically the relevance of those questions
- find, critically evaluate, select and summarise information on such questions
- identify the various kinds of sources from which relevant information is likely to come, and critically assess the status of sources from which collected information has come
- understand the various kinds of information media, their roles, origins, ownership and production processes

These are some of the basic elements of what I propose as an agenda for promotion of critical media literacies, in which both media and literacy are plural (and increasing in number), but the guiding competence is critical, representing both an ability to distinguish the valid from the invalid and the awareness that there are always alternatives.

One way for academic librarians to deal with the proliferation of various information sources has been to insist on a standard for valid research information, namely, peer review. But the diversity of media for publication of research has increased recently and some of the newer open-access media publish before, during and without peer review. Indeed, peer review itself is a much researched subject, and increasingly contested as a gold standard. Reflecting the competitive pressures at work in research and higher education, more and more peer-reviewed material is more and more narrowly focused and some of it has been demonstrated to be false or fraudulent. Even here, librarians may be forced to depart from the old certainties of “bounded collections” and focus on equipping learners to make critical judgements for themselves, albeit with reference to peer review as an important part of the production process of some media.

Books too can be seen as media and the role of our public libraries in continuing to stimulate the appetite for books is wholly admirable. As we meet here, the local library in Tallaght is hosting a public interview with author Colum McCann and yesterday hosted a live radio talk show focusing on books. Last night, Michael Murphy was reading and discussing his memoir in Blanchardstown library. And the Dublin City Libraries have developed an annual campaign, One Book, One City. Facilitating information-seekers in accessing many different kinds of source may appear to present the risk that it could drive more people away from books. But encouraging people to think about the validity of information, and the value, including the personal and ethical value, of information, may also

encourage them towards the quiet contemplation of a story or the active engagement with an argument that the book uniquely provides.

The continuing increase in the amount of information available to people is not in itself a threat any more than it is in itself a condition for learners and citizens to be smarter. There is a vast amount of naive and wilful misinformation available in online, printed and broadcast media. That was always true of information media but the misinformation is now more easily accessible and more easily recycled. We all face problems of information overload, but that merely emphasises the need for critical choices to be made on what we access and what we don't at any given time. Whether the current concern is about misinformation or information overload, or a moral panic about social networks and eating disorders, the response is to be found in a programme of developing critical media literacies in and through our schools, colleges, libraries and other cultural institutions.

In this spirit and in reference to your conference theme I dare to propose that public and academic libraries appropriate to the demands of the early 21st century need to be

Shared social and cultural spaces

Multimedia and media-literate spaces

Accessible and adaptable spaces

Relevant and reliable spaces

Training spaces

In other words, they need to be S-M-A-R-T.