



Changing information behaviour: education, research and relationships

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ABSTRACT

The paper reviews the drivers for change in education and learning behaviour for the library and information studies profession as viewed from the perspective of one education provider, the University of Wales, Aberystwyth. Strategies for e-learning, the contemporary employability agenda in the profession, together with an assessment of the impact of new approaches to learning and learning providers on traditional LIS education are all critically evaluated. Finally, an overview of the significance of such trends and changes for the future development of the LIS profession is presented.

Introduction

The development of search engines with simple interfaces has challenged the way in which librarians meet the needs of their customers (Kenney, 2004). Concerns with regard to the behaviour and dominance of Internet search engines, particularly the market leader Google, are well documented and remain unresolved, despite well-publicised attempts to achieve a rapprochement between Google and the information profession (see Buckley Owen, 2006). Moreover, these concerns must be viewed in conjunction with events in the UK, where there have been several instances of universities attempting to dismiss significant numbers of professional librarians (see Broady-Preston, 2006; MacLeod, 2005).

The results of two pilot research projects investigating the contemporary relationship between academic libraries and their user populations in the light of such developments were published in 2006 (Broady-Preston, Felice and Marshall, 2006; Broady-Preston and Felice, 2006). Subsequently, a major research project is being developed in the UK currently, in partnership with SCONUL members, which seeks to test these ideas further. However

...what emerges from the two studies is that there is no one solution to current questions relating to the role and relevance of university librarians in contemporary society...librarians need to embrace positively the challenges of creating and sustaining relationships based on an active partnership with their customers. In doing so, they are moving beyond merely ascertaining need and then providing for such need via relevant services, into a two-way collaborative relationship reliant on purposeful and relevant communications strategies (Broady-Preston, Felice and Marshall, 2006, 442)

The implications of the results of research projects such as these arguably should and do have an impact on education and training for the Library and Information Services (LIS) profession. Moreover, the pressures for change with regard to curriculum content are matched equally by pressures from the various stakeholders in the wider information world for changes in delivery modes, timing and level of qualifications, together with the growing impact of new education and training providers (see Broady-Preston and Preston [in press]). Such pressures for change need to be viewed in conjunction with the reported decline in both recruitment to the profession and the dearth of inspirational leaders (See for example, Brindley, 2006).

Drivers for change

As indicated above, the impetus for change is seemingly emerging from several distinct but interrelated factors originating both from within and outside the information studies profession. Concepts such as employability, moves towards formalising and recognising work-based learning, and Governmental strategic initiatives, particularly in relation to the funding and skills agendas, are proving to be forceful drivers for change in relation to both education of and professional development for the library and information services (LIS) profession. Outlined below is an examination of these drivers as perceived from the perspective of one educator, UWA, as it seeks to position itself to anticipate and meet the needs of a changing profession within a volatile external environment.

Skills agenda and background to the debate

As noted in an earlier paper

the concept that LIS is a profession characterised by rapid change, together with the concomitant necessity to acquire new sets of skills, are ideas which have been addressed by significant numbers of commentators during the last five to six years (Broady-Preston and Preston, [in press])

Moreover, as Missingham notes (2006), the debate surrounding the skills and knowledge individuals require in order to practise effectively in the LIS profession has acquired increasing significance in the 2000s. The specific issues concerned with the future development of professional skills and the stakeholders in this process have been addressed elsewhere recently (see

Broady-Preston and Preston, [in press]). A useful summary of contemporary thinking vis-à-vis the LIS skills/knowledge debate may be found in this recent quotation from a library manager

...we have built on our core competencies and on our experiences and developed into a very valuable 'new breed' equipped to bring the profession to the forefront of the knowledge economy. Web developers and content creators are crying out for the information retrieval skills of the librarian. But our people skills are also in demand. As a profession we are good at liaison and team-working. We have excellent customer-facing skills. We are approachable, flexible and keen to help. The internet is supposed to be user-friendly, but people need significantly more guidance in using electronic resources than they did in using a library of print materials (McGettigan, 2007, 27).

Clearly, however, debates in relation to the skills requirements of specific professions/sectors need to be viewed within a wider national and international context. Funding for and the provision of formal education is traditionally the remit of government, and the governmental agenda will self-evidently impact upon and drive any sector-specific debate. UWA, as a Welsh university must address the strategic imperatives of both the UK Westminster Government and the Welsh Assembly Government, together with those of the wider European framework within which it operates.

Additionally, as outlined in an earlier paper (Broady-Preston and Preston, [in press]), there is significant attention being paid by Government to developing the generic skills of UK graduates in order to increase their employability. This

contemporary focus on the concept of 'employability' stems in the UK from the connection between higher education and the economy, together with governmental pressures to ensure their investment in human capital delivers the appropriate skills in the workforce to enable them to compete in the global knowledge economy (op. cit., citing H.M. Treasury, 2000).

This paper will not revisit the ongoing debate with regard to employability, but rather will attempt to broaden the discussion to include wider UK and European developments with regard to the relationships between traditional formal education and vocational or work-based training. Definitions of employability and an assessment of its relationship to LIS may be found in an earlier paper (op.cit.). However, the discussion below should be viewed in conjunction with the developing generic skills and employability agenda.

Traditional LIS education within the UK is predominantly a formal process, based largely within Higher Education Institutions (HEIs), usually universities. However, as will be seen below, there are indications of greater moves towards developing mechanisms for accrediting and recognising more informal work-based learning (see for example, Roberts, D.H.E., 2006). Moreover, not only are there indications that the profession is moving towards greater flexibility and wider recognition of more informal approaches to

learning as evidenced in the *Framework of Qualifications* (Chartered Institute of Library and Information Professionals, 2007), but additionally, that this is a key strategic aim of the UK government.

Leitch Review: a paradigm shift for HE?

In 2004 the UK government commissioned an independent review under the chairmanship of Lord Leitch with a remit to

identify the UK's optimal skills mix for 2020 to maximise economic growth, productivity and social justice, set out the balance of responsibility for achieving that skills profile and consider the policy framework required to support it. (H.M. Treasury, 2006, para 1)

Popularly known as the Leitch Review, an interim report was produced in December 2005, followed by a final report in December 2006 (*ibid.*). The implications of the report are still being debated; however,

it shows that the UK must urgently raise achievements at all levels of skills and recommends that it commit to becoming a world leader in skills by 2020, benchmarked against the upper quartile of the OECD. This means doubling attainment at most levels of skill. Responsibility for achieving ambitions must be shared between Government, employers and individuals (H.M. Treasury, 2006, para 2).

This latter sentence is key. There is apparent agreement amongst informed commentators that the interim report

establishes a clear link between productivity and higher level workforce education and training (Longhurst, 2007).

More fundamentally, the implications of the Leitch recommendations are that their implementation requires a paradigm shift in UK HE from a supply-led system to a demand-led system (see Tallantyre, 2007; Longhurst, 2007). Thus, universities would be required to become more directly 'engaged' with employers. In place of the current system whereby academics devise degree schemes and offer these to the market, it is posited that programme content would be 'designed in partnership with employers and employer organisations' (Longhurst, 2007). Moreover, the latter would have a greater voice in determining what is taught, by whom and to what level (*cf.* Tallantyre, 2007). Finally, a key recommendation of Leitch Final Report is that Government should

route all public funding for adult vocational skills in England, apart from community learning, through Train to Gain and Learner Accounts by 2010 (H.M. Treasury, 2006, 9).

The above, should it be adopted, would result in the removal of financial support from the formal education sector.

Bologna process: an update

Moves toward a more direct engagement with employers coincide with wider European initiatives. Roberts recently offered an update on progress towards achievement of the aims of the Bologna Process declaration and its impact for UK HE (Roberts, G., 2006). To recap briefly, the Bologna Process began in June 1999 with 29 (now 45) European HE Ministers signing a declaration of intent outlining what had to be achieved in order to create a European Higher Education Area (EHEA) by 2010. The basic aims of Bologna are to establish Europe as a world leader in Higher Education (HE) and, perhaps more significantly in this context, to facilitate mobility and employability amongst the citizens of the signatory countries. As Roberts observes

mobility and employability depend in part, on people in one country being able to understand and recognise the academic and professional qualifications in another (Roberts, G., 2006, 22).

In the seven years since its inception much has been achieved by Bologna, including a radical restructuring of HE delivery in many countries, together with reforms of curricula, approaches to teaching, learning and assessment, and movement towards a more student-centred learning process overall. A core achievement has been the establishment of the 'Dublin Descriptors' which set out the typography of learning outcomes for each of the three cycles of undergraduate and postgraduate qualifications (Bologna, 2004), together with an common framework for recognising and transferring learning credits, ECTS (European Credit Transfer and Accumulation System) (European Commission, 2006)

More recently, it has been suggested that the European Commission's proposals to establish an over-arching European Qualifications Framework for Lifelong Learning (EQF) as part of the Bruges-Copenhagen Process may create confusion (see Roberts, G. 2006). Bruges-Copenhagen has similar aims for vocational education and training as those of Bologna for HE, including identifying and establishing a typography of learning outcomes for eight qualification levels. The potential for confusion arises from the intent of the EQF to include descriptors for levels 6 to 8 to include vocational and technical qualifications which are currently outside HE, as currently, levels 6-8 encompass undergraduate and graduate qualifications (ibid).

This evolving relationship between traditional, formal qualifications and newer vocational work-based approaches to learning forms but one element of a range of broadly based changes in the traditional qualifications landscape.

Economics, demographics and workforce development

The Leitch Review is set within the context of rapid demographic change in the UK. Within the period 2010-2020 a decline in the traditional 17-18 year old university entry population of 20-25% is forecast, and therefore,

concentrating too much on younger age groups could create further long term problems for the amount and the use of high level skills in [the] workforce...new higher education growth should not be 'more of the same', based on traditional three year honours degrees. Rather provision should be based on new types of programme offering specific, job-related skills (Leitch Report, 2006, para 3.56).

Moreover, traditional HE provision normally fails to address issues in relation to lifelong learning, work-based learning and workforce development. Tallantyre offers this definition of workforce development as

learning which accredits or extends the workplace skills and abilities of employees (2007).

In his 2006 review of LIS workforce issues in Wales, Roberts clearly views such learning as constituting a central tenet of strategic workforce and succession planning, viz

the future pattern of training and continuing professional development should place greater emphasis on training in the workplace and in post (Roberts, D.H.E., 2006, 16)

Moreover, CILIP is currently reviewing proposals for a work-based professional development scheme for minority ethnic groups (known as the Compass Project) and a draft report from consultants Tribal Technology is under review (14 May 2007) (Daines, 2007).

Developments such as the Welsh Review and the Compass Project must also be seen in conjunction with the more fundamental reappraisal of professional qualifications by CILIP as represented by the introduction of the new category of member, the Associate grade (ACLIP) which recognises and accredits experiential or work-based learning (Chartered Institute of Library and Information Professionals, 2007a). Under this scheme, members of the LIS workforce without formal degree-level qualifications may apply for the new qualification, having prepared a portfolio which includes a critical assessment and reflection on their work-based learning and experience. Such candidates may eventually progress towards full Chartered Membership of CILIP without acquiring a degree in any discipline. Prior to this development, the only clear career pathway for paraprofessionals lay in acquiring CILIP accredited degree-level qualifications such as the BSc in Information and Library Studies at Aberystwyth, offered via Distance Learning (DL), allowing entry via an Accreditation of Prior Experiential Learning (APEL) route (University of Wales, Aberystwyth, 2006).

Presently, there are no publicly available data in terms of take-up and completion rates for the ACLIP scheme or a formal qualitative evaluation of its merits and demerits from the perspective of key stakeholders. Nonetheless there is anecdotal evidence that it is proving to be popular with the target market (see Huckle, 2007). However, at time of writing, it is difficult to evaluate the longer term potential of such a qualification as there are no

formal learning outcomes listed for the scheme, thus making it difficult to map onto and place within the wider qualifications landscape of either the UK or Europe, although there may be moves towards developing these in the near future (ibid). Moreover, one obvious potential disbenefit is that the qualification is valid only whilst the holder remains in membership of, and good standing with, CILIP, whereas a degree once obtained, is a permanent lifelong qualification.

Foundation degrees

The establishment of a new qualification, the Foundation degree (FD), designed to be a hybrid qualification, bridging the HE/FE (Further Education) divide at level 4/5 is yet further evidence of Governmental commitment to the workforce development agenda. Established following a ministerial speech in 2000, FDs are designed to be partnerships between FE and HE or between specific employment sectors and HEIs. Since their inception the design has varied, with certain schemes being offered entirely within an HEI. However, the key characteristic of the schemes as a whole is the requirement for work experience, the basic principle being that students combine studies with practical work experience outside HEIs (see Broady-Preston, 2007)

These schemes were meant to address new markets, be demand-led by employers, and to challenge traditional assumptions about curricula – i.e. to be trans-disciplinary (Longhurst, 2007). Clearly this is a challenging agenda to meet. A review of seven years of their inception reveals differing levels of development and success. Firstly, this is not a UK-wide initiative, in that the constituent nations of the UK have devolved responsibility for education, and the provision of and funding for FDs differs markedly in England, Scotland, Wales and Northern Ireland. Thus

Foundation Degrees are not awarded by Scotland's colleges and universities as Higher Nationals continue to be the preferred vocational qualification at this level (Ramsden, 2007, 2)

In Wales, whilst Foundation Degrees are available, there has been and remains, no Government funding for this initiative from the Welsh Assembly Government, whereas the Westminster Government has provided significant levels of funding for England (see Broady-Preston, 2007; Longhurst, 2007; Ramsden, 2007). Currently, there are no FDs as such in LIS offered by Welsh institutions, although Coleg Llandrillo recently announced plans to begin offering one such scheme from September 2008 (Coleg Llandrillo, 2007.) .Moreover, the BSc DL degree offered by the Department of Information Studies (DIS) UWA addresses the needs of this same market, but, as students graduate with Honours degrees, is therefore a level 6 qualification as opposed to one at level 4/5 and is thus arguably a “better” product.

Furthermore, there is evidence that not all schemes either reflect demand from employers or that universities are prepared to change their traditional culture and delivery mechanisms in order to meet these challenges effectively. A March 2007 Council for Industry and Higher Education (CIHE) review of the evidence on employer demand concluded that

It is difficult to obtain an accurate picture of the extent of employer demand for Level 4 learning and of the consequent financial benefits to HEIs and FECs in providing this level of provision. It is not possible to draw valid conclusions by marrying up... financial data on CPD with employer payment of fees for degrees, Foundation Degrees, HNDs, etc, to give a holistic view of HEI provision to employees, as these appear to lack any internal consistency. There is a general consensus emerging from surveys that employers are providing more training and funding more of this but the nature of this activity is often unclear (King, 2007, 26).

Layer observes, for example, that

the challenge is to change the curriculum so that its meets the needs of learners, not to change the learner so that they [sic] meet the needs of the university (2005, 3)

Watson and Bowden assert

foundation degrees will fail if they are heavily promoted as a system-wide supply-side recipe for growth (2005, 45)

In the LIS field there appears little evidence of employer-demand for such schemes thus far, if judged by the criterion of bodies seeking formal accreditation from the professional association for such degrees. There is only one scheme being evaluated currently by the Accreditation Board of CILIP and there are no schemes in existence to date which are formally accredited and recognised by this body (see Huckle, 2007; Chartered Institute of Library and Information Professionals, 2007).

Sector Skills Councils

Key stakeholders in the changing qualifications landscape are the Sector Skills Councils (SSCs). Established and funded by government, SSCs are “the strategic voice of employers in the lifelong learning sector across the UK” (Roberts, D.H.E., 2006, 3). This UK-wide remit is somewhat unusual in the contemporary UK education and qualifications arena as demonstrated earlier. However, as King suggests

the emergence of Sector Skills Councils and Sector Skills Agreements creates an opportunity to address many of these [workforce development] issues. The SSAs aim to get “the right people with the right skills in the right place at the right time.” Many SSAs have begun to look in detail at the need for Level 4 training and how this can be provided. Taken together with the work of the Regional Skills Partnerships and the HEFCE Train to Gain pilots, these documents are likely to drive forward the changes in English skills policies signalled by Leitch (2007,26).

The SSC for the LIS profession is Lifelong Learning UK (LLUK). Currently, this body is undergoing a review of the vocational qualifications framework and standards for the libraries, archives and information services workforce, the background to which is outlined in an earlier paper (See Broady-Preston and Preston [in press]). Developments for 2007 include LLUK taking forward its work on devising new National Occupational Standards and new vocational qualifications for the libraries, archives and information services workforce, and a further round of open consultation events on the standards are to take place during late April - early June 2007 (Ramsden, 2007). A February 2007 update on progress is available with the stated aim of completing the consultation and review process during the summer of 2007, with the new standards and associated documentation to be submitted to the National Occupational Standards Board in September 2007 (ibid).

Thus, LLUK would appear poised to act as a mechanism for bringing together the various stakeholders in workforce development in the LIS sector, with Ramsden observing

as the national voice of employers on workforce development issues, Lifelong Learning UK remains committed to initiating a discussion with existing and potential providers, and the professional bodies, to agree a model of what foundation degrees in our sector should look like, how they should relate to the new National Occupational Standards and the body of professional knowledge, and how employers can be involved in their development (2007,2).

This claim of LLUK that it is the natural facilitator of workforce development for LIS is further reinforced by the 2006 Memorandum of Understanding between CILIP and LLUK, viewed by the Chief Executive of LLUK as

an opportunity both to foster the career development of existing staff but also to create opportunities that will attract growing numbers of high-calibre new entrants. The role of LLUK is to work with our employers across the four countries of the UK and the professional bodies such as CILIP to develop a top quality workforce, meeting both individual needs and those of the wider economy (Hunter, D, quoted in Broady-Preston and Preston [in press]).

Implications for HE institutions and the learning agenda

These attempts to broaden the remit of UK HE must also be viewed in conjunction with evidence of pressures upon the existing system. Whilst it is beyond the scope of this paper to explore such issues in depth, it is interesting to note recent reported research findings claiming that two thirds of UK HE institutions have student: staff ratios above the international average, viz:

analysis of statistics from the Higher Education Statistics Agency (HESA) by UCU reveal[s] an average of 16.8 students per member of teaching staff in the UK in 2005/6. The most recent Organisation for

Economic Co-operation and Development (OECD) statistics showed an international average of just 15.5 students per staff member (UCU, 2007).

In January 2007 one assessment of **general** progress towards attaining the Bologna goals amongst the signatory countries concluded that

the HE structures of the majority of the now 45 European countries signed up to Bologna, have the three-cycle system in place or are working towards this goal, including Germany, France, Italy and Scandinavia. In contrast, the UK hasn't witnessed the same commitment from Government to endorse the Bologna Process. (Roberts, 2007, para 8).

Thus there would appear to be a distinction between rhetoric and reality with regard to the UK Governmental education and workforce development agenda. Furthermore, whilst HEIs appear to be under pressure to conform to Governmental policies and to expand and develop in hitherto unknown areas, support for such strategic change would appear limited.

Blended learning and e-learning

If UK HEIs are to embrace new partnerships and new relationships with employers, sector skills councils and professional associations, then implicit in all the above discussions is a need for changes to delivery modes in learning and teaching. Work-based learning, embracing demographic change, including that of realising a goal of planning for lifelong learning for an increasingly ageing or 'greying' workforce would appear to suggest that a fundamental reassessment not only of curricula, but also of delivery methods is required. This reassessment needs to go beyond merely offering degree schemes via a variety of modes of study – i.e. Full Time (FT), Part Time (PT) or DL, requiring a fundamental rethinking of approaches to learning, and perhaps more significantly, accessibility to learning materials.

As Allen suggests, the concept of blended learning is now widely accepted, defining this as

a structured learning process that involves a mixture of learning and teaching activities, including e-learning and face-to-face or telephone contact (Allen, 2007, 26)

The distinction between the two concepts of 'blended learning' and 'blended e-learning' is not altogether transparent, either within the Allen paper, nor within the HEA commissioned report which she critiques (see Allen, 2007; Sharpe et al, 2006). However, what emerges from studies such as these is that students

don't use e-learning modules, unless prompted by their tutors. Instead they use their own technologies, and discussion boards, to talk to

peers about their course. Mobile phones are used for other discussions (“Social... 2007, 17)

This review of the first phase of a JISC (Joint Information Systems Committee) funded research project (2007), further concludes that

Recognition of the social networking element in e-learning is leading to a shift in emphasis by course developers, focusing on the learner. Technical development in universities will need to concentrate on the new area of personalisation, rather than mass education. Staff will need to get more involved with curriculum design – active, contributory, blended and face-to-face. Social networking skills of the skype, podcast, webcase, MySpace/YouTube variety need developing, as well as online communication, effective information retrieval and evaluation, and promoting dialogue with students.

Educators are concerned about the future of virtual learning environments (VLEs), if students prefer e-portfolios...Another concern was the student response to expectations that they should collaborate more and more with people they do not know (ibid).

Such changes need to be seen within the context of other related HEA e-learning developments including a UK wide review of their e-learning benchmarking programme. This exercise will evaluate the role of e-learning in universities’ planning and strategic processes, following the internationally-recognised standard – the E-learning Maturity Model (eMM) amongst a sample of UK universities, including UWA, in the period May-December 2007 (Wright, 2007).

JISC, amongst others, has funded the development of re-usable learning objects to facilitate work-based learning, one such project being SURF WBL-Way, a project based in Staffordshire, England which aims to

make it easy to support and deliver work based learning... The project also aims to create a community of providers, mentors and learners, and [is] hoping to address the problems with employer engagement. The project also aims to support the development of Foundation Degrees and learners progression...interviewing providers of Foundation Degrees, employers and mentors to identify their individual needs. They are then going to use tools such as portals, repositories and forums to create a personalised gateway to information (Corfield, 2006, para1; paras 5-6).

Where are we now?

In relation to LIS education, a 2005 survey of the 2004 European Union applicant states concluded that

LIS schools have generally changed their curriculum towards those of modern LIS schools and have also embraced the EU outlines

regarding higher education, especially the Bologna Declaration (Juznic and Badovinac, 2005, 173)

Thus, in terms of the curricula, there may indeed, be a degree of uniformity amongst the European LIS educators. Moreover, this same survey further concluded that the concept of learning outcomes and the three cycle system have been adopted and are largely in place within Europe (ibid.). That such developments are facilitating new relationships and partnerships is exemplified by the new degree programme offered jointly by three European Universities (Tallinn, Palma and Oslo) under the terms of the Socrates Erasmus-Mundus scheme (see Unesco, 2007).

In Aberystwyth, DIS UWA has a long history of anticipating and meeting new market needs, pioneering DL provision in the UK, having begun offering such degrees twenty-one years ago in 1986. Currently, as a Department within UWA, we are participating in the eMM review and are evaluating our present e-learning platforms and provision, in particular the nature of learning support given to both FT and DL students, in recognition of changes in student learning and information behaviour. Partnerships with other providers is a further avenue being explored, as are mechanisms for accrediting forms of work-based learning, as advocated in the Roberts review (2006), and the means by which we may build upon such learning and incorporate this into our own product offerings. Thus we are exploring new relationships with the professional body, CILIP, and with the LIS workforce as represented by LLUK, together with colleagues in other sectors.

Conclusion

The key challenge for departments such as ours lies in navigating a relevant path through the complexities of a rapidly evolving and volatile external environment. What is obvious from a review and assessment such as this is that increasingly LIS educators will become more diverse; it is now questionable whether Departments such as ours can meet all of the education and training needs of all the profession simultaneously without a significant increase in the resource and funding base. In the UK, this is unlikely to occur, and realistically, LIS educators will be in the not uncommon position of being required to do more with less.

However, what does emerge from the discussions above is that we do have opportunities to rethink and redesign our offerings; to align formal education more closely with the needs of a professional workforce, itself facing radical challenges and change as it seeks to adapt to similar economic and demographic changes. There have been concerns expressed previously at the lack of responsiveness seemingly exhibited by educators to the needs of the profession. What is evident from a review such as this is that new relationships and partnerships will be crucial to both educators and the profession surviving into the long term future. Thus we need to explore new ways of working together, recognising respective roles and relationships and investigating means of supporting and encouraging learning in a professional context, building on and acknowledging the strengths of each other.

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