

# The Future for Library Science Education

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This article analyses characteristics of the information profession with suggestions as to which characteristics are likely to remain significant in the future. It focuses on professional values, professional parameters and the impact of information technology. The author concludes with a discussion

of possible changes to the education of librarians based upon this analysis. He also suggests how educators need to view the future of the profession in order to introduce the necessary changes to educational programmes gradually but consistently.

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## Introduction

Lord Shaftesbury said that to predict the future one must have a sound grasp of the past. That is, in order to forecast what *might* happen, we need to know very clearly what *has* happened. It is also likely that, by taking an historical perspective, we will come to the conclusion that the more things change, the more they stay the same – and I suspect that this is really what Shaftesbury had in mind. Certainly in librarianship it appears that, in some aspects of our profession, the keywords change far more than the underlying concepts. Yet in other aspects change is significant and radical, and one cannot possibly predict what will happen. As Buckland says, “although the purpose is to depict the future as it seems likely to be, such prediction is rash and a probable source of embarrassment if, in later years, anyone bothers to review the foolhardy predictions of 1986” (Buckland 1986, 779).

If that was true in 1986, how much truer is it in 1999? One is likely to fail in predicting for one of two reasons – for failing to foresee a significant breakthrough in information technology, or for failing to see that events will turn full circle much

faster than even the most ardent traditionalist might hope for.

In my own field of specialisation, collection management, the current battle cry is ‘access rather than assets’ (the National Library of Australia translates this as ‘Distributed National Collection’), and we are finding that the Internet, for example, has massive potential in the access component of collection management. Five years ago we did not think of the Internet as a collection management tool, and five years from now Internet may well be serving a variety of additional uses not yet considered – but note that the functions are not changing, only the tools are. The more things change, the more they stay the same.

And some things do not change at all. Buckland, when asked in 1986 to consider our profession in the next century, looked at what had been happening 100 years earlier. He found that the *Library Journal* had published articles on copyright, public access to government documents, preservation and conservation, cooperative arrangements, and improved subject access. That was 1886; today the professional literature includes articles on copyright, access to government documents, on preservation, on co-

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ing such decisions. The techniques belong to the other two categories. While the techniques need to change dramatically in order to fulfil our values more effectively, the values themselves, I believe, should change very little. For example, we all recognise that there is a fine line between what is acceptable and unacceptable in the content of library collections, and we have professional standards with regard to censorship. But the standards change, the fine line moves, as society's standards change. So the specific items that we might exclude from a collection today or in two decades will undoubtedly change, but the principles behind such exclusion will not.

Let me highlight two interrelated professional values that will be most significant in defining who we are in light of changes most likely to occur in coming decades. These are accountability and personal orientation – really values that define any profession and us as librarians. These are the values that the more reflective practitioners regard as the keys to our identity and our success in society. Our professionalism is a state of mind, an attitude, as well as an application. Ours is a client-oriented profession, and without clients we have no purpose. Therefore, we must orient our services towards the client and must seek to demystify instead of confuse.

#### *Accountability*

Accountability is a value that is increasingly significant because there is less money available for information services than in the past, and funds must be divided among increasingly costly functions (higher salaries, higher costs of technology, and higher costs of information resources). How information professionals shepherd their resources is a growing concern, and this means that we must be better at many aspects of our work including:

- Marketing
- Promotion and distribution of services
- Planning, including financial planning and control
- Rationalisation and resource-sharing
- Performance evaluation

All of this comes down to attitudes and approaches. We need professionals who are self-confident, who have the conviction to argue a

case for information products and services effectively and who can communicate more than adequately. Accountability is not a matter of tugging the forelock but of what one might call more aggressive stewardship – something more notable by its absence than its effectiveness. Accountability is a matter of attitude and approach, and it always has been; this was formally recognised in the mid-1980s by the Library Association (Transbinary Group 1986, 16). Management, promotion, and communication are the keywords here. Librarians have always been held accountable in these areas, but how we exhibit or exercise accountability is changing rapidly.

#### *Personal orientation*

Librarianship has always been a people-oriented profession, despite the enduring stereotype that suggests otherwise. In the past we may not have been known for success in this area, but it has been primary nevertheless. Today, as technology influences information processes even more, this personal orientation is increasingly significant, in part to counter the remarkably impersonal approach of computer science and computer applications. For example, most computer science departments present computing primarily from a technological perspective, and students are often attracted to computing as a discipline and a career because interaction with computers is a substitute for interpersonal interaction (Shaw 1994). Thus our personal orientation has a role in reducing this technical and anti-personal focus of much information technology.

The services we provide must continue to be appropriate to the situation, and this means always putting the client, the person, first.

Technology is not always an appropriate solution. In modern information practice we must assess our responses and make sure they empower the client(s), not suffocate them. Within the information community we must be careful not to equate technology with progress (Welch 1992, 47).

How information professionals relate to people is a key concern, and this means that we must concentrate on the human interface of our work:

- Client relations
- Staff relations

- Complaint handling and conflict resolution
- Information packaging
- Information services
- User-friendly technology

Here one might suggest the need for professionals with a clear ideological bias that puts the individual, the personal, above the system. Indeed as information workers become less institutionalised and more community based, and as information services become more closely identified with referral, advice and advocacy, the traditional, organisational orientation of the profession will begin to change in favour of close commitment to clients and users. Once more it comes down to attitudes and approaches. We continue to need professionals who put people first, who are confident of themselves as individuals, who have a user-friendly approach to information work, and who recognise that this is a service industry. The key words are people, user-friendly, and service industry.

If I, as an academic, may be permitted a personal example, let's look at how information technology has affected our use of university libraries. Because we have greater access to information technology, we have a greater opportunity and obligation to know (Dennett 1986). If we have an obligation to know, then not knowing becomes a professional failing that is guilt-inducing. Birdsall (1992) suggests that faculty members' guilt about what they do not know is often compounded by their lack of knowledge about how to use the 'opportunities to know' – i.e. the means of finding out what there is to know. Because librarians know how to exploit these opportunities, they constantly remind us that there is no level of excusable ignorance. The question then becomes, how can the faculty accept librarians as partners in the research enterprise when this barrier of guilt exists?

As long as ever-greater amounts of published research and ever-changing information technology continue to generate ever-deeper levels of guilt, there may be no solution to this problem. However, as a start it may be useful to recognise that our efforts to serve faculty more, and to have more of them love us, is a major psychological problem, not a technical one (Birdsall 1992). Personal skills remain a constant

in our profession.

### *Professional parameters*

Unlike professional values, which appear to be largely unchanging, our professional parameters are clearly evolving, but at a sedate pace often unnoticed by busy practitioners. These parameters have to do with our understanding of librarianship and the central issues of professional practice, as well as the boundaries of this practice. There are five key areas encompassed by professional parameters:

- Information retrieval theory (cataloguing, classification, indexing)
- Information gathering behaviour (user studies, bibliometrics, knowledge utilisation)
- Historical studies of books and recorded communication
- Bibliographical control
- The nature and operation of information organisations (Wilson 1984, 389–397)

While there has been development in each of these areas over the years, change has been slow. This is because the central issues (information gathering behaviour, for example) are grounded in complex, obscure aspects of human understanding and behaviour. It is also because the basic principles have already been well refined for us in the past (for example, cataloguing principles) and undergo only refinement today.

We are slowly learning to rely on insights from our sister disciplines in the social sciences (especially psychology, sociology, linguistics, and perhaps artificial intelligence) to show the way for further refinement and understanding. But for the most part their contribution is limited to context and background, and not to central concerns. Take the example of artificial intelligence: it is useful in helping to solve the simpler problems of library service but not in solving the more intractable problems in indexing, interpreting or explaining (Buckland 1986, 784).

At the same time as we draw insights from related disciplines, the boundaries of our professional parameters are being pushed outwards to encompass a wider range of information contexts, still including libraries, but now extending to archives, records management and those other professions in the larger concentric circle. The

context is being broadened to information science more generally, thereby taking us outside the constraining institutional parameters of traditional librarianship into areas where cross-fertilisation is burgeoning. The representations of knowledge change as one moves from one context (librarianship) to another (records management), but the ways in which these representations are dealt with (information gathering, information retrieval, etc.) remain constant. The exciting aspect of this change is that we are finding that an ever-expanding range of professional categories is susceptible to the same theories and processes that have long existed within our traditional professional parameters. The really big changes here may occur in educational affairs, but in terms of professional processes the essence of information work changes little as one moves across the circle.

### *Information technology*

When we move from information parameters to information technology, we make a quantum leap in terms of change, for here little remains the same for more than a short time. By information technology we mean the technology that is available for use in information services wherever and however they are available. This technology is concerned with the handling of physical manifestations of information: paper, microform, magnetic records, optical media. What we are seeing change with breathtaking speed is text-bearing media and the technologies for handling these media. In the next ten years, even the next ten months, both the media and the technologies will change more than we can imagine, and they will change for the better – this much is clear from the kind and quality of change we have seen in the past five years. Technology will simplify and enhance our access to information and may well remake ‘libraries’ completely in the next generation. Libraries will be freed, or forced, to provide value-added services to encourage and improve user access. Therefore, it is fatal to think that any librarian or information professional will survive without wholeheartedly adapting to, and adopting, technology. ‘To be technophobic in our time is to be willing to accept starvation or slavery’ (Anderson and Hauptman 1993).

Where information technology will continue to have the greatest impact on our work is in the

areas of storage of information and physical access to information. But storage and access, while important, are only part of the picture. The big problems will remain, and will continue to define the uniqueness of librarianship and related professions: that is, deciding what should be retrieved, overcoming language barriers, improving comprehension, and acknowledging the politics of access. Indeed many believe that the power of information technology will renew attention on these traditional, non-technical concerns of librarianship. The fact that a record has been stored in some place does not mean that we know it exists, that we could find it if we wanted it, that we could understand what it signified, that it is not contradicted by some other record, or that those who should have access to it do (Buckland 1986, 786–87).

### *The Education of information professionals*

If professional values are changing *minimally*, professional parameters *slowly* and information technology *rapidly*, it follows that education of information professionals has to reflect minimal change, moderate change and total change – all at once!

### *Minimal change*

The curriculum of the future will continue to contain those basic elements that have characterised education for librarianship since its origins: professional foundations, technical services, reference and user services, collection management, and administration and management. These elements will remain because the *mission* of information service, to bring information to people, remains unchanged, although the way in which we express these elements may well evolve. Buckland, for instance, uses slightly different words to highlight specific aspects of the elements, but their essence and intention do not change:

- The role of information in society and of information services
- The information-gathering behaviour and institutional contexts of groups to be served
- The theory and practice of information retrieval
- The managerial, political and technological means for developing appropriate information services (1986, 785–86).

What librarianship continues to bring to a more broadly conceived information studies is this service orientation, but a service orientation informed by the principles of the organisation of knowledge (for which technology and technical progress are but tools, not ends in themselves). So – if the essence of our profession does not change, professional education will continue to impart three basic kinds of knowledge, as proposed by Jesse Shera many years ago:

- Knowledge of the precise characteristics of the records of human culture
- Knowledge of the precise characteristics of users
- Knowledge of administrative and technical systems to bring the two together (Wedgeworth 1991, 47–48).

### *Moderate change*

It is difficult to draw a line between moderate and radical change, because it is as much a matter of personal orientation and viewpoint as of quantitative phenomena. I will take the viewpoint that all of us are committed to change and so we accept these prognostications as only moderate changes. The important changes fall into two broad areas, which I will term professional concerns and educational concerns.

### *Professional concerns*

The most immediate and the most crucial professional change has been occurring for some time, and that is the expanding boundaries of what we regard as the information professions. However, by and large, this change has been uneven, unplanned, uncontrolled, fraught with difficulties and suspicions, and resulting in unbalanced or even dying education programmes. We all know about the rampant library school closures in the USA some years ago, and there have been similar closures and amalgamations elsewhere. This is one extreme. Closely related to it has been the swing from ‘librarianship’ to ‘information science’ and ‘information management’. In some instances the change has been largely cosmetic, but in others it has been more dramatic. In many Western countries library schools moved so far away from teaching librarianship in a form needed by employers, with the result that they were attracting fewer and fewer students from the library

side. Back in 1990 Michael Gorman lamented the drift of library school away from librarianship when he wrote “now that many of the schools have abandoned all but the most cursory attempts to educate librarians (as opposed to ‘information scientists’...), libraries are increasingly having to train *and* educate their new professional staff. This imposes strain, increases tensions, and exacerbates generational differences” (1990, 463).

For a time we seem to have lost the plot in our rush to embrace the new and the different, although in the Antipodes educational and professional conservatism has enabled us to avoid the worst excesses. We would all agree with Michael Gorman that most students go to a library school to learn about librarianship because they want to be librarians. Moreover, any library administrator should want to hire professionals who have received an education relevant to the concerns and problems of modern libraries (Gorman 1990, 463).

True enough, but we must also be open to the benefits to be gained from our sister professions in the broad field of information science and must not simply dismiss it as ‘a bogus and dismal science’. Information science is “that discipline that investigates the properties and behavior of information, the forces governing the flow of information and the means of processing information for optimum accessibility and usability” (Borko 1968).

This definition encompasses both theory and application, and it is left largely to the professional disciplines to give it meaningful application in various organisational contexts (librarianship, records management, etc). In other words information science can be viewed as the *theoretical* study of the life cycle and use of information, whereas librarianship or library science is the *practical application* of the information cycle in a particular institutional setting (Auld 1990, 56). Records management, archive management and related fields are practical applications in other institutional settings. If we accept this as a viable model of the synergy between theory and practice, then it should be clear (a) that one should not exist without the other and (b) that schools of ‘information studies’ can only benefit by incorporating both into their curricula. We continue to educate librarians, but we give them a

broader grounding in the theory of information. One does not absorb the other. Similarly, other practical applications can only benefit by incorporating information science, but whether a single school can then also train archivists, information managers and all the rest remains to be seen.

In a sense what we are arguing for is the de-institutionalisation of our information education programmes, or perhaps their multi-institutionalisation. Lancaster proposed this back in the 1980s, when he pointed out that our professional education has focused on the library rather than the librarian.

Our focus on the library as an institution would find its equivalent in the medical profession if the latter focused attention on the hospital as the major institutional element in health care delivery. By the same token, if medical education were modelled on library education, it would seek to prepare 'hospitalarians' rather than physicians (Lancaster 1983, 747).

We need to recognise that information service is not something that goes on just in a library, in the same way that health service is not something that happens only in hospitals. The tasks that librarians perform and the skills that they need are much the same in any setting. An information professional diagnoses an information need and prescribes a specific information solution; how the solution is located and delivered is quite irrelevant.

This does not mean that we ignore libraries, for at the moment they form our main constituency. But it does mean that we must be willing to take on board other contexts and be preparing information professionals to work in those contexts as guides to information resources, as selectors of information resources, and as evaluators and interpreters of information resources. This means moving away from a single purpose mentality (whether it be to educate librarians or information scientists) to a multipurpose mentality, which is not the same as an all-purpose mentality that probably no school, with limited resources and staff, can perform.

#### *Educational concerns*

The first concern is outreach to the university community and to the profession. The second

concern is professional accreditation; the third, applied research; the fourth, updating and up-grading of faculty.

In 1988 Marion Paris published her study of library school closures in the US. She found that the library schools in her investigation shared two traits: "the inability of library school educators to define their discipline convincingly, and the social and academic isolation (resulting in a failure to communicate) of the library school faculty from other university colleagues" (Hyman 1991, 47).

Budd echoes these findings in his criticism that "library schools traditionally have been narrowly conceived – high on rhetoric and low on research productivity. They've maintained a misguided pride in their isolation and have permitted themselves to be overregulated and intimidated by the Committee on Accreditation of the American Library Association" (1992, 44). To this I would add the isolation of library schools and probably many libraries from other information-focused institutions. Budd goes on to say "our existing information institutions will be – if they have not been already – severely challenged by new and emerging institutions that will more efficiently satisfy our clients' needs for information" (1992, 44).

Thus we see commercial databases providing direct access to needed information, bypassing all institutional constraints, and data systems devised by corporations for their own use because existing structures are inadequate. Libraries need to find new ways of storing, retrieving and using information that can compete with such challengers – the 'value-added' component of libraries that is becoming so much talked about. Libraries need to ask hard questions, and so do library schools. What are these emerging information institutions doing, and how are they doing it? How are they appealing to customers, and how are they using the technology? How are consumer expectations and behaviour changing? How are they using information they acquire, and in what form?

I have suggested that a library school cannot be isolated within its university, nor can it be isolated from its professional base. The second educational concern, then, is with professional accreditation or recognition. Relations between educators and professional accrediting bodies seem to be strained at the best of times, even

though we may maintain otherwise. I believe this is because an academic programme is subject to the canons of professional recognition by a professional body. Academic programmes teach *methods*, how to solve problems; professional concerns are with *content*, ready-made solutions in specific situations. Usually when method and content meet in conflict, we go along with the requirements of practitioners for programmes that are content-focused. In effect we are training (not educating) people for professional practice in the present, not to cope with change in the future.

Many library professionals measure the success of library schools by how well they train their students to fit the existing mould, and to a large extent the accrediting body insists upon it (Budd 1992, 47). When this happens, only the profession suffers, because information professionals in many instances are less able to cope creatively with the future – is this why we are seeing more non-library professionals appointed to lead large libraries, from the Library of Congress down to local authorities and small specialist information centres? There needs to be a more symbiotic relationship between professional body and professional school; we need to identify changes in client base and user needs, and we must experiment with new and untried programmes and structures that may be of service in the future. There is, in short, a need for educational programmes that offer both problem-solving skills and specific solutions.

The third area, applied research, is more contentious among academics because it smacks of interference with academic freedom. First, educators of applied disciplines must be involved in research far more than has been the case in the past, and because we are in an applied discipline I believe that this research must be applied. That is, it must focus on solving current problems in professional practice rather than philosophical and historical concerns. By doing applied research we keep our fingers on the pulse of what is happening. One may have personal research interests in less applied areas, but this should not be viewed as essential to the educational enterprise. And if we are to be researchers, then we must be marketing these research skills to the profession and must be receiving recognition from our universities that this is part of our work.

Schools and professional institutions alike must formulate a research ethic that will permit us to address the critical issues of the profession. Research presents a systematic method for identifying problems, gathering pertinent data about issues, and developing findings that lead toward workable solutions (Budd 1992, 47).

Finally, updating and upgrading of faculty cannot be ignored, and this goes back to recruitment in the first instance. I believe it is crucial to appoint ‘qualified professionals’ – people recognised as competent, experienced practitioners with appropriate research skills and research degrees. But once appointed such people should not be allowed to languish. They must be trained in effective methods of instruction, they must have an opportunity to keep abreast of new information and learning technologies, and they must be allowed to return to the workplace as consultants/researchers/employees. Most universities give lip service to all of these requirements, but few do much in reality.

#### *Some needed changes*

Let me conclude with a ‘wish list’ of educational practices that I believe to be realistic and attainable in the short term with the co-operation of enlightened university administrators and the support of an educationally aware profession. These will enable us to create a more effective, more responsive and more enjoyable education for future generations of information professionals. These are based on the following principles:

- The education we provide must be flexible, individualised and self-paced;
- Equality of access to learning technologies should be guaranteed, and these technologies should be locally available;
- Educators should be technologically empowered and their jobs enriched through continuous training;
- Education and training are lifelong activities requiring closer integration of academic and professional skills;
- Education and professional/employer fraternities should be engaged closely in determining educational outcomes;
- New technological capability to support education and training should be funded by public/private partnerships (Benjamin 1994).

It is heartening to note that in recent years there appears to have been a convergence of thinking along these lines, and that at least some of our professional bodies have been actively promoting the kinds of principles outlined above. A prominent leader in these initiatives has been International Federation for Documentation (FID), primarily through two of its committees or groups: the Education and Training Committee (FID/ET) and the Special Interest Group on Roles, Careers and Development of the Modern Information Professional (FID/MIP). In both FID/ET and FID/MIP the focus is on developing 'multi-functional information professionals', as ably described by Irene Wormell (1994, 1996). The multi-functional information professional, someone able to function effectively and proactively in the multifunctional information polis, is what we strive to nurture in our LIS educational systems.

### Conclusion

Much change has occurred in education during the past five years, and much is still changing. This has affected education for the information professions as much as any other sphere and many of us may earnestly desire a period of calm stability. This is also true of information organisations, which are undergoing equally profound change at the hands of technology, budget constraints and demands of accountability. But calm stability is available to neither. The world is in a period of instability and is moving from one paradigm to another.

As we move to the new paradigm, represented by a switch from industrial age technologies to the electronic age of information and communications, we have to manage the turmoil that results – we cannot withdraw to some hidden place (Benjamin 1994, 54).

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