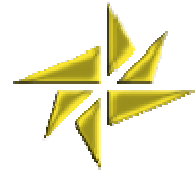




ALIA 2006 Biennial Conference



Australian Library and
Information Association

Refereed Paper

Dr Jaya Raju

Associate Professor, Department of Library and Information Studies, Durban
University of Technology, South Africa.

Contact details

Postal: Department of Library and Information Studies
Durban Institute of Technology
PO Box 1334, Durban, 4000
South Africa

Phone: 027(031) 308 6808/6773

Email: jayar@dit.ac.za

Biography

Dr Raju currently teaches undergraduates, supervises research (including masters and doctoral students) and undertakes independent research. Her research area: is ILS education and training with particular reference to the synergies in ILS offerings between different types of higher education institutions and the implications of this for the information services work environment. National Research Foundation (South Africa) funding allows her to explore this area in the international arena. She has published numerous journal articles in peer-reviewed national and international journals and co-authored *Descriptive and subject cataloguing: a workbook*. Dr Raju is currently serving on the editorial advisory board, *South African Journal of Libraries and Information Science*; on the program committee, National Annual Conference, Library and Information Association of South Africa; and on the standing committee for Continuing Education and Professional Development of the Library and Information Association of South Africa.

A careful blend of general and vocational education: Is this still necessary in the education and training of the modern LIS professional?

Abstract

In the context of a rapidly evolving discipline almost completely dominated by digital technology, this paper revisits the long-standing debate on the value of general education in higher education in which professional information and library science (ILS) education and training is located. In doing so it reviews the literature to draw out the dominant discourses on general education as well as refers to findings on the subject in a recent study of library and information services (LIS) employers, employees and ILS educators in South Africa. The purpose of the paper is to examine whether general education is still necessary for the modern information context. The paper concludes that general education is as essential as vocational preparation for the current LIS work environment. It recommends that the modern ILS curriculum must capture a careful blend of general and vocational education.

Introduction

This paper begins by presenting library and information science as a rapidly evolving discipline. In this context it revisits the debate on the value of general education in higher education generally and in information and library science (ILS) education and training in particular, to draw out the dominant discourses on the subject. It also draws from an empirical study conducted in South Africa that raised the issue of general education in ILS education and training in South Africa. The purpose of the paper is to examine whether general education (defined later), which traditionally has been incorporated in some way into professional ILS education and training in most countries, is still necessary for the modern information context.

An evolving discipline

There has been much inconsistency in the use of terminology to refer to academic departments, professional associations and journal titles in our discipline. Sometimes both the words 'library' and 'information' are used, and at other times either one of these terms are used with the latter in more recent times being the more popular choice. There has been debate in the literature as to what lies behind these various terms (International Federation of Library Associations and Institutions [IFLA], 2000; Martin, 1987; Stieg, 1992). Despite this ongoing debate, academic programs, departments or schools have gone on to change their names to include 'information studies' or 'information science' or 'information management' and more

recently, 'knowledge management'. According to some commentators (Broadbent, 1985; Todd & Southon, 2001) while some of these changes may be seen as cosmetic and designed to assist with image problems associated with the discipline of library science, on the whole the changes in name do reflect a real shift in orientation for academic staff, students and programs. Educators and institutions have been responding to the changing information and technological environment.

Information science emerged into the arena of library science in the 1960s. Library science educators could not ignore the fact that an entirely separate field of study was developing in a way that threatened the foundations of library science (Grotzinger, 1986, p. 459). Librarianship, before the revolutionary effects of information technology, had focused on developing physical collections of books and other materials in library buildings staffed by people who had been trained to select, acquire, organize, retrieve and circulate these materials. However, evolving information and communication technologies (ICTs) have revolutionized the services and management of libraries and information centres (Bawden, Vilar, & Zabukovec, 2005; Sengupta & Umarani, 1996; Tedd, 2003; Tredinnick, 2004). As a result of the revolutionary effects of information-handling technologies library and information services have extended beyond 'physical collections and buildings to the virtual world of the

Internet' and the focus became information provision in a variety of contexts (IFLA, 2000, para. 1). According to Grotzinger (1986, p. 459) it was in this evolving context that 'independent degree programs in information science ... began to cut into the available pool of students and to threaten the credibility and existence of library schools'. A number of library schools began to establish an information science track or sub-curricula within their basic professional programs. Crowley and Brace (1999, p. 77) point out that by the 1970s many of the schools of library science in the United States of America had begun to change their names to schools of library and information science. Martin (1987, p. 130) argued that this inclusion of information science into the basic professional library science programs was partly in response to the challenge of new information-handling technologies that had been evolving, and partly 'to provide a more satisfactory vehicle for studying the generation, use and transfer of information.' Information science represented 'a conscious attempt to introduce academic rigour and standardized research methodologies into an area which evolved on a largely *ad hoc* and pragmatic basis' (Martin, 1987, p. 130). Wilson and Hermanson (1998, p. 487-488) reiterated this by arguing that for some time there had been an increasing call for an intellectual base in library science that could stand in its own right. There was a need to unify practice and theory and many leaders in the field believed 'information science is what will bring the profession to full flower'.

The relationship between library science and information science has long been of interest to the professional and academic community as there has been much uncertainty about this relationship. Some believe library science and information science may be regarded as two separate disciplines with some common interest. Others believe they may be viewed as together forming a single whole. The former define librarianship as being devoted to the organization, preservation and use of human graphic records, and information science as a field devoted to scientific inquiry and professional practice addressing the problems of effective communication of knowledge and knowledge records among humans in the context of social, institutional and/or individual uses of and needs for information (Vakkari, 1994). With regard to the unifying concept, while there have been various arguments about what unifies library science and information science, a significant feature of this concept is that information science is not tied up with any particular information organization. Consequently, 'the transition from library science to information science has broadened the scope' of the discipline of library science (Vakkari, 1994, p. 11). For example, there has been a broadening of the scope of librarianship to include in library and information studies not only libraries of many kinds, but also online retrieval services, archives, databases, records management and documentation of many kinds.

The literature also alerts us to the growing significance of the emerging information market. Cronin (1985, p. 11) pointed out in the 1980s, that there was a rapid growth in the number of information-related occupations and in the number of professionals filling these roles. At this time Cronin also pointed out that while in the past library schools monopolized the education and training of professional information workers, this situation was changing fast. The growth in the number of information-related occupations and the parallel growth in information consciousness generally, have resulted in an increasing number of higher education institutions moving into the business of providing professional information-related education and training programs. These programs are variously designated 'information technology', 'informatics', 'information systems analysis and design' and various other such names, and represent an increase in the variety and sophistication of programs designed to produce a new wave of information specialists. One of the effects of the 'information revolution' has been to deregulate the training market and to create opportunities for expansion among institutions not traditionally associated with training for information. Lor (1990, p. 70) also made reference to the 'growing acceptance of the strategic value of information and that the proportion of workers involved primarily in the handling of information is growing'. He also pointed out that this emerging information market is diffuse and difficult to define as it 'cuts across conventional industries

and sectors'. It is for this reason that Cronin (1985, p. 14) referred to it as the 'invisible marketplace'. It still is today, in fact even more so, especially with the entry of the elusive concept of knowledge management into the fray. Bruce (1999, p. 189-190), writing at the turn of the century, talks about information flow now being global and how institutions and organisations are increasingly recognising that the 'creation, management and utilisation of company-wide information and knowledge are of strategic importance'. He makes the crucial point that in this environment where information is the key ingredient in many kinds of work, the individuals working with the creation, diffusion and utilisation of information do not necessarily regard themselves as information professionals belonging to a specific profession, even though they do concede that they need to learn how to work better with information. While this further emphasises the 'diffuse and difficult to define' nature of the emerging information market, according to Bruce (1999, p. 190), what needs to be identified and catered for by education and training programs are 'the essential competencies of a workforce equipped to function in learning organizations and knowledge-based businesses'.

Many writers (Bawden et al., 2005; Enser, 2002; Tedd, 2003; Todd & Southon, 2001) have alluded to the fact that no particular profession or field of study has a monopoly on job opportunities in the emerging information market. Although

librarians and related information professionals such as archivists, records managers and documentalists can contribute valuable expertise and competencies to the emerging information market, they are not the only ones in the field. Since information technology, specifically computers and data communications is extensively used in the organization, processing and dissemination of information (including Web-enabled information delivery), computer scientists are well placed to move into this field. Computer science departments have been developing programs in information systems and business data processing. Business schools have also developed programs in management information systems and information management. In fact Crowley and Brace (1999, p. 77) pointed out that information science as a profession will be engaged in competition 'not with library science, but with the business-related profession of management and information systems'.

The pervasiveness of information work has made it very diverse with information and library science (ILS) graduates taking up positions beyond the traditional boundaries of libraries and information centres. The emerging information market in which these graduates are pursuing careers include database services, as entrepreneurs, in small information enterprises, in publishing and the book trade, and in information resource management and knowledge management in government and industry (Brine & Feather, 2002; Todd & Southon,

2001). These markets place different demands on the goals and objectives of ILS education and training programs. While the emergence of the information and knowledge economy has created new opportunities for providers of ILS education and training, it has also presented some challenges in a highly competitive higher education environment. It has already been suggested that jobs in the emerging information market need not necessarily be filled by graduates of ILS programs. The emerging information market has been attracting recruits from outside traditional librarianship and information work.

Thus some of the challenges facing ILS programs are to decide to what extent to concentrate on the traditional library market, whether to be in competition with other 'non-traditional' providers and attempt to satisfy the demands of the emerging information market, or whether to attempt to meet the needs of both markets. There is no simple answer especially in the context of the shifting and changing nature of the information landscape. Van House and Sutton (1996, p. 145) warned 'that the field is changing: the boundaries, players, capital and rules of competition are all in flux'. Testimony to this is the more recent arrival of knowledge management which is seen by some as a 'saviour of the beleaguered image of librarians' and by others as 'offering substantial enhancement of the role of the information professional and an opportunity to rejuvenate the

profession' (Todd & Southon 2001, p. 315).

The debate revisited

It is evident that the ILS discipline is a rapidly evolving one that has been almost completely dominated by digital technology. Further, its boundaries have become blurred as emerging information markets in a modern knowledge economy have resulted in multiple disciplines laying claim to the business of information and knowledge management. It is in this context that the long-standing debate on the value of general education in higher education, in which professional ILS education and training is located, is revisited.

Higher education has for many years been characterized by two competing philosophies, that is the liberal arts philosophy (also referred to in the literature as general education) and the vocational philosophy. General education or liberal arts education focuses on the individual's state of being educated. Subjects are studied not for the utility of their content for practical purposes, but rather for their capacities to train the mind and cultivate the intellect (Sanderson, 1993, p. 189). The famous liberal arts philosopher J.H. Newman expounded the virtues of general education in the book, *The idea of a university* which was first published in 1873. A liberally educated mind has 'the capacity to follow logical chains of argument, deduce, induce, draw beliefs from reasoning and form theoretical standards for critical comparison' (Sanderson, 1993, p. 189). This capacity for critical inquiry

and reflection is developed through focus on liberal arts subjects such as grammar, mathematics, logic and rhetoric as well as various discipline based subjects. Advocates of the liberal arts philosophy believe that a mind trained in an abstract liberal discipline could easily apply itself to practical matters and this way serve the needs of society. Barker (2000, p. 2) reiterates this with the argument that the goal of general education is to provide students with the knowledge, skills and values that will prepare them for active and effective participation in society. Today, general education at the tertiary education level in most countries is usually provided by means of a general bachelor's degree in any field of knowledge that aims to give an individual a broad base of knowledge.

Vocational education, on the other hand, tends to focus on the needs of society: 'Professional expertise should be developed not as a matter of idle curiosity but because of its enormous significance for the community' (Allen, 1988, p. 21). Aldcroft (1992) asserts that education should be less reverential about the cultivation of the mind and more concerned with the acquisition of skills that are required for the world of work, production and wealth creation. Cowper and Macintosh (1983), in a context of an industrializing world, pointed out that the industrialization of society and the concomitant need for skilled labour, such as engineers, mechanics and other technical personnel, have demanded that educational curricula embrace

vocationalism. Students need to engage in learning that 'prepares them for real life and real work' (Barker, 2000, p. 2).

Each of these approaches to higher education has been dominant at various times and in various places in the world. For example, the general education or liberal arts approach rose to prominence in both Britain and America in the late nineteenth century. The vocational approach seems to be in ascendance in many parts of the world today, particularly in the context of the current technological revolution. And indeed, as pointed out earlier, library and information services do currently find themselves in the throes of the digital age. There have been attempts to reconcile the two divergent philosophies. Years ago Brubacher (1978, p. 80) explained that when students came from a limited leisure class, as in a traditional oligarchy, classical liberal education was satisfactory. But today, when most people work, as in a democracy, higher education must include some specialized training for earning a living. Vocational education is needed to improve one's labour-market opportunities (Dronkers, 1993). However, general education is still necessary today when one considers the student's future role as a citizen. In contemporary society citizens must be informed and be able to comprehend, understand and debate issues that impact on the daily lives of individuals and on society in general. Furthermore, one needs to be prepared not only for a job, but also for a change in jobs and it is for

this reason as well that 'general and vocational education must go hand in hand' (Brubacher, 1978, p. 81). Barker (2000, p. 7) points out that today's graduates will experience change at an unprecedented pace and to cope with this change they will need adaptability and a capacity for continuous learning. It seems that it has become necessary for higher education teaching and learning to 'achieve integration of the two educational routes' that have traditionally been separated (Leclercq, 1994, p. 52).

There have been various arguments over the years as to why a bachelor's degree is considered to be an important part of professional ILS education and training. Shera (1972, p. 327-329), writing in the 1970s, believed that librarianship must draw from and be sustained by the three great branches of human knowledge, that is, the humanities, the social sciences and the sciences. According to Shera, through an understanding of the historical development, the current state, the methodology and the critical appraisal of each of these areas, the student will acquire the wisdom and intellectual capacity required for the formation of sound judgements. Gates (1976, p. 98) too, writing in the 1970s, encouraged students preparing for graduate study in librarianship to emphasise 'broad general education in the humanities, social sciences and natural sciences'. Contemporary commentators in the field (Davidson-Arnott & Kay 1998; IFLA, 2000; Quattrocchi, 1999) continue to emphasise the importance of general

education in ILS education and training. Robbins (1990, p. 42), writing in the North American context, maintains that the reason why professional ILS education and training is provided at the graduate level is because professional education requires an 'intellectual maturity' that is achieved most effectively only through the attainment of a bachelor's degree. Wilson and Hermanson (1998, p. 482) assert that the principles of librarianship only have full professional significance when they are related to a broad background knowledge of other subject matter. A librarian does not perform any of his/her skills in a vacuum and without this academic background the application of techniques in librarianship is simply a matter of skill and training, that is, it is technical and not professional.

The literature reviewed reveals strong arguments for the presence of general education in higher education generally and in ILS education and training in particular.

Empirical study

An empirical study on ILS education and training (Raju, 2002) conducted in South Africa among past students, employers and educators in the library and information services (LIS) field raised, among other issues, questions about general education in ILS education and training in South Africa. Self-administered questionnaires were used in the study and while the return rate of questionnaires from employers (seventeen percent of the four hundred and fifty-five questionnaires

sent out) may be considered to be low, there was input from significant quarters of this population that warranted analyzing and reporting. There was a significant fifty-two percent response rate (of the sixty-five questionnaires administered) from the educator population.

The majority of employers (seventy-three point seven percent) and educators (seventy point six percent) surveyed believed that general education as provided by a university bachelor's degree is essential in the provision of an efficient LIS service in most contexts. These findings correlate with the literature that has stressed the importance of general education in ILS education and training. Some comments from employers and educators included:

- good service is dependent on the general knowledge and the intellect of the individual providing the service;
- a lack of general education is a serious impediment in LIS services;
- information workers without a broad knowledge base are not effective;
- generic conceptual, analytical and problem-solving skills are intellectual skills that are developed through theoretical and comparative study that should be a part of a bachelor's degree program and these are skills and values that are required for professional leadership in a library;
- information work not only requires 'techniques' but also general and

subject knowledge to deal with in-depth consultation and guidance;

- human and social sciences and even natural sciences provide a good foundation on which professional education may be built;
- general education allows individuals to go beyond routine processes and make critical decisions and lead institutions; and
- general education provides a better understanding of the information world and helps professionals to guide users.

(Raju, 2002)

Like these respondents, Tin and Al-Hawamdeh (2002, p. 336) also express a general concern that someone without a 'professional degree' may not have the 'appropriate judgement' to respond to reference queries in a library satisfactorily.

The study by Raju (2002) also revealed a misconception among some, particularly employers, that general education is provided by a general arts degree only. The literature reviewed, particularly Shera (1972), as well some of the comments from respondents cited above, clarify that general education is provided by a university bachelor's degree in any field of knowledge, including the sciences and other disciplines, and incorporates specific subject and discipline based knowledge. Raju (2004, p. 84) points out that perhaps the term 'liberal arts education' by which general education is also referred, and which

has popularised the concept of general education, has possibly led to this misconception.

A blend of general and vocational education

Economies and society worldwide, have become knowledge driven where the creation and dissemination of knowledge are significant processes in organizational success, as espoused by knowledge management experts such as Prusak (1997) and Nonaka and Takeuchi (1995), to name a few. The modern information professional is currently operating in a knowledge driven economy which is being powered by globalization and rapidly advancing ICTs. The dynamism demanded of the information professional in such an elusive context necessitates lifelong learning which is embodied in general education.

In order for information professionals to take full advantage of the opportunities and excitement generated by the knowledge economy, as well as to creatively meet the many challenges presented by this redefined and dynamic professional territory, the education and training of these individuals must integrate both professional or vocational training and general education. For example, many writers (Barker 2000; Bawden et al., 2005; Virkus & Wood 2004) have alluded to the need for both technical ICT and information-handling knowledge and skills as well as lifelong learning skills such as problem-solving, critical inquiry and understanding, analysis, evaluation

and decision-making. Barker (2000, p. 7) appropriately points out that in order to prepare all students for effective participation in today's global society, we need a contemporary curriculum that integrates lifelong learning and vocational study so they can make sense of the forces unleashed by the combination of rapid technological innovation, globalization and competition, which are indeed the features that characterise the current knowledge economy. By offering a blend of both general and vocational education, the ILS curriculum would also be providing students with capacities for managing change, for adaptability and for continuous learning all which are required in a fast changing information and knowledge environment.

Furthermore,

a familiarity with the body of knowledge and methods of inquiry of the arts and sciences and a capacity to integrate knowledge across experience and discipline may have far more lasting value in such a changing world than specialized techniques and training, which can quickly become outmoded (Barker, 2000, p. 7).

These words echo those of the enduring Shera (1972) who, decades ago, claimed that students of librarianship must be exposed to the humanities, the social sciences and the sciences to develop their wisdom and intellectual capacity as librarianship, more than any other profession, is in need of a sound general education.

Conclusion and recommendations

This paper has revisited the debate on the value of general education in higher education in the context of a rapidly evolving discipline and has drawn from an empirical study conducted in South Africa which reiterates the value of general education in ILS education and training. On the basis of this, the paper concludes that general education as provided today in higher education in most countries by means of a general bachelor's degree in any field of knowledge, that aims to give an individual a broad base of knowledge, is as essential as vocational preparation for the current LIS work environment.

It is for this reason that this paper recommends that the modern ILS curriculum, in order to allow graduates to meet the challenges and take advantage of the opportunities presented by a dynamic information landscape located within a knowledge based, technology driven and global economy, must capture a careful blend of general and vocational education. The modern work environment, especially in emerging information markets, demands critical thinkers, problem-solvers, innovators, creative thinkers, communicators, decision-makers, leaders and individuals who are able to analyse, evaluate and apply information, often for competitive advantage. ILS curriculum planners and designers must take cognizance of the fact that in preparation for such an environment, a balanced and integrated curriculum in which general education, which imparts

many of the above lifelong learning skills, and professional education

form complementary parts, is critically important.

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