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CHALLENGING TECHNOLOGIST: THE EDUCATIONAL RESPONSIBILITY OF LIBRARIANS

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None of the three levels of formal education—primary, secondary, tertiary—has really grasped the implications of a world which has a surfeit of data and information, or of the impossibility of sustaining lifelong learning in the 21st century without information literacy—the understanding and capacity to recognise the need for information, to identify, access and find the needed information, and then evaluate and apply it.

What formal education, politicians and governments have tended to grasp is the glittery but slippery straw of information technology, at great cost and to date with little demonstrable educational return on investment. At the same time those very agents—libraries, teacher librarians and librarians—able to provide leadership and substance in dealing with the complexities and issues of the information age, have at best received modest recognition and investment. At worst they have been deemed to be obsolete or irrelevant. This is despite the fact that librarians were among the first to recognise the potential for information technology, especially the web, to extend access to information resources and enable scholars to display, find modify and store information. They were also very early in learning how to use and evaluate web resources. Their obsolescence is as implausible, if not more so, than the demise of the real, as opposed to the virtual, university. However, regardless of the proddings, mainly by librarians, about information literacy as the key issue for education in the 21st century, governments, politicians, and educational institutions are generally failing to take the issue seriously, despite its societal, economic and democratic consequences. There has been a massive misjudgment that the key educational issue of the information age is information technology, rather than information literacy. The consequences of that assumption have been evident for some time.

For example, in 1996 Reuters published *Dying for information? An investigation into information overload worldwide*, and in 1997 *Glued to the screen: an investigation into information addiction worldwide*. These confirmed business people were experiencing high levels of information anxiety. The 1998 Reuters report *Out of the abyss: surviving the information age* reviews the responses of 1,072 company executives in eleven countries, developed and less developed. It concluded

... that while information overload is still a severe problem for many across the globe, different countries appear to be at different stages in the information development cycle.

What we are now witnessing is the emergence of a new era of the information age where individuals and businesses are rejecting multiple sources of information in preference to a single source that they believe will actually give them all the information they need. While the quantity of media and content continues to proliferate, a sea change in the way in which we consume and manage information is becoming perceptible. It is a question of survival of the fittest, because increased financial constraints and the threat of recession mean that companies increasingly require the right information at the right time. Those who learn quickly how to harness the power of information for competitive advantage will set a standard of information management that others will follow. Those who don't will still risk falling into the overload abyss of stress, confusion and poor productivity. [1]

Eighty one per cent of respondents felt that schools should do more to prepare children to deal with information. *In other words, to become more information literate.* Of equal interest would have been their response to the questions 'How did your university education prepare you to deal with information' and 'Do you consider yourself information literate ie able to recognise the need for information, to know how to identify, locate and access the needed information, and evaluate and apply it?' They are questions suggested to Reuters for its next survey.

Technology in education

To set the educational scene, an excellent paper produced in 1998 by the Centre for Education and Change at Deakin University in Australia, entitled *The new information technologies in schools: making plans or having options*, is drawn upon.[2]

Although this working paper focuses on schools, its observations and conclusions apply to higher education. For example, that 'Although reluctant to admit it, schools are clearly caught in an increasingly expensive pattern of consumption of high technology products'. Universities are caught in a similar pattern, a pit of expenditure for which no bottom is in sight.

This pattern of consumption means that in the US, schools purchase about 500,000 pcs a year, although, as elsewhere in the world, it appears that as schools spend more on technology, they spend even less on training teachers to use it effectively. The glitz of the technology is what impresses parents. Working out how and what to use the technology for often takes second place. The Blair government in the UK is intending to spend £1.7 billion in a 'computers for all' effort in which schools, colleges, public libraries and corporations are being enlisted to build a dynamic IT and T industry. And in Australia the various state governments are in the process of spending as much as a total of \$2.8 billion on school computers and infrastructure with the general aim of ensuring that there is at least one computer for every five students in government schools. Some private and government schools already exceed that level of provision. For universities worldwide, calculation of the total expenditure on educational information technology, infrastructure and maintenance would confirm that it is large, and growing.

The technolust dream

All of this expenditure is the dream come true for the technolusts of this world. What, and who, are these technolusts? The Deakin University study identifies four discursive fields concerned with the information and communication technologies and

education. These fields are given the labels of *Booster (Technolust)*, *Antischooler*, *Critic* and *Doomster*. Each discourse, explicitly or implicitly, points to a future, although not to longer term conclusions because proponents or opponents seldom adopt

... the art of the long view. The working paper suggests therefore that those involved in changing education and those being changed by education should understand the future of each discourse rather than accept uncritically its promises and prognostications and blindly take up its imperatives.

Boosters (or Technolusts)

These are by far the noisiest group. They:

- are unequivocal promoters of information technologies in education
- their pronouncements are easily found in the media and are rarely questioned by journalists
- Bill Gates is a major leader
- have an unswerving faith in the technology's capacity to improve education and most other things in society
- consider the duty of teachers and lecturers is to make the best use of these technologies as if they all have intrinsic educational value
- rarely challenge the educational claims made on behalf of technology
- the technology is seen in terms of replacing inefficient human activity. Such replacements are unproblematic
- have a faith in finding a technical solution to any educational problem, including those problems produced by using technology itself
- rarely interrogate their own privileged positions with regard to access to hardware, software and the expertise in using it
- display no awareness of the lessons of history or concern for the fallibility of technological prediction
- believe there will be no problems in terms of equity and access since the technology has become so affordable and available—the fact that web usage is growing disproportionately in some groups is of no concern.

Yet as Dellit points out 'the dominant paradigm of the web is the marketplace and ... capitalism thrives on inequality. The web is therefore a vehicle of inequality by definition.' [3]

Technolusts, of course, have existed for a long time, have often been confounded by events and usually fail to recognise that one technology rarely completely displaces another. In this context I am reminded of an observation by the president of the Libraries Board of South Australia, made in 1937 when the State of South Australia had no free public lending libraries. He said that 'Other countries are now paying dearly for free libraries, which are meeting with much the same competition'. [4]

The competition to which the president referred was 'the wireless', 'modern enlarged newspapers and magazines, and talkies (movies) with their never ending sessions'. The result he said 'is that books have to take a second, third and fourth place where formerly they were the first'.

In 1999 that president could probably add the internet, video shops, super bookstores, amazon.com, computer games, cell phones and satellite and cable television to his reasons for not funding a public library system accessible by all citizens regardless of their circumstances. He was wrong in 1937 - he would be equally wrong in 1999, and in 2099.

Antischoolers

These are a subset of the technolusts. They use their analysis of the relationship between institutional educational and information and communication technologies to propose the demise of institutional education itself.

They tend to the view that putting computers into educational institutions is like putting an internal combustion engine into a horse.

Antischoolers

- conceive a utopian, high technology educational future, with no educational institutions at one extreme
- may see educational institutions as supporting a monolithic and restrictive curriculum model of education compared with what the internet can offer
- they are critical of top down command systems of educational bureaucracies and large institutions
- argue that as businesses become more concerned with the production and distribution of knowledge they will become unwitting competitors to educational institutions which have been unable to adapt to the demands of technology based change
- the home will be a key site for delivering entertainment and information
- easy access to broadly based digital information will be sufficiently commonplace to allow, if not trigger, the decline of formal education
- there will be no schools
- universities will be reduced to small, highly specialised, privately subsidised research institutes
- just in time online lifelong learning is a high industry, delivered to students at any time anywhere
- teachers become private tutors who work for individual, or consortia of, students education is totally negotiated

The critics

This diverse group is critical of the rush to technologise educational institutions and education more generally. It is sceptical of many of the claims advanced for using information and communication technologies in education. It urges caution and draws sociocultural analyses of technological change to support its concerns. Critics

- distinguish between what a computer can do and what it ought to do
- challenge the taken for granted assumptions about the use of computers in education
- have social justice concerns about access to and use of technology and predict information rich and information poor schools and students
- are concerned about the educational minimalism of some technology based approaches to teaching and learning

- are concerned about the technologies as technologies of control by the state over educational institutions
- turn givens of technolusts into uncertainties, or raise questions about the assumptions underlying their proclaimed benefits
- reject the comparison of learning outcomes that purportedly derive from the use of different media
- argue that technology amplifies some ways of knowing and diminishes others
- argue for a more balanced assessment when computers are to be employed in any situation
- see technology as a resource for learning but also as a context for learning and about which learning must occur
- are not simply negative but are constantly alert to the difficulties, dilemmas and dangers

In Australia, at the end of 1998 the major national newspaper *The Australian* entered the debate. One commentator, a critic (Bigum 15 December 1998) observed

The end of the millennium and the enthusiastic promotion of new information and communication technologies makes for a heady climate in which to make predictions about education in the new century.

Since the commercial availability of affordable computers some 20 years ago, schools have been subject to predictions of impending revolutions, most of which are little more than unpaid industry public relations. There is nothing wrong with telling ourselves stories about how the world will be. But it is equally important to ask about the critical assumptions that underpin such predictions.

The demise of schooling as it is practised has been a consistent prediction by some. The assumptions that typically underpin this prediction are based on limited understandings of the social adoption of technologies. They make crude equivalences between information delivery and teaching. They ignore the enormous infrastructure and investment associated with schooling, and demonstrate poor understanding of schools as powerful social technologies.

I believe that when we take out the industry promotion factor, the disputes around these technologies in education reflect generational differences. John Perry Barlow talks of immigrants and natives, of two different mindsets, of one group (natives) that has grown up with this technology, and has understandings and insights that are generally unavailable to the 'immigrants', for whom these technologies were invented after they were born.

As we (immigrants) move from our initial infatuation with these technologies and learn to understand that technical solutions to complex social and economic problems need to be taken with more than a few grains of salt, we might learn to be more supportive of, and sympathetic to, the generations that will have to live with the decisions we have made and will make about computers in education and more generally.

Another commentator, a technolust (Spender) declared in the same issue of *The Australian*

Every student needs a computer. You can't be a full member of an information society unless you have one. While it might seem a tall order to provide everyone with their own terminal, it's the only way every Australian will have a stake in the information future.

Last century we decided everyone should have access to books, but that not everyone could afford them. So we came up with the public library. This is how we did equality with print. But we are definitely not doing it digitally.

This commentator ignored completely the fact that most Australian public libraries now provide free public access to the internet.

Many letters were received, mostly from parents and mostly critical of the technolust position. The newspaper's editorial (14 December 1998) concluded

The maxim that children need computers at school is a marketers' dream, tapping the fears and hopes of parents and the desire of governments to appease them. Research and experience are yet to identify whether or how children learn different and important cognitive skills by using computers. Perhaps early exposure simply gives them a confidence and comfort with new technologies that will stay with them for life. Until adequate research can provide a better basis for allocating competing resources, caution rather than panic should be exercised by schools and governments.

When dividing the finite funding pool for education, governments must not be driven by an assumption that technology is by definition the best investment for children. Computers must be examined like, and weighed against, every other educational resource.

Doomsters

These are unqualified opponents of the information and communication technologies and see much damage to society and education arising from the uncritical acceptance of new media forms, ranging from television to the internet. They are closest to the Luddites of 19th century industrialising England, and ask

- why replace perfectly good practices and institutions with technology based ones?
- are concerned at what they see as a deskilling of students who use calculators, spell checkers and other aids
- consider the internet poses important questions about how students are taught to select and judge information from a source in which the quality controls of print based resources do not exist
- consider that what is confused is the amount of information that is available and the amount of information a person can actually use
- see the digerati as the glitterati but as hollow and shallow people tied psychologically to their machines

Doomsters can be found among academic staff in universities. However the reality is that higher education has begun an irreversible transformation, of which information technology is a part. It is also a reality that no study or cost benefit analysis proves conclusively that a significant investment in information technology is worthwhile. Therein, for university administrators, is the unresolvable conundrum. [5]

Librarians: technolusts, anti, critics or doomsters?

As this IATUL conference demonstrates, librarianship is an international profession with core values. In its responses to the above discourse it would have among its individual members adherents of all four scenarios - from those who almost gleefully anticipate the demise of physical libraries and librarians and their replacement with virtual libraries and information professionals, to those who argue that online catalogues are not natural replacements for card catalogues.

The starting point for an examination of where librarians should be in the discourse has to be that

- Librarianship is *not* synonymous with information management—it is much broader in principle, practice and potential
- Librarians are much more than information professionals, however that trendy term is given definition

The next point has to be the values which underpin the work of librarians and libraries. In response to this, Michael Gorman, Dean of Library Services at California State University Fresno proposes [6]

- stewardship
- service
- intellectual freedom
- privacy
- rationalism
- commitment to literacy and learning
- unfettered access to recorded knowledge and information
- democracy

Yet, as Gorman observes 'Every single last one of those values is explicitly or implicitly under attack from those who tout the virtual library, the library without walls, and all the other vapidities of the digerati'. Gorman also notes that, encouragingly, a number of recent publications have begun to question the digital fantasies of the elite. He quotes Michael Noll, author of *Highway of dreams: a critical view along the information superhighway* (NJ, Lawrence Erlbaum, 1997). Noll, a former US Presidential Science Adviser and Bell Labs and AT&T employee states

... the superhighway is a lot of hype and fantasy, promising services that most people do not want, or are willing to pay for; that the superhighway would be costly to build; that much of the technology exists only on paper and is not real ... As you can imagine my critics accuse me of being a Luddite; of having no vision or faith. To them, I say faith belongs in church. I tell them that their utopian vision is old hat and will for some become a financial nightmare.

There has also been a tendency to overstate the threat to higher education, in particular, from global media networks. The lie to this is given in a thorough 1998 Australian study *New media and borderless education* which found that

While there is a good deal of hype relating to the involvement of global media networks in higher education, there is currently little evidence of this involvement and ... little intention of involvement beyond current interests in the carriage of educational content produced and controlled by other providers [7]

These kinds of critique need to be seen in a world context which can all too easily not be part of the consciousness of the privileged, such as ourselves. It is salutary to consider the following observation from Larry Irving, Assistant Secretary for Communications and Information in the US Department of Commerce

Imagine that we could shrink the world's population to a village of precisely 100 people, with all existing human ratios remaining the same. If we did so, it would look like this: There would be 57 Asians, 21 Europeans, 14 from the western hemisphere (north and south) and eight Africans. Fifty-one would be female; 49 male. Seventy would be non white; 30 white. Eighty would live in substandard housing. Seventy would be unable to read. Fifty would suffer from malnutrition. Only one would have a college degree. No one would own a computer. [8]

The age of information

When the history of librarianship of the last quarter of the 20th century is written two names will stand out for their sanity and their balance in the discourse about the role and future of libraries, for their insistence on distinguishing between new methods

and enduring principles, and for contributing intellectual rigour to an educational and library discourse which has not been over endowed with that quality. They are Michael Gorman and Walt Crawford. [9] It is they who have emphasised that only the technolust will be content with an information society limited by the values of governments, and merchants who colonise cyberspace. Crawford, in a 1999 article in *American libraries*, makes the point well when he describes the age of information as a metaphor, an organising principle and an image, and that things go awry when people seize on that image and reshape their views of reality to fit it. He contends that

Ages are what people make them. Technology works when people need and use it. People don't fit neatly into simple models, but people—in their complex, confusing aggregate—determine which technologies survive, which ones become significant but minor niches, which ones linger on without significance, and which ones sink without a trace.

Libraries serve people. Libraries will prosper in the future by serving people's diverse interests and needs, not by asserting that librarians know what people *should* want and how they *should* acquire information, knowledge, and recreation. People require a mix of analog and digital resources to serve their preferences and abilities; libraries could honor those requirements. [10]

In similar vein, Gorman concludes that

Change is all about us, in libraries and in the wider world. We are dealing with new ways of doing things, with the incorporation or invasion of technology into all aspects of libraries and their services, and with the psychological dislocation that such pervasive change brings to all of us. But change is just concerned with processes; it is a serial event not the heart of what we are. All the more reason then, if we are to survive and thrive in such a time, to distinguish between the process of change on the one hand and the meaning and values of what we do on the other. We will have new libraries and many of our programs and services will be new and different from what we have known, but our mission remains the same and the values that inform that mission the same. [11]

Libraries and librarians are thus about much more than just information management. This is true of the libraries of educational institutions, it is true of public libraries. It should also be true of special libraries and librarians, even those who persist in using the restricting and short sighted terminology of 'information centres' and 'information managers'. Every library, and every librarian, has an educational role to play. If they do not, they deny their calling and responsibility. This responsibility has never loomed larger because information, writ large, is the currency of society. Librarians see and observe how people come to and use that currency, and to what use it is put. Data and information is also the currency of the internet, and there is no profession in the world better placed or able than librarians to reflect, comment, advise and educate on the rhetoric and reality of the internet and information technology, or to challenge the assumptions of the technolusts—assumptions which at best may be naive and at worst may be dangerous.

However the reality is that the discourse of librarians about the issue has remained largely within the profession. It is time to move on and enter the broader educational and societal debate from a position of confidence about the values, knowledge and insights librarians have. To use a 19th century image, the educational horse has to be placed firmly in front of the technology and information management cart.

There is no use in librarians attempting to assert their educational understandings and role if this is not the explicit core of their public mission statements. Teacher librarians in schools have had this for many years; librarians in community colleges often do so; yet librarians in universities are often still equivocal about asserting their integral educational role and wisdom. What they still tend to emphasise is their role as academic support agencies, efficient information gatherers and managers, and access providers.

A recent trawl of university library websites for their mission statements (mainly in English [[12](#)]) confirms this (the name of the university has been excluded).

For example, from *Australia* we have

- To provide quality information services and resources to enhance the University of ...'s national and international standing as a place of excellence in teaching, learning and research
- To achieve excellence in the provision and promotion of information services to meet the research, teaching and learning needs of the University
- To support research, teaching and other activities of the ... University by provision of effective educational media services and by making available relevant and accurate information in all forms and as fast and efficiently as possible
- The Division of Library Services contributes to and supports the University's pursuit of excellence in teaching, research administration and community service by offering a full range of university library, archival and art curatorial services
- Developing and delivering client focused information and technological services that enhance ...'s educational , research and community programs
- To provide and enhance access to published information in print and non print formats which supports the University's overall mission, specifically its research, teaching and education programs and its regional, national and international responsibilities in library matters
- We bring people and information together to enhance teaching, learning and research within the ... community
- We link people with information, enabling The University of ... to achieve excellence in teaching, learning and research
- The University Library has a threefold mission to provide quality information services and resources to support:
 - learning through ... University courses
 - research and independent study by University students and staff, and
 - activities in the wider community
- The mission of the ... Library is to provide, either by local acquisition or retrieval from remote sources, all forms of recorded information in selected fields pertinent to the goals of the University of ... and to make them available to members of the ... community engaged in teaching, research, study and community service
- To be the University's key facilitator of information access for student centred learning, research and information literacy

In *New Zealand* five of the seven university libraries have mission statements on their home page

- The Library participates directly in the University's commitment to teaching, research and the development of new knowledge by
 - providing the University community with equitable access to information and recorded knowledge
 - acquiring, organising and making available information resources appropriate to the University's educational purpose
 - teaching information skills to all library users as the basis for lifelong learning
 - promoting information services in a manner which reflects the distinctive character of the University

- The Library aims to provide an effective and properly managed information resource for the teaching, learning and research needs of all members of the University of ... and thereafter the wider community
- The Library is the University's key access point for information and recorded knowledge in support of current and anticipated teaching and research. The Library selects, acquires, preserves and provides suitable study environments for its users. Library staff assist in providing access to information and knowledge and training in information literacy skills
- The mission of the University Library is to be the primary gateway to global information resources for the University of ... community, providing customer service support for scholarship, learning, teaching and research by accessing information and teaching knowledge navigation
- To maintain through the provision of library facilities, collections and services of the highest quality a learning environment supportive of excellence in both teaching and research

In *The Netherlands* most university libraries have an English version of their home page, but out of the sixteen university libraries, only one has a mission statement, in Dutch

- De bibliotheek vormt de kern van een nieuwe organisatie die in de Universiteit onderwijs en onderzoek ondersteunt. Zij heeft een flexibele instelling in een continu veranderende wereld en is expertisecentrum voor het opsporen, verwerken, opslaan, produceren en verspreiden van informatie

Ze fungeert als een centraal trefpunt waar onderzoekers, onderwijsgeevenden en studenten elkaar kunnen ontmoeten en ideeën kunnen uitwisselen in een aangename omgeving

South Africa has five web mission statements

- The mission of the University of ... Libraries is to provide information and an effective service in support of learning, teaching and research in response firstly to the needs of the University community and then to the community in general
- We strive to provide information to users through excellent library and information services
- The basic goal of the University of ... Libraries is the effective development of library and information services to all sections of the University community to promote the educational, research and service programmes of the University. At the same time the University Libraries recognise their obligation to support the intellectual activity of scholars and students, regionally, nationally and internationally, through their involvement with other libraries and library organisations in view of the unique nature of ... library collections
- Through a client driven focus we are the preferred source of academic information services for the University where, in a dynamic environment, skilled and dedicated staff are a guarantee of quality service
- ... University Library aims to be an excellent academic library through the provision of ready access to information resources, and by aiding in equipping people for lifelong learning. We are committed to quality user focused service, fairness, innovation and professional integrity

Switzerland has one mission statement, in German

- Die Öffentliche Bibliothek der Universität ... ist ein wissenschaftliches Informationszentrum für die Universität und die Region und zugleich Kantonsbibliothek des Kantons Sie ist Teil des nationalen und internationalen Informationsnetzes.

Im Mittelpunkt unserer Arbeit stehen die Dienstleistungen für unsere Benutzerinnen und Benutzer. Unser persönlicher Einsatz und unser Verhalten an jedem Arbeitsplatz der ... läßt die Benutzerinnen und Benutzer erkennen, dass sie im Zentrum unserer Arbeit stehen

Austria has one mission statement

- Die Aufgaben der Universitätsbibliothek umfassen
 - Die Beschaffung, Erschließung und Bereitstellung aller zur Erfüllung der Lehr- und Forschungsaufgaben erforderlichen Informationsträger unter Beachtung der weitgehenden Kontinuität und Vollständigkeit
 - Die Bereitstellung der Bestände für die wissenschaftlich interessierte Öffentlichkeit
 - Die Vermittlung von Information unter Nutzung weltweiter Datennetze (z.B. Internet) und Datenbanken einschließlich der Dokumentenlieferung
 - Die Pflege und Erschließung des wertvollen historischen Buchgutes
 - Die Mitarbeit an Gemeinschaftsunternehmen des österreichischen und internationalen wissenschaftlichen Informationswesens
 - Die Kooperation und Koordination mit den anderen wissenschaftlichen Bibliotheken Österreichs und des übrigen Europas

Germany, too, has one

- Dienstleistung für unsere Benutzerinnen und Benutzer ist der Inhalt unserer Arbeit. Persönliches Engagement bei der Arbeit soll die BenutzerInnen erkennen lassen, daß sie im Mittelpunkt und Arbeit stehen.

Wir unterstützen unsere BenutzerInnen der Universität bei Forschung, Lehre und Studium, außerdem unsere BenutzerInnen aus der Region in ihrem wissenschaftlichen Literaturbedarf, sich das mit der Versorgung der Universität vereinbaren läßt. Als große wissenschaftliche Bibliothek sind wir Teil des kulturellen Lebens der Euregio Bodensee

Iceland has one

- The National and University Library of Iceland is a research library which is both the national library and the library for the University of Iceland. The library functions include, amongst other things, collecting and preserving all materials published in Icelandic and serving the needs of teaching and research activities at the University of Iceland

Namibia has one

- The University Library is a pivotal player in the process of education, development and social change. Being central to learning, teaching and research, our primary goal is to meet the information needs of staff and students and to serve as a national reference library

Canada has eleven, out of 38 searched

- The mission of the University of ... Library System is to serve the information needs of the University and its communities by providing effective access to information resources within and beyond its walls, through a balance of traditional and innovative services.
- Principally, the Library exists to serve the needs of students, faculty and researchers at the University of ... But it is also ... primary research library, vital to the economic, cultural and social development of the province
- To play a central role in promoting learning by providing expert and innovative access to information and the world's knowledge to a wide range of users within and outside the University through high quality services and collections
- The Library plans for, makes available and facilitates access to a broad spectrum of information resources and services to support the teaching, learning and research activities of the University. Library services—and the ways in which they are made available—will complement the University commitment to creativity, innovation and excellence. To the extent possible, Library resources and services will be accessible by the wider community.
- Le mandat essentiel de la Direction des bibliothèques est de fournir à la communauté universitaire les ressources et les services documentaires nécessaires à l'enseignement et à la recherche

- The creation, communication, and preservation of knowledge are essential to the academic community. The ... University Library forms an integral part of this community by acquiring, organising, preserving, and providing access to information and knowledge sources, in whatever form or location, to advance the university's instructional, research, and public services goals. The Library is committed to service: its staff share a common purpose and responsibility to provide exemplary service
- The Library will be an essential partner in the research and instructional endeavours of the University of ... providing an information infrastructure rooted in a knowledgeable and responsive staff, a sound collection base, and the continuous pursuit of collaborative opportunities to expand access to scholarly information resources
- The mission of the Libraries is to support the University's mission in achieving excellence in the scholarly activities of teaching, discovering, preserving and applying knowledge by
 - anticipating information needs
 - building and preserving collections that support the teaching and research programs of the University, and which emphasize identified University priorities
 - delivering information in a timely fashion
 - encouraging information literacy by educating our community in the use of information resources
- The Libraries' mission is to support teaching, learning and research at the University of ... by providing expert and innovative access to the world's recorded knowledge
- The University of ... Library contributes to the achievement of the University's goals by collaborating with other members of the University community in teaching, research, learning and service
- The Library's mission is to provide access to information resources and to promote the necessary conditions for their effective use in support of the University's stated mission, which is 'the pursuit of learning through scholarly research, teaching, study, and artistic activity, all within a spirit of free enquiry'

In the *United Kingdom* only nine (including the University of Oxford), from 82 universities and college libraries, have a mission statement on their home page

- The mission of the ... is to support the University's mission by providing ...
- The Library is committed to enhancing the teaching and research objectives of the University of ...
- ... aims to work in partnership with schools to
 - support and stimulate the learning, teaching, research and consultancy activities of the University by providing access to the widest range of facilities, resources and systems
 - ensure that services are of appropriate quality, responsive to users' needs and good value for money
- The primary role of ... University Library is to serve the members of the University and, as far as resources permit, to meet their needs
- Within the context of the University's arrangement of responsibilities and services, and in support of its corporate objectives, the Library undertakes ...
- The Library's mission is to maintain and develop collections and services in support of the present and future teaching and research needs of the University of ... and of the national and international scholarly community. In order to carry out this mission, the Library will always aim to ...
- The aim of Library and Learning Resource Services is to provide a key element in support of the University's mission as a leading provider of vocationally-orientated higher education. It therefore aims to help the University achieve and maintain the highest educational standards and be a means of providing challenging opportunities and support to its wide and socially representative constituency of students. It aims to enable students to take responsibility for their own learning and help them achieve their full potential and aspire to the highest academic standards. The service also aims to contribute to applied research activity and support University staff in a range of scholarly activities, to a level which supports but does not adversely affect provision for student teaching and learning services.

- The University Library provides library and information services in support of the University's overall aims and objectives, as embodied in the mission statement and strategic plan. Paying due regard to the need for cost effectiveness, the University Library will continue to be responsive to user demand and proactive in the development of services and use of technology
- The Library's mission is
 - the satisfaction from its own resources or otherwise of the legitimate information needs of the members of the University
 - the preservation for the benefit of scholarship of appropriate parts of its collections
 - the promotion of the Library's role in the academic work of the University and of the research community as a whole
 - cooperation with other information providing organisations at local, regional, national and international level
 - provision of access to the information in its stock for other users who are not members of the University
- The Learning Centre sees its mission as contributing to the University's success by providing a high quality service which stimulates student learning and enhances the professional lives of teachers

Lastly, a trawl of about 70 per cent of university websites in *the US* revealed just 32 library mission statements. Significantly, well known institutions such as Princeton, Cornell, Yale and Columbus, do not appear to have library mission statements. If they have, they are not publicised to the world.

- We are a teaching library. Our vital information resources and skills advance the university community's pursuit, development, and sharing of knowledge
- In affirmation of ... State University's mission as ... public liberal arts university, the mission of ... Library is
 - to provide information resources and services that implement, support, and enrich the academic programs of the parent institution
 - to facilitate the interaction of students and faculty with the ever expanding, increasingly complex information universe
 - to support and assist faculty efforts to instill in students an ability to recognise a need for information, to understand the value of information, and to distinguish between information and knowledge
 - to serve as teachers, mediators, liaisons, advisors, consultants, and partners in the information seeking process
 - to encourage the habit of reading and use of libraries in order to develop the potential for self education and intellectual development for lifelong learning
- The ... Library system provides library resources and forward looking information services of the highest quality in a timely, cost effective manner to support and facilitate the research and educational programs of the Institute
- ... Library supports the academic programs of ... through instruction, collections, technology and services which enable students and faculty to access recorded knowledge and information resources
- This is the mission of the library
 - to provide collections, services, personnel and systems that support the teaching and research programs of the University
 - to organise, interpret, and maintain those collections, services and systems
 - to empower the members of the University community to think creatively, analytically and critically about the utilization of information resources and the acquisition of knowledge
- The Libraries are the primary information centers for individual students, faculty, and staff at ... University. Since efficient access to information on a global basis is critical to learning and research, the Libraries are indispensable to the University Mission. Library services and collections play a crucial role in the support of instruction; in scholarly communication; and in expanding information literacy within the university community through direct instruction
- ... Library supports the University curriculum and stimulates teaching and learning by providing an environment in which instruction and research can flourish. The library promotes

the use of electronic information and instructional technologies on campus and facilitates access to collections and resources worldwide. The library empowers its users with the information and technological competencies necessary to pursue their educational, research, and professional goals. To maintain and extend quality services the library solicits feedback from its constituency and conducts regular assessments. Besides providing service to a diverse campus population, ... Library serves as a cultural and intellectual resource for the local community, encouraging lifelong learning

- The ... Library participates directly in the purpose of ... State University, a comprehensive public university, and serves as an integral part of the educational program of the university. Thus, the mission of the ... Library is to provide access to the information resources necessary to fulfill the institution's curriculum, teaching, research, educational and community leadership objectives
- The ... Library provides information resources and services to the ... University academic community
- The Library supports and enriches the educational and research missions of ... State University by facilitating the access, evaluation and use of information resources. The Library supports course integrated instruction and provides personal consultation to help users meet their information needs. The Library also shares information resources with the local, state, national and international communities
- The ... Library, in partnership with the ... community, creates a dynamic and innovative learning environment that motivates, educates, and encourages individual participation in active learning of information skills and knowledge which leads to success at ... and in a global environment
- ... Libraries, the mission
 - assist students, faculty, state, community and cooperating library users with their information needs through the acquisition, organization, and interpretation of text, electronic, and multimedia information resources. ... Libraries support the instructional, research, extension, service, and international program missions of ... University
- The ... Libraries support and enrich the education and research of the University of ... by linking students, faculty, administrators, and staff to information resources in any format or location. The ... Libraries support instruction and provide consultation in the use of information in a knowledge based society. The Libraries also share information resources with members of the local, state, national and international communities
- Access to information captures the guiding mission, purpose, and service ethic of the University Libraries. The Libraries are committed to effectively supporting the information requirements of a diverse community of students and faculty engaged in learning, teaching and research
- To provide high quality services and collections to meet the needs of ... education and research programs. To provide a place conducive to discovery and self education outside the classroom and laboratory. To share with the scholarly world at large the unique information resources of the ... Libraries. To take an active role in cooperative efforts that insure access to and preservation of information resources for scholarly research
- The mission of the ... Library is to support the teaching and research of the ... Graduate School of Education by providing access to information in the field of education, teaching the use of information resources, and supporting the collections, equipment, and staff in a manner that ensures that the library will remain a leader among education libraries
- The University Libraries provide the information, collections, and services essential to excellence in the University's instructional and research programs. The Libraries are an intellectual crossroads for the campus, enriching individual lives and strengthening public life. The Libraries seeks to teach information literacy, including how to navigate the Internet and how to assess information and evaluate its merit and reliability. Librarians collaborate with students and faculty in stretching the boundaries of knowledge, in developing curricula, and in exploring new approaches to integration of knowledge
- We at ... Library believe in the leadership potential of ... University students. We know that responsible leadership requires the ability to use information wisely in making decisions.

Therefore we commit ourselves to ensuring that students at ... University have the opportunity and freedom to learn to access, evaluate and use the information they need while practicing in the area of responsible leadership

- The ... Library, by promoting the interaction between the ... community and the increasingly complex information environment, is central to the educational mission of ... College.

An academic department of the college that achieves its goals in close consultation with other academic units, the library utilizes its landmark building and advanced information technology to promote the optimal use of information, stimulate the pursuit of free intellectual inquiry, support faculty research, and instill habits of lifelong learning

- The mission of the ... University Library is to assist the educational and research efforts of faculty, students, and staff of ... University by acquiring, organizing, providing access to, preserving and providing assistance in using the materials they require for scholarship and research. The Library offers its collections and services to users in an environment that actively supports learning, teaching and research

The Library also serves as a major academic resource in the region, state, and nation. Within its available resources, and through cooperative resource sharing agreements, the Library has a responsibility to make available selected materials needed by the external scholarly, professional, and business communities

- In active support of ... University's mission
 - we provide to the University and wider academic community a place for self education and discovery
 - we promote scholarship and good citizenship through information literacy
 - we acquire, organize, preserve, and deliver information resources and assist users in their effective use
 - we create a great Library for a great University
- The mission of the ... Library is to support the University in its educational, research, organization, and interpretation of information resources. In addition, the ... Library assumes its special role as a major cultural resource for the community and the region at large
- The ... University Libraries are committed to meeting the diverse and changing information needs of the University's students, faculty, and staff, and to participating in resource sharing programs throughout Ohio and the world

The Libraries' facilities, collections, services, instruction, and scholarship contribute to the University's attainment of excellence in teaching, research and service

To these ends, the Libraries collect, create, organize, manage, preserve, and provide access to information sources, and foster an environment conducive to academic inquiry, scholarly communication, creative achievement, and lifelong learning

- The mission of ... State University is to provide collegiate level career and transfer educational programs and supportive services, which will prepare individuals to live and work in an increasingly technological and global community
- ... Library will provide varying levels of access to quality and current research materials and services for students and faculty of ... University and persons in the ten county area of eastern ..., in a thorough and timely manner
- The mission of the ... State University Library is to support the University's mission in providing academic excellence to students
- The ... Library supports and stimulates teaching and learning by providing an environment in which instruction and research can flourish. To fulfill its general purpose, the ... Library of ... University locates, acquires or delivers, organizes, interprets, and preserves information contained in all types of resources. The Library develops information literacy among students and faculty so that they may effectively use all forms of information in teaching and learning

- The ... Library strives to provide an environment in which students and faculty encounter and integrate the many branches of human knowledge by providing access to information regardless of format or location. The Academic Library responds to the changing needs of its clientele and is committed to making available new resources and services that foster educational excellence and to teaching their use to the community
- The ... Library supports the academic and religious mission of ... University. The Library's mission is to acquire, organize, preserve, and make readily available collections of scholarly and related materials in all media; to assist its patrons in finding and using information available at the University and elsewhere; and to encourage lifelong learning
- The mission of the University of ... Libraries is to improve the educational, research, and service programs of the university through the dissemination of knowledge
- The mission of the University Libraries is to meet the instructional, research and service needs of students, faculty and staff

Commentary

A sustained critique of these mission statements is not the purpose of this paper. However a few observations are made

- there will be many academic libraries worldwide which have mission statements which are not evident on their websites. They should be. We all have something to learn from each other in the intent and way we express our role, responsibilities and contribution
- in this global communication context it would be useful if university library mission statements—and that of their universities—were given in one or more of the international languages
- the IATUL Conference in Queensland, Australia in 2000 could include a workshop or panel session to examine approaches to mission statements and educational goals, and in particular if there is anything distinctive about technological university libraries which should be reflected in their mission statements
- of the mission statements currently available through the internet some merge a vision and a mission statement, and some include goals and objectives
- many of them refer, without real meaning, to excellence and quality. Universities tend to do the same. Surely it can be assumed that everyone, in their own way, aspires to excellence and quality
- a minority, particularly in North America, are moving towards an assertion of a central education role
- the majority still describe the library as an institutional teaching, learning and research support agency, focused on information resources and access

The question is, as we near the 21st century, does this last point really convey the educational role, responsibility and potential of libraries and librarians? From their mission statements, at least some university libraries think not. A number of them place considerable emphasis on their facilitation of information literacy, for example. When this does not appear in the mission statement, it is sometimes indicated as a major goal of the library. Some of them refer to the library's role in underpinning that icon of late 20th century education, lifelong learning. However only one of them refers specifically to the library's impact on curricula, when it asserts that

Librarians collaborate with students and faculty in stretching the boundaries of knowledge, in developing curricula, and in exploring new approaches to integration of knowledge.

Libraries as educational change agents

Worldwide, there has never been a greater political and educational questioning of the inputs and outputs of higher education, or greater perplexity about what should be learned, how it should be learned and how that learning should be evaluated and applied. This is challenging but healthy.

Not so healthy, and a limitation of the mission statements of many university libraries, is that they convey a sense of unquestioning support of the educational status quo, rather than a sense of being an educational change agent, an *agent provocateur* if you like, with special insights about the core currency of the educational process-information.

The only conclusion that can probably be reached about higher education at the end of the 20th century is that some of it is not very high, and that some of it has little to do with education as preparation for the challenges of the next century. There are agencies in universities concerned to change this, particularly those senior university administrators, who despite the increasing demands of corporate management, have retained a strong sense of educational mission, the public good, and societal values; and a sense of the need to change the curriculum and methodological paradigm within their institutions. They have a keen sense that the 19th century approaches which still characterise late 20th century higher education, will not suffice for long in the next. They may also have been persuaded that information technology can be the main driver of that change, when information technology can never be a driver, only a road - a facilitator, an opportunity.

Information technology is ultimately but a tool, and only one of the tools which universities, libraries and librarians use to fulfill their mission and responsibilities. Thus it is a logical nonsense to argue on educational grounds for the structural convergence of university libraries and university information technology units, which was something of an educational fad in the late 1980s.

The funding impact

An outcome of not understanding this, may well be that information technology, in all of its guises, becomes that institutional bottomless funding pit which libraries sometimes used to be viewed as by administrators - even if they rarely were. Libraries themselves are heavy users of information technology, more effectively than most because of their client orientation. Yet a major reason why libraries usually cannot make their fullest contribution to teaching, learning, research and educational change is not because of the crisis in scholarly publishing, it is not because of the cost of serials, it is not because of the cost of, and licensing restrictions on the use of, electronic products.

The major reason is because at the institutional level library budgets are residually, and historically, determined by

- a didactic, content focused, teaching paradigm which still requires overwhelming expenditure on staff who spend much of their time conveying content which can be found elsewhere
- increasing expenditure by institutions on ill performing information technology, driven by technolusts outside of, and sometimes within, the

institutions. Every dollar spent on such information technology is a dollar that would almost certainly be better spent on a library, its services, resources and staffing.

As noted earlier in this paper it is the ultimate irony that, in this so called age of information, those agencies and individuals best qualified and able to challenge the technolusts, and best able to help change the educational mindset, are not better recognised. There are probably too many vested interests and institutional rigidities to suggest that the Library-College concept of the 1960s could be resurrected in the information abundant and globally connected 1990s. However libraries, given the increasing emphasis on student centred learning, problem based learning, information literacy and lifelong learning should position themselves to receive a much larger slice of the funding cake, instead of acceptance of too little, or too ready compliance with the persistent admonition to do more with less.

A university which really seeks to innovate, contribute and thrive in the 21st century is one which will invest pedagogically and financially in information literacy as its key educational aspiration for its graduates. In this context it is surprising that no university has yet adopted a slogan similar to 'Preparing people for the knowledge age'. Such a thriving university is also one which will invest not a meagre 5 or 6 or 7% of its budget in its library, but one which will work towards providing it with at least 25% to make it truly the heart of its educational endeavour, through which its learning lifeblood will be pumped.

Even at a lower level of investment, this will not occur unless university libraries are more assertive and specific about their educational role and aspirations than many of their mission statements suggest. It will also not occur if they do not - from their position of real knowledge about the utility and limitations of information technology - publicly join the challenge to the technolusts and their beguiling, but too often extreme, enthusiasms and predictions.

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