

Professional education: Some reflections

It was a courageous decision to found a journal in the early 1980's; and it was nothing less than a leap of faith to name a journal: *Education for Information*. The times were not auspicious: people were becoming less certain as to what 'Education' was; and it was often said of 'Information' that it told one more about the user of the term than it did about its intended objective correlative. Library and Information Science (LIS) schools had burgeoned forth in the 1960's and 1970's; but at the end of the latter decade there was strong feeling that, in the words of the old song, the party was over. Ten years before the founding of this journal the oil crisis had plunged the world into an inflationary period that was to last for another fifteen years. The United States and the United Kingdom were to experience the first wave of monetarism: that economic theory which posits that the whole of the economy can be controlled through control of the money supply – and that meant money for education at all levels. There was an accompanying change in the professional mindset of those who practised their skills in libraries and information services, and, with each new phase of cultural change, came a new set of 'language games'. 'Library Schools' were changing their titles to reflect their wider interests. Some still favoured the action term: 'Librarianship' as more expressive of curriculum content. This form of nomenclature was said to help students when they were faced with that hardy annual of an exam question: 'Librarianship is applied bibliography. Discuss'. There was a growing realisation that libraries were not alone in the universe of information. Indeed, from the other side of the galaxy (and the Atlantic ocean) publishers were producing heavyweight journals on Information Science, a subject that appeared to be heavily reductionist in method and was tetchily disdainful of any form of discourse from the Humanities or the Social Sciences. From Russia came the term 'Bibliometrics', which had an austere rigorous denotation, and reminded the less-numerate among us of the notice over the door of Plato's Academy: 'Let no one who cannot do mathematics enter these portals'. It will be noted that 'Information Management' and 'Knowledge Management' lay yet in the womb of time.

There are many personal and intellectual movements that influenced LIS curricula in the period under review. In the 1950's S.R. Ranganathan was the man most cited in textbooks on classification and subject heading theory. There is little doubt of his influence on bibliographic publications, such as the *British Technology Index*, and the *British National Bibliography*, largely through the work of E.J. Coates and A. Wells [1]. His own publications were forbidding in their (sometimes) cultivated mysticism – and an unnecessarily idiosyncratic terminology, which was an object of dread on the part of most students. Ranganathan's own classification scheme was

found to be unworkable as an intelligible shelf ordering for the location and retrieval of books, though the scheme survives in some places, more as an act of piety than a realistic tool for the storage and retrieval of library materials. There was a time when his Fundamental Categories: Personality, Matter, Energy, Space and Time had a talismanic effect. To have gently pointed out that Western categorial analysis, from Aristotle to Immanuel Kant, was more closely akin to the natural language of the library user, would have been tantamount to heresy. Very few LIS teachers understood him, and as the years passed they became fewer still.

Information or Communication Theory was a different matter. At a time when information was a loose synonym for facts of any kind, the idea that one could measure information sounded as absurd as trying to weigh the Theorem of Pythagoras. The names of Warren Weaver and Claude Shannon [2] began to be cited in journal articles on information science. But hard-headed communications engineers had recognised the need to measure information, or, as they saw it, to facilitate the transfer of signals along a channel. A communication channel exists (and is paid for) in order to transmit information. The economics of information compel us to compare the efficiency of alternative methods and to estimate the capacity of each to do the job. Advertising agencies had been doing this for some time. Human knowledge advances not only by facts, but also by metaphorical extension. We asked ourselves such questions as: could a library be thought of as a channel?; Could a catalogue suffer from redundancy, or noise. If closed systems were inevitably affected by entropy, then what about those libraries that were never replenished by new materials, new ideas, and new staff. Would this dreadful Law of Thermodynamics apply to LIS schools as well? There was another problem for the more fundamentalist among the information science family. Natural language usage gives the erroneous impression that information was a kind of magic bullet that was fired into the receiver. But, as the new cognitive theorists were busily pointing out, human beings were not machines in that specific sense. In ordinary language we say that we have received information, but we mean that what we know has changed. The bigger the change in our cognitive maps, the more information we have received. Even pictures have structural information content that could be measured; a small help for those devising co-ordinate indexing systems for visual materials. And so it was: information, like energy, does work; but whereas energy does physical work; information does logical work.

Since the Theory of Information embraces communication processes of all kinds, whether in human societies, in nervous systems, or in machines, it inspired some exaggerated expectations in many fields. A quick glance at Library Literature for the early 1970's will show that editors of conservative library journals were admitting materials on cytesnetics, communications and mass media topics. It was only a matter of time before the subjects were on the LIS syllabus. At first such topics were taught as options; indeed there was a new option variously designated Computers and Libraries, or more brazenly, Computers in Libraries. Little did we think that one day LIS schools themselves would be swallowed in departments of Information Technology.

For some unknown reason, perhaps the so-called counter culture of the time, the early 1970's was a time of many gurus and much predicting of the future. One of the dominant themes was 'education for leisure'. The society of the future would have to decide how to spend its leisure time creatively. There is little need to point the consequential irony. At the end of the decade both students and staff were facing leisure in its least attractive form of enforced idleness as unemployment figures rose, and practising librarians clamoured against 'the overproduction of librarians' by the LIS schools. The traditional knowledge map that had sustained the major disciplines for so long was changing radically. Teachers of LIS were also driven to wonder if the syllabus that was handed on to them, as a set of professional 'tools and tactics'; by the Library Association, could not be rationalised and taught with greater economy – and, above all, a more creative intellectual coherence which was so essential for degree-level study.

As so often happens, practice was ahead of theory. The first Curriculum Conference at Aberystwyth in July 1977 showed that staff and students had subject and organisational interests that stretched beyond the narrow horizons of the conventional syllabus. The Library Association had handed on the task of examining to the LIS schools. The syllabus was represented by four tracks: Cataloguing and Classification; Bibliography; Administration, and the Literature and Librarianship of a Special Subject. These components had to be re-assembled to meet the requirements of academic institutions making the awards. Administration became Management and there began the attempt to find a teachable base to the different types of library that figured among the optional (elective) offerings. It was noteworthy how many of these consisted, for example, Map Libraries, Slide Libraries, Hospital Libraries, Mobile Libraries; indeed as one contemporary wit expressed it, everything except 'Lighthouse Libraries'. As one might expect this led to time-wasting duplication, especially if the option was so asynchronous with the timing of the core course that it assumed knowledge that the student had not yet acquired.

Each generation of curriculum planners inherits the questions posed by their predecessors. It is always to be hoped that they can see a little further because they can stand – at least temporarily – on the shoulders of those who have gone before. That hope was briefly in the minds of those who planned undergraduate degrees since that momentous year when Strathclyde began its Joint Honours Degree, to be speedily followed by Loughborough and Aberystwyth. The degree structure was in the tradition of interdisciplinary studies: that is, a planned sequential structure in which two or more disciplines are studied together with an intended focus upon common topics. The important pedagogic point was (and is) that the disciplines are studies designed in such a way as to produce planned interaction, not merely yoked together in the hope that they would eventually pull the student towards a desirable (though unspecified) goal. Some examples of this 'interactive parallelism' were given where students studying politics and science could look at problems of environmental conservation and pollution from two perspectives. The question most often raised was: 'is librarianship a discipline'?. It was most certainly not an academic discipline;

though there were areas within its purview that could be studied in an academic manner, for example, public libraries can be viewed as expressions of a changing society, or of economic or political philosophies [3]. Gradually we began to see that librarianship was a *formal* rather than a *material* subject. Since it is rather an old distinction, a word of explanation may be needed. Material subjects had a recognisable physical domain with investigative methods appropriate to the aims of their teachers and researchers. Geologists and the study of rocks were the usual textbook example. Formal disciplines based their title on the Latin etymology of *forma*, a map, or plan, or by extension of meaning a principle of organisation. Mathematics was cited as *pure form*; to a lesser degree, music and logic. Our argument was: that though we had no distinct essence or area of physical reality to which we could lay claim, librarians (information professionals) performed organising operations (intellectual and physical) upon the subject domains of other disciplines. Strangely enough we did not have the nerve to say we *managed* the recorded thought of other disciplines; it may have been because 'the manager' did not become a folk hero until the 1980's. The Joint Degree overcame the initial scepticism that it was a half of everything but a whole of nothing; and there are many senior members of the LIS profession who hold the award. Like every innovation it was a 'hearts and minds' job for teachers and taught; and was greatly dependant for its efficacy on the sympathy and confidence of the host institution. The argument that (quantitatively) it was four-thirds of a degree will be supported by many students who understandably groaned at the workload. By this time, alert and critical readers will be striving to correct our erroneous assumption that there can be a hard and fast distinction between formal and material subject disciplines. It can only be pleaded that we had to work a model of some kind.

This may be a convenient juncture to introduce the Council for National Academic Awards (CNAA). Very briefly, it was the special body set up by the UK government in 1964 to validate courses, especially degree courses, offered by colleges and polytechnics. Until 1991 it was the only non-university body in the United Kingdom permitted to validate and award degrees. Made up of panels of specialists, this body guided curriculum developments in nine LIS schools for more than a quarter of a century. Its influence on LIS studies is worthy of specialist attention. Over the years the members became skilled in assessing quality assurance and the efforts being made towards its enhancement. There was a set pattern which looked at each qualification under the following broad headings: Curriculum Design, Content and Organisation; Teaching, Learning and Assessment; Student Progression and Achievement and the Learning Resources available to guide and support the student; and as the 1980's progressed this entailed the provision of information technology for staff and students. As may be seen these are arbitrary headings, and only partially describe the seamless activity of teaching and learning. As the polytechnics moved more and more in line for university status, the visiting panels would probe more into policies for staff development and research.

A certain amount of contention was usual over issues such as: 'the core'; the placement (practicum); transferable skills and the applicability of the course to

employment trends. These are contemporary concerns, and will continue to be so in the future. The one abiding lesson is that the roots of the proposed curriculum must thrust deeply into the subsoil of social and economic needs. There are many ways of structuring curricula, and each of them may be right in its own way. But the constants would appear to be: assessing needs; formulating teaching objectives in the light of these needs; the selection of content to meet the objectives; the organisation of the content into a helpful teaching/learning sequence; the selection of learning experiences to translate the syllabus into productive modes of thinking and acting – and the ways and means of evaluating the foregoing which comes back to the correct discernment of success and failure in satisfying needs. It is one of the main planks in sociological thinking that humans have evolved social institutions to meet social needs. Thus social institutions consist of the structural components of a society through which its main concerns and activities are organised. We think of, Education, Health and the Church as supplying these needs through their appropriate agencies: schools, libraries, hospitals, and churches. But these needs change, together with the value systems that undergird them. These social institutions have been (and are) served by groups of people designated as professionals. Some, like the European clergy, have declined in numbers and influence as the perceived needs for their services declined. It is never easy to crystallize perceived needs in to the quasi-legal language of the aims and objectives of a course. It is always a judicious balancing of the necessary skills and the most appropriate people to use them. Forgetting the learner-enhancement aspect leads to a narrow vocationalism and this is why the initial statement of objectives must try and visualise the ideal student at the moment of completion. If one is planning a three-year degree it is often better to start with the final year rather than the first. The selection of subject matter becomes more problematic as the aims and objectives become more wideranging. The core of LIS studies may be organisational and formal but there is a neglected content as Paul Sturges has so ally pointed out [4] and this content has a symbiotic relationship with a changing context. Some of these changes are frequently brought to notice by government action. In 1985 *The report of the Committee of Enquiry: Education for All* investigated underachievement in ethnic minority groups. Earlier in the decade there had been British Library-funded research into the public library needs of ethnic minorities but new and more radical policies were needed if they were not to be disgracefully under-represented in teaching and librarianship. 'Access Courses were pioneered in LIS schools, most notably at Manchester and the Polytechnic of North London. This meant (and still means) that many universities are prepared to accept students without 'standard qualifications' (i.e. a minimum of 2 A Levels) provided that they can be satisfied that the students have reached appropriate standard by other means. Most often the courses were favourable to mature students who wished to work in the 'personal service' professions. There was a heavy emphasis on the acquisition of study skills. In 1989 the Access Course Recognition Group was set as a joint venture by the Committee of Vice-Chancellors and the Council for National Academic Awards: its purpose was to provide a national framework of recognition

for these courses. It will be interesting to see if future historians of information services will note this decade as one which emphasised 'the access philosophy' or whether the movement grew from the equality of opportunity' ideas of the 1950's. The history of women's education in the United Kingdom is not a pretty story for a nation that prided itself as the doyen of liberal democratic societies, and some subjects (e.g. Comparative Librarianship) regarded its social institutions as the paradigm of progress. Students in a highly feminised profession were not slow to notice that the standard lists of subject headings had entries for 'Women as Engineers'; or that Dewey's Decimal Classification devoted a whole class (376) to the 'Education of Women' – which seemed to denote an activity of rare occurrence. By 1992 there were three female Heads of LIS schools.

There were other controversial changes in store, which like many of their kind had their roots in history. There has always been a distinction between what is loosely termed 'academic' and even more disparagingly termed, 'vocational'. The nineteenth century tradition of 'liberal' education has always been a shaping cultural force in education, especially in curriculum planning. Liberal, in this sense, means intellectual freedom (*libertas*). The idea was that this type of education broadens the mind and frees it from narrow prejudices and pre-conceptions. To achieve this objective, premature specialisation must be avoided. In the course of time this approach became contrasted with vocational training, which was principally meant for the lower social classes. In terms of professional education, the usual classroom distinction was that existing between builder and architect. In the 1980's the government of the day decided it was high time that vocational education, as a 'wealth-creating activity' should be given appropriate priority at *all* levels of the national system. In 1986 it established a body to co-ordinate the existing "jungle" of vocational courses, and to preserve standards – it was called the National Council for Vocational Qualifications. This development was greeted with enthusiasm by most representative bodies of public librarians, and by some information professionals. Over the previous thirty years there had been various attempts to establish a 'para-professional' level of qualification for those who did not aspire to high status, and were content to labour at low-level tasks. With the National Vocational Qualifications (NVQ) came a new language derived from the practices and policies of training. There is a basic notion of occupational *competence* which can be assessed at appropriate levels by *outcomes* which will be performance-based, often in the form of *skills* or clusters of skills which would be assessed by supervisors in the *workplace*. There were to be five levels of National Vocational Qualification with the fifth level to be equivalent to a technically-related postgraduate qualification. There are some vocations and subject areas which are eminently suitable for workplace degrees; but does the nature and intent of the major LIS fields fall within the same training category, as say electrical engineering? It is a question that will have to be discussed, particularly as the library end of the LIS spectrum becomes regarded as a candidate for the present government's proposed 'Two-Year Degrees'. For Heads and managers of LIS departments, the planning and operation of placements has always been a financial and administrative headache.

This problem was particularly acute for those schools that had a postgraduate diploma course which was limited to thirty teaching weeks.

This problem was lessened somewhat when the postgraduate diploma was linked to the Masters Degree. The student could then undertake a dissertation and translate the language of first principles into the idiom of the workplace. Although there were times that we dreamed of large libraries that could act analogously to teaching hospitals, it never moved from the dubious status of wishful thinking. There is (or used to be) a maxim in the social sciences that at one level every living person in the world is the same; at another and deeper level every single person on the planet is different. Thus it is with libraries. At a deeper level of analysis each library and information service is uniquely contextualised and has to be experienced not only intellectually, but 'through the pores of the skin' – the old description of how values are acquired. Sadly, despite the good example provided by the University of Central England, we have to bequeath this insoluble to our successors in the 21st century. It is a strange and noteworthy fact that many of the published and unpublished plans for curriculum change tended to take the teaching staff as a given. Most schools made numerous attempts at staff development programmes; yet so many were abandoned because the staff for which the programme was intended were tied down by heavy workloads. The existence of tenure, particularly at universities, had long been seen as a prerequisite for academic freedom. Good reasons for dismissal had to be shown by the employing body and the findings could be challenged in a court of law. The Education Reform Act of 1988 provided for a revision of university statutes to weaken rights of tenure. As with many other matters discussed in this editorial there were considerable variations between 'old' and 'new universities', the latter being the term for former polytechnics. In most (if not all) institutions, new members of staff are increasingly being offered short-term contracts. The implications for research and long term curriculum development are obvious. And there was more to come. It became government policy to make further and higher education more competitive and open to market forces. In 1991 two government 'White Papers': *Education and Training in the 21st century*; and *Higher Education: a new framework* became law in the Further and Higher Education Act, 1992. The binary line – the old distinction between universities and polytechnics, was abolished. Higher education funding was to be a mixture of market competition with 'old' and 'new' universities competing for students and research grants. There was to be much tighter control from the central funding councils. Quality assurance became a new term with a number of interesting sub-categories: quality control (mechanisms *within* the university); quality audit (external scrutiny of internal controls). The Council for National Academic Awards was replaced by the Academic Audit Unit which would be independent of the funding councils and would make available 'performance indicators' information about universities for potential students and employers. The last decade saw radical changes in the jobmarket for graduates with relevant skills; a surge of demand information professionals in the private sector with salaries higher those in the universities. As Ian Johnson has succinctly pointed out, the

universities have responded to the new pressures by flatter management structures and fewer departments [5]. The traditional LIS courses in some universities have found themselves in harness with other subject disciplines such as information technology, business studies, and media studies.

It is no easy matter to guess or intuit what LIS courses will be like in twenty years time. Within the writer's own professional lifetime it has been foretold that television would banish the book; that there would be a 'paperless society'; that there would be so much leisure urgent measures should be in train to prevent us dying from boredom. The sciences predict; the social sciences prophesy. One chief prophet for the social sciences told us that the bourgeoisie and the working classes would annihilate each other; and the State would wither away. Twenty years ago when this journal was founded, this prophecy would have been plausible. Now we are not convinced. Then, the idea of the 'world encyclopaedia' cropped up every now and then, but hardly any of us could have envisaged the Internet. Computers were kept in temple-like structures with access granted only to the technical priesthood. Only the most visionary spoke of computers in the home, despite the writings of Arthur C. Clarke. Now the present government plans access to the Internet for *everyone*, as a basic human right. At the same time readers of a national newspaper are encouraged to collect coupons which can be traded for much-needed textbooks in local primary schools.

There are signs that LIS education in the United Kingdom is beginning to resort to the co-operative consortium mentality which many of the smaller educational fields are doing. The recent initiative in the shape of a proposed National Training Organisation for LIS is a welcome start. This body will be able to influence policy across a whole range of education and training activities. But there will always be the problem of content, no matter how sophisticated our communications media become. It will be vital to make the distinction between education and training; when they are being done separately, or in fruitful convergence. Universities in the United Kingdom are grouping together to ensure a substantial share of the overseas student market. Some specialisms such as children's librarianship have all but disappeared; but others have been developed, such as Heritage Studies and Information Policy Studies.

Curriculum planning in the information and communication sciences in the next twenty years will have to contend with library and educational challenges of an emerging global cultural system. This phenomenon has been extensively noted in the professional journals. The global culture hypothesis is brought about by a variety of social and cultural developments: the existence of world information systems; the emergence of global patterns of consumption and consumerism; the cultivation of cosmopolitan lifestyles; the spread of worldwide tourism; the recognition of a worldwide ecological crisis; the concept of human rights, and the complex interchange between world religions. However, globalism comprises two contradictory processes: homogenisation and differentiation, which often engender movements of resistance against globalisation processes. Cultures and languages will be submerged. It is estimated that of the world's four thousand or so languages only seven per cent have

found printed form. On national levels there are sections of the population who do (or will not) have access to the opportunities provided by the information society. The economics and politics of information have not yet found a productive focus, and more research is needed. The scarcity of doctoral studies in LIS disciplines is a source of concern. At the end of the 1980's there was a panic in the social and behavioural sciences at the low PhD completion rate compared to the natural sciences. If we have no successful completions in our field then we shall have no supervisors – and no external examiners. There may be a possibility for a Standing Conference or like body to cover the whole range of the information and communication studies areas. We could get to know what the others are doing; and they could learn about us. We could construct and design a knowledge map and stake out our territories. Perhaps a new creative synergy will emerge from the union of the Library Association and the Institute of Information Scientists. It is but hopeful conjecture. Such things were discussed twenty years ago; but new challenges often bring forth new people. It is a happening devoutly to be wished.

References

- [1] See for instance: E. Coates, *Subject catalogues: headings and structure*, 1960.
- [2] C. Shannon and W. Weaver, *The mathematical theory of communication*, 1949.
- [3] See for instance, A. Black, *A new history of the English public library: social and intellectual contexts*, 1996.
- [4] P. Sturgess, The pursuit of content, *Education for Information* **17** (1990), 175–185.
- [5] I. Johnson, Where will all the flowers grow? *Library and Information Appointments*, 14 January, 2000.

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