The Education of Information Professionals in Denmark

The paper describes the situation of the Royal School of Library and Information Science at the turn of the millenium. The School has got a new law and it will obtain full university status from year 2000. As a consequence of the law the school has restructured its curriculum into a bachelor of science programme. The bachelor programme is characterised by flexibility, electives and it is heavily oriented towards the needs of the students. The paper also analyses the situation at the labour market in relation to the strategic planning of the school in relation to internationalisation, continuing education and research.

Die Ausbildung von Informationsspezialisten in Dänemark


L'education des spécialistes d'information au Danemark

L'article décrit la situation de l’Ecole Royale des sciences bibliothécaires et d’information au tournant du millénaire. L’école a reçu une nouvelle loi et obtiendra, dès l’an 2000, le plein statut d’université. En conséquence de la nouvelle loi l’École a transformé son programme de formation en un programme de „bachelor of science“. Celui-ci est caractérisé par sa flexibilité et des matières à option et s’oriente fortement aux besoins des étudiants. La contribution analyse pareillement la situation du marché de travail en vue de programmes stratégiques de l’École, de l’internationalisation, de la formation continue et de la recherche.
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Introduction

The Royal School of librarianship has changed its name to Royal School of Library and Information Science. It is a consequence of the new status that came true in December 1997, when the school obtained nearly full university status. You can look at it as a kind of consolidation or an official confirmation of a long development. The university status in full will first be obtained after the research evaluation that takes place in 1999. An international panel evaluates the last 10 year of research from the school. The new law and status will not cause revolutions at the school, but it will certainly change some of the features a bit. I guess there will be a gradually increase in resources used for research from the existing 23%. We will probably get full professors and our own PhD – programme. Our degree in librarianship will be transformed to a bachelor degree. On top of that we have our own Master degree in library and information science. These changes take place at the same time as the school negotiate a 4-year contract based on objectives, results and outcomes with the Ministry. A contract of this kind consists of statements of a mission, goals and objectives and measurable outcomes. Important in this context is that the structure of financing will change and it will be based on the number of full time equivalent students. The contract is still under negotiation with the Ministry but it is obvious that the School will change some of it priority areas. Some of coming important priority areas are of course research, but especially continuing education activities for librarians on an regional basis. We will also intensify the nordic co-operation and be a bit more selective with some of the international programmes. Another priority areas is of course emphasis on computer based distance learning techniques. The school has a multitude of responsibilities. By law it has the obligation to run courses and programmes at both the bachelor- and master level. The school has also the obligation to conduct a 1-year post-graduate programme directed towards research librarians and documentalists and a 180 hours education for the paraprofessional staff in libraries. It is also a part of the obligation to run a rather huge programme of continuing education courses for librarians. Some of these courses are fee-based.

The School has a branch in Aalborg. In total the school take in 260-270 students each year at the bachelor level, 40-60 at the master level and around 5000 librarians go each year through the continuing education activity by following a course lasting from 1 day to several week. The academic staff-number is around 65-70 and the support staff is around the same size. The school has during the latest 10 years been a very active player at the international scene with exchange programme for students and staff and with involvement in international consultation and research.

To be able to cope with the challenges and changes in the coming years the school has just from 1999 changed its organisational structure. All teaching and research are now organised in 3 departments. The 3 departments, which include two research centres and groups working with IT – based distance learning programs, have their own budgets and they operate in relation to objectives that relate to all the activities. Work, decisions and responsibilities are connected in the departments. The 3 departments are Department of information studies, department of library management and the department of cultural and media studies. The departments include teachers and researcher from both Copenhagen and the branch in Aalborg.

To support the departments the school has already change its infrastructure. The economic administration now encompasses both Aalborg and Copenhagen as the educational administration also does. It has given a certain rationalisation and the objective is to move resources from administration to teaching and research.

The environment

These changes takes place in a society with a very low level of unemployment and a if not blooming, then growing economy. The general unemployment figures in Denmark are very low at the moment. There is lack of labour in quite a lot of the sectors in the society. It is especially in branches and sectors that are knowledge and IT – oriented.

In our field we have during the latest 5 years have had a yearly intake around 260 students of librarianship. A maximum of 190-200 students graduate. Some choose to continue studies at the master level. Quite a lot takes a job in the private sector. It is estimated that only around 100 graduates take a job opportunity in the traditional public sector.

In the library sector there is a growing concern about a future scarcity of librarians. At the moment the unemployment °/0 is under 5, which indicates full employment. The real growth in the library sector took place in
the 60ies and beginning of 70ies. It simply means that a huge number of librarians will take retirement in the coming years. This, together with huge demands and requirements for organisational changes, upgrading of qualifications and development of new competencies will give the libraries a very demanding and interesting agenda in the coming years.

The Royal School of Library and Information Science has a kind of monopoly in educating librarians. It is the only institution of its kind in Denmark. The growing demand for librarians in both the public and private sector with the perspective of a rather huge insufficiency in numbers educated is of course challenging not just for the school but also for the library sector.

The challenges for the public and research libraries in the future will according to this scenario are to recruit professionals. It means that the different institutions have to create interesting jobs and job opportunities. This development comes in an environment in which a huge number of librarians will take retirement in the coming years (2000). The act is discussed heavily at the moment in the library community. One of the concepts you often hear is the concept of the extended library. The concept the extended library simply means that the new media like computer – programs, videos, multimedia, music, access through computers and networks and so on will be a normal part of the services libraries have to offer. In this connection there is also a debate about which services ought to be fee-based or not. Another interesting feature in the draft of the coming new library act will pass the Parliament in the autumn this year (2000). The act is discussed heavily at the moment in the library community. One of the concepts you often hear is the concept of the extended library. The concept the extended library simply means that the new media like computer – programs, videos, multimedia, music, access through computers and networks and so on will be a normal part of the services libraries have to offer. In this connection there is also a debate about which services ought to be fee-based or not. Another interesting feature in the draft of the coming new library act is that the director of the public library does not have to be a librarian by education. In the coming years this could mean a change in the management structures in libraries.

As in most other countries there is shortage of people with IT – skills. An interesting new feature has occurred in the Danish educational scene. This year we saw the creation of a new educational institution, the so-called IT – University. It is a kind of consortium of existing institutions in the capital area, and it focuses on research and teaching in IT-related areas. It has created new bachelor programmes e.g. in multimedia and in computer science, but it also creates post-graduates studies in which bachelors from other institutions can enrol.

The new institution recruits teachers and researchers mainly from the Department of Computer Science at the University of Copenhagen and from the Business School. It has just started with a little over 100 students, but I feel quite sure that at least some graduates will compete with our candidates on the future job market. Graduates from the Royal School of Library and Information Science have since the middle of the 80ies paved their way into all sectors of the society. In the 80ies and in the beginning of 90ies, where the public labour market was contracted up to 35-45% of graduated librarians got jobs in the private sector. Many of the graduates created their own jobs and they work in a multitude of different functions, but most of them in some kind of knowledge management.

Of course librarians have competed with other professions about jobs in the private sector, but it is not different from any other profession. Probably the greatest change will come in the public library system. We already now see a tendency that implies that especially greater public library systems recruit IT – people and professionals with a background not in information science, but other subjects. It is not – as I see it a danger for the professionals of library and information science, but some of them will in the future work with people with a different background.

If this trend continue the public labour market – especially the public libraries – will have great difficulties in recruiting new staff.

There is general agreement that the society of the future – we can call it the knowledge society – is a society in which life long learning will hold a prominent place. It will be a learning society. Life long learning that can be institutionalised in CPD is a rather broad concept that relates to the need to cope with changes in the workplace as well as participating in decision – making and being actively involved in the democratic process in society.1

Most of the curricular debate the latest decade has centered on the so-called transferable skills. There is now a general superficial agreement that these skills include at least the following capabilities and competencies:

- Interpersonal skills and critical ability;
- Computer and network skills;
- Financial awareness;
- Analytical qualifications;
- Teamworking and communication skills;
- Management skills;
- Decision-making skills.

At the personal level, it will be necessary to develop competencies such as confidence that means that the curriculum must reinforce the student's capacity to solve problems and use skills in different environments. In order to achieve this, the education must be problem-oriented and success-oriented.

It should be emphasised that maybe the most important attitude is one of flexibility. It points both to mental flexibility and a career oriented flexibility. These general and personal skills must be seen in the context of what constitutes a LIS – programme in relation to domain-specific competencies, qualifications and skills. It is a rather demanding task in a field where confusion about the core of our discipline seems to be a quite normal state of mind.

The educational viewpoints and approaches

However, it is not an easy task to prepare a new programme. Studies have shown that there was not any agreement on any single criterion or indicator of quality in LIS-education.2 And of course if you are part of a rather large institution a multitude of different interests and orientations among staff and students make it a difficult task.

Librarianship has further the characteristic that it is both a discipline and profession. In addition, it differs from many other academic subjects, because the focus is not a subject, but an activity or maybe a process, which implies, that the discipline changes when the profession change. It gives some problems with the knowledge base and without a well-established knowledge base, it is very difficult for educational institutions to transfer a kind of professional identity to the students.

The other danger is that a diversified knowledge base makes the discipline very open to import of theories and methodologies from other disciplines. We see this phenomena quite a lot in these years where many European library schools establish new programmes and courses. A lot of these courses and programmes are alien to what is normally perceived as the traditional knowledge base of our discipline and profession. We have during the last decade or two seen on a European basis seen a climate of pluralism which leaves LIS programmes easy prey for predators in IT, management and communication studies. In some ways, you can talk about the deconstruction of library and information studies.

Practitioners and academics have different standards and demands for the LIS-curriculum. This question pops up in different disguises from time to time and the debate seems to be a bit different from continent to continent, from country to country according to the traditional educational structures. There is no widespread acceptance of what constitute the real knowledge base. It looks like the emergence of information science and its inclusion into the curricula of librarianship for some are confusing.

The purpose of advanced information and library education ought to be the furthering of knowledge in the field and the dissemination of that knowledge to future and practising professionals. It is only based on knowledge including scientific knowledge that professionals can develop the skills that will permit them to practice independently and cope with changes. It is only because of knowledge that practitioners can reflect on and change their works experiences, and in the end acquire relevant standards of competence.

Flexibility and accessibility are essential principles in this context. However, there will be need for pattern, form and coherence. One of the important elements would be to consider carefully the relationship between the basic education, the master programme and the CPD. There is a marked need for a formalised co-operation between stakeholders in the educational scene.

The mechanics are unimportant; the goal – the emergence of the librarian able to cope with changes is not. He or she will need help, all the high-tech skills and selfrelance he or she can muster.

The educational strategy has to focus on teaching and learning approaches. We need a curriculum that is both knowledge – based and skills based. It puts on some heavy requirements for the teaching and learning climate.

The above mentioned reflections forms part of the considerations behind the proposed curriculum and course structure at the school.

The bachelor programme

The new bachelor curriculum is based on modularisation and electives already from the second year. 45% of the curriculum consist of electives. The total number of classroom hours is 900. It implies a huge amount of self-directed learning. In the first year of the bachelor programme the students have 12 classroom hours per week, in the second year they have 10 and in the third they have 8. All courses are in modules of 30 or 60 hours and they are calculated using the ECTS-system.

The first year of study consists of compulsory modules. From the second year the system of electives start and the third year consists solely of electives.

The topics in the programme are the traditional ones. Information retrieval, knowledge organisation, information technology, information selection, research methodology, management, user and media studies, history of libraries in a cultural context. On top of these topics there is a rather comprehensive system of electives. The electives mean that the single student can specialise in whatever area they want.

After the Bachelor degree the students can choose if they want to study a further half year and participate in a practise oriented semester after which they will obtain the degree of Librarian. They can also choose to try their luck in the labour market, go to another educational institution or take one of the Master degrees the school offers either alone or in co-operation with other universities. I think it is one of the merits that it is explicitly stated that the degree of librarianship is more than a bachelor.

The principles for the education is stated as theoretical and methodological, which means that it is not the main objective to produce candidates that have all the skills as librarians did just a few years ago.

The teaching principles will have to change quite a lot. We will reduce the number of classroom hours with over 20% and at the same time we will uphold what we at the moment will regard as our rather high standard. It implies a huge workload put upon the students as independent and self-directed learning.

We also have to take into account the different transferable skills and how we most effectively develop them. I guess it will mean a careful planning of the whole course structure in a way where the single course also is direc-


ted towards certain personal and transferable skills in the objectives for the course. Some courses would then stress teamwork through group assignments, other courses could stress oral presentation and communication skills.

The master programmes

The School has run a two – year Master programme since 1990. The programme has also been conducted as a 4-year part-time programme based on open-university models. The programme has focused on what some calls the core elements and disciplines of library and information science. It is a structured curriculum based on what I would call a European educational tradition. Each of the three theoretical semesters or terms have teach own theme and they are supposed to support each other in a progressive way.

The first semester is focused on information science and information retrieval theory including informetrics. The focus is on information needs and rather advanced theories and methods related to information theory. The second semester focus on what you could call the information needs of organisations and collective groups. The information need is analysed in the context of organisational structure, value, economy and learning. It is a management-oriented semester but the focus is on information. The third semester is focused on system design. It is practical oriented but of course theory based. In system design the students learn to develop system in relation to both individual and collective information needs and in relation to economic parameters. This semester draw heavily on the two first. Documentation, Information literacy, user interfaces is also part of the semester. The fourth semester is dedicated to the master thesis.

Through the programme there is also a rather comprehensive module in research methodology with emphasis on advanced statistical analysis.

This rather unique programme has to be changed during next year. A lot of the educational elements have already been moved to the bachelor programme. The number of classroom hours will be reduced with 20-25% and we have to give the students a possibility to elect modules and make decisions about the emphasis of their programme.

What we want to do is to give the students possibility to specialise in cultural planning, management, informetrics and so on, but still on the basis of information retrieval, knowledge organisation and management of information as the core disciplines each student has to take as compulsory subjects.

The school has an educational agreement with the University of Odense. Culture and Mediation is the designation of a new postgraduate course offered as a joint venture between the School and the University of Odense. The programme which covers two years of study is divided into three „tracks“: 1) Mediation of culture; 2) Organizational culture and communication; 3) Children’s and youth culture. The new course prepares students for employment in mediation tasks in institutions, organizations, and companies.

The course will be taught by academic staff members from the University of Odense and teachers from the Royal School of Library and Information science.

Internationalisation

It should be emphasized that the School is increasingly internationalizing its activities. This trend is reflected in the instructional activities and in the learning resources but it is also visible in the academic staffs’ presentation of papers at international seminars and conferences and in their publication record. A growing number of scholarly papers find their way into international journals of repute. A few teachers have been awarded visiting lectureships and research fellowship (United States and Australia). Other academic staff members serve on committees, etc. within the framework of international organizations in the LIS field. Also, several teachers are members of editorial advisory boards of international LIS journals or active as editors or co-editors. 1994 marked a milestone in the internalization efforts of the Royal School of Library and Information Science. This year the School conducted a pioneering sandwich-type three-month course, a so-called ICP (Inter-university Cooperation Programme) course financed by an ERASMUS grant. The international course was termed „Access to Information“ and arranged as a joint project by the partner institutions involved in the ICP network. It has run each year since 1994. At the moment nearly 10 European library schools are involved in the network.

The course was aimed at students from these institutions. For Danish students, it was offered as a special seminar option. The course being of 12 weeks’ duration was offered during the autumn term 1994 and full credit was provided for all the participating students.

The lecturers teaching the course were from the LIS educational institutions in from Aberdeen, Copenhagen, Loughborough, and Sheffield.

Students at the school has twice been involved in organizing the international Bobcats – conference, 1998 in Budapest and 2000 in Krakow. The School has since 1994 been heavily involved in 4 Tempus/Phare programs concerning development of LIS – institutions and modernization of libraries in Hungary, Macedonia and Lithuania. The co-operative activities include expert missions, consultancy, arranging short intensive courses for colleagues as well as student mobility.

The School has conducted several studies for the European Commission and at the moment it is involved in rather comprehensive projects in South Africa. One of the activities is to establish a PhD network. The other is together with the British Council to participate in the up-
grading of library science departments and libraries in 17 of the poorer universities.

Research
The establishment in 1998 of the Centre for Cultural Policy Studies at the Royal School of Library and Information Science marks a significant new step towards enhancing the quality of research in the cultural policy area in Denmark by concentrating resources and encouraging continuity of the research being conducted. The centre works jointly with the School’s own research academics, research workers undertaking ad hoc assignments and project work. It intends to further develop an in-house research competence that can be instrumental in developing new knowledge on the prerequisites and results of cultural policy programs and initiatives. In 1996 the Royal School of Library and Information Science set up the Centre for Informetric Studies. Informetrics is a term coined relatively recently for a group of familiar subjects including the quantitative study of documentary material (bibliometrics) and quantitative study of factors affecting the development of science and technology (scientometrics). The Centre aims to publish research papers; provides education at degree level and below, guidance for research students, courses (both funded and fee-paying) and consultancy services; and work on projects together with domestic and foreign partners.

As mentioned in the introduction the school is at the moment involved in an evaluation of its research activities. The international evaluation panel will end its work late autumn 1999. A positive evaluation can mean that the status of university will be transferred to the school. In itself it will not give more resources to the institution. During the last 15 years the school has used around 20% of its teaching resources to research. The research has always been conducted in relation to a 3-years research plan, but mainly on an individual basis. One of the plans that the school intends to realize is to focus the research in a few programs. In 1999 the 3 new founded departments took up the challenge each to formulate 2-3 research programs. The programs should be defined by the end of this year. The intention is that each researchers work should relate to a program. In this way the program becomes both an instrument of priority and a theoretical frames of reference.

Until now much of the research has been done on an individual basis. In the future it will be more focused and team-working around research projects will become more frequent.

Continuing education and development of competence
There is recognised a growing need for continuing education and for continuing professional development in the profession. The situation concerning continuing education throughout Europe is much diversified. It clearly mirrors several different educational traditions and to a certain degree reflects the standing of librarians in society. The education of librarians and information scientist takes place at both universities and different vocational schools. In some countries librarians receive an academic degree. In other countries, they receive a special kind of Diploma. In some countries, it is possible to take a degree as a librarian at a college or a vocational school and then move on to university to take a Master degree in Information Studies or a related topic. The situation is very complicated and it is nearly impossible to make comparisons.

In the different countries, the difficulties in coping with the technological development have many causes. One central barrier may be a lack of sufficient continuing education for librarians and information professionals in work.

Part of the public sector in Denmark has introduced performance-related pay – system. A part of this system is that public worker, including information professional have a differentiated and negotiated salary based on functions, qualifications and performance. The system is just introduced but it is evident that the pressure for participating in CPD will increase because it is one of the ways to obtain new qualifications and competencies. I would like to stress that CPD has to cover the totality of our field even if we at the moment are predominantly concerned with IT and IT – related skills.

As a response to the problems outlined in this paper the School has just launched a ambitious plan established a whole system of continuing education activities. They are planned in close relation to the content of the basic education. Undertaking postgraduate distance learning has encouraged practising LIS professionals to continue their professional education and undertake a piece of supervised research which will enhance their skills while being of direct relevance to their professional situation.

Some of the biggest changes will be in our continuing education. The school has an obligation to run continuing education. We are simply planning to transform the resources into 7-10 programs of CPD – courses. We use the resources we earlier used running hundreds of short courses into regular programs with a diploma status. Each of the programmes will have a workload equivalent of half a year of study. Each programme will last for 12-18 month based on distance education methods. The important thing is that the 7-10 programmes will cover the whole spectre of our profession.

As examples, it is planned to put up programmes in areas and topics like

– Youth and Children Culture;
– Management;
– Information Retrieval theory;
– Media studies.

Each programme will consist of 5 modules. They will give some credit in relation to the master programme, but the objectives of the CPD programmes are not quite the same. The will be oriented a bit more towards the profession and they will tend to bridge the gap between the academic orientation and the practical orientation. The programmes will be assessed.

Let us look at bit more into the details of one of these CPD – programmes. It is a fact that the workload of participating in one of the programmes will be a half year. Normally the programme will run for a year or a bit more. It will as a matter of fact be a very demanding part time study.

The interesting thing is of course how the market will respond to the plans, which we have implement from 1999.

Conclusion
It is evident from this paper that the school at the moment is involved in a very interesting process of change. The changes involve everything from new educational programmes, new research strategies and fundamental organisational reorganisation of the whole institution.

The outcomes of the process will to a certain degree be determined in relation to the contract with the Ministry. It is evident that some of the institutions priorities, goals and objectives will be revised. The connections with the libraries in Denmark will be strengthened and new patterns of co-operation will arise.

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