

The European LIS Curriculum Project: Findings and Further Perspectives

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Der Beitrag berichtet über die Ergebnisse des europäischen Projekts zur Entwicklung eines Curriculums im Bereich der Bibliotheks- und Informationswissenschaft / Library and Information Science (LIS). Er ergänzt einige bewertende Anmerkungen zu den Ergebnissen, die der Arbeit von zwölf Expertengruppen entstammen und in der E-Publikation *European Curriculum Reflections on Library and Information Science Education* (2005) vorgelegt wurden. Das Projekt wurde mit Bezug auf den laufenden Bologna-Prozess durchgeführt. Besonders werden in dem Beitrag die Teildisziplinen Bibliotheksverwaltung und Knowledge Management berücksichtigt. Der Beitrag weist außerdem kurz auf die bestehende Komplexität und die kulturelle und strukturelle Vielfalt der europäischen LIS-Ausbildungslandschaft hin. In den Schlussbemerkungen wird kurz auf mögliche gemeinsame Initiativen und Kooperationsprojekte auf europäischer Ebene bei gleichzeitiger Bewahrung nationaler Spezifika eingegangen.

The paper briefly reviews the results of the European Library & Information Science (LIS) curriculum development project reported in the e-book entitled *European Curriculum Reflections on Library and Information Science Education* (2005). Some evaluative comments are made on the findings produced by the twelve expert working groups each analysing a major LIS curriculum theme. This collective process was conducted with special reference to the Bologna Process. In describing project results, special attention is given to the sub-disciplines of library management and knowledge / information management. Also considered are the existing multilingual reality of Europe and the diversity of cultures and higher education systems in which European LIS programmes are embedded. Finally, some concluding comments are presented on possible European-level joint initiatives and collaborative projects.

high degree of homogeneity of LIS schools

LIS EDUCATION EUROPE: DIVERSITY AND CONFUSION

In Europe, almost all Library and Information Science (LIS) programmes are developed and offered within the context of a single nation state. Thus, typical of the European LIS education scene is the diversity of cultural and language contexts, traditions, programme structures, levels, course lengths, thematic profiles of curricula, delivery formats, forms of teaching and assessment, and other features. Add to this confusion and disparity that there are many different approaches to accreditation of LIS programmes. If done at all, reliance on national-level accreditation bodies and mechanisms or internal procedures will be the normal procedure. There are, as the situation looks now, no institutionalised and recognised European-level accreditation and quality assurance procedures for LIS educational programmes.¹ European diversity – illustrated by the variety of epistemological frameworks, the patchwork of national traditions, cultures and languages and the multiplicity of LIS educational practices and philosophies – definitely has its charm, while

at the same time being a valuable asset.² The reverse side of the medal are the constraints arising from the fruitful chaos represented by so many national approaches to how the building blocks for a LIS curriculum should look like and how they should be assembled. However, a fairly optimistic tone is present in a comparative study on LIS programmes in the European Union (EU) applicant states until 2004 reported by Juznic and Badovinac. The authors of the study do not see the long period of traditional library education offered by schools in the new EU member countries as a great barrier to adjusting to new professional and political standards. They demonstrate that LIS schools in these countries have generally changed their curricula towards those of mainstream institutions in the field and schools have also embraced the principles and guidelines of the Bologna Declaration, etc. When it comes to curricular content, disparity does not seem to be a major problem: ›One thing that stands out from this research is the degree of homogeneity that exists across the analysed LIS schools. This homogeneity exists despite some differences which can be explained inside the framework of historical, education policy and the social dimensions of individual LIS programmes or countries. While some diversity is visible, the desire for a higher degree of comparability, as introduced by EU instruments, provides an opportunity to work toward this European LIS common standard‹. And the authors continue, ›throughout the study, some general obstacles have been identified, which have been ubiquitous but tacitly present: language obstacles, historical/traditional reluctance to openness, not enough human resources (small LIS departments), financial resources, cultural/political differences, etc.‹³

EUCLID AND THE EUROPEAN CURRICULUM DISCUSSION

The umbrella, under which Europe's LIS schools, or at least some of them, gather, discuss and work together, is EUCLID (the European Association for Library and Information Education and Research).⁴ Within EUCLID and at the meetings and conferences conducted by the Association attention has increasingly been directed towards issues related to the comparability and equivalence of LIS programmes and qualifications in European countries. In addition, the focus has

LIS education: diversity of cultural and language contexts

been on ways of strengthening the collaborative links among LIS academic institutions throughout Europe. The seminars organised by EUCLID with their focus on convergence of European LIS educational programmes and the theoretical foundations of LIS education led to the decision of implementing a joint European LIS curriculum study in context of the ongoing Bologna Process.⁵ The study was carried out by the Royal School of Library and Information Science (RSLIS) in conjunction with EUCLID and funded by a grant obtained from the European Union's SOCRATES programme. A need was identified for bringing European LIS educators together to enable them to systematically discuss the issues with each other both in a virtual mode and conventionally face-to-face. In examining European LIS educational programmes including the concept of a core curriculum for LIS studies, due attention would be given to all dimensions of European LIS curriculum thinking, both in terms of contents and geography. This European LIS analytic project, undertaken under the auspices of EUCLID, was started in June 2004 with the major aim of organising a working seminar for a group of handpicked LIS curriculum experts from all over Europe.

TWELVE EXPERT GROUPS AT WORK

At the pre-seminar stage, twelve virtual (groupware-based) discussion groups were formed (June 2004). Each group, led by a designated group leader, was asked to explore a specific LIS curricular theme and submit a brief report on its work. Thus, the material generated for the final electronic publication represents a synthesis of the electronic discussion among some 150 European LIS educators during more than six months (February-August 2005) plus work done at a two-day discussion and writing seminar for LIS curriculum experts in Copenhagen mid-August 2005. The workshop themes agreed on by the project steering group were defined so as to match or be largely representative of mainstream course areas or subjects as they appear in catalogues and syllabi of many LIS schools in European countries. In this context it should be emphasised that in mapping and analysing the various curriculum areas, expert groups were expected to do their analysis from a holistic perspective and not to concentrate on a particular degree level. Thus, from the outset of their work the groups established would consider different levels of education such as postgraduate (Master) and undergraduate (Bachelor). A report on a questionnaire-based survey designed to gather information on Europe's LIS schools and their curricular structures, resources, student enrolments and similar items in condensed statistical format is

available as Chapter 13 of *European Curriculum Reflections on Library and Information Science Education* that was released as a web publication in December 2005.⁶ *European Curriculum Reflections on Library and Information Science Education* is the major tangible deliverable of the European LIS educational project.⁷ It was presented and discussed at a special session at the BOBCATSSS Conference in Tallinn, Estonia, on January 31, 2006. In addition, the profile and findings of the project have been presented at various seminars and conferences in 2006 and 2007. An excellent opportunity of disseminating information on the thoughts, ideas and analysis contained in the above multi-authored e-publication was offered by Anita Sundaram Coleman, co-editor of *Journal of Education for Library and Information Science (JELIS)* who suggested the publishing of a range of papers by European LIS educators. Thus, JELIS Spring 2007 appeared as a special issue featuring LIS education in Europe. The background, development and significance of the project are briefly outlined by Kajberg and Lørring.⁸ This publishing opportunity has served to stimulate further discussion on European curriculum development issues in our field in a way that – in addition to discussing some major principles underlying the LIS curriculum development – some of the authors contributing to the theme issue articulate different positions on the direction, nature and subject emphases of LIS curricula. Also provided is a detailed treatment of a few selected LIS curriculum subjects.

SOME OUTCOMES OF THE PROJECT: ATTEMPT AT AN APPRAISAL

The aim of the present special issue of *ZfBB* is to provide an overview of the routes to managerial positions in libraries with coverage of existing educational frameworks, the nature and structural characteristics of relevant course offerings along with further and continuing education opportunities. Hence, given that the overall context of the *ZfBB* thematic issue is library management, particular attention is given to briefly illustrating those parts of *European Curriculum Reflections on Library and Information Science Education* which consider library management-related topics. For this purpose two LIS curriculum experts' reports were singled out for treatment: the one covering knowledge / information management (Chapter 6) and the one concerned with library management (Chapter 12).

The thirteen chapter e-book on *European Curriculum Reflections on Library and Information Science Education* is the major outcome of the European LIS school project. Obviously, the reports of the twelve work groups vary in terms of structure, scope, size and the thoroughness with which the questions presented

European Curriculum Reflections on Library and Information Science Education

working seminar for LIS curriculum experts from all over Europe

knowledge management, information management, library management

knowledge information management: tricky and much disputed field

to the groups at the outset of the virtual work group phase were addressed. Also differing are the approaches adopted for delineating and analyzing the content of the curriculum fields and in establishing the boundaries for the curriculum field under study. Noteworthy here is the work documented by the experts' group analyzing the somewhat tricky and much-disputed field of *Knowledge / Information Management*. The group did an impressive job of sorting out the contents of the two fields along with determining overlaps and disciplinary links. One is left with the impression of knowledge management as a disciplinary framework posing definitional problems. In many ways knowledge management can be viewed as a trendy, fancy and catchy label that seems to cover quite a lot within the continuum of innovation, knowledge sharing, creativity management, on-the-job-learning, lifelong learning, etc. In this respect, mention should be made of an interesting contribution to the international discussion on knowledge management as a discipline or an organisational and management dimension as well as its coverage in a curricular context by Hazeri, Sarrafzadeh and Martin.⁹ The authors conclude that it is urgent for LIS educators to deliberately address the development and curricular coverage of knowledge management as an emerging and frequently commercially oriented field. Overall, the three Australian researchers, two of them PhD students, feel on firm ground in sorting out the relations between LIS and knowledge management. The polemical touch is distinct when they emphasise that knowledge management remains a subject field of substantial interest to the LIS profession, and, as they add, »this despite stubborn opposition from a minority opposed even to the notion of KM.«¹⁰ But it is interesting to note a slight hesitation on the part of the researchers with regard to the wider dispersion and generalisability of the conception of and views on knowledge management as a domain: »It is also important to bear in mind that much of the literature on KM, as with responses to our two surveys, has emerged from within the English-speaking world.«¹¹ Consequently, as the authors make clear, »it would be useful with additional research available that focused on the perceptions of LIS professions in non-English speaking countries.«¹² In this context, Michael J. D. Sutton's imposing exploratory and explanatory investigation of the difficulties and complexities involved in planning and designing of knowledge management graduate programmes in two higher education institutions deserves mention. In Sutton's doctoral dissertation, interesting material is presented on the bodies of knowledge of knowledge management and identity of knowledge management

as an emerging discipline. In addition, the conceptual and contextual frameworks of academic programmes in the field of knowledge management are explored. Also examined is knowledge management from the perspective of LIS. It is concluded that increased involvement by LIS faculty could enhance the relevance and relationship of the LIS field to knowledge management education.¹³

In the context of the European LIS education project, another group of curriculum theme experts explored the sub-field of *library management*. In addition to presenting observations on the conceptual clarification of library management as a LIS educational sub-discipline, the group developed a tentative cluster of the library management field with its various thematic components. The disciplinary sub-areas identified include such course topics as library management basics, communication skills and negotiations, library and information services in society, quality management, project management and human resource management.

CONTINUED DISCUSSION OF LIS CURRICULUM DEVELOPMENT

Overall, the European LIS curriculum collective exercise turned out to be an innovative experience. The project developed a new model of running an analytically based collective process in a multi-cultural environment and a new approach to conducting conferences. The EUCLID annual meeting in Prague on 29 January 2007 included a special session featuring the European curriculum project. David Bawden, member of EUCLID's Board, gave a brief outline of what has been done on the part of the project organisers and EUCLID to publicise the e-book with the results of the project. In year one after completion of the project, the interest in getting access to the e-book on »Curriculum Reflections« had been impressive. Other signs of interest include response and input received from academic colleagues in other parts of the world and comments provided by LIS (educational) bloggers. In addition, quite a few recent seminar and conference papers have cited the final project report. The influence of the work done within the project is also visible in current curriculum development processes in that a handful of LIS academic institutions – in England, Ireland, Slovakia and Slovenia – have revised specific parts of their curricula in the light of the ideas and recommendations presented in the e-book. In order to take the discussion a bit further, an Educational Forum on »Similarity and diversity in LIS education« was conducted on 13 August 2007 in conjunction with the Sixth International Conference on Conceptions of Library and Informa-

an innovative experience

much of the literature on knowledge management has emerged from the English-speaking world

tion Science – »Featuring the Future« in Borås, Sweden, 13–16 August. The Educational Forum was convened by David Bawden, City University London. The papers given at the Forum included a presentation on »Information seeking and information retrieval curricula development for modules taught in two library and information science schools: the cases of Ljubljana and Dublin«. Other presentations addressed the communication aspect of information literacy as a new direction for LIS and the iSchool Curriculum. Briefly, iSchools – an American »invention« – can be defined as »library schools that have transformed themselves into agencies with a broader mission and a field of study that encompasses not just the traditional paper and media based realms of library collections, but information in the broadest sense that includes potentially everything in the internet and every form of information found in the world.«¹⁴ Another conference entitled »Librarian@2010: Educating for the Future« organised jointly by EUCLID, EBLIDA (European Bureau of Library, Information and Documentation Associations) and the BAD (the Portuguese Association of Librarians, Archivists and Documentalists), took place in Lisbon on 19–21 September 2007. The conference was arranged as a response to the need for bridging the gap between the academic field of LIS and the community of practicing LIS professionals in the discussion on the future of European LIS education, the profession and its services. Further, the aim of the conference was to bring educators, researchers and practitioners together in order to discuss the effects of the profound social changes related to digitisation, multiculturalism and the growth of the knowledge economy. A range of interesting summaries, papers and PowerPoints were presented at the conference. Ragnar Audunson, President of EUCLID, presented the background, organisation, stages and final report of the European Curriculum Development project. Audunson emphasised that the report, the e-publication embodying the results of the project, should not be considered an authoritative document representing the views of a specific organisation. It reflects the thoughts and reflections of the expert groups responsible for drafting the individual chapters. One of the findings of the European project is that LIS is not limited to librarians but includes archivists, documentalists, record managers, web editors and, with some hesitation, publishers and museologists. Audunson also observed that the required pillars in a LIS curriculum would be (1) Knowledge organization, information seeking and information retrieval; (2) The contents of that which are to be communicated or mediated and (3) Institutional and managerial issues along with issues related to the social role of li-

brarianship. The publication should not be regarded as a curriculum proposal, but the report with its findings could, according to Audunson, be considered a starting point for discussions and reflections and maybe also for benchmarking activities. Audunson ended his presentation with the following conclusions:

- Information seeking, information retrieval and knowledge organization is a *sine qua non* in any LIS curriculum
- In a rapidly changing world, teaching and learning in these subjects should focus more on robust theoretical understanding than on the practical mastery of tools and established systems
- Digital and multicultural competencies should pervade LIS educational programmes
- The road towards transparency should be process-oriented.¹⁵

One of the presentations at the Lisbon conference focused on the proposed European Qualifications Framework of Lifelong Learning. Also presented were preliminary results from an IFLA feasibility study of guidelines for equivalency and reciprocity of qualifications for LIS professionals.

KNOWLEDGE MAPS OF INFORMATION SCIENCE

So, after all, the European LIS curriculum project stands out as a success story. However, in looking for additional input to the current discussion of the contents of LIS programmes, LIS curriculum designers and educators could also draw inspiration and ideas from current research activities and mapping exercises centring on identification of competences in the LIS field and the generation of domain-specific knowledge maps provide an example of this. Thus, a study by Zins, which represents one of four articles that resulted from a Critical Delphi study on the anatomy, basic entities, major conceptions and thematic structures of information science as a discipline conducted in 2003–2005, sets out to construct a Knowledge Map of Information Science.¹⁶ The aim of the study was to explore the theoretical foundations of information science. The Zins article comes up with a systematic and comprehensive knowledge map of the discipline and is based on discussions by an international panel consisting of 57 leading scholars in information science coming from 16 countries. The international scholar panellists are claimed to represent nearly all the major subfields and essential aspects of the information science field. The map drawn up includes 10 basic categories: (1) Foundations, (2) Resources, (3) Knowledge Workers, (4) Contents, (5) Applications, (6) Operations

information literacy as a new direction for LIS and the iSchool Curriculum

bridging the gap between the academic field of LIS and the community of practicing LIS professionals

LIS is not limited to librarians

knowledge maps and subject classifications as tools for professional education

and Processes, (7) Technologies, (8) Environments, (9) Organisations, and (10) Users.

According to the author »knowledge maps and subject classifications are powerful tools for professional education«.17 Zins points out that »information science educators can utilize the knowledge map for developing introductory courses and compiling reading lists and bibliographic collections based on the conception of the field.«18 Thus, the Zins Knowledge Map of Information Science can be drawn upon by LIS schools as a resource or source of inspiration in »internationalising« the content of their curricula.

The European LIS curricular experts' analytic reports and the European LIS school survey seem to indicate that many European LIS schools are transforming their LIS curricula to be more in line with »international« or »mainstream« type of curricula. It seems that the subject components of the curricula are getting closer to LIS-oriented programmes in Canada, the United Kingdom and in the United States.19 The findings presented in the comparative analysis done by Juznic and Badovinac seem to indicate that some of the European schools are on their way towards »internationalising« the LIS programs they offer. The authors argue that LIS programmes in for instance the former Socialist countries that are now EU member states20 show signs of a process of disciplinary reorientation that has brought about a larger degree of curricular homogeneity. Also, more weight has been given to information science and information management-related themes and some schools have followed the North American, and British, trend of dropping the library label from their names. Thus, in Bulgaria, for instance, there has been a pressure for introducing strong IT-related components in the LIS school programmes. In addition, persuasive arguments are presented in favour of market-driven approaches: »Therefore, the LIS educational programs have to answer the needs of the markets and to offer courses preparing future professionals with innovative behaviour and capability to apply new models and solutions in a complex digital information-related content environment.«21 In other words, ideas, illustrations, theories, conceptual frameworks and notions developed in LIS academic contexts in the Anglo-American world are increasingly finding their way into what specially east European LIS educators present to their students in lectures and seminars and into the textbooks and articles they are expected to read.

However, it should not be overlooked that, apart from a handful of specially arranged international courses and seminars conducted in English outside UK and Ireland, the vast majority of teaching activities in European LIS schools are still undertaken in na-

tional languages. It is worth being aware that a significant part of the production and transfer of LIS-specific knowledge is taking place in large European countries such as France, Germany, Poland and Spain. Quite often vehicles of dissemination in national languages are relied on. The above observation is largely in line with views articulated by Paul Sturges in a paper presented at the EUCLID-EBLIDA-BAD Conference Lisbon in September 2007. In discussing the relevance and suitability of a common LIS curriculum, Sturges points out that a European or even a global curriculum may not be an appropriate response, particularly for librarianship. He points to the fact that »the library profession serves the culture of its nation and region.«22 As a consequence, library educational programmes »fail if they concentrate on the generic to the exclusion of the geographically specific.«23

CONCLUSION

In these years, national-level thinking and actions emanating from the Bologna Process are having a clear impact on the restructuring, internationalisation and Europeanization of LIS education in several European countries. The transformation of German LIS education including the adoption and implementation of a two-tiered system of Bachelor's and Master's degrees is but one example of evident and recordable progress in this area. But ongoing curricular streamlining efforts should be balanced by an awareness of the still existing cultural and academic diversity within what could be called LIS Europe, which can at the same time be considered strength and an asset. Various conceptions of LIS exist within the LIS academic community in Europe and reflected by European LIS programmes currently provided is the variety of approaches to what should be included in LIS curricula. The different approaches are visible in such areas as the influence of the past, the role of cultural perspectives, the relations between LIS and archival science and museology, the nature of information and/or knowledge management, foreign languages (English) as well as foundation disciplines such as linguistics, pedagogical science, philosophy or semiotics. Different views on the contents of LIS curricula also cover the weight to be ascribed to subject areas such as IT and digitization of libraries. Pushing it to extremes, »mainstream« curriculum development initiatives grounded on and inspired by current scholarship and theory building activities in LIS mainly in the UK and North America – valuable as they may appear – can be said to reflect ideological undertones and hegemonic features. In some sense, it could be argued that the orientation towards achieving »universalism« in the way the LIS curricu-

Bologna process has a dear impact on restructuring, internationalisation and Europeanisation of LIS education in Europe

vast majority of teaching activities in Europe is still undertaken in national languages

lum is composed and the priority given to models, theories, entities, etc indirectly formed by market-driven developments, globalisation trends, the conceptions of the knowledge society, etc represents one position. The other position emphasises the continued role of different cultures and languages in European LIS education and LIS research. So there should still be room for focussing attention on the ways in which LIS education is affected by language contexts and interact with different social, cultural, historical and epistemological traditions. There might even, in some countries, with recent independence, be a need for considering higher education reforms and LIS programmes from the perspective of nation-building.

On the other hand, it seems obvious to carry on with the curricular discussions and include new and upcoming issues such as the educational implications of digital librarianship,²⁴ the role of information and communication technologies and the emergence of the iSchool concept.²⁵ Further, work should be continued on exploring the management domain in a curricular context and on sorting out the apparently delicate nature of knowledge management. Also, there is a need for stimulating and enhancing educational convergence and formal cooperation and networking among Europe's LIS academic institutions. For this purpose, formalised collaborative structures and communication mechanisms such as thematic networks of institutions across boundaries, technical communication infrastructures, regular meetings, physical or virtual, would seem required and obvious. In the student mobility area, new opportunities are coming up including the notion of *the virtual campus* and schemes for *virtual mobility*.²⁶

However, in addition to reliance on virtual conferences and other web-based communication packages furthering the interpersonal communication, formal or informal, between LIS school academics, consideration should be given to more ambitious and far-reaching solutions. In Europe, for instance, a major challenge is to develop a set of common goals and joint policies for European LIS school activities and their collaborative structures.

¹ Audunson, Ragnar: Editorial: LIS and the creation of a European Educational Space. In: *Journal of Librarianship and Information Science*, 4 (2005), S. 171–174. Audunson's views are very illustrative of this point.

² Kajberg, Leif: Developing an e-Book as an integrated process among 100 academic colleagues. In: *Bulletin of ASIS&T*, 2 (2006/2007), S. 9–15.

³ Juznic, Primoz and Badovinac, Branka: Toward library and information science education in the European Union. In: *New Library World*, 1210/1211 (2005), S. 173–186.

⁴ EUCLID is an independent European non-governmental and non-profit organisation existing for the purpose of promoting European co-operation within library and information education and research. EUCLID's homepage is accessible at www.jbi.hio.no/bibin/euclid

⁵ The Bologna Process is a unique set of concerted actions in the higher education field blueprinted by European ministers of education within the EU including ministers of education from a range of non-EU countries as well. Core materials about the Bologna Process are available at www.bologna-bergen2005.no

For a brief description of the Bologna Process see also Lørring, Leif: Content, reflections and curricular questions. In: *Bulletin of ASIS&T*, 2 (2006/2007), S. 16–20.

⁶ Kajberg, Leif; Lørring, Leif [Hrsg.]: *European curriculum reflections on library and information science education*. Copenhagen: The Royal School of Library and Information Science, 2005. The collective publication is available free-of-charge in English as an e-book at http://biblis.db.dk/uhtbin/cgiirsi.exe/Thu+Feb+28+23:53:55+2008+/SIRSI/o/518/o/db.leikaj05/Content/1?new_gateway_db=HYPERION [Stand 26.02.2008]. See also Leif Lørring's comments on the results of the study in Lørring, Leif: Content, reflections and curricular questions. In: *Bulletin of ASIS&T Nummer 2* (2006/2007), S. 16–20.

⁷ Kajberg and Lørring [Hrsg.]: *European curriculum reflections on library and information science education*, S. 232–242.

⁸ Kajberg, Leif; Lørring, Leif: From the guest editors. In: *Journal of Education for Library and Information Science*, 2 (2007), S. 65–67.

⁹ Afsaneh, Hazeri; Sarrafzadeh, Maryam; Martin, Bill: Professionalism on knowledge management competencies in the LIS curriculum. In: *Journal of Education for Library and Information Science*, 3 (2007), S. 168–186.

¹⁰ Afsaneh, Sarrafzadeh and Martin op.cit., S. 181.

¹¹ Afsaneh, Sarrafzadeh and Martin op.cit., S. 182.

¹² Afsaneh, Sarrafzadeh and Martin op.cit., S. 182.

¹³ Sutton, Michael J. D.: Examination of the historical sensemaking processes representing the development of knowledge management programs in universities: Case studies associated with an emergent discipline. Montreal, QC, Canada: McGill University, 2007. Doctoral dissertation. For details on access to the publication, available as pdf file, the author can be contacted at: msutton@westminstercollege.edu

¹⁴ Seadle, Michael; Greifeneder, Elke: Envisioning an iSchool curriculum. In: *Information Research*, 4 (2007), 4 S. <http://InformationR.net/ir/12-4/colis/coliseo2> – [Stand 26.02.2008]

¹⁵ Audunson, Ragnar: European curriculum reflections on LIS education, 2007 S. 7. www.apbad.pt/Librarian@2010/PPT_01c.pdf [Stand 26.02.2008]

¹⁶ Zins, Chaim: Knowledge map of information science. In: *Journal of the American Society for Information Science and Technology*, 4 (2007), S. 526–535.

¹⁷ Zins op.cit., S. 532.

¹⁸ Zins op.cit., S. 532.

¹⁹ Some LIS schools in Eastern and Central Europe have strong ties with schools in the United States. Thus, conference activities, networking and visiting lectureships serve to maintain and enhance contacts.

²⁰ Juznic and Badovinac op.cit. Bulgaria and Romania became members of the EU on 1 January 2007.

²¹ Krassimira, Anguelova and Nikolova, Irina: Impact of electronic information environment on LIS education in Bulgaria. In: *Information, innovation, responsibility: Information professional in the network society*. Proceedings of the 14th BOBCATSSS symposium Jan 30 – Feb 1, 2006 in Tallinn, Estonia. Jane Kjertmann Jensen et al. [Hrsg.]. Tallinn: Tallinn University, Department of Information Studies, Estonia; Royal School of Library and Information Science, Denmark: 2006, S. 155–164.

²² Sturges, Paul: *Mobility and Flexibility*, 2007, S. 12. www.apbad.pt/Librarian@2010/PPT_01b.pdf [Stand 26.02.2008]

²³ Ibid., S. 12.

²⁴ Tammaro, Anna Maria: A Curriculum for Digital Librarians: a Reflection on the European Debate. In: *New Library World*, 5/6 (2007), S. 229–246.

²⁵ Seadle and Greifeneder op.cit.

²⁶ Virtual mobility refers to agreements set up between two or more higher education institutions that allow their students to acquire a number of ECTS points at one of the foreign partner universities or through participation in a joint activity between the partners. The ECTS points resulting from this international experience will then be transferred to the student's diploma records at his/her home university. Virtual mobility takes place in a virtual learning environment: students study in their domestic academic environment, and, as a consequence, they need not travel outside their home countries.

continued role of different cultures and languages in European LIS education and research

formal cooperation and networking among Europe's LIS academic institutions

DER VERFASSER

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