LIS and its competence framework
Ton de Bruyn, July 2005

Introduction

Over the past five to ten years the paradigm of competence learning has played an important role in Dutch professional higher education. Library information sciences (LIS) are, traditionally, mostly offered by institutes for professional higher education. Here, I want to give a short overview on the developments within Dutch LIS curricula over the past two decades and to explain the role of competence learning in LIS at Deventer. Although the Dutch ICT curricula play a prominent role in the later developments and these curricula have their own, very interesting history, that history will not be discussed here.

History of Dutch LIS

It is not my intention to give an exhaustive description of LIS curricula in the Netherlands. My main objective is to try and illustrate this recent history in such a way as I think relevant for the difficulties the curriculum has to overcome at the moment. So, not only is this history short, it is also very subjective.

I work at the School for Communication, Information Technology and Information Management of Saxion Universities at Deventer. My School, which also contains the ICT curricula of the University, incorporates the LIS-curriculum. This illustrates very well, I think, the many changes and the momentous shift in the LIS-curriculum over the past decades. To commemorate the fifth lustrum of LIS in Deventer in 2000 a small book was composed.[1] This book can be used as a yardstick for the changes in the Dutch LIS curriculum. And those changes are not over yet. Indeed, the curriculum is in a critical state: on the one hand not many young Dutch people chose to study Information Services and Management and on the other hand the job market is not very transparent for graduates. How has this come about?

There are many aspects relevant to the changes of LIS. I will try to put these aspects into the LIS perspective:

- technology
- education
- job market
- related curricula
- (inter)national platform
- LIS curriculum itself

First of all, technology is obviously of tantamount importance to LIS. ICT has changed things like access to, the presentation and the life cycle of information dramatically. As libraries (and archives) were the prime dealers in information during the 19th and 20th centuries[2], they had to keep up with new demands from professional as well as private information consumers. By doing so, libraries themselves have laid the foundation for the confusion surrounding the identity of LIS curricula.

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[1] BIEP; in the book the evolution from Bibliotheek en Documentatie Academie (BDA, Library and Documentation School), its successor the Bibliotheek en Documentaire Informatie (BDI, Library and Documentary Information) and finally to the Informatiedienstverlening en –Management (IDM, Information Services and Management) is described

[2] In 1978 the Statuut van de Openbare Bibliotheek was published; it wanted to "bevorderen van het vrije verkeer van informatie door deze ter beschikking te stellen van iedereen" (*enable the free traffic of information by giving access to all*); in: RUPS.

That technology was directly and indirectly putting pressure on libraries and librarians will need no explanation. Much research on this has been done and many reports have been issued. The problem is not that this pressure led to important changes in libraries but that these changes again led to different requirements for staff. The Dutch LIS curricula started to adapt to the new requirements: not only did librarians have to become literate in computers, networks and software but they also had to be trained in business and marketing.

In the fields of ICT, business and marketing, however, other curricula are competitors for LIS. By adding components of these fields to the LIS curriculum, it becomes less LIS and graduates will start to apply for jobs that are only weakly related to the traditional market. Especially in the late 1980's and early 1990's Dutch LIS graduates were in demand in non-traditional contexts. These new contexts started to make their own demands for the LIS curriculum from outside the traditional LIS perspective. How to cope with these demands?

Surely, the non-traditional job market for LIS graduates was a Faustian proposition for the people designing the LIS curricula: here were jobs that appealed to young people and apparently LIS could do something about it. Meanwhile, within the LIS curricula the libraries became marginalized, not only because libraries did not provide the jobs that graduates wanted but also because budgets of public libraries were sometimes dramatically cut as well. Over the past ten years libraries have started to hire far more staff of secondary level and the information officer (once we called these people *librarians*) has emancipated beyond the library. In the mean time libraries are complaining that graduates are no longer adapted to the specific tasks to be found in libraries!

The downturn to the shift in the curriculum has been, however, that the intrinsic coherence of the LIS curricula was dumped. The Dutch LIS curriculum is not based on a set of coherent job descriptions geared to train librarians (or any other particular job) of however modern standards.[3] This has ironically been justified by the shift in the job opportunities for LIS graduates. It seems that with diversity in the curriculum its identity has also been lost. This loss of identity is symbolized by the current name for the LIS curriculum: Information Services and Management (ISM). Graduates of the ISM curriculum end up in jobs like: business intelligence consultant, information broker, database administrator, innovation manager, knowledge mediator or indeed librarian.[4]

In contrast to these grand jobs not many students are to be found studying the ISM curriculum. Blaming this solely on the loss of identity seems crude. Undoubtedly, due to the more ICT oriented curriculum, it is also more liable to the same economic powers that dictate the demand for other Dutch ICT curricula. At the moment the job market for ICT graduates is certainly picking up. It will be interesting to see how this will affect the choice of students for an ISM curriculum.

Over the past five years another problem has cropped up. The competition of ISM with other curricula has become more invasive due to an initiative of the HBO-raad (National Council of Dutch New Universities). In the Netherlands professional higher education is organised in sectors. The two sectors relevant for ICT and ISM are the sector for Technology (three out of four ICT curricula) and the sector for Economics (ISM and one ICT curriculum). Curricula are state accredited and registered roughly by their name and hierarchically to their respective sectors. The sector of technology contains about 80 different curricula while the sector of economics contains almost 150 different curricula!

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[3] FOCUS.
[4] ID.

In 2000, in the wake of Bologna, the idea was conceived in the HBO-raad to do something about complaints over this swamp of different curricula. The councils of all sectors were requested to define a limited number of domains to which all the curricula could be assigned with the objective to reduce the enormous complexity of accreditation and to get rid of the curriculum registration (and accreditation) of each individual curriculum. Obviously, this means that curricula will have to be fitted into a domain. The process of defining the domains was very much to the discretion of the council of each individual sector.

At this point some curricula were either mangled or ignored. ISM was one of the curricula that were ignored. Only six institutions (at the time, now seven) offered the curriculum and only a small number of students were enrolled. During the process of defining the domains, many new universities had started to re-cluster the curricula in schools or departments (they had been clustered in faculties) as they seemed fit. In most instances, ISM got clustered with ICT-curricula, most of which were part of the sector of technology. This meant that ISM became the blind spot of the sector of economics. The coincidence of the fragile identity of ISM together with the invisibility has proved to be too much and no special domain for LIS-like curricula has been defined.

Most people working in the Dutch LIS curricula feel torn between two domains registered with the HBO-raad[5], ICT and Communication. It is ironic that the introduction to the description of the Communication domain says:

> *Dit domein omvat een groot aantal uiteenlopende en totaal verschillende beroepsactiviteiten, variërend van communicatiemanager en journalist tot tolk/vertaler en multimedia vormgever of uitgever/bladmanager.*
> *[This domain encompasses many different and totally diverse (maybe even disjunct?) professional activities ranging from manager of communications and journalist to interpreter/translator and multimedia designer or publisher/journal manager.]*

This echoes the same stance that the ISM curricula have taken over the last five to ten years.

Finally, perhaps, a remark on the international perspective should be made. Although the ISM at Deventer does have many international contacts, it must be observed that it has diversified to a much larger extent than many of its foreign partners. With respect to the developments just described, one must accept this as a very ambivalent. With regard to the competence framework of Dutch LIS it is again ironic to have to note that, already, three out of the six or seven universities offering the curriculum have now decided to join the conference of ICT curricula.

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[5] HBORAAD; see especially the section on domains.

Competence learning at Deventer

Before starting out on this section, I want to point out that I do not intend to give a thorough overview of the concept of competence learning. It is an extensive and not always very rigorous discipline to explore if one wants to gain thorough knowledge in it. There are many publications to be found that do a much better job than I would. There are some aspects, though, that are important to my paper and that I want to put forward immediately.

For the ISM and Business Information Systems Technology (BIS) curricula at Deventer an operational definition for competence was used:

> *(the description of) the ability of an individual to achieve a professional objective*

What is so different about competence learning as opposed to more traditional paradigms? Well, actually not very much apart from a difference in perspective. The classical learning model is usually assumed to focus on knowledge, skills and attitude as important aspects to *predict* competence. The advantage of this approach is the relative easy way knowledge and skills can be tested. Attitude, of course, has always landed in an obscure locker of education due to the emphasis on, easy and cheap, cognitive testing.

Competence learning only concerns itself with outside behavioural and assumes that when this behaviour is measured correctly (valid, reliable) it is a good indicator of competence *and future performance*. To be competent presupposes one to be knowledgeable, skilled and professional in attitude. The validity of competence learning hinges on the assumption, that behaviour can be measured in a valid and reliable way. Furthermore, competence learning assumes the extrapolation of shown behaviour to other, though related, contexts. This can, I think, only be justified by the presupposition of relevant knowledge and skills.

A second important aspect of the competence learning is the way in which competences are described. Fundamentally, there are two different ways. The first and most true to the integral approach of competence learning is synthetic. The description of such a synthetic competence description brings together all the different elements that are needed to achieve a professional objective. Such synthetic competences are partly indicated in the Dublin descriptors, although these are not 'complete' in the sense that they have been abstracted from specific professional contexts and they have been graded.[6] A succinct example of such a synthetic competence is:

> *The student is able to chair a Joint Requirements Planning Session.*

Though not elaborate, this competence indicates communication skills, planning, empathy but also specific ICT knowledge all rolled into one. In the end, however realistic in a professional context, this is not a workable proposition in education, less so when we are trying to reach for the flexibility of personal development. It is not so much the problem of creating the right training context, as it is the assessment of this type of competence. It is far too complex.

So, while the synthetic approach may be interesting enough for curriculum design (as for its professional context!), it is very difficult within the context of assessment where we want reasonably detailed analyses of the individual performance either in guiding personal development through feedback or in actual graded assessment. It is from this perspective that both the ICT and

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[6] EHEA, p. 33 for first cycle.

ISM frameworks have originally been designed.[7] These frameworks are far more analytically described in elements of competences than its framework for professional context.

Contrary to the stance many theoretically oriented educationalists take, the analytical model is actually the most prevalent. It is far too easy to counter this conclusion by stating that it is apparently very difficult to change from a purely cognitive framework of learning objectives to a real competence framework. Perhaps the most incisive remark might be that while a (synthetic) competence is apt enough to describe specific job requirements it falls short of the need in an educational setting where a wider variety of task performance is needed in order to come to the conclusion that the student is competent. In our modern world where the categorical curricula have faded into far more generic curricula (with ISM as the shining example) the educational context will always and necessarily fall short (or, overshoot, for that matter) of the professional context.

In recognition of its rather detailed and mixed approach in competence description the HBO-I Stichting (Dutch conference of Deans in ICT at New Universities) started a project to renew its competence framework. In this new framework the HBO-I acknowledged the importance of the analytical approach on the one hand and the value of the integral professional context on the other. The new HBO-I framework[8] now mentions generic and specific competence *building blocks* (in honour of the analytical approach) and gives specific illustrations of (partial) jobs in a rather successful attempt to put the focus on the synthetic expression of the competence building blocks within a specific professional context.

As already stated, the ISM curriculum and the ICT curriculum of Saxion Universities at Deventer have since 2000 been organised into one department and since 2004 this unit has even been enlarged to include the ICT-department of the Saxion Universities at Enschede as well. All in all, this School of ICT and ISM comprises about 1300 students of which at the most 150 ISM. At the time, ISM was just finishing a major refit of its curriculum but was also moving towards innovating the didactical paradigm of its curriculum (competence learning), two major operations taking up a lot of time and effort.

When the BIS and ISM curricula were brought together into one institute, within BIS an initiative was also gathering momentum to try and change its didactical paradigm. It is important to correctly identify the different motives for this change because it plays a role not only in the *pas de deux* danced by BIS and ISM but also in the stance ISM takes in its relation to its professional context.

With BIS the feeling was that its student population was changing in such a way that more traditional didactics like classical instruction and maybe even a substantial amount of projects was not offering the necessary inspiration to students. The publication of the then new ICT-curriculum frameworks,[9] although based on competences, was merely considered a justification for this operation. With ISM on the other hand, the idea was that with the inception of a new job description framework based on competences, there was an intrinsic need to implement competence learning to reflect this change. The problem with the new ISM framework was that it reflected the loss of focus discussed under history.

These two motives blotted out a third and far more important motive. The new competence frameworks for both the ICT curricula and the ISM curriculum were of course based on the need to resynchronise the curricula to the needs of the professions it catered for. For ISM this,

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[7] BIT, FOCUS; although reading the original competences in these frameworks one is still noting the integral approach, it is clear by having a division into generic and specific competences, that the attempt is mainly analytical.
[8] BICT
[9] BIT published in 2000 and FOCUS published in 2002, but based on MORGEN published in 2000.

contradictorily, had led to an alienation from some of its traditional professions because so many interesting new professions in the information domain seemed to open up for ISM graduates. ISM at Deventer actually tried to address this issue by doing so-called job surveys in order to glean focal competences from these jobs that could be matched to the national ISM framework.

Although the obvious objective for ISM was to gain more focus in its curriculum, it actually lost its confidence in the process. The synthetic job competences were very difficult to translate into workable analytical competences. It tended to force ISM in more different directions than it could cope with. Nationally, the loss of a unified identity within the LIS curricula led to a serious division: some ISM-departments already opted for a heavily ICT infused curriculum whereas others became more and more opposed to this tendency and tried to either go their own way or find refuge within another domain (Communication) or in one instance, even, to create their own domain. At Deventer the Board decided in favour of ICT whereas staff preferred a move towards the Communication domain. Its size, nationally and locally, made it feel the threat of extinction and consequently wanted to express its individuality by not being ICT, to which it seemed doomed by organisation.

In the mean time, work on implementing competence learning continued happily together with BIS. The generic competences were jointly expressed in learning objectives and criteria. Both curricula became thematically oriented within each semester. Each semester was assigned a project as training context for students. With regard to the context specific competences, however, ISM chose to opt for an all (of the specific competence) at once approach whereas BIS chose a concentric approach. Although expressly motivated from a wish to have flexible learning routes, again the suggestion is there that it is was also a way for ISM to try and create its own identity. It has led to 'sneers' that ISM is nothing more than a collection of haphazard semester themes, in effect reflecting its disjunctive competence framework.

All this criticism does not detract from the actual value of competence learning when it is grounded in an actual professional context. This is perhaps the main benefit that we have observed in Deventer: students recognize the reality in the thematic approach based on competences that can be extrapolated to a real professional context. In some instances students are indeed in the position to train themselves in a professional context along the relevant criteria of the competence framework. Although some problems are felt to be major problems, there is confidence that adapting the organisation can solve these. For some part this may mean that rigorous cognitive testing is reintroduced plainly because it is a far cheaper way to take of this part of assessment than trying to do it integrally.

At the moment ISM is trying, nationally, to renovate its competence framework and it is intending to frame this according to the building block and context illustration approach of the HBO-I. ISM is yet suspended in limbo outside any domain where both ICT and Communication seem viable. The main question is, whether it is possible for an ISM curriculum to express a reasonably coherent set of professional competences that will enable it to derive a set of learning objectives, which will provide it with an individual identity.

Up till now ISM has focussed very much on the 'disjunctiveness' of its framework. It seems wise to abandon this approach and leave to Caesar what it Caesar's but appropriate a more modest framework, within either one or more domains, that will provide an added value. The concepts of synthetic and analytical competences or competence building blocks may facilitate the process of identifying the most interesting professional contexts and deriving the building blocks from those. Whether those building blocks fall within one or the other domain then seems less relevant. If and

when in the long run this specific combination of building block seems coherent enough to create a valuable supply to the job market, then the domain is ipso facto present.

When attending the Digital Library Workshop at Florence in March of this year, I was not only pushed into recognizing much of what I have described in this paper but I also observed that many of the participants were struggling along the same road albeit at different road section. First I wanted to start to warn everyone for the obvious problems later on along the road and to some extent I did. But it is no use warning people away from this road: it is inevitably part of the changes prevalent in higher education and the way higher education caters for the job market. The jobs traditional education catered for either no longer exist or will change beyond recognition over the coming years. It is wise to bring together the experience and knowledge and perhaps the lucky insight that will correctly predict the LIS job requirements and competence framework for 2010. Competence learning at least requires this framework to be grounded solidly in the relevant professional context.

LIBRIJE   Nederlandse bibliotheekgeschiedenis : van Librije tot virtuele bibliotheek + CD-ROM / P. Schnijders. - Biblion/NBD uitgeverij bv, 1997. – ISBN 9054831383. – An illustrated history of the Dutch library from the middle ages till modern times.

MORGEN   Met het oog op morgen / [?] . – Utrecht : Landelijk Overleg IDM-opleidingen, 1999. – The job profile for the Dutch LIS-graduate.

BIEP   Van biepmiep tot kennismanager : 25 jaar BDA, BDI, IDM in Deventer / René van den Driesche. – Deventer : Saxion Hogeschool IJselland, 2000. – The fifth lustrum book(let) of the IDM at Deventer.

BIT   Beroepsprofiel en Opleidingsprofiel : Bedrijfskundig Informaticus, Informaticus, Technisch Informaticus / Drs. P.A. Santema ; Drs. A.E.N. Hacquebard. – Amsterdam : HBO-I platform, 2000. – The first attempt at a competence oriented job and curriculum profile for the New Universities' ICT-curricula.

ID   Het ID : Twaalf specialisten in het InformatieDomein / Wim Verbei ; Egon Viebre. – [Den Haag] : NVB, 2001. – Perhaps the best example of the phenomenological approach to describe the job context of the Dutch LIS grauate: it is just an enumeration of 12 not entirely different jobs..

FOCUS   Focus op Kennis / ed. Hans Koolmees. – Utrecht : Landelijk Overleg IDM-opleidingen, 2002. The – still current, though under severe revision – curriculum profile for the Dutch LIS curricula.

RUPS   Van Rups tot Vlinder... : Een bladwijzer voor de toekomst van bibliotheken in Nederland / D. Boom BA; Drs. F.R.E. Lekanne Deprez; Prof. dr. R.J. Tissen. – Breukelen : Nyenrode University Press, 2002. A booklet that provides a road map for the Dutch libraries.

BICT   Bachelor of ICT : Een competentiegerichte profielbeschrijving / René Tönnissen e.a. – Amsterdam : HBO-I Stichting, 2004. – The second attempt at competence oriented job and curriculum profile for the New Universities' ICT-curricula.

EHEA   A FRAMEWORK FOR QUALIFICATIONS OF THE EUROPEAN HIGHER EDUCATION AREA / Bologna Working Group on Qualifications Frameworks. – 2004

HBORAAD   www.hbo-raad.nl – Homepage of the joint Dutch New Universities.

HBOI   www.hbo-i.nl – Homepage of the Dutch ICT curricula at New Universities.