

NEW ORGANISATIONAL TRENDS AT THE UNIVERSITEIT VAN AMSTERDAM

ICT-driven changes in the student learning environment and their influence on the task of the University Library

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Presented: May 9th, 2003 at the seminar of the Librarians Committee of the Spanish Rectors Conference on Learning Resources Centres, Mallorca

Ladies and Gentlemen,

At the Universiteit van Amsterdam the developments in the field of ICT have led to major changes in the organisation of supportive services for education and research. The consequences are particularly significant for the library, which sees itself transformed from a 'passive' source of information into an active multimedia knowledge provider. The development of Learning Resources Centres, supported by the library, is in full swing and it is fascinating to see the close collaboration evolving between faculty, IT specialists, communication professionals, library staff and publishers. The measure of success proves to relate strongly to the physical design and furnishing of the location, which is in turn determined by the given architectural - and financial - parameters. The didactical concept is the leading principle.

I shall begin with a brief sketch of higher education in the Netherlands in general, along with a few facts and figures regarding the Universiteit van Amsterdam (UvA). After that I'll go into the management philosophy that has been developed and practised by the UvA since the mid-nineties: administration 'at a distance' through contract management. Within this context I will then discuss the developments in the University Library, including the creation of Learning Resources Centres. In a broader perspective I shall finally touch upon the desirability of outsourcing IT facilities.

The higher education system in the Netherlands

The Netherlands has two main types of higher education institutions: universities and higher vocational schools. 450,000 of the country's 16.6 million inhabitants are following higher education.

1. *Universities*

The Netherlands has 14 universities, including the Open University. While the principal task of these institutions is to train students to be scientists and scholars, many study programmes also have a professional component and indeed, most graduates find work outside the research community. The universities vary in size, with the enrolment ranging from 6,000 to 23,000. Altogether some 150,000 students are enrolled.

2. *Higher vocational schools (hogescholen)*

The study programmes offered by higher vocational schools are primarily career-oriented. The Netherlands has more than 50 such higher education institutions. The

largest have 20,000 to 25,000 students, but many are much smaller. Altogether some 280,000 students are enrolled in this form of higher education.

Since the educational standards of all Dutch universities are considered comparable, what matters in the Netherlands is the degree you earned and not the university / school where you earned it. The same is true of the higher vocational schools. Academic titles can only be conferred by recognized institutions and are legally protected in the Netherlands.

Since the Netherlands has signed the Bologna Agreement, all universities are in a process of restructuring their degree structure into bachelor and master programmes. Most universities have begun implementing this structure this year, 2002/2003. All academic bachelor programmes take three years to complete and master programmes either one or two years, depending on the entrance level of the student and depending on the discipline. A PhD requires 3-4 years, depending on the previous master.

The vocational schools do not offer state-sponsored master programmes. A vocational school graduate in possession of a bachelor degree is entitled to enter a master programme at a university.¹

The Universiteit van Amsterdam: facts and figures

The Universiteit van Amsterdam, also called UvA, has 21,734 students and about 3,300 fte employees (not including the Faculty of Medicine), making it a major comprehensive university. The university has a strong internationalisation programme, with a number of courses conducted in English. There are seven faculties, covering humanities, social science, law, economics, medicine, dentistry and sciences. The University Library, including all the faculty libraries, is the biggest library in the Netherlands with more than 5 million volumes spread across some 15 different locations.

Developments in the field of ICT and educational reform

In recent years we have seen rapid developments in the field of ICT, with both the production and consumption of information now running more and more on the digital highway. This has a profound impact on methods of education, the support of learning processes and the role played by the University Library.

The educational system is facing new challenges that transcend various boundaries, for example:

- Spatial boundaries, when global and international networks such as long- distance learning facilities are established,
- Pedagogic boundaries, when networked multimedia technologies create new forms of teaching and learning,
- Strategic boundaries, when the pursuit of new skills and media and digital “literacies” becomes part of educational objectives and strategies.²

¹ Website NUFFIC: <http://www.studyin.nl>

These challenges require a new approach to education: a shift from a supply- to a demand-centred organisation of learning. The university – and teacher – must begin with an evaluation of the learner's prior knowledge and skills, and proceed from there to mould the learning project into a learning path. They should subsequently organise access to learning resources, as well as organise a regular monitoring of their progress. This approach has far-reaching implications for the way in which universities organise their teaching and support services. Each individual learner is to operate with a substantial measure of self-reliance. By no means is this new approach to education being exercised throughout the UvA, but faculties and services have undertaken various initiatives to adopt a demand-centred approach, particularly in arranging ICT facilities.

The University Library, including the faculty libraries, must adapt to stay abreast of this new approach to education, meaning that it, too, must learn to be demand-driven. The librarians and assistant librarians will come to operate as facilitators rather than experts. The University Library will also have to take account of the increasing shift from printed sources to digital information. At present, digital information already makes up by far the biggest part of the acquisitions of the library for natural sciences. A five-year subscription contract has been signed with Elsevier Publishing Company for all magazines and journals in digital form. With many other commercial and non-profit publishers contracts have been signed as well.

Contract management

The Executive Board has drawn up, on the basis of a Strategic Plan, a covenant with the Director of the University Library that obliges the latter, in the course of the coming years, to steer the library through a development in line with the perspectives sketched above. Before I go into these plans, I shall first describe the general system through which the Executive Board manages the university and its faculties and services.

The Executive Board sets out the medium and long-term targets in a Strategic Plan. By passing the budget it allocates funds to the faculties, institutes and central services. The Board and the professional Dean of each faculty enter into four-year 'administrative covenants' concerning the implementation of the Strategic Plan and the application of the allocated funds. The Board can issue guidelines to the Deans (who are appointed for a maximum of five years) concerning the performance of teaching, research and management duties.

Despite the Board's regulatory powers, the faculties have a great deal of autonomy. Within the framework of the covenant the Dean is ultimately responsible for all that happens at the faculty; for the duration of the covenant the Board's role is mainly to encourage, facilitate and coordinate. Before starting discussions on a covenant, the faculty (the Dean being the person responsible) develops a plan based on the faculty's mission, taking into account the

² Website Eenet, The European Experts' Network for Education and Technology: http://www.eenet.org/cgi-bin/output/output_medien.pl, see the paper titled 'How learning is changing...information and communications technology across Europe – ICT in Education policy' (1998).

proposed elaboration of the university-wide goals as formulated in the Strategic Plan. Before reaching a decision, the Board can have the faculty audited by external experts, and will take the audit report into account when considering the proposed covenant. The Universiteit van Amsterdam also uses a quality assurance system to measure management results. Aside from these managerial forms of self-assessment, the faculty also relies on scientific assessments such as external visitations.

The covenant covers specific topics that apply only to the particular faculty involved, as well as general matters that apply to all the faculties. Before it can be approved the Dean must consult the faculty's Personnel Council and Student Council, both of which have advisory powers in regard to covenants.

The Dean is personally responsible for the implementation of the covenant entered into with the Board. It is not a legally binding contract but a working or administrative agreement. On the basis of the covenant the Dean arranges the implementation of the teaching and research programmes with the Directors of the Institutes. The directors of the departments (each of which represents a 'human resources reservoir') are responsible for personnel and for the development of the discipline as a whole. The Dean can hold the institutes and departments to account should they fail to observe the arrangements made, but he remains accountable to the Board for implementation as a whole.

Covenants with the University Library

The central University Library formulates its goals, priorities and strategic plans in covenants and in medium and long-term plans (for 4 and 10 years respectively). From each type of plan the main topics related to ICT and Learning Resources Centres will be highlighted:

Covenant 2003

One of the main aims of the 2003 covenant is described as "delivering a contribution to the digital availability of publications by university staff through the Digital Production Centre". This way the University Library aims to fulfil the ambition of the university to make scientific information available to the scientific community in a transparent and cost-efficient way.

Mid-term plan 2002-2006

In its mid-term strategic plan, the central University Library describes its aims, among others, as follows:

- Strengthening the cooperation between the central library and the faculty libraries;
- Fine-tuning of library services to the needs of users, in order to enable them to find their way by themselves. This requires a user-friendly and logical lay-out of the physical as well as the digital library;
- Further development of the digital library by creating more digital content and enhancing user-friendliness. The library should also increase its role in the electronic learning environment.

Long-term plan 2002-2012

The perspective on 2012, as sketched in the long-term plan devised at the end of 2002, sees the University Library evolve into a supplier of mainly digital information for education and research. The plan also aims to develop the central and, through clustering, the subsidiary libraries into Learning Resources Centres. These will support the academic community on a local level (in libraries for clustered units), and will contribute significantly to the academic socialisation of both students and staff. The library has indicated that this requires substantial investments in ICT facilities and accommodation.

The transition from traditional University Library to Learning Resources Centre

Traditionally, a library is an organisation that collects printed documents. The digitalisation of the media, the instant availability of the Web and the academic ‘campus wide networks’ have rendered this function more or less obsolete - although this varies greatly per discipline. For many members of the academic community ‘going to the library’ has been replaced with ‘turning on the computer’. There is nevertheless still a strong need to physically visit a library, especially among students. Their computers at home generally don’t match up to those at the library, and they often need various sources of information that may not all be available in digital form. Moreover, the need for a place to meet others remains strong. A university is not just in the business of turning students into people with a high degree of knowledge, but must also help them develop all necessary social skills. The academic setting requires that there are places for people to meet, and here the library plays an important role. In traditional libraries the study-cubicles, photocopiers and canteen facilities already were perhaps as important as the collections of books and journals. While the importance of traditional collections is gradually waning, the importance of digital information and the facilities it requires is growing rapidly. The library can incorporate these developments by gradually transforming into Learning Resources Centres, or LRCs. These will offer students and staff a place to pursue any and all activities that promote the learning process. An LRC offers a broad array of facilities, providing students at one location with all the necessary means to pursue their study.

Developing the LRCs is not an easy task, not least because the library buildings are not always amenable to the new concept, and much of the space available is occupied by the book collections. Many universities, including the UvA, have had to take recourse to sub-optimal solutions. Traditional study halls fitted with personal computers are often operated by IT specialists, which means that the computerisation concept takes precedence over the educational concept which should be the leading principle of a ‘real’ LRC. Realizing this principle requires that IT facilities be intimately connected to the library, which will enhance the utility of both facilities.

The form which an LRC takes may vary greatly per discipline. Collections of books and journals will disappear from the natural science library far sooner than from the libraries of humanities and social sciences. Another question that needs to be answered is which other facilities can - and should - be integrated within the LRC. Possibilities are: a modest bookstore; a canteen or cafeteria; an education information counter; a photocopy service; a faculty shop for the provision of readers, et cetera; a digitalisation workshop; facilities to

study or produce audiovisual media; and meeting facilities for students and student associations.

The question is whether such facilities should be made part of the library, or whether, conversely, the library becomes part of some kind of 'facilitheque'.

Success in transforming the traditional libraries into Learning Resources Centres depends crucially on the extent to which the library staff manages to adopt and adapt to the new way of working. In an LRC, library and IT staff collaborate closely, seeing job profiles gradually merge and the lines separating different groups of staff becoming less rigid. For the traditional library staff this may amount to quite a transition. They will have to familiarize themselves with the digital library and be able to address any technical problems and information queries students might have. Particularly for personnel that is not used to working with IT (often those aged 50 and over) this may pose a daunting challenge, possibly eliciting resistance to the necessary changes. This makes a proper, pro-active human resources policy extremely important. Over the past five years the University Library has invested heavily in staff training and in facilitating a change of attitude.

The position of libraries and LRCs in the city

The University of Amsterdam is made up of a number of semi-autonomous institutes, housed in larger and smaller localities spread across the city. The past fifteen years have seen the university move towards a greater concentration in larger buildings. In a crowded historic city like Amsterdam, optimum concentration could only be achieved by moving away from the city centre. However, since many students are attracted to the university because it is situated in the city centre, we have chosen to maintain our identity with a number of important clusters located in the city centre. Only the Faculty of Mathematics and Sciences and the Faculties of Medicine and Dentistry will be moved to the city outskirts. This concept implies an extremely ambitious development programme, financially and otherwise, that will largely determine the university's agenda for the next two decades. Building a new central library has the highest priority, although other locations also require central facilities. The existing smaller faculty libraries will gradually be replaced by a small number of well-equipped larger libraries, each of which needs to function, within its given setting, as the natural focal point of that university location. Each of these libraries will have to be the Learning Resources Centre for the students of that particular cluster.

ICT facilities and projects to support education and research

Learning Resources Centres will increasingly play the role of partner to teachers and students in the digital learning environment and to researchers for the production and distribution of scientific output.

I shall offer a few examples of the manner in which the University Library supports teachers and students in the educational process, both at present and in the future:

- *The interlinking of the digital library and the electronic learning environment*
It goes without saying that the establishment of an LRC requires setting up both physical and digital libraries. This means that students can perform searches within the electronic learning environment, and that digital course materials contain links to the digital library.

- *Electronic information counter*
The digital library provides the possibility to contact information specialists. The communication is as yet not synchronous – there is a certain lapse of time between question and answer – but the aim is to design the information counter in such a way that, at pre-established times, students are able to communicate directly with the specialists (in a chat room).
The specialists’ working method is in line with the shift from teaching to learning: they do not directly provide an answer to a student’s query, but will advise the student as to how and where an answer may be obtained. This will increase the students’ self-reliance, improving their ability to find answers on their own next time around.

- *Collaboration between libraries and faculties in digital educational programmes*
At present the University Library and the Faculty of Humanities are busy developing a new e-master initiative called “History and Culture in the Dutch Golden Age”. The topics of history, literature and art history are presented in relation to each other. The e-master will be made available for distance education, which means that the online education component will be well represented. This is a good example of devoted collaboration by teachers and library staff.

The University Library offers ICT support, not just to education but also to scientific research, particularly in regard to digital publishing. To this end the library cooperates closely with the Amsterdam University Press (AUP), with the AUP providing the expertise pertaining to publishing, and the Library providing the technical know-how.

This is prompted in part by the exponential increase in subscription fees to scientific journals. This often results in the strange situation that universities are unable to subscribe to journals in which their own scientists publish their work.

The UvA is attempting to diminish the scientists’ dependence on large commercial publishers in several ways:

- A Digital Production Centre has been established to support scientists and knowledge organisations in creating, filing and making available electronic publications and databases.
- The University Library will make a repository / document server (e.g. the Open Archives Initiative) available, following international standards. In this way the university is able to make her scientific production worldwide available and to share it with other scientific institutions.
- The University Library has also joined SPARC Europe, which is an alliance of European scientific libraries and research institutes that aims to stimulate greater competition in the publication of scientific journals.

E-publishing will remain a fast moving field for the coming years; with innovation in the field of digital publishing, improvement of access to scientific information, changes in scientific communication processes, and changes in the tasks of different parties (publishers, libraries, scholarly societies, etc.).

Essential focus of attention for the scientific world is the role of peer reviews and the way in which universities evaluate and reward scientific activities. These aspects, which are part of our scientific culture, have a tremendous impact on the success of this kind of worldwide initiatives of universities and libraries.

Outsourcing ICT services

All of the ICT-related developments mentioned have been carried out by the university itself. It is worth asking whether it would, in some cases, be more advantageous to outsource the ICT facilities and, if so, in which case.

The advantage of outsourcing is that external bureaus are often better informed as to the latest market developments. Secondly, the university will not be affected by costs relating to sick leave, paid leave or resignations of external personnel. Finally, outsourcing can prevent an excess of bureaucratic structures. However, outsourcing may mean that the internal experts are deprived of challenges and responsibilities to a point where they might choose to leave the university. A second risk is that the costs involved in outsourcing may greatly exceed the original budget, due to additional requests made by the university. Lastly, it may turn out that the external experts are insufficiently able to gear their product to the needs and desires of the university, due to their lack of familiarity with the organisation.

In my opinion it is generally more advantageous for smaller universities to outsource services or share them with others, than it is for large universities. For small universities it is relatively expensive to operate independently, since it entails the provision of services with little qualitative workload. The UvA especially outsources the provision of standard utility services (e.g. telephone services, application hosting and ICT-trainings). Facilities that are mission critical to the university (e.g. Directory Services and Blackboard) are provided and maintained by the in-house Computerization Centre (Informatiseringscentrum).

The Universiteit van Amsterdam does outsource certain activities to collaborative bodies set up by universities. One such body is SURF (Stichting Universitaire Rekenfaciliteiten): an organisation in which higher education and research institutes work together in the field of network-services and ICT. SURF's mission is to operate and enhance a common ICT infrastructure, so as to profit fully from the potential offered by ICT to improve the quality of higher education and research. In this way, local aims are imbedded in broader goals for the Dutch higher education system. The focus is particularly on those areas where results can be achieved that transcend the capacities of one individual institute. SURF is financed by the government for about 5 million euro per year. The HE institutes finance the remaining costs themselves.

Another example is the Digital University (Digitale Universiteit): a consortium of ten universities and vocational schools devoted to redesigning education in the light of ICT. The government supported the Digital University with an initial contribution of more than 11 million euro. The Digital University is now financed completely by the consortium itself. This collaboration enables the institutes to make use of one another's expertise, to acquire the knowledge that all institutes need and to share the high costs of innovation. The initiative got off to a difficult start, due to an initially limited commitment, but, with 9 new projects approved and 35 project proposals submitted, it is now firmly up and running.

Conclusion

The far-reaching developments in the field of ICT have changed the learning environment of students. Education is becoming more demand-driven and competence-based. These developments in turn lead to changes in the libraries' tasks: from a 'passive' source of information they change into active multimedia knowledge providers.

As a consequence of these processes, increased efforts are required in the field of:

- Strategic planning through internal contract management (covenants and strategic plans);
- More intense collaboration among teachers, IT specialists, communication professionals, library staff, publishers et cetera;
- The development of Learning Resources Centres, providing digital as well as physical facilities (especially places where students can meet each other).

Although the development of LRCs is a far from simple process, this process is now in full swing and its perspectives are positive."

With thanks to ms drs. E. Langen who helped me preparing this presentation.³

³ And special thanks to drs. A.J.H.A. Verhagen (director University Library), K.F.K. de Belder (director electronic services of the Library), and dr. J.P. Dijkman (director Computerization Centre) for the fruitful discussions.