DIANA OBLINGER PRESIDENT OF AMERICAN EDUCAUSE:

‘DEMAND FOR HIGHER EDUCATION GROWS DURING DIFFICULT ECONOMIC TIMES’
INTERVIEW

photos: bob rives
COLLABORATION WITHOUT BORDERS

Higher education and research is becoming more international, and so does SURF. Think of issues such as system interoperability, student mobility and international collaboration in research. Institutions join forces and share knowledge by collaborating in various fields with international partners.

At a strategic level SURF has collaborated extensively with JISC, its counterpart in Great Britain. JISC and SURF have recently joined forces with the American EDUCAUSE. Diana Oblinger, president of EDUCAUSE, presents the advantages of collaboration and the first steps toward a joint strategy.

What are currently the biggest ICT challenges faced by higher education and research in the USA?

ICT supports the overall mission of our colleges and universities, so we are – and must be – actively engaged in issues such as access to education, quality of education, affordability, and innovation.

If you think about more IT-specific issues, three issues come to mind. Firstly, cloud computing and distributed services. We know that IT infrastructure doesn’t need to be on your campus so long as you have access to the services. This allows us to consolidate resources and look for scale, efficiency and possibly ‘green’ advantages. But there are real challenges, too, such as resistance to replacing existing functions with outside services. There are also issues of how to manage and control IT security in a cloud. Underneath all the technical complexity lies a very human issue – the issue of trust.

The IT workforce is a second issue of concern. Will we have enough skilled IT leaders as our population ages? What skills do CIOs need now and in the future? Are we bringing enough young professionals into our field with the required skill sets? Are we helping them to develop or advance those skills?

Finally, institutions struggle with how to address rapid advances in ICT on campus as well as student expectations. For example, what should colleges do with social networking? Virtual worlds? How do campuses harness the latest technologies to support learning, discovery, and engagement?

What in the year 2009 are the key benefits of ICT in the USA?

Technology plays an increasingly important role in teaching and learning at our institutions. It provides students, whether on or off campus, with learning experiences to which they otherwise might not have access. It also increases the level
of interaction and engagement they can have with course content, faculty, and their peers. Demand for higher education traditionally grows during difficult economic times, and we expect institutions to turn even more to ICT to help meet student needs for flexible learning options.

Likewise, high-performance computing, data storage, advanced networks, and applications – cyberinfrastructure – is increasingly critical to research, innovation, and education. Cyberinfrastructure has already enabled research insight and collaboration that would have been unthinkable just a few years ago. We expect the speed and volume of research innovation made possible by cyberinfrastructure to grow. And equally as important, cyberinfrastructure enables new forms of learning and collaboration.

Finally, none of our institutions could run without ICT. Technology supports our financial, student, research, and human resource systems. It is fundamental to how we communicate. We use IT to store vast quantities of data and other digital information. At this point, IT is involved in almost every university function.’

\[\text{Markedly strong commitment of ICT professionals in higher education}\]

What is the role of EDUCAUSE?
‘EDUCAUSE supports those who lead, manage, and use ICT for the benefit of higher education. We engage colleges and universities on a wide range of higher education and ICT issues, such as governance, teaching and learning, research, and more. We do this in the US, but also abroad. EDUCAUSE focuses not just on technology but also on the effective application of that technology. Our motto is “uncommon thinking for the common good,” because we believe ICT innovation has a major role to play in advancing higher education’s mission. Students need to learn, discover, and show engagement for the benefit of individuals and communities as well as the world. To achieve this we hold conferences, publish magazines, sponsor working groups, conduct research, and offer professional development programmes.’

Since the summer of 2008 you have been engaged in serious talks with JISC and SURF to strengthen collaboration between the organisations. In what areas do the organisations aim to collaborate?
‘SURF, JISC, EDUCAUSE, and the Council of Australian University Directors of Information Technology (CAUDIT) plan a joint paper on the future of higher education. We see similar futures in our countries, and we hope this shared vision will promote discussion and collaboration between our organisations and their members, leading to changes that serve all of our countries.

In addition, the project will help us determine how to collaborate on future joint ventures. For example, we have discussed doing surveys across our countries to look at multi-national trends. We have talked about bringing together groups of IT experts and researchers to collaborate on the most challenging issues in cyberinfrastructure. There are many ways in which we might address common issues. This project will also provide a starting point for engaging other organisations in a shared vision of the future of higher education.’

What makes it worthwhile for EDUCAUSE to collaborate with JISC and SURF?
‘We have discovered we have similar values, challenges, and interests. Regardless of country, higher education ICT professionals have a strong commitment to advancing higher education’s mission of learning, discovery, and engagement through ‘uncommon thinking for the common good.’ EDUCAUSE members have consistently expressed interest in connecting with their counterparts internationally to foster greater
knowledge-sharing. We view the future of this higher education project and the additional collaborations to which it may lead as key steps along that path.’

**What do you aim to achieve together?**

‘Because higher education is similar among our countries, we may be able to see trends and issues earlier by working together. Just comparing information brings us insights. Much of our work is complementary and can be shared readily from one country to another. For example, we have just compiled a bibliography of cyberinfrastructure resources based on what our countries have produced. Perhaps most importantly, we believe that by working together we will all have greater influence with higher education leaders, government, and our institutions. If policy makers in the U.S., for example, see that the Netherlands has the same challenges we do and has developed an effective solution, they are more likely to support such a solution in the U.S.’

**What are the joint plans for 2009?**

‘In addition to the future of higher education report, we anticipate a joint presentation at the EDUCAUSE annual conference and other major venues. We also aim to share our thinking about higher education’s future and what we need to do to realise it with policymakers, university leaders, and others. And we will plan our next steps if our efforts in this project are successful.’
CONSORTIA UKB AND SHB OUTSOURCE LICENSING MANAGEMENT TO SURFDIENSTEN

DIGITAL CONTENT: E-COLLECTIONS

Academic universities and universities of applied sciences, as well as their researchers, staff and students, can turn to SURFdiensten for a wide selection of affordable software products. It is less well-known that SURFdiensten also provides licensing management for online content, including journals, databases en streaming video materials. SURFdiensten does so by order of UKB and SHB, the umbrella organisations of the libraries in higher education. Presidents Maria Heijne and Jan Companjen explain how this works.

Staff and students of academic universities and universities of applied sciences have access to a huge selection of digital content: from scientific journals to teaching methods, and from instructional films to e-books and medieval manuscripts. They are usually unaware that this has taken extensive negotiations behind the scenes with commercial publishing houses such as Elsevier, Kluwer and Wiley. SURFdiensten enters into these negotiations on behalf of the collaborations of the libraries in higher education, UKB and SHB. Licensing agreements have been made with about 55 publishing houses.

HITCHING A RIDE
‘At the end of the nineties the members of the UKB (the collaboration of libraries of academic universities and the National Library of the Netherlands) decided to start conducting the negotiations with the commercial publishers together instead of each separately,’ explains UKB president Maria Heijne. ‘The publishing houses came up with ever more elaborate and longer running contracts for digital content, with substantial annual rises in prices. By joining forces we improved our position, obviously. We first had our own licensing office, but later on SURFdiensten increasingly carried out more of the work. After all, they were doing the same for software.’

When the libraries of the universities of applied sciences united in 2003, they also decided to outsource the licensing management of online content to SURFdiensten. Jan Companjen, president of the SHB (the collaboration of libraries of universities of applied sciences): ‘It is very profitable for us, especially in the case of large international publishing houses. We can now hitch a ride on the contracts that SURFdiensten
'The agreements with publishers usually run for three to five years. Their renewal takes much preparation.'

**BIG DEAL**

Both UKB and SHB have a Licences workgroup that annually determines the priorities and draws up a shortlist with SURFdiensten on behalf of their user group. The members use SURFgroepen to monitor online how the activities at SURFdiensten proceed. Heijne: ‘The agreements with publishers usually run for three to five years. Their renewal takes much preparation, from both SURFdiensten and us. We provide our wishes as input. It used to be that we concluded big deal contracts with the large publishing houses. That means that you have access to their entire online collection at a fixed fee. But we do not want that any longer; the costs can be aligned more to the available budget if we are more flexible in the choice of the titles. SURFdiensten negotiates with the publishers on the basis of our wishes.’ The list of content providers that SURFdiensten negotiates with is still growing. Companjen explains how this works in the case of the universities of applied sciences: ‘As is the case with UKB, our Licences workgroup draws up an inventory of the wishes of the teaching staff.

Our members then determine the priorities. We consult with SURFdiensten how much time there is for agreements with new providers, after which the licensing managers get to work for us.’

**OPEN ACCESS**

The role of the library has changed considerably for the universities of professional education over the past twenty years, states Companjen. ‘It is the task and the ambition of universities of applied sciences to conduct more research. This involves a structural upgrading of the library and information facilities. Closer collaboration can yield much added value. At the same time in many universities of applied sciences we see a trend of economising, in these facilities as well.’ Clearly, next to the commercial provision of content there is a growing interest in other interesting sources which are freely available through the internet. ‘For teaching staff we are one of the many providers of information. In the end they decide which materials they will be using,’ Companjen adds.

Open access is a clear trend in the scientific community as well. Heijne: ‘In principle scientific information should be available to everyone, but this cannot be achieved within the context of the current licensing model of the publishing houses. For this reason the academic universities have set up repositories for their researchers’ academic publications, which can be searched through a central interface, NARCIS. And the universities of applied sciences have the HBO Kennisbank (knowledge products online). Such initiatives are emerging all over the world. Additionally, there is an increase in open access publishers, so the established commercial providers will have to adapt to this in one way or another. One option is to have authors pay the publishers for publication, keeping the existing strict review procedures in place though. The publishers in their turn will make their online collections accessible to everyone. Even now publishers are experimenting with open access variants. It may take years before the existing system is changed, but I find it exciting to see how it will develop.’

Daphne Riksen
There are stacks of equipment in his office. The new HD video mixer has just arrived. An ENT specialist with a remarkable affinity for technology, he is a pioneer in the use of HD video conferencing equipment in the operating theatre. A conversation with professor doctor Wilko Grolman of the Utrecht University Medical Centre.

Several cameras in the OR, including a microscope camera, register ear operations that are watched live all over the world. Using SURFcontact, the SURFnet HD video conferencing service, the Utrecht UMC is taking a big step forward toward even better facilitation of live surgery registration. Grolman, together with ENT specialists Robert Vincent from France and John Oates from England has been very active in the LION Foundation for some years. LION (Live International Otolaryngology Network) aims to optimise international knowledge sharing and collaboration in the field of ENT. Grolman finds it important to stimulate the use of video conferencing technologies in the operating theatre.

QUEUING
The ‘Global Otology-Neurotology Live Surgical Broadcast’ is organised annually by the LION Foundation. ENT specialists all over the world can watch several ear operations. Grolman: ‘Ear operations are performed simultaneously at fourteen locations. The images all arrive a central location and the outgoing streams are coordinated by two moderators. This means that two ENT specialists are at the helm in order to provide people all over the world with the most interesting images by switching from one operation to the other. It is possible to ask questions and to have a dialogue with the surgeons through the moderators.’ According to Grolman institutions are really queuing to participate during the annual congress. ‘Last year an estimated 4,000 people watched from forty locations, from a packed lecture hall in South Africa, where the images were projected onto a large screen, to a specialist in front of his PC in the United States.’

FIRSTS
The LION congress is organised for the fourth time on 19 May 2009. Together with SURFnet the Utrecht UMC takes care of the technological coordination during the event, with several firsts this time. The image quality has never been this good. The surgical procedures are shown in HD quality. ‘Image is essential in our field, it really is necessary to be able to see what someone is doing. The quality of HD is incredible. We now use 720p images, and 4 CIF for the microscope, a quality we have never achieved before.’ Grolman explains. Besides the improved quality the participants will be given the option of on-demand switching to another channel in order to watch a different procedure. This year they are
‘HD video conferencing in the operating theatre will only become successful if the specialists themselves are actively involved’

broadcast not on one, but on two channels. Moreover the procedures can now be watched through web streaming.

DUTCH COORDINATION
The technological coordination moved this year from Paris to the Netherlands, due to the efforts of Grolman, but also of SURFnet and Bert Andree of management partner Ant Arbor. ‘The MCU (Multipoint Control Unit), which combines the video images from the various locations, is physically located at SARA in Amsterdam. In this way we are taking on more responsibility, but technologically speaking this was a necessary step. We also impose much stricter demands on the participating institutions these days. An institution needs to be certified in terms of their quality of image and sound, because a weak link can be the bottleneck for the entire process. Various preparations are also required locally in order to make the HD video conferencing equipment work. Think of the internal network, the firewall, but also the lighting and the sound in the operating theatre. These matters are all essential for an efficient and secure deployment of the video conferencing service.’

SMALL-SCALE INITIATIVES
Grolman: ‘In December we did a test run at SURFnet. The results were positive. Some institutions were not up to par yet, but SURFnet has proven its knowledge and skill and has shown that it can make this run reliably.’ In the longer run Grolman hopes that ENT specialists will deploy the videoconferencing tools of their own accord in order to ask colleagues for advice or to have them watch independent of their location. Or, even better: to bring in other specialists. ‘It is my aim to build an international knowledge network, in which small-scale initiatives are set up regularly in order to learn from each other. HD video conferencing in the operating theatre will only become successful if the specialists themselves are actively involved.’

Mariëlle Schipper-Heesters
Almost ten thousand publications of students, teaching staff and lectors of Dutch universities of applied sciences are available digitally. The HBO Kennisbank showcases a capital in knowledge in the form of theses, research reports, papers and articles produced by universities of professional education.

Each month over 28,000 interested parties visit the public portal www.hbokennisbank.nl, which gives them easy access to knowledge products of seventeen universities of applied sciences. The HBO Kennisbank provides access to theses for students to use as input for their own research. The available research reports or articles can be interesting for teachers, to keep their lessons up to date with current developments.

KNOWLEDGE SHARING
Universities of applied sciences increasingly characterise themselves as knowledge institutions. The lectors conduct much applied research, which they publish in a report. These publications are digitally accessible through the HBO Kennisbank and become available worldwide free of charge. The HBO Kennisbank forges the link between vocational practice and applied research, and supports lectors in disseminating knowledge to society. The accessible knowledge materials are usually of an innovative nature and discuss subjects that are currently important to the industry and to society.

HOW DOES IT WORK?
The universities of applied sciences connected to the HBO Kennisbank decide for themselves whether to offer a knowledge product through the portal. The product needs to comply with the institution’s regulations, and the author needs to provide consent. Moreover theses need to be free of restrictions from any companies involved. The theses and publications that are made available can be fully accessed and searched for key words and author. Additional functionalities were added as from last year: visitors can add assessments to knowledge products and write reviews, tell colleagues or friends about articles and make use of a bookmarking tool.

FURTHER INFORMATION
The HBO Kennisbank is part of the SURFshare programme of SURFfoundation and was developed in collaboration with SHB (the collaboration of libraries of universities of applied sciences). Further information on connecting to HBO Kennisbank: Lianne van Elk, project manager hbo knowledge dissemination (vanelk@surf.nl).

Sabrina Vredenberg

FURTHER INFORMATION:

- www.hbokennisbank.nl
- www.surffoundation.nl/surfshare