Learning with New Media:
The Swiss Virtual Campus and the Swiss Universities
| 19 | AUM | Department for teaching media (Abteilung für Unterrichts-Medien) | University of Bern |
| 19 | Brainbox | Medical Learning Center, University of Basel |
| 14 | brache.ch | E-learning solutions, UAS at a distance Switzerland, Brig |
| 36 | Bil – Assisted Self-Learning | (Begleitete Selbstgesteuerte Lernen), part of study program Specialized Journalism and Organizational Communication, Zurich UAS Winterthur |
| 11 | CAL/ULA | E-learning Analysis Center, University of Applied Sciences Valais |
| 5 | Center for Teaching and Learning | Support center for teaching and laboratory for educational technologies, EFF, Lausanne |
| 7 | Center of Study | Center for Technologies of Education (Center Technologies pour l’Enseignement et la Formation), University of Lausanne |
| 17 | Center for Teaching and Learning | Rectorate, University of Basel |
| 19 | dades | Teaching in university didactics at University and ETH Zurich; a joint venture of AFH, Center for University Didactics (Arbeitstelle für Hochschuldidaktik), University of Zurich and DIK, Center for Teaching and Learning (Didaktikzentrum), ETH Zurich, in cooperation with NET at ETH Zurich and IC at University of Fribourg |
| 5 | E-learning | Electronic classroom with telecommunication infrastructure, UAS Bern |
| 30 | EDUM – Educational Management in the Swiss Virtual Campus | SVC mandate given to Institute of Communication and Education (ICCF), University of Italian Switzerland, Lugano |
| 12 | eBusiness Online | Postgraduate courses, public-private partnership, UAS Bern |
| 23 | Eduche | SVC mandate (Technical Support & Consulting) given to Center NPE, University of Freiburg |
| 11 | Learning Group | Northwestern Switzerland UAS Solothurn |
| 7 | EFF on line | University program, EFF Lausanne |
| 33 | eQuality | SVC mandate (pedagogy/didactics) given to the Department of General Pedagogy of the Institute for Education, University of Zurich |
| 10 | e-Support DWI | E-learning support and services of the Department of Economics in the areas of project management and didactics, UAS Basel |
| 8 | ESN World | University programs, ETH Zurich |
| 7 | ESN | Fund for financing educational projects, ETH Zurich |
| 3 | FNL | Forum New Learning, a SVC project at UAS for the support of UAS projects, UAS Bern |
| 10 | Hyperwerk (Hyperwork) | Center at UAS Basel, Muttenz |
| 29 | ICF | Institute of Communication and Education, University of Italian Switzerland, Lugano |
| 32 | ICT Center for Information and Communication Technology | Vice President’s Office for Teaching, University of Zurich |
| 18 | IWP | Institute for Communication and Culture, University of Lucerne |
| 25 | InterTICS | SVC mandate (pedagogy/didactics) at TECFA, University of Geneva |
| 27 | IW – Institute of Business Education and Educational Management | Learning center for foreign and subject specific languages, University of Basel |
| 17 | Learning Center and E-E-Learning | Competence Center, Institute of Business Education and Educational Management (DWP), University of St. Gallen |
| 16 | LearnTechNet (LTN) | Network for e-learning, University of Basel |
| | | | |
| 18 | Media Center | Lecture rooms and seminar rooms for media intensive teaching, ETH Zurich |
| 35 | MENTORS | A collaboration programme between RPP Lausanne and the Foundation Fernstudium Schweiz, Brig |
| 10 | MM – Multimedia Center | [Multimediazentrum] of the Faculty of Humanities, University of Bern |
| 17 | NDK ePl – Postgraduate course e-learning | Nachdiplomkurs E-Learning, University of Lucerne and Central Switzerland UAS |
| 8 | NET | Network for Educational Technology ETH Zurich |
| 28 | NotiAcademy | Research platform of the Institute for Media and Communication Management, University of St. Gallen |
| 4 | notigra | University programs and competence network for e-learning technologies, UAS Bern |
| 17 | New Media Center (NMC) | Media development center, University of Basel |
| 24 | New Media Didactics Center | [Servizio per la Didattica dei Nuovi Medii], UAS of Italian Switzerland, Lugano |
| 29 | New Media in Education Laboratory (Benefits Lab) | Institute of Communication and Education (ICCF), University of Italian Switzerland, Lugano |
| 33 | NITE | Center for New Technologies and Education, University of Fribourg |
| 33 | OLAT Center | Implementation and support for the learning management system OLAT for lectures at the University of Zurich and ETH Zurich, University of Zurich |
| 31 | Online Universität Zürich | University program, University of Zurich |
| 33 | Pool of knowledge „e-learning“ | Think Tank [Centro di, Zurich UAS Winterthur |
| 20 | STUDIUM online | Curriculum information server of the Faculty of Medicine, University of Bern |
| 38 | SVC | Swiss Virtual Campus, Virtuelles Campus Schweiz, Campus Virtuel Nord, Campus Virtuel Suisse, Swiss University Conference, Bern |
| 23 | TECFA Unit: Instruction and courses | Teaching and research program for new learning technologies, University of Geneva |
| 24 | TECFA Unit: Research | Teaching and research program for new learning technologies, University of Geneva |
| 33 | T-Learning | Production center for video and multimedia, University of Zurich |
| 2014 | uNetra | Technology transfer of the Universities of Bern and Zurich |
| 17 | University Data Processing Center | Development and administration of e-learning platforms and technical support, University of Basel |
| 19 | University Didactics | A program for university didactics of the University of Bern |
| 31 | VAM | Virtual Learning Platform Medicine, University of Zurich |
| 31 | VC Business Informatics | Virtual Campus Business Informatics, University of Bern |
| 31 | VC Pedagogy | Virtual Campus Pedagogy, University of Bern |
| 17/6 | Virtual Campus Lucerne | Technology transfer of the Universities of Bern and Zurich |
| 35 | Virtual Study Center | Study program advice, The Foundation Fernstudium Schweiz, Brig |
| 38 | Virtual University Library | Development and administration of a virtual library containing specialist electronic literature, University of Basel |
| 37 | WIRTEACHING | Implementation of tools and consulting for lecturers, Zurich UAS Winterthur |
The Swiss University system compared to other European systems

Compared to other European universities, Swiss universities have considerable autonomy. Many university authorities have developed strategies for the use of new information and communication technologies in academic teaching: e-learning as top level business, competence centers at management level.

Swiss Universities have launched and developed various initiatives and institutions:
- competence centers and networks which are either subject specific or of a university wide nature
- internal university programs
- theme specific programs for education and continuing education.

Many Swiss universities realised quiet early that e-learning has to be supported on a broad basis and by sustained strategic planning so that innovative and high-quality projects and their connected learning programs can be developed. Therefore, they supported the project to establish e-learning as a part of everyday university teaching (foundation and main studies) with a program of the Swiss federal authorities and so became the parents of Swiss Virtual Campus.

Unlike many foreign e-learning initiatives, Swiss Virtual Campus is aimed primarily at undergraduate students and only secondly at mature part-time students. The financing method (one part federal money, one part money from the institutions) has the advantage of supporting the integration of e-learning at the existing universities. Many foreign initiatives created special institutions or developed isolated projects with the help of special government allowances, and so could only partially count on the support of the existing institutions.

Imprint:

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Coordination and documentation: SVC Coordination team, Swiss University Conference – Schweizerische Universität konferenz (SUK), Bern (www.cus.ch).

Organisation: LearnTechNet (LTN) / University of Basel, NET / ETH Zurich, ICT / University of Zurich. The responsibility for all entries rests with the indicated departments of the relevant universities.

Note: This list contains only those universities who have sent descriptions of their specific e-learning initiatives. The seven universities of applied sciences (UAS) are still being organised. There are projects in the e-learning field at most of the campuses of the seven universities of applied sciences.
Various events organized by the coordination of Swiss Virtual Campus as well as by the above mentioned mandated agents will promote the creation of a Swiss Virtual Campus Community. The basic technology allowing students easy access to the necessary resources at universities nationwide (SWITCH-Project AAI: Authorization and Authentication Infrastructure) will be implemented in cooperation with SWITCH (Swiss Academic and Research Network).

The impulse program Swiss Virtual Campus will be completed at the end of 2003. To guarantee sustainability, a consolidation program for the years 2004 – 2007 has been applied for. The main points of the application are as follows:

- Maintenance and support for the user community of the qualified projects of the impulse program 2000 – 2003
- Setting up of at least one professional production team at each university
- Promotion of new projects
- Coordination authority, mandates and program management.

The consolidation program does not currently plan a virtual campus as has been created in some European countries, although it does not totally rule out such a virtual campus, should it be considered sensible and useful by the Swiss universities.

**Swiss Virtual Campus – today and tomorrow**

Today, Swiss Virtual Campus, as a hyper-network of currently 50 inter-university project networks, supports the exchange of information and cooperation among Swiss universities. In future, it could take on the function of a coordinating national e-learning body, corresponding to the requirements and wishes of the participating universities.

One possibility might be a joint service agency for all Swiss universities:

- Developing the quality label „Swiss Virtual Campus“ and a marketing portal for the international web presence of inter-university products (e.g. continuing education courses)
- Organizing distribution and support processes, as well as assisting students in correspondence courses.

However, these are still visions of the future, although the model – a virtual campus, supported by a consortium of universities and assuming the corresponding responsibilities – is already quite common in other European countries.

The projects of Swiss Virtual Campus are currently producing e-learning courses which are gradually being integrated into the regular curricula of the participating universities. The production of these courses is supported by accompanying mandates of the Swiss Virtual Campus:

- Technical Support & Consulting (Edutech)
- Pedagogical Support (eQuality, InterTICES)
- Educational Management (EDUM)
- Multimedia law (regulations)
Short Presentations: The Swiss Universities and their e-learning initiatives

Berner Fachhochschule (BFH) (University of Applied Sciences (UAS) Bern)

Due to the current holding structure of BFH, there is no central strategy to implement e-learning in teaching. However, at some of the campuses, particularly in the fields of engineering sciences, computer sciences, economics and art, there have been efforts to support teaching projects. BFH also funds the program ‘New Educational Technologies’ (net4net) from the common pool of research funds. This program coordinates various projects inside BFH while, at the same time, creating the competence network ‘net4net’ (Network for new educational technologies) which is part of the national ‘Information and Communication Network ICTnet’.

net4net

Basic responsibilities, objectives: net4net offers practice-oriented coaching and project consulting in technical and media didactic areas to students or project managers who are planning, implementing or evaluating blended learning arrangements. net4net initiates, coordinates or assists in applied research and development projects supporting the application and quality of new study methods and technologies, particularly blended learning. net4net aims at closer cooperation with the centers for university didactics.

Strategy, priorities: The net4net management team offers a variety of standard services, such as project management, assistance in the promotion of new projects or when looking for partners. They also organize an annual international conference. Lecturers will find support when introducing blended learning into their teaching.

The network partners have specific experience in the application of computer and internet learning, they develop the necessary infrastructure or are in the teaching profession themselves.

Scale: 100% fte (full time equivalent)

Link: www.net4net.ch

Forum New Learning (FNL)

Basic responsibilities, objectives: Forum New Learning is a Swiss Virtual Campus Project whose objectives are the didactic and technical support of lecturers, as well as a network of knowledge in the new learning technologies.

Strategy, priorities:
- Community of Practice: Unlike traditional support centers, Forum New Learning regards itself as a competence center whose basic objective is the creation and moderation of a so-called community of practice, i.e., a community of experts who educate each other by exchanging specialist knowledge.
- Tool Sharing: One critical factor for the use of new media is the availability of technical resources. Therefore, the central installation, maintenance and administration of tools and platforms remains an essential objective.
- Education: Basic competences, such as “Basic design of websites”, “Using WebCT” or “Developing virtual learning activities”, are taught in one-day courses.
- Support: Due to FNL’s design, a considerable part of all questions can be answered by the community. FNL also provides a support service for short-term support, which may be accessed by members via mail or phone.

Scale: 250% fte

Link: http://www.fnl.ch

eduswiss online

Basic responsibilities, objectives: eduswiss provides a modular postgraduate study program in the field of IT and telecommunications comprising roughly 40 training courses a year. The project “eduswiss online” was initiated as a SVC project and aims at implementing components of virtual teaching and learning in the training modules. The objective is not so much the total virtualisation of the modules, as a mix of on-campus and online studying (blended learning). Depending on the study aims, curriculum or target group of a module, new learning technologies may be employed in different ways – ranging from assisting in the application of a learning platform to complex scenarios of web-based self-learning or the telemedial support of teamwork.

Strategy, priorities: Support and didactic consulting for lecturers, coaching in the didactic methodology for the application of new educational technologies, practice-oriented workshops, technical support and the evaluation of tools, information and brochures.

Scale: Duration of project: 2001 to 2003, jobs in project: 140% fte

Link: www.edol.ch

eec-room

Basic responsibilities, objectives: As part of the national competence network for telecommunication ICTnet, eec-room’s initiative aims at establishing a telecommunication structure in the form of electronic classrooms for the UAS Bern. The same kind of infrastructure has already been established at the Western Switzerland UAS (HES-SO, École d’ingénieurs de Fribourg), while the UAS for Southern Switzerland (ELIPS) are active in similar directions. The objective is to use the new media to establish new and useful communication channels, thus fulfilling requirements and revaluing many forms of teaching and teamwork. Systems employed are mainly video conference systems and multimedia applications (room wave). Development of technical, as well as educational know-how.

Strategy, priorities: Investment should be minimal, updates of the infrastructure will only be implemented on the basis of evaluated experience. The basic technology for the application must be part of the course (Optimization by e.g. theses in the field of electrical engineering).
The EPFL has recently launched a new center to promote educational change and propagate a pedagogical vision. In this vision, the student is an active problem solver, engaged in both individual and group projects. A bottom-up strategy is implemented, focusing on multiple projects rather than campus-wide reforms. Learning technologies are not considered as the universal solution, but as an answer relevant to specific training needs. A typical course would integrate traditional lectures, group work in the lab, web-based activities, etc. Moreover, the EPFL intends to build a learning center where books will meet digital media, bringing under the same roof a broad variety of learning resources.

CAPE (temporary name)

Goals: The center aims to improve pedagogical quality by helping teachers to design and assess their courses. The support provided concerns the use of learning technologies but also any pedagogical issue relevant to the EPFL. The center works in close collaboration with the EPFL on line team, in charge of defining and implementing the web strategy across the institution. The center also runs several research projects, namely in the field of computer-supported collaborative learning.

Strategy: We encourage a light approach to e-learning, that is to design simple environments, with few features and with a limited scope (a chapter or a sub-chapter in a course). We thereby hope to increase the sustainability of projects when initial funding is over. We promote the individual freedom and creativity of teachers, rather than focusing on the definition of norms or standards. We plan to develop more intensive use of e-learning in specific niches such as postgraduate diploma and continued education.

Volume: The new center results from the merge of four former teams that have been involved in thirteen "New Learning Technologies" and "Swiss Virtual Campus" projects. The new center opened on November 1st 2002, with the arrival of a new professor, P. Dillenbourg, former director of TECFA (UNIGE). The team of about 20 people includes experts in pedagogy and assessment, in learning technologies, in the various academic fields of EPFL as well as technicians in charge of PC labs and multimedia equipment in lecture halls.

Web site: A new web site will be open; Contact: pierre.dillenbourg@epfl.ch

Eidgenössische Technische Hochschule Zürich (ETHZ)

(Swiss Federal Institute of Technology Zurich)

ETHZ participates in the promotion and broad support for new educational technologies at ETH. The founding of NET- Network for Educational Technology has established a competence center which should strengthen networking and also offer the best possible support to interested lecturers. The infrastructure project ETH World establishes the necessary framework for optimal worldwide data exchange. The ETH teaching center combines three independent units in one center, and with Fonds Filep the basis for the funding of educational projects has been laid.

Fonds Filep

Basic responsibilities, objectives: Financial support for innovative educational projects. Educational projects which exceed the basic assignment, but introduce considerable innovation into university teaching, may be supported by Fonds Filep. Filep provides start-up funding. Applicants have to demonstrate convincingly that a transfer of the project into the regular curriculum is guaranteed after the start-up funding runs out. Each project must also contain valid evaluation.

Strategy, priorities: Clearly defined criteria are used to evaluate the applications received via WWW. The last instance to decide is the rector whose decision is in turn based on the recommendation of the Filep team and the Filep board. Larger project applications will also be evaluated by the study commission.

Scale: Start 2000 at CHF 2 m, annual increase by CHF 1 m, up to CHF 5 m. 44 projects have been authorized.

Link: www.filep.ethz.ch

didactica

Basic responsibilities, objectives: Training courses for lecturers of both the University of Zurich and ETH Zurich, jointly offered by both institutions. There are courses covering communication and interaction in the classroom, and courses presenting the use of new educational technology.

Link: www.epfl.ch/enligne
Strategy and priorities: The courses are non-obligatory, and the curriculum is continually adapted to meet the needs of the faculty. Attendance is free for the teaching staff of ETH and UNIZH, external participants are accepted at a charge if places are available.

Scale: Program of 25 mostly two-day courses, published twice a year.

Link: www.didactica.unizh.ch or www.didactica.ethz.ch

ETH World
Basic responsibilities, objectives: ETH World is a strategic initiative aiming at making ETH Zurich fit for the IT era. A platform for universal virtual communication for the support of all ETH associates will be created. In addition to the two locations ETH Zentrum and ETH Hänggerberg, a third virtual campus will be implemented. The cooperation between research teams, lecturers and students will be enhanced. The project will be in operation until 2005. Currently, several sub projects in accordance with the spirit of ETH World are being funded.

Scale: 25 sub projects

Link: www.ethworld.ethz.ch

NET – Network for Educational Technology
Basic responsibilities, objectives: NET, founded in 1997, was initiated by the Center for Continuing Education (Zentrum für Weiterbildung (ZfW)) and the Center for Teaching and Learning (Didaktikzentrum (DIZ)). The current project NET was implemented into the regular operations of ETH. The same year also saw the link-up of NET, ZfW and DIZ to form the ETH Teaching Center (ELZ). NET supports lecturers at the ETH and – on a more limited scale – the University of Zurich who want to make use of new educational technology in their classes. The support measures consist of project consulting and project support, various courses and operative support in the use of selected learning platforms and further software used in education. Symposia and colloquiums contribute to the exchange of information between project managers. In the well-equipped audio/video studio teaching sequences and other films may be produced, which are then, for example as video stream, published on the WWW. Lectures and seminars can be transmitted from the tele-teaching auditorium to a remote auditorium and the video conference service allows the exchange of information with partners worldwide.

Strategy, priorities: Support of interested lecturers. Support and consulting with strong emphasis on media didactics.

Scale: 55% fte permanent, further projects

Link: www.net.ethz.ch

Media Center
Basic responsibilities, objectives: NET established a media center at the main building of ETH whose services are constantly being updated. It allows media intensive university teaching with state-of-the-art technology. Classes may be transmitted from the tele-teaching auditorium to a remote auditorium and back. The multimedia seminar room may be used for individual events and also for video conferences. Films may be edited and scored at the digital video editing studio and the audio studio, using professional equipment. The state-of-the-art server infrastructure allows problem-free transmission of video sequences as web stream. There is close cooperation with ETH World.

Strategy, priorities: State-of-the-art equipment, professional support, teaching projects are treated as a priority

Scale: 160% fte permanent, 170% fte project

Link: www.net.ethz.ch/d/dienst/mz/index.html

Fachhochschule Nordwestschweiz (FHNW) Fachhochschule Aargau (FHA)
(Northwestern Switzerland University of Applied Sciences)
(University of Applied Sciences Aargau)

The University of Applied Sciences Aargau (UAS Aargau) consists of five departments.

The objectives of the steering team are:
- supporting and coordinating activities
- analyzing and defining weaknesses and developing appropriate measures
- initiating projects
- cooperating with FHNW and other institutions
- maintaining a forum to exchange ideas and experiences.

The Forum meets five times a year at which time e-learning projects are introduced and basic questions are discussed. All departments of the UAS Aargau are represented at the forum and members of other institutions and universities participate as well.

The UAS Aargau takes part in various projects of the SVC. In addition, ICT-based courses are offered in all the departments. The WebCorp platform which was developed in the UAS Aargau Technology Department is used in several courses.

Link: http://www.fh-aargau.ch/e-learning
The UAS Basel supports a moderate and requirement oriented use of e-learning.

**e-Support DWI**

The department of economics (DWI) of FHBB supports lecturers in the use of e-learning and offers e-learning management to commercial enterprises as well as non-profit organizations. Currently e-learning is being employed by seven departments of DWI.

Two employees (70% fte) offer support to lecturers in the following areas:

- E-learning management (feasibility studies, concept development, project management, coaching)
- Didactics (Development of study scenarios, tele-teaching, evaluation)
- Technology (production of simple teaching material in electronic form, use of study management systems)

[Link](www.dwi.fhbb.ch/e-learning)

**Hyperwerk (Hyperwork)**

Hyperwerk, a pilot study program, recognized by the federal authorities, is about the design and use of interactive team media for work and education. The full-time UAS course includes design, didactics, technology and economics. Hyperwerk students are committed and talented and assume an active role in the organization of their own studies. Among the main criteria for applicants to be accepted for this course are capacity for teamwork, creativity and language skills.

[Link](www.hyperwerk.ch)

Northwestern Switzerland UAS Solothurn supports e-learning methods in teaching, aiming at improving the quality of teaching and enriching the day-to-day classes. FHSO has been hosting an annual symposium on web-based training since 1999. In addition, FHSO was the leading organization in a recently completed project ‘Web-Based Learning at the UAS of Northwestern Switzerland’. This project was also supported by the cooperation counsel (KOR) of the three campuses in Northwestern Switzerland.

Since early 2002, there has been an e-learning group at Northwestern Switzerland University of Applied Sciences Solothurn. The group’s main aim is to coordinate and support the various e-learning initiatives of the lecturers.

**eLearning Group**

**Objectives:** Technological and educational support for lecturers, who are interested in introducing e-learning into their teaching. Information in a periodical newsletter. Workshops and courses on e-learning methods already in use at the institute or elsewhere. Contact with other teachers of Northwestern Switzerland UAS, who work towards the same goals, in order to ensure the coordination and cooperation of e-learning activities at the level of FHNW.

**Strategy:** There has been a demand analysis to evaluate the various requirements of the lecturers to introduce e-learning. It is presented to the university management conference, who will use its results to develop an e-learning strategy in the course of the next few years. Priority is a list of best practice methods which will help lecturers to integrate e-learning into the system of assisted self-learning, which is an integral part of the classes at Northwestern Switzerland UAS Solothurn.

[Link](www.fhnw.ch/e-learning)
Fachhochschule Westschweiz (HES-SO)  
Hochschule Wallis (HEVs)  
(Western Switzerland University of Applied Sciences)  
(University of Applied Sciences Valais)

Mobile Learning-Laboratory  
- Research in the field of mobile learning.  
- Lecturers do analyses and research, relying on projects realized by final year students of UAS computing science.  
- Under development

Fachhochschule Zentralschweiz (FHZ)  
(Central Switzerland University of Applied Sciences)

FHZ is a partner of Virtual Campus Lucerne (VCL), which is a part of Campus Lucerne containing a network of university institutions and their partners working in the field of e-learning. Virtual Campus Lucerne has the following objectives:

Innovation: VCL supports and initiates ideas and possibilities of e-learning especially in the field of tertiary education.

Coordination: VCL coordinates existing activities.

Competence: VCL supports the participating partners' development of competence.

Virtual Campus Lucerne distinguishes between two kinds of lectures: "Single Mode" (all the classes are online) and "Dual Mode" (some on campus classes, some online classes).

The following campuses of FHZ participate in VCL:
- Hochschule für Wirtschaft Luzern (HSW) (School of Business Luzern) (currently 5 "Dual Mode" courses)
- Musikhochschule (MHS) Luzern (Music University Luzern)
- Hochschule für Gestaltung und Kunst (HGKL) Luzern (Lucerne School of Arts and Design)
- Hochschule für Technik und Architektur (HTA) Luzern (School of Engineering and Architecture) (currently one "Single Mode" course)
- Hochschule für Soziale Arbeit (HSA) Luzern (School of Social Work Luzern)

Contact in the group of VCL for projects at UAS: Brigitta Pfäffli, mail: swf@hsw.fhz.ch

Link: www.vcampusluzern.ch

NDK eLE – Postgraduate course e-learning (Nachdiplomkurs E-Learning)

The postgraduate course e-learning (NDK eLE) offers participants a survey of the technical possibilities of online learning. It supports the development of competence in online teaching, web didactics and online education management.

The knowledge and skills in the fields of online learning and web didactics will moti-
Internet based continuing education
Development of two programs in the fields of the education of teachers and eCommerce.

**LearnTV**
Development of an information homepage on educational programs in Europe, with constant updating of the information on educational programs. The following information will be available: Program, station, content, broadcasting information (when, where), possible ways of receiving (cable/satellite), addressees. A second element will be interactive programs on health related themes, which will be broadcasted on cable in the Valais. The interaction will mainly be asynchronous.

**Library**
Every program allows access to important Swiss university libraries and other libraries.

**Learnshop**
The Learnshop is an electronic book and software shop with an implemented e-commerce solution, i.e. the products are marketed electronically and may also be bought and paid electronically, as long as the transmission capacities allow it.

**Distance Education Centre (DEC)**
The DEC is a technical, organizational and didactical unit. This means that, for the development and realization of products and services, the relevant technical, organizational, pedagogical, didactic, psychological, society relevant, economic and legal requirements for the development of corresponding structures and activities are evaluated. Programs and services are evaluated in practice-oriented conditions and constantly improved. The main focus are not primarily technological but curricular and organizational factors. The responsibilities of the DEC may be divided into three main areas:
- Administration and provision of a good technical infrastructure
- Constant development of didactic teaching and learning models for teaching with ICT technologies
- Assistance in their implementation.

Based on these projects and on the constantly developing experience with the technical and operational feasibility, the following service portfolio emerges:
1. Distribution of a good e-learning platform (sale, rental schemes, ASP)
2. Conception and planning of e-learning solutions
3. Development of new courses and adaptation of existing ones
4. Training of coaches
5. Hosting of an education portal (Campus21)

**Fernfachhochschule Schweiz (UAS at a distance Switzerland)**
The UAS at a distance Switzerland has been offering study programs to employed persons since autumn 1998. 2/3 of the course are off-site and 1/3 on campus at one of the regional study centers in Zürich, Basel, Berne or Brig. As a campus of a UAS, with federal authorization and cantonal approval, the school has a clear commission. The degrees obtained from the UAS at a distance are equivalent to the ones obtained from full time UAS. The new study form with direct practical experience closes a gap in the Swiss educational system: It leads professional people to higher qualification without withdrawing them from the job market.

**brain-tec**
Within the feasibility study Virtual Learning Space (Virtueller Lernraum) seven basic projects have been drafted; they will be implemented until 2004.

**University study programs**
The following services will be provided for the students:
- Online study program advice
- Online support
- Database of study material
- Exam system (assistance)

**UAS study programs**
Applications to the following elements will be available for the students:
- Current online information
- Online study material logistics
- Work and learning platforms
- Online exercises
- Online work teams
- Database of literature

NDK eLE is for teachers (lecturers and assistants) at UAS and universities, at polytechnics and other schools, as well as at companies who want to use the intranet or internet in their educational courses.
Entry condition is a degree from a university or UAS or comparable qualifications.
Link: http://www.swf-csfh.ch
Universität Basel (UNIBAS) (University of Basel)

University teaching is currently undergoing modernization. One of the measures taken by the University of Basel is the support and introduction of e-learning adopting the following principles:
- E-learning is an integrative part of the university wide modernization process of teaching.
- E-learning is a part of university didactics and is introduced to this effect.
- The University of Basel requires on campus attendance. E-learning is coordinated with on campus learning.
- Studying without being taught or engaging in discourse is not effective. Online teaching and virtual communication, therefore, play a central part.

LearnTechNet (LTN): Network for e-learning

LearnTechNet is the service network for e-learning at the University of Basel. It coordinates the technology, media and didactics competence of various institutions and supports the institutes in their development of multimedia and internet supported learning and teaching modules. Projects are accompanied throughout their development, from their conception to their introduction into the curricula. LearnTechNet:
- offers consulting and support for e-learning projects
- provides general and project specific training
- supplies infrastructure and instruction to its use
- implements interdisciplinary development projects
- cooperates with external partners from universities and business communities
- follows the state-of-the-art and looks critically at trends.

LearnTechNet has been developed since 2001 and contains sub-sections of existing institutions, such as the University Data Processing Center, the University Library, the Department of Teaching and the Medical Study Center. It has been complemented by the New Media Center for Media Development and by the Language Center for Students and Employees of the University of Basel. In the years between 2001 and 2004, LearnTechNet is funded with CHF 6.2 millions.

Center for Teaching and Learning (Ressort Lehre)
The Center for Teaching and Learning supports and coordinates the introduction of e-learning elements within the university wide modernization process of the conceptional and didactic issues in teaching. With a focus on didactics and in close cooperation with the Centers for University Didactics, Curricular Development and Evaluation, projects of internet supported study and teaching are supported from their conception to the implementation of internet supported teaching and learning forms into regular courses. Currently, there are two full time jobs in the field of e-learning at the Department of Teaching.

New Media Center (NMC)
The New Media Center supports projects and institutes in the development and design of new study and teaching media: from the development of electronic media and their implementation into multimedia teaching to supplying the suitable infrastructure. It offers professional solutions in video production and multimedia development. New Media Center has been redeveloped for LearnTechNet and there are 2.5 jobs. The existing video studio was integrated into the project.

University Data Processing Center (Universitätsrechenzentrum, URZ)
The University Data Processing Center develops the technical infrastructure necessary for the development and use of e-learning. It introduces new IT technology ensuring the technological basis for LearnTechNet and the projects. URZ offers consulting and coordinates internal projects with external technology partners (outsourcing of programming, interface definitions, etc.). Two extra full time jobs have been created at URZ to develop and manage specific e-learning platforms and tools.

Language Center (Sprachenzentrum)
At the language center, students of all faculties and employees of the university may learn or expand language skills in self-learning sessions in a laboratory of 24 computer terminals. Additionally, the infrastructure allows multimedia classes in foreign and subject specific languages, as well as German as a foreign language (multimedia language laboratory of 20 computer terminals). Study and teaching material is available from a media library in the same building. The language center, which is still in its development stages, plans setting up a central tandem exchange. 150% fte (the head of department and a 50% fte (technical)).
To date, the use of e-learning and e-teaching has not been centrally planned but has been realized on the initiative of the departments, partly on a faculty level. The way to implement e-learning has been decided by the teaching staff responsible for teaching and research. The integration of e-learning components will be of the greatest importance to the university as well as to the students.

Link: http://www.virtualcampus.unibe.ch

**AUM – Department for teaching media (Abteilung für Unterrichts-Medien), Faculty of Medicine University of Bern**

**Basic responsibilities, objectives:** AUM has operated a competence center in the field of university didactics and new media for 20 years. It produces study modules in all areas of medical education. The team produces its own videos and CD-ROMs and operates various internet servers, among them STUDMED online. AUM takes part in several SVC projects, operates a study center (500 m²) with a pc pool, and offers a graphics service for scientific drawings, poster printing, etc to the teaching staff, as well as a course program “Web publishing for teachers”.

**Strategy, priorities:** Priorities are those educational projects which comply with the Swiss Catalogue of Learning Goals for Medical Students (Schweizerischer Lernzielkatalog für das Medizinstudium). Projects for the continuing education in medicine have to be self-financed, i.e., they have to raise external funds. The team consists of three medical doctors and 10 employees in the areas of web publishing, graphic arts, database programming and IT.

**Scale:** 10 full time jobs

Link: http://www.aum.iawf.unibe.ch

**University Didactics (Hochschuldidaktik)**

**Basic responsibilities, objectives:** Improvement of the quality of teaching.

**Strategy, priorities:** Individual courses and an entire study program ‘Higher Education for teachers’ employed by the University of Bern. However, the offer is also open to the public. Assistance is given to teams who want to organize, realize and evaluate events and/or study programs. Participants are given individual support in their teaching project and are requested to participate in a “community of practice”. They get particular assistance from blended learning education: Introductory courses to web-based studies and work platforms, courses in the didactics of blended learning arrangements, project assistance and individual consulting when developing media or administering web communities.

**Scale:** Main resources: 4 scientific assistants, 80 days of education per annum

Link: http://www.kwb.unibe.ch/hochschuldidaktik/

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**University Bern (UNIBE) (University of Bern)**

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**BrainBox**

The learning center BrainBox uses the new forms of teaching and learning at medical school. It has been created as a part of the educational reform in Medicine and it offers students space for self-learning and tutorials. Among the study aids necessary for self-learning, students may use a computer room, audiovisual teaching aids, a library of standard works and CD-ROMs and the BrainBox shop where scripts and other necessities are offered for sale.

Link: http://www.unibas.ch/brainbox/

**Virtual University Library (Virtuelle Universitätsbibliothek, UB)**

The virtual library connects the University Library to LearnTechNet. It offers electronic literature and integrates the material of partner institutions into the virtual library. UB offers an information infrastructure of more than 8000 full text periodicals and 150 databases on the net of the University of Basel.

Link: http://www.ub.unibas.ch/vlib/

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**Scale:** Main resources: 4 scientific assistants, 80 days of education per annum

Link: http://www.kwb.unibe.ch/hochschuldidaktik/
MMZ – Multimedia Center (Multimedienzentrum) of the Faculty of Humanities, University of Bern
Basic responsibilities, objectives: Development of multimedia teaching materials and assistance to lecturers with platform independent systems. Digitalization of the abundant analogous visual and audio teaching material of the Faculty of Humanities.
Strategy: Data collection to final employment, i.e. the collection of raw material, e.g. of lectures, and copying of the finished product in the form of films or multimedia CDs. End products for the students should be film and audio documents as streams in broadcast quality, on multimedia CDs/DVDs, etc. There are four Modules: Module 1 is a media library pool which may be accessed by all the faculty, containing digital photo and film cameras, digital voice recorders and their corresponding players, etc. Modules 2, 3 and 4 correspond to the so-called Multimedia Centers MMZ covering a large field of uses and offering near unlimited technical possibilities with the following Software: AVID Broadcast Studio, AVID Xpress, DVD Authoring, DVD Studio pro, iShell, Final Cut pro, etc. An audio studio is also integrated in the system.
Scale: 1 full time job and further resources according to the current project.
Link: http://www.mmz.psy.unibe.ch

STUDMED online
Basic responsibilities, objectives: The Department for Teaching Media of the Faculty of Medicine of Bern has been operating a curriculum information server since 2000. It contains all relevant information on the first three university years for medical students, such as timetables, scripts in the format PDF, practical training instructions, database supported discussions and question forums and an intensively used news service. There are also several tutorials in e-learning modules: http://e-learning.studmed.unibe.ch
Strategy and priorities: Open software solution based on HTML, Javascript, mySQL and PHP. There is widespread acceptance among the 100 lecturers and about 600 students in the relevant study sections, not least due to the employment of a web-publisher, who can offer assistance and quality control.
Scale: 0.4 job, 26 000 pages (among them 22 000 pages of e-learning)
Link: http://studmed.unibe.ch

unitectra
Basic responsibilities, objective: Unitectra is the organization for technology transfer of the Universities of Bern and Zurich. It offers services to support researchers in their cooperation with the business community and other private or public research institutions. Unitectra assists in the practical conversion of research results into new products and services by defining optimal conversion strategies and realizing them in cooperation with the researchers. The conversion is implemented in cooperation with existing companies or by founding university spin-off companies.
Strategy and priorities: Our main services may be divided as follows:
- Definition of optimal conversion strategies
- Negotiating contracts (research cooperation, licensing, MTA, etc.)
- Protection by copyright, patents
- Support in founding spin-off companies
- Training in the field of technology transfer
Unitectra is a non-profit incorporated society and belongs entirely to the Universities of Bern and Zurich.
Scale: Legal safeguarding of the marketing of research projects and drafting of contracts between members of ICT projects and partners of all SVC projects of University of Zurich.
Link: www.unitectra.ch

Virtual Campus Pedagogy (VC Paed)
Basic responsibilities, objectives: Commissioned by the Conference of Teacher Training Colleges, the Institute of Education carries out pedagogic-didactic studies as ‘Virtual Campus Pedagogy’. The project started 2001, and is operational since winter term 02/03. Currently, three VC Pedagogy modules are conducted per term, one in ‘General Pedagogy’, one in ‘Pedagogical Psychology’ and one in the ‘Didactics of Specific Subjects’. There will be a further module from 03/04 in ‘Sociology of education’.
The VC-Pedagogy contains six (later eight) modules equivalent to 5 hours of course work. Didactically, they have been shaped by their respective authors and are therefore quite different from each other. Virtual elements may, for example, assist in the build up of basic knowledge and support project work in teams. All the modules are designed as blended learning: They contain differently shaped parts requiring on-campus-attendance (from plenary sessions to project discussions in small groups).
VC-Pedagogy has been designed to include the possibility of a later cooperation with partner universities.
Strategy and priorities: The project group VC-Pedagogy assists teams of authors and tutorials didactically and technically in their conception and preparation, first run (including evaluation) and subsequent revision, before the programs are transferred to the relevant departments.
Scale: Project group VC-Pedagogy 160% fte; authors and tutorial teams of 250% fte and 150% fte
Link: http://www.vcpaed.unibe.ch

Virtual Campus Business Informatics (VC Wirtschaftsinformatik)
Basic responsibilities, objectives: Support of traditional forms of teaching by supplementing online material (blended learning) and (in suitable subjects areas) the development of autonomous online courses.
Strategy and priorities: We started from didactical concepts and tried to use the most recent technological concepts, as XML, Learning Material Markup Language (LMML) and Stylesheets to achieve an ideal of cross media publishing. We tried to build an
interface between authoring systems and content management systems. The teaching of methodically difficult facts is organized by breaking them down into small steps and by including the students in the process of solution. In order to customize subjects a decision theory based approach is used. See: http://www.ie.iwi.unibe.ch/e-learning/projects.html.

The institute is part of an association of 17 leading Schools of Business Informatics from Germany, Switzerland and Austria in the project “Virtual Global University”. See: http://www.vg-u.de/. This institution offers the FIBAA certified qualification International Master of Business Informatics.

Scale: Within the framework of traditional lectures, we support classes using WebCT, among them introductory classes for more than 500 students.

Link: http://www.ie.iwi.unibe.ch/e-learning/
integration in education.
- To provide rich courses and learning environment for the actors of the develop-
  ment/ implementation of educational ICT (pre/in-service teachers, course and web
  designers, developers, …).
- To reach all levels (undergraduate, graduate and postgraduate programs in educa-
  tion and psychology, continuous education like "Webmaster for community
  portals") and to supervise Ph.D. thesis.

Priorities/strategies:
- To teach about and with ICT providing meaningful learning in realistic context and
  with beacon technologies.
- To foster project based and collaborative learning as core learning activities making
  the learner active in the construction of his knowledge and competencies.
- We use blended learning systems combining presence and distance education
  through web activities, making innovation in both pedagogy and technology
  interwoven concerns.

Volume/extent:
- Undergraduate: 6 courses, (350 students/year).
- Graduate: DESS, a 2 years program with 10 courses, 2 seminars, 1 practicum and 1
  thesis (18 students/year).
- Postgraduate: participation in doctoral schools.
- Continuous education: 3 courses a year (60 students).

Link: http://tecfa.unige.ch/tecfac/teaching/teaching-overview.html

TECFA UNIT: Research
Goals/tasks:
- To foster the design, development, implementation and evaluation of rich blended
  learning environments/activities integrating ICT.
- To contribute to the field of educational technology (ET) by sound research realized
  in experimental as well as natural settings and using appropriate methodologies.

Priorities/strategies (ET and distance learning R&D):
- Since 1989, we have participated to Swiss (PNR 33, Demain la Suisse, FU NT) and
  European projects (Delta I-II, Tribune, Tempus, Sigma, Comp’Act, Humanities I- II,
  Socrates, EU Net, LearNet, Recre@sup).
- TECFA is deeply involved in the SVC, as an expert group (see mandate IntersTICES)
  and partner in Swissling and Computers for Health.
- New research projects:
  - SEED (Seeding cultural change in the school system through the generation of
    communities engaged in integrated educational and technological innovation), a
    5th Framework European IST / School of Tomorrow project funded by the Swiss Fe-
    deral Office for Education and Science.
  - Equel, a Virtual European Centre for research into innovation and the practice of e-
    learning at the level of higher and post-compulsory education.

- ICT for all, a UNESCO Chair Network on “ICT pedagogical integration for all”.

Volume/extent: 25 persons (academics, researchers, assistants), 2/3 hired for external
R&D contracts.
Link: http://tecfa.unige.ch/
Cooperative self learning with new media is a central part of the policy of the University of St. Gallen. E-learning supported self learning covers 25% of the redesigned study program. The emphasis on this teaching method is part of our aspiration to focus attention on and to support those study goals not sufficiently supported by traditional university teaching. The innovation has been designed with the term ‘lifelong learning’, very consciously in mind. Besides acquiring knowledge of subject relevant theories, students should learn how to organise and design their learning processes competently.

IWP – Institute of Business Education and Educational Management (Institut für Wirtschaftspädagogik)
Basic responsibilities, objectives: Since the winter semester of 2001/2002, the study program at the University of St. Gallen has been part of a didactic reform. Within the framework of this reform 25% of the study program is assisted self learning. A central component of this innovation is its support by the potentials of e-learning. Since 2000, under the management of one of its directors, Prof. Dr. Dieter Euler, IWP has been responsible for the development and implementation of the e-learning assisted self learning program within the framework of a reform of teaching at University of St. Gallen.
Strategy and priorities: A standardized learning platform (IBM Learning Space) and support structures (e.g. continuing education courses) will be made available to all lecturers. Additionally, there is particular support for lighthouse projects of far-reaching effect for the university.
Scale: 25% of the study program have been implemented in the form of e-learning assisted self learning within the framework of the new study reform and successively developed for ensuing semesters.
Link: www.unisg.ch, www.iwp.unisg.ch

Learning Center and CC E-Learning
Basic responsibilities, objectives: The research department Learning Center at the Institute of Information Management, founded in 1997, is concerned with the field of e-learning, focusing on the potentials of modern information and communication technology in in-company education and training. At the Competence Center E-Learning, we carry out research and consulting projects with companies and public institutions.
Strategy and priorities: The activities of the Learning Center may be divided into four parts. Of particular importance are research and consulting in cooperation with companies and public institutions, publications in the periodical „Arbeitsberichte des Learning Center der Universität St. Gallen“, or articles in other periodicals and books, e.g. the book „E-Learning im Unternehmen“ by Prof. Dr. Andrea Back, Oliver Bendel and Daniel Stoller-Schäi, published in 2001, that has attracted considerable attention with its definition of ‘e-learning’ and the e-learning reference model of St. Gallen. Ho-
The availability of communication technologies (e-mail for students, classrooms with beamer and Internet access, computer rooms available 24h a day) is an excellent pre-supposition for the introduction of e-learning. Applications include the offer of remote learning and teaching opportunities for postgraduate courses, the development of on-line courses in the Swiss Virtual Campus and use of ICT to renew the didactics of existing courses. These initiatives are supported by a broad competence basis on Internet communication, on pedagogical issues and on organisation of e-learning, as well as by the cooperation with the University of Applied Sciences of Italian Switzerland (SUPSI) and the Swiss Center of Scientific Computing (CSC), in Manno and the Swiss Institute for Pedagogy in Vocational Training.

ICeF – Institute of Communication and Education

Objectives: The Institute of Communication and Education (ICeF) is the fifth institute of the Faculty of Communication Sciences; its main focus is communication in educational and training contexts. Besides e-learning, also managerial and multicultural issues are at the very center of ICeF interests and research activities.

Activities: ICeF offer courses on new media in education at undergraduate, master and doctoral levels, as well as in its executive master for school managers. An important research area is that of evaluation of innovative experiences in vocational training. ICeF is also coordinating the doctoral school on new media in education, a joint project with other Swiss universities funded by the Swiss National Science Foundation. The institute offers also support for pedagogical design and evaluation to SVC projects (Swissling; MACS; i-Structures).

Resources: 2 full professors, 10 lecturers and 10 researchers and PhD students.

Link: http://www.lu.unisi.ch/icef/

New Media in Education Laboratory (NewMinE Lab)

Objectives: The laboratory, which is a part of the Institute of Communication and Education, helps to implement and evaluate experiences in the e-learning area, in partnership with private companies and public institutions. It tests also educational software and resources. A special attention is devoted to the integration of audio-visual sources – mainly from TV programs – in e-learning activities.

Activities:
- research and evaluation on the impact of new technologies in educational and training environments;
- support and counsel for the implementation and evaluation of e-learning courses in higher education and in professional and corporate training;
- monitoring of new developments in e-learning technologies and documentation;
- realisation of e-learning course modules for public institutions and private companies;

NetAcademy at the Institute for Media and Communication Management

(NetAcademy am Institut fuer Medien- und Kommunikationsmanagement)

Basic responsibilities, objectives: The institute for Media and Communication Management, headed by Prof. Dr. Beat Schmid, developed and implemented the concept of NetAcademy in 1997. NetAcademy’s special feature is to interface research and teaching in internet based communities. Communities may be formed by students, lecturers, tutors, researchers, field workers and other experts who all share an interest in certain specific topics in certain fields of knowledge. NetAcademy is a project at the interface of e-learning and knowledge management (dealing with new fields of knowledge, exchange of knowledge).

Strategy and priorities: The editorial office for the research community and extension of the learning community by conceptional modules.

Scale: five employees (editors, editorial office) in assistance and support for researchers and students in the fields of e-business, communication, media management and knowledge management.

Link: http://www.netacademy.org
The University of Zurich believes that information and communication technology has the potential to improve the quality of university teaching and student learning. However, this potential can only be developed if technology serves people—not the other way around. By using information and communication technology (ICT), the University of Zurich combines the advantages of traditional university studies and online learning.

Online-University of Zurich
Basic responsibilities, objectives: The Online-University of Zurich is the portal to online courses at the University of Zurich. Course entries are updated each semester. The majority of courses are complementatory to live courses; however, a small number of offerings are stand-alone online courses. Included are also ICT courses in development.

Strategy and priorities: The Online-University of Zurich offers web-based courses (WBT), computer-based courses using a CD-ROM (CBT), as well as virtual seminars using online discussion forums.

Scale: 52 ICT projects (University of Zurich), 22 Swiss Virtual Campus projects (eight of them headed by Zurich), 76 ICT supported courses and lectures – status WS 02/03
Link: www.onlineuni.unizh.ch

EDUM – Educational Management in the Swiss Virtual Campus (SVC Mandate)
Objectives: The objective of the project is to explore the conditions for the successful realisation of e-learning activities, focusing in particular on the test and use phase of the courses produced in the framework of the Swiss Virtual Campus program. EDUM will also focus on the institutional structures needed for the successful diffusion of e-learning in Switzerland, especially at the university level.

Activities:
- analysis of existing e-learning courses and of their implementation strategies;
- case studies of Swiss Virtual Campus projects;
- benchmarking of e-learning strategies of universities in Switzerland and in the neighbouring regions in Europe;
- comparative analysis of e-learning policies in Switzerland and in Europe;
- preparation of a handbook for project managers on organisational and institutional issues of e-learning;
- organisation of discussion and dissemination workshops.

Resources: The project is financed by the Swiss Virtual Campus program and by the Università della Svizzera italiana for the years 2002 and 2003; three researchers are actually working on it.
Link: www.edum.ch

didactica
Basic responsibilities, objectives: Training courses for lecturers of both the University of Zurich and ETH Zurich, jointly offered by both institutions. There are courses covering communication and interaction in the classroom, and courses presenting the use of new educational technology.

Strategy and priorities: The courses are non-obligatory, and the curriculum is continually adapted to meet the needs of the faculty. Attendance is free for the teaching staff of ETH and UNIZH, external participants are accepted at a charge if places are available.

Scale: Program of 25 mostly two-day courses, published twice a year.
Link: www.didactica.unizh.ch or www.didactica.ethz.ch

VAM – Virtual Medical Learning Platform (Virtuelle Ausbildungsplattform Medizin)
Basic responsibilities, objectives: VAM is the e-learning portal for the Medical Faculty at the University of Zurich. Its aim is to integrate medical projects in a common web portal. VAM emphasizes consistent navigation and effective instructional design. All the online courses available through VAM can be accessed via a single login. VAM members can also participate in a moderated discussion forum.

Strategy and priorities: The online courses in VAM complement traditional courses and are thus integrated into the curriculum. VAM is a pilot project funded by the ICT Center for Information and Communication Technology at the University of Zurich. VAM uses the IBT server from time4you. To ensure sustainability of VAM, guidelines...
for ICT use are being developed for faculty.
Scale: VAM has been online and continuously growing since Winter Semester 2001 and has been accessed by more than 2,500 medical students at the University of Zurich. Currently 30 percent of all medical courses use educational technology.
Link: www.vam.unizh.ch; Contact: info@vam.unizh.ch

ICT Center for Information and Communication Technology
Basic responsibilities, objectives: The ICT Center is part of the Vice President’s Office for Teaching at the University of Zurich. It supports and coordinates the use of new media (e-learning) at the University of Zurich.
Strategy and priorities: The ICT Center serves three central functions for projects involving new media at the University: coordination, consulting and support. Coordination involves ensuring that all ICT projects follow a common approach. We achieve this by helping development teams determine project goals, facilitating a free flow of information between project participants, and organizing forums to promote the exchange of ideas. Consulting involves finding collaborative solutions to problems that arise during ICT projects. Support involves helping faculty to improve their teaching through the effective use of information and communication technology. We share our experience and best practices and point the way to financial and staff resources available for ICT projects at the University of Zurich and elsewhere. The ICT Center also coordinates projects at the University of Zurich which are part of the Swiss Virtual Campus, as well as projects with other national and international partners.
Scale: The ICT Center currently supports over 80 ICT projects with eight employees (620 % fte).
Link: www.ict.unizh.ch

unitectra
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- Strategy and priorities: Our main services may be divided as follows:
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  - Protection by copyright, patents
  - Support in founding spin-off companies
  - Training in the field of technology transfer
Unitectra is a non-profit incorporated society and belongs entirely to the Universities of Bern and Zurich.
Scale: Legal safeguarding of the marketing of research projects and drafting of contracts between members of ICT projects and partners of all SVC projects of University of Zurich.
Link: www.unitectra.ch

OLAT Center (Online Learning and Testing)
Basic responsibilities, objectives: The OLAT Center supports the Learning Management System developed by the University of Zurich (OLAT). OLAT is an open source Learning Management System available for download to faculty at University of Zurich and the ETH. OLAT was developed by three computer science students from the University of Zurich who were awarded the MedidaPrix 2000. In June 2001, the OLAT center was founded in cooperation with the ICT Center for Learning Technologies.
Strategy and priorities: The OLAT Center support staff regularly organize OLAT trainings and assists faculty at the University of Zurich and the ETH in course development. OLAT Center development staff ensure that OLAT remains state-of-the-art to guarantee scalability and interoperability of the system.
Scale: 23 OLAT courses at University of Zurich, 2 OLAT courses at ETHZ (status WS 02/03)
Link: www.olat-zentrum.unizh.ch

TV-Uni (TV-University)
Basic responsibilities, objectives: The TV-Uni is part of the Department of Administration of the University of Zurich.
Strategy and priorities: TV-Uni’s service includes evaluation, purchasing and the maintenance of AV devices, the creation of AV productions as well as technical assistance in the creation of AV productions. In addition, we do live transmissions to locations inside and outside the University and video conferences. The TV-Uni is also involved in multi media and ICT productions. There is a pilot project concerned with the digitalization of videos (Streaming Server) and live recording.
Scale: A large collection of teaching videos, participation in various multi media and ICT projects.
Link: www.tv.uni.unizh.ch

eQuality (SVC Mandate)
Responsibility: eQuality implements the Swiss Virtual Campus mandate ‘Pedagogical Support and Evaluation’. The team assists the predominantly Swiss-German Swiss Virtual Campus projects with the development of high quality virtual learning environments. In addition, the mandate includes the task of developing an inter project monitoring instrument.
Strategy and priorities: The concept of formative evaluation is an integral part of eQuality’s consulting services. The team reviews pedagogical concepts and virtual learning environments. The reviews are conducted according to a moderately con-
The Foundation Fernstudien Schweiz (FS-CH)
The Foundation Fernstudien Schweiz was founded in 1992 and is currently the only center offering complete university correspondence courses in Switzerland. The Foundation cooperates with various European correspondence course universities, such as the FernUniversität Hagen, the Open University, five French universities and the Télé-université de Québec. Correspondence course programs are available in the fields of education, humanities, communication science, economics, and IT. Currently, 1300 students are registered. The Foundation runs a competence center in Brig and three regional study centers in Brig, Pfäffikon (SZ) and Sierre. In the field of e-learning there are simultaneously two projects.

MENTORS, a collaborative program between the EPFL and the Foundation Fernstudien Schweiz, Brig

The EPFL is deploying a flexible learning scheme for student pilot courses in engineering education. In this scheme, the pilot courses combine traditional lectures with Web-based learning resources. Five individual training programs are evaluated in the MENTORS project. The objective is to sustain the evolution from traditional teaching to autonomous learning and to integrate education resources created or available online.

Flexible learning corresponds to a diversification of pedagogical methods by using new learning technologies. It therefore deals with alternative tutoring types, interaction styles, time and workplace situations, as well as cognitive activities. In such a framework, the potential added-value that can be brought in student support is essentially based on tutoring for supporting the learning process. The ongoing deployments at the FS-CH in Brig are the development of education modules for tutors and students aimed at creating a mentoring environment and tutoring services. These deployments are aimed at giving tutors a uniform training that will be necessary to achieve autonomy and adequate collaborative work in flexible education. Such an integrated combination of new pedagogical skills and new Web-based engineering learning resources has never been tested in a large scale configuration. – Duration: 2001 to 2003

Virtual Study Center
The study center in Brig started to develop a virtual study center in 2000. The aim of the virtual study advice is to offer improved support for the correspondence students and the extension of advice services by the study center in Brig. The virtual study center purposes the extension of student support and advice by using modern virtual communication methods, such as e-mail, newsgroups, chat and videoconferencing, which will assist the students throughout their studies.
Apart from the core contents of the course (which are didactically processed according to the requirements of the correspondence course), virtual courses offer the opportunity for discussion and forums (newsgroups), chats or videoconferences. The acquired knowledge and skills can be checked in online tests. Information to relevant literature or direct access to libraries or specific information (e.g., links to interesting websites) complement the course program. Constant contact to mentors, who evaluate course progress, ensures excellent support of the students. Immediate feedback and communication within the system support and strengthen the individual learning process and the application of information.

Duration: 2002 – 2004
www.stubrig.ch

The strategy in three parts:
- ZHW wants to participate in the implementation of e-learning and, with partners, direct and employ its development.
- The quality of teaching is vital. E-learning must contribute to its constant improvement.
- Fashion trends and superficial economies must not be decisive for the implementation of e-learning.

Internal Initiatives:
- The Institute for Business Administration IVM (Institut für Verwaltungsmanagement) develops training programs for communities and administration.
- Professor Eduard Gamp offers support for WebCT.
- Assistant Martin Vögeli publishes the newsletter 'eLearning News'.

Further Information: http://www.zhwin.ch/studium/e-learning.php, elearning@zhwin.ch

Zürcher Fachhochschule (ZHF)
Zürcher Hochschule Winterthur ZHW
(Zurich University of Applied Sciences)
(Zurich University of Applied Sciences Winterthur)

Begleites Selbstgesteuertes Lernen (BSL – Assisted Self Learning)
in the study program Specialized Journalism and Organizational Communication

Basic responsibilities, objectives: The study program Specialized Journalism and Organizational Communication does not offer e-learning but uses the internet and the intranet as a management instrument for Assisted Self-Learning.

Strategy and priorities: Currently, the most important thing is for lecturers and students to become acquainted with the net for this purpose.

WEBTEACHING: Implementation of Tools and Consulting for Lecturers

Basic responsibilities, objectives: Many lecturers dread (with good reason) the immense effort involved in the introduction of new learning technologies. Therefore, the project leader’s experiences made during a sabbatical dedicated to training in the field of e-learning will be made available to the other lecturers at ZHW.

Strategy and priorities: An advisory service and a set of flexible models for internet courses, interactive documentation, practice sessions and knowledge databases will be created, which will facilitate the lecturers’ introduction into the promising field of teaching and learning by internet. The project is funded by the Foundation for the Support of ZHW.

Scale: One part-time lecturer
Link: http://home.zhwin.ch/~gae/Vortrag090501/, Eduard Gamp, gae@zhwin.ch

Pool of knowledge „e-learning“ – Think Tank (Container 1)

Basic responsibilities, objectives: At the Pool of knowledge ‘e-learning’, you can get information and support. The pool is there to facilitate your introduction to e-learning and assist you in your first steps. The following categories are available: Definition, didactics, technology, resources and FAQ. There is also a newsletter: the ‘eLearning News’.

Strategy and priorities: You are thinking of creating your own e-learning course? Contact us and we will assist you in your first steps! You may contact elearning@zhwin.ch or get a general idea from our website.

Scale: One assistant
Link: http://elearning.zhwin.ch/pool/; Martin Vögeli, vom@zhwin.ch
Short Presentations:
National Programs

Swiss Virtual Campus (SVC)
A Swiss Federal Program for promoting new information and communication technologies in university level.

Project responsibility: Swiss University Conference, in cooperation with: Federal Office for Education and Science, Federal Office for Professional Education and Technology, ETH Board

Strategically, the projects of Swiss Virtual Campus should increase the quality of teaching at Swiss universities, thus strengthening the international competitiveness of the 'Think Tank Switzerland'. Since the projects are inter university based and are composed of partners from at least three institutions, they promote mutual recognition of qualifications. Close cooperation of Swiss universities is of general strategic importance, for example to reach critical mass in various areas of e-learning.

Basic responsibilities, objectives: The impulse program for 2000 – 2003 supports 50 inter university project networks to each develop a regular online course, integrated into the curriculum of the participating universities. The consolidation program planned for 2004 – 2007, should contribute to the sustained and efficient incorporation of e-learning at Swiss universities.

Strategy, priorities: Cooperation with university administrations, established by the SVC Commission, is of the first importance. The Swiss University Conference, a strategic committee of government representatives of the university cantons, are responsible for the execution and coordination of the program. They have appointed the SVC Steering Committee, an international team of experts, to plan, choose and support (mandates) the projects.

Scale: CHF 30 millions are contributed by the federal program for universities. As the participating universities, as a rule, contribute 50% of the project costs, total funding will come to roughly CHF 60 millions in 2000 – 2003. Projects at universities of applied sciences (UAS) are funded with CHF 12 millions by the Confederation. Together with the funds contributed by the participating UAS themselves, the total amount available for projects at UAS comes to CHF 20 millions. The ETH board (Swiss Federal Institutes of Technology) funds SVC projects with CHF 2 millions, while certain specific projects receive further considerable funding from the institutes.

Link: http://www.swissvirtualcampus.ch

The following mandates of Swiss Virtual Campus have been described in detail in the entry of the relevant universities:
- EDUM – SVC Mandate (Educational Management) given to Instituto comunicazione e formazione ICEF (Institute of Communication and Education), Università della Svizzera Italiana (University of Italian Switzerland)
- Edutech – SVC Mandate (Technical Support & Consulting) given to Center NTE, University of Fribourg
- eQuality – SVC Mandate (Pedagogy/didactics) given to Institute for General Pedagogy, University of Zurich
- InterSTICES – SVC Mandate (Pedagogy/didactics) given to TECFA, University of Geneva

Swiss Virtual Campus Universities of Applied Sciences (UAS)
Project responsibility: Federal Office for Professional Education and Technology

Creatools "Creative tools®UAS" – creative use of e-learning tools at UAS
As a complement to the SVC project networks, the Federal Office for Professional Education and Technology has initiated a program of 21 e-learning projects at UAS within the framework of Swiss Virtual Campus at UAS. Program start was April 8, 2002; the results will be presented to the public April 8, 2003.

Objective: Development of 21 student centered e-learning modules for Swiss UAS.

The main strategic elements of creatools are:
- Focus Efficiency: Funding limited to CHF 50,000 per module. Development phases, including implementation and evaluation not exceeding one year. Project results must be employable by UAS that did not participate in their development.
- Focus Creativity and Participation: Support of interaction of students and lecturers as well as of human and machine. At least two students must participate in the development of e-learning modules.

Scale: 21 Project teams of 4-6 participants each. Roughly CHF 1 million federal funding and CHF 500,000 self-financing by the participating UAS.

Link: www.creatools.ch, Contact: Dr. Urs Gröhbiel, edunovum gmbh (www.edunovum.ch)
Cooperation network
The Swiss Virtual Campus and the Swiss Universities – e-learning initiatives

- National Programs
- University Competence Centers
- Subject Specific Competence Centers
- University Programs
- Continuing Education Programs

Swiss Virtual Campus Coordination (SVC)
FNZ (SVC-Project)
MMZ – Multimedia Center
University Didactics
unitec
net.net
ec-room
AUM
STUDMED online
VC Pedagogy
VC Business Informatics
eduswiss online
CENTEF
CAPE
EPFL online
InterTICE (SVC-Mandate)
TECFA Unit: Instruction and courses
TECFA Unit: Research
Edutech (SVC-Mandate)
CAL/ELA
Virtual Campus Lucerne
NDK LE (Postgraduate course e-learning)
Virtual Study Center
brain-tec
MENTORS

eSupport DWi
Hyperwerk

eQuality (SVC-Mandate)
ICT Center for Information and Communication Technology
unitec
OLAT Center
TV-Uni
.NET
Media Center
VAM
Online-University Zurich
Filep
ETH World
didacta

WEBTEACHING
Pool of knowledge „e-learning“
BSL
Learning Center and CC E-Learning
NWP
NetAcademy
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**National Programs**

- **Swiss Virtual Campus**
  - Project responsibility: Federal Office for Professional Education and Technology
  - Support mandates of SVC: EDUM (UZH), Edutech (UNIFR), eQuality (UNIZH), IntersTICES (UNIGE)
  - 12 of the 50 SVC projects led by UAS

- **Swiss Virtual Campus Fachhochschulen**
  - Project responsibility: Federal Office for Professional Education and Technology
  - 50 interuniversity project networks

**Institutional Data**

- **Swiss Virtual Campus**
  - 50 interuniversity project networks
  - Support mandates of SVC: EDUM (UZH), Edutech (UNIFR), eQuality (UNIZH), IntersTICES (UNIGE)

- **Swiss Virtual Campus Fachhochschulen**
  - 12 of the 50 SVC projects led by UAS
  - 20 projects at UAS, joint development by lecturers and students

**Swiss Virtual Campus Fachhochschulen**

- Project responsibility: Federal Office for Professional Education and Technology
- Support mandates of SVC: EDUM (UZH), Edutech (UNIFR), eQuality (UNIZH), IntersTICES (UNIGE)