



Call for Proposals

Swiss Virtual Campus



2000 – 2003

A Swiss Federal Program
under the 1999 University Promotion Law
for promoting new information and communication technology
at university level

October 1999

Proposals should be submitted in quadruple by 30 November 1999 to:
Swiss University Conference
Sennweg 2
3012 Berne
Switzerland

Contact addresses

Swiss University Conference
Sennweg 2
3012 Berne
Switzerland
Jean-Marc Barras
Fax: ++41 31 302 17 92
E-mail: jean.barras@shk.unibe.ch
<http://shkwww.unibe.ch>

Swiss Federal Office for Education and Science
Hallwylstrasse 4
3003 Berne
Switzerland
Dr. Franziska B. Marti
Fax: ++41 31 322 78 54
E-mail: franziska.marti@bbw.admin.ch
<http://www.admin.ch/bbw>

Swiss Federal Office for Vocational Training and Technology
Effingerstrasse 27
3003 Berne
Switzerland
Prof. Beat Hotz-Hart
Fax: ++41 31 371 82 89
E-mail: beat.hotz@bbt.admin.ch

Prof. Bernard Levrat
Department of Computer Science
University of Geneva
Rue Général Dufour 24
1211 Geneva 4
Switzerland
Fax: ++41 22 705 77 80
E-mail: Bernard.Levrat@cui.unige.ch
<http://cuiwww.unige.ch/~levrat/>

<http://www.virtualcampus.ch>

<http://www.edutech.ch>

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1. Introduction and initial situation

New information and communication technology is having an increasing influence on our everyday lives. Tertiary education also needs to adapt to the modern world. Expressions such as 'distance education', 'multi media' and 'virtual, just-in-time and life-long learning independent of space and time' now have a new meaning or have been accepted as part of our current vocabulary. One of the key questions facing today's information society is how we can enable students and university staff to transform information into knowledge and skills in any efficient way. Answers to other important questions are also needed. What are the likely general effects of virtual courses on teaching and learning methods? How can interaction and collaboration be encouraged in virtual learning? How can people be motivated to learn on their own – is an optimum level of didactics, pedagogic and ergonomics sufficient? What is the cost-effectiveness ratio? What can and should the population expect from a Swiss Virtual Campus in the medium and long term? Are all subjects suitable for virtual learning? Are there any sectors of the population that will be disadvantaged by the teaching and learning methods involved in the Swiss Virtual Campus? And furthermore, the teaching staff and students should enjoy virtual courses – this could be a significant factor influencing the setting up of a sustainable virtual campus in Switzerland.

The 'Swiss Virtual Campus' program involves the whole of the tertiary education sector¹ in Switzerland. The program aims at helping to provide answers to some of the questions listed above and thus promoting the 'information society' in Switzerland. In practical terms, it should offer students an aspect of virtual mobility that will enable them to play an active role in learning processes. In this connection the program supports projects that develop high-quality courses and learning modules on the Internet involving preferably subjects that attract large numbers of students. These modules must be part of the curriculum offered by the universities involved. Collaboration between the universities and an international approach are of paramount importance. Each project should be based on an interdisciplinary team made up of qualified people in the fields of pedagogic, didactics and ergonomics, in addition to those specialized in the subject matter *per se*, in order to guarantee products of an internationally acceptable state-of-the-art quality. The ideal conditions that will guarantee the success of a Swiss Virtual Campus should be created through 'horizontal' study projects that involve in particular pedagogic, didactic, ergonomic, legal and economic aspects, developing communal tools on stable platforms as well as the necessary regulations for a credits system. The vocational universities should also be able to set up staff-support centers if necessary.

The Swiss parliament approved the implementation of the Swiss Virtual Campus program as part of its *project-linked contributions* under the terms of the federal law on aid to universities, on the basis of the Federal Council's message of 25 November 1998 relating to the promotion of education, research and technology for the period 2000 to 2003 (text available on www.admin.ch/bbw). The program is based principally on a proposal made by the University Education and New Technology Working Group of the Swiss University Conference. The Confederation has budgeted an amount of SFr. 30 million for the cantonal universities in connection with the Swiss Virtual Campus project. The two federal institutes of technology and the universities of applied sciences will also be contributing towards the Swiss Virtual Campus project from their own funds.

¹ Universities, federal institutes of technology and universities of applied sciences

2. The contents of the program

2.1 Goals

The Swiss Virtual Campus program is part of a process aimed at promoting the 'information society' in Switzerland as well as enabling education – in particular tertiary education – to take advantage of the opportunities now available through new information and communication technology. In this respect the program hopes to provide students with a virtual mobility that will enable them to play an active role in learning processes and follow high-quality courses on their computers. The principal concrete aim of the program is to develop accessible teaching modules through the Internet, in particular for subjects that attract large numbers of students. In order to take into account the specific needs of the universities of applied sciences projects might also involve continuing education and developing a range of services in the field of didactics and virtual teaching methods, as well as helping to set up didactic, technical and ergonomic support centers.

Three main aims can be identified:

- To improve the quality of student learning processes and to strengthen interactive² teaching by transforming university teaching into a range of available courses for both attending and correspondence students. The students should be encouraged to use all the information and resources available on the Internet as part of their real studies.
- To strengthen collaboration between the universities. Several institutions should be involved in each project. A system of credits should be set up to back up the virtual mobility offered by the Swiss Virtual Campus system as well as life-long learning in the long term.
- To develop high-quality teaching materials and methods. The Steering Committee's recommendations, the decision to create multilingual modules and the use of communal tools for setting up modules and for management functions should ensure that the products created by the Swiss Virtual Campus in the future are of the highest quality. This high level with regard to content, didactics and ergonomics should also guarantee a demand for the products outside Switzerland.

2.2 Structure of the program

Projects

The Confederation has undertaken to provide special support for a certain number of projects for a maximum period of three years, so that the targets set can be achieved. The two federal institutes of technology, the universities of applied sciences and any

² In this context 'interactivity' can be defined as 'intellectual involvement in solving a problem with the help of a computer'. In the Swiss Virtual Campus program interactivity should include not only dialogue between the person and the computer but also interactivity between students and teachers.

interested private or foreign institutions will fund their own involvement in the program.

In general, each project should comprise a course which can be followed via the Internet and include teaching material, exercises, seminars or practical work as well as online or direct aids and assessment (self-assessment and examinations). Projects involving teaching modules for large numbers of students will be particularly welcome. The courses offered should be part of a curriculum of the universities involved.

The projects are based on an interdisciplinary team of specialists in teaching, new technology and pedagogic plus people with specific knowledge of the IT tools necessary for implementing the course. The aims and content of the courses proposed should be drawn up by all the parties involved and the question of recognition of qualifications and/or credits must be clarified within each university. The courses will be made available to the general public after they have been evaluated by the partners involved in the project. The modules that make up a course will be drawn up by one or several of the institutions interested, which will appoint a competent, motivated person as a project leader (at least 50%). At the same time they will set up a suitable infrastructure and ensure that the modules can be tested under controlled teaching conditions.

The Swiss Virtual Campus projects will differ from other efforts to enhance teaching by introducing new information and communication technology in that they involve complete courses that can be followed independently via the Internet. They will thus open the way to correspondence courses and life-long learning as an addition to the current range of courses available. Thanks to their autonomous character, the Swiss Virtual Campus projects will be ideal for use outside Switzerland.

Mandates

'Horizontal' projects will ensure optimal conditions for the Swiss Virtual Campus. This term implies investigations or studies into topics which apply to the whole program, i.e. involving legal (copyright, data protection, etc.), didactic or ergonomic topics, economic (cost effectiveness, product marketing, etc.) or technical (EDUTECH, etc.) questions or projects connected with the necessary credits system and recognition of qualifications.

3. Organization

According to the Federal Council's message, the Swiss Virtual Campus will be run by the existing Swiss University Conference and taken over by the new SUC when that comes into operation.

Two bodies have been set up to prepare and implement the whole program: the Swiss Virtual Campus Commission and the Swiss Virtual Campus Steering Committee.

The fact of creating two supervisory bodies will ensure on the one hand that there is close contact with universities, which is essential for the success of the project, and on the other that the proposals submitted will be assessed from a neutral point of view by recognized specialists.

Following the approval of the Swiss parliament outline projects can now be submitted. They will be assessed by the Steering Committee and selected applicants will then be asked to submit a more detailed project. The Steering Committee will then arrange the detailed projects in order of priority, allot mandates and draw up an allocation concept and a detailed plan of execution. Proposals submitted by universities of applied sciences or applications involving universities of applied sciences must be assessed and approved by the Federal Office of Professional Education and Technology. Similarly, the Board of the Swiss Federal Institutes of Technology will deal with applications submitted by their own institutions. The Steering Committee will then present a proposal to the Swiss University Conference for allocating the first part of the funding, justifying its selection, and submit a budget for the year 2000 and a financial plan for 2001-2003.

The Federal Office for Education and Science will be responsible for controlling and revision of the Swiss Virtual Campus program. A progress report and a financial report must be submitted annually. The second annual report will serve an important purpose not only as an interim report on the program but also as part of the next message on promoting education, research and technology. The final report will serve as a basis for the third phase; it will include an evaluation in the form of an analysis of the impact of the program and enable the Swiss University Conference to draw conclusions concerning the Swiss Virtual Campus program and make recommendations to the decision-making bodies in the field of education. It is planned to organize a public event to mark the end of the project.

4. Schedule

30.11.99	Outline projects to be submitted
Mid-January 2000	Selected applicants asked to submit detailed projects
<i>Probably</i> end of February 2000	Detailed projects to be submitted
Summer 2000	The Swiss University Conference will take a decision about the initial allocation of funds, projects and mandates
2001/2002	Allocation of the second part of the funds, projects and contracts

5. Finances

The funds mentioned in the Federal Council's message (SFr. 30 million) for financing the program, the projects and the mandates are reserved for the cantonal universities. The two federal institutes of technology, the universities of applied sciences and other partners will provide their own funds for participating in the corresponding projects. Projects drawn up by the universities of applied sciences or involving them will be subsidized from the Federal Office of Professional Education and Technology under the same conditions. The general cost of projects in which the cantonal universities, the universities of applied sciences and the two federal institutes of technology participate will be covered by the program.

The cantons will be expected to make an appropriate financial contribution (30-50%) to the projects. The factors to be taken into account for the cantonal contributions are defined in the federal decree concerning aid to universities, which also allows for exceptions to this rule under certain circumstances. The agreement of all other promotional organizations involved in the funding must be obtained before the Swiss University Conference can approve the projects that make up a program.

After calling for proposals in autumn 1999 it is planned to initiate a series of 10 to 15 projects in late summer 2000 with funds of around Fr. 15 million. A further amount of Fr. 10 million has been reserved for later projects, for any mandates, which may be considered necessary, or for expanding existing projects.

Fr. 3.4 million will be made available for mandates involving several projects.

An amount of Fr. 1.6 million has been budgeted for managing the program (including fees for specialists and their staff, assessments, expertise, reports, events, etc.).

According to the provisional financial plan the Fr. 30 million will be allocated as follows:

Year	2000	2001	2002	2003	Total
Projects	4	6	7.5	7.5	25
Mandates	0.6	0.65	1.1	1.05	3.4
Administration	0.4	0.35	0.4	0.45	1.6
Total	5	7	9	9	30

6. Information

Information can be obtained from the Internet, from the institutions involved and from the chairman of the commission (see page 2 for addresses).

7. Conditions for participation and instructions for applicants

All outline projects must be submitted to the secretariat of the Swiss University Conference (Sennweg 2, 3012 Berne, Switzerland) by the designated project managers by 30 November 1999 at the latest. Each project should involve several university partners, normally three (including the project manager). Additional partners from industry and from other countries who are likely to contribute to the success of the project are welcome. The Swiss Virtual Campus funds are for the sole use of participants from cantonal universities and for general costs incurred by participants from the federal institutes of technology and universities of applied sciences. Outline projects must indicate the support that will be provided by the relevant institutions.

Outline projects should not exceed 6 pages and may be submitted in German, French or English (in quadruple). They should include the following points:

- Applicant (= project manager): name, institution or organization, address, telephone and fax numbers, e-mail address;
- Project partner(s) (name and institution(s) or organization(s));
- Title of the project;
- Summary (in English);
- Information concerning support from the universities or institutes involved in relation to recognition of qualifications and implementation of the courses (generally within one course of studies), allocation of credits;
- Description of the project including general and detailed aims (in particular pedagogical and didactic aims and technical aids);
- Information concerning the number of students expected to follow the course;
- Expected income and expected costs;
- Duration of project (maximum 3 years);
- Necessary funding (roughly broken down into salaries, running costs, installations and equipment);
- Expected financial support from all partners (including project manager).

8. The selection process

All the outline projects will be assessed by the Steering Committee on the basis of the criteria indicated below and the general regulations. If necessary an expert will be called in. The authors of the selected outline projects will then be asked to submit a detailed proposal, probably mid-January 2000. The councils of the federal institutes of technology and the Federal Office of Professional Education and Technology will assess projects from or involving the federal institutes and the universities of applied sciences respectively. Details concerning this second stage will be provided when the authors of the selected outline projects are asked to submit a detailed proposal.

9. Conditions and criteria for project selection

The projects submitted should contribute towards achieving the aims set out in section 2.1 and must meet the following *criteria*:

- Collaboration between several universities (generally three);
- Realization of a clear pedagogical aim;
- Use of communal IT tools on a stable platform;
- Support (including own funds) from the institutions to which those involved in the project belong (in order to ensure the continuation of the project);
- National or international character of the courses.

In their evaluation of the outline projects submitted the Steering Committee will also take into account the following *aspects*:

- Projects for teaching modules which will attract large numbers of students are particularly welcome;
- The modules proposed should be interactive;
- Potential innovativeness of the courses planned;
- Multilingualism;
- Participation of the private sector.

In order to take into account the specific needs of the universities of applied sciences the following applies to their internal projects. On the basis of the triple mandate laid down by the law and the corresponding specific orientation, projects involving the universities of applied sciences should focus on:

- The use of virtual teaching for continuing education and the transfer of technology;
- Media didactics in the sense of combining innovative technical potential with new pedagogical approaches;
- The setting up and operation of a service center, including exchanges for learning modules and advice on setting up a corresponding learning environment;
- Transfer of know-how to special areas of application such as further training;
- Quality management in virtual teaching.

These aspects will be explained in more detail in the universities of applied sciences' implementation plans. The conditions and selection criteria listed here do not exclude projects drawn up in conjunction with the universities of applied sciences.

