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PREPARING SWISS HIGHER EDUCATION INSTITUTIONS FOR E-LEARNING ACTIVITIES
EDUCATIONAL MANAGEMENT IN THE SWISS VIRTUAL CAMPUS

Universities are faced with many challenges today, due to the large increase in the number of students, to the freezing of state subsidies and to quest for more efficiency and accountability in their functioning and, finally, to reform at the European level like the introduction of the so-called Bologna model. In this context, the wide adoption of eLearning[1] is often seen as a major instrument to modernize existing universities, to improve quality of learning in face of growing number of students and stable (or even decreasing) financial resources and to broaden the scope of educational offer to new markets (lifelong learning; working students; students abroad).

However, the successful introduction of new learning technologies presupposes an organization and a culture very different from the traditional universities, as well as far-reaching transformations in the role of the university professors, in the organisation of the courses and of the whole curricula and in the administrative rules and procedures. The aim of this article is to highlight in the case of Swiss universities the organisation and management problems that need to be solved to successfully implement eLearning courses in the traditional universities, as they emerge from the experience of the projects in the Swiss Virtual Campus Programme. For this purpose first results of the Educational Management in the Swiss Virtual Campus project are presented.

Key Words: e-Learning, Swiss Virtual Campus, institutional strategies, educational management.

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[1] e-Learning is "The use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration" (CEC 2001).
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1. The EDUM project and the Swiss Virtual Campus

The objective of EDUM[2] is to explore the conditions for the successful implementation of eLearning activities, focusing in particular on the test and use phase of the courses produced in the frame of the Swiss Virtual Campus (SVC, http://www.virtualcampus.ch).

The main hypothesis of the project is that eLearning activities require the development of new organisational strategies both for production, management and for a successful integration of eLearning into higher education. The major research themes are:

- the analysis of different models adopted for integrating eLearning into the higher education curricula;
- the Swiss universities strategies in the field of eLearning;
- the sustainability of the SVC courses after the end of the program.

The project started January 1st 2002 and is run by the Institute for Communication and Education (ICeF) at the University of Lugano as part of the activities of the New Media in Education Laboratory (http://www.newmine.org) and is funded by the Swiss Virtual Campus programme.

During this first year of the project, EDUM activities followed two principal research lines:

- one part of the study focused on the analysis of the SVC projects from the point of view of their organisation, institutional relationships and financial situation. To analyse these issues, between April and October 2002 interviews were done with 18 projects out of the 50 ones financed by the SVC programme;
- the second part has been completed with the analysis of the strategies of Swiss higher education institutions in the field of eLearning. Interviews have been done with cantonal universities, Swiss Federal Institutes of Technology and a University of Applied Science.

First results have been presented in a seminar (Bern, 3 - 4 December 2002), and the final results of the research will be published by the end of 2003.

In the following paragraphs some results concerning the projects (paragraph 2) and universities' strategies (paragraph 3) are briefly pre-

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[2] The project team in EDUM is now composed as follows: Edo Poglia, scientific direction; Benedetto Lepori, project manager; Sibilla Rezzonico and Chiara Succi research assistants and PhD Students. The project team is supported by a steering committee composed by Lorenzo Cantoni, Mauro Martinoni, Jean-François Perret.

sented. The 4th paragraph outlines some relevant issues for the future development of eLearning in Switzerland.

2. Interviews with SVC projects

The results of the interviews show that most of the courses have been conceived to be closely integrated with the existing course, leaving a large component of face-to-face teaching. The on-line course will be mainly used as a replacement of single lectures, or a support for students, or to enrich the teaching activities (for example, by the use of simulation software). While most of the projects are working on courses that already existed in a face-to face format, a few completely new ones are being developed.

For what concerns the strategies inside every project, many of them follow a self-sufficient policy, developing all needed competencies in the project rather than to look for external support centres. As a consequence, SVC projects are largely autonomous: most of the decisions are taken by the project responsible and the role of the university department and of the university appears to be quite limited. The co-operation with other universities, one of the main aims of the programme, was evaluated to be fruitful by about half of the interviewed projects, since they could divide the different tasks among the partners and exploit different competencies (for example in the production of content). For the rest of the projects, working with project partners proved to be difficult, slowing the progress of work.

Almost all the manpower has been recruited inside the universities, being mostly PhD students or university students; very few projects asked for external professional support. Thus projects contributed to spread eLearning competencies inside the universities; however this could mean that in some cases a few aspects (e.g. presentation and layout) do not completely meet professional standards. External support is frequent in IT, through the co-operation with companies of the sector; some projects collaborated with their university support centres.

The choice of a learning platform has been a major issue. Some of the 21 projects that did choose from beginning WebCT are not completely satisfied with the platform, anyway they could work more quickly in the development of the course; other projects lost quite a lot of time and resources in the choice of the platform or even in developing a new solution.

Finally, the results of the financial issues: many projects have some ideas on how to get resources for the further development and maintenance; however, very few have detailed plans, since most of them are still in the development phase and many will not complete all the foreseen modules until the end of 2003: it seems that issues of institutional implementation of the course and of ensuring their long-term sustainability are rather far away from many projects, since most of them were still mostly concerned by the development of course materials at the time of the interviews.

3. Institutional strategies in the Universities

At the level of the universities, the SVC had a strong stimulus function: most universities have started some forms of reflection about eLearning and in many of them support structures have been created; either in the form of specific support centres or of support from existing structures (for example, informatics services). However, the level of engagement is quite variable, the financial contribution of the university ranging from less than 100'000.- to several millions of francs. Also the reflection has not led until now to the design of long-term strategies, approved by the universities and political authorities; the integration of eLearning in the Swiss universities remains thus fragile.

A striking element is that all Swiss universities see eLearning as an instrument to improve the quality of teaching and learning for the existing students; possible niches are then classes with large number of students, simulations in the natural sciences and medicine and, finally, better study opportunities for commuting students. Many universities see opportunities in the continuing education (this might even be the market of choice for eLearning); however, the structures created to support eLearning are institutionally separated from the department for continuing education.

No university expects financial benefits from eLearning, in terms of reduction of costs or of revenues from more students (except for continuing education); eLearning is seen more as an opportunity to improve the service offered by the university and thus to strengthen its social and political reputation. The meaning of eLearning is also very large, encompassing in some cases also the diffusion of basic technologies like e-mail or PowerPoint presentation; the integration of tools into the existing courses, following differentiated strategies, is seen as being more impor-

tant than the development of full on-line courses. This means also that in many universities the diffusion of eLearning is strongly correlated with reform of the course structures (for example the introduction of the Bologna model).

In almost all cases, the management of the university sees its function in providing support instruments for the introduction of eLearning, in particular through the creation of dedicated support centres. The decisions on the introduction of eLearning into the curricula and the financing of the additional costs are the responsibility of the faculties (since no one of the universities has plans to create a specific department for eLearning); however, the seem to have been hardly involved in the selection of the SVC projects and is not clear if all the concerned faculties will be able (and/or willing) to assume these tasks.

The relationships with the SVC projects are also quite different. Some projects co-operate with the support centres and with the rectorate, while others are hardly known by the central structures. The general impression seems to be that the projects are quite independent and that universities have little control on this development since the projects were directly selected from the SVC programme; however, some universities (having larger financial means) seem to be better equipped to manage this development than others, where the role of central coordination is almost lacking.

4. Open issues and conclusions

In this conclusion, we wish to present some aspects that emerge from our research, as well as future research directions.

a) The first remark is that the SVC programme has been very effective in diffusing competences on eLearning in the Swiss university system. This is a deliberate result of the design of the programme and especially of the decision to integrate eLearning in existing university courses and to realize cooperation projects between different universities. So not only all Swiss universities are participating in SVC projects, but these are spread in the different disciplines and departments. Moreover, the fact that the major actors in the projects are university professors and researchers ensures that the competences gained in SVC projects will be integrated into the universities, contributing to the diffusion of an eLearning culture.

Finally, universities have been also responsive to the programme, not only cofinancing the projects, but also by creating in many cases support

structures (see section 3); the consolidation programme for 2004-2007 foresees that each Swiss university should have such a centre.

b) The second remark is that the original concept of producing on-line courses which would be jointly used by several universities has been profoundly modified: not only most projects will keep a (large) part of the course in presence ("blended learning"), but also the use of produced contents and tools will be quite different for each university. We could probably say that many projects will not produce a course but rather a pool of resources, that will be integrated *à la carte* by each professor in her/his (existing) course.

In pedagogical terms, this can be interpreted as a sign that the practices of presential teaching and of distance learning are converging towards an hybrid mode (Perret 2003). However, we think that this choice reflects also the strength of the normative model of university teaching, where courses are basically centred around the professor (being largely autonomous in designing the course). At the contrary, in distance education the relationship between course and teacher is in many cases reversed: the educational institution organises, manages and owns the course and hires specialized competences for contents, teaching and tutoring.

This is the reverse side of the decision to integrate eLearning into existing universities: the existing institutional and normative models largely constrain the mode of adoption of eLearning; developing new institutions or at least new curricula would have left more freedom to design organisational structures most suited to eLearning (as the case of the projects realising new courses shows clearly).

3) The third remark is that, exactly for this reason, the consolidation of the SVC projects raises many issues concerning their organisation, but also the viability of the chosen model. As already explained, most SVC projects are not courses which could be directly integrated into university curricula, but rather pools of resources to support teaching and learning. These collections are very large and complex (both for contents and technology) and their maintenance cannot be managed as a side activity of university teaching; moreover, these are joint products of several universities and thus there is no institution responsible for the whole. Their use and maintenance will bring extra costs, which are not compensated by saves in teaching activities since the whole structure of presential teaching is still in place; scale economies are hardly present, since the use will be very specific and commercial exploitation difficult.

This means that we need a suitable organisation form for joint use, ac-

cess and maintenance of these resources between Swiss universities (and, possibly, also with universities abroad); this could be done for example by creating joint consortia or by a sort of open source policy, where all parties contribute and get in exchange access.

4) The forth remark is that innovation in the SVC has been strongly concentrated at the microlevel of the single course, i.e. in the type and sequence of didactical activities, but rarely involves larger units, like the creation of new curricula, the set-up of common courses between the different universities (the last one being an explicit objective of the SVC) or the opening of new markets either in university education or in vocational training. Almost all Swiss universities concentrate their efforts in the support to bottom-up initiatives through the creation of support centres, rather than designing overall strategies and new institutions.

However, we think that this rather passive approach – supporting innovators – should be complemented with more pro-active actions. This means firstly to design (and to officially state) an institutional strategy for elearning, which could function as a guidance for professors and departments, to support their efforts (e.g., by creating a favourable climate for eLearning) and to set up some common rules (for example limiting the diversity of technological solutions). Secondly, it means using eLearning strategically, as a tool to modernize the institution and to answer to new requirements (e.g., to answer to new social demands for education). It becomes thus essential to link eLearning development strategies with the ongoing university reform processes and especially with the introduction of the bachelor and master organisation of studies.

Our first results show that the use of an institutional and organisational framework to study eLearning can give very interesting insights, which complement those gained from approaches more centred on pedagogical models or on technology; moreover, these results lead to important implications for the design of a Swiss policy towards eLearning and for the functioning of the Swiss Virtual Campus.

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