

RED-INK: Educating through technology

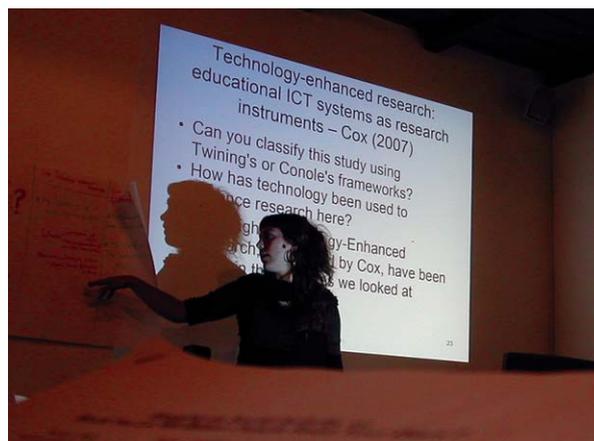
The RED-INK (*Rethinking Education IN the Knowledge society*) doctoral school is committed to unravelling issues related to the introduction, management and impact of educational and eLearning technologies in a Knowledge Society. Funded by ProDoc, a programme of the Swiss National Science Foundation (SNSF), RED-INK brings together three research centres from three Swiss universities, including the New Media in Education Laboratory (NewMinE Lab) of the Faculty of Communication Sciences, Università della Svizzera italiana, USI, which acts as leading house.

Today's knowledge society is characterised by great labour mobility and places its emphasis on skills and know-how rather than on functions. Such a society calls for different educational and learning methods. The use of digital technology contributes to a better response to the new social and cultural environment.

RED-INK (*Rethinking Education IN the Knowledge society*) is a doctoral school created under the banner of the ProDoc programme of the Swiss National Science Foundation (SNSF). Its aim is to achieve a deeper understanding of issues connected with the introduction, management and impact of educational technologies (eLearning) in different contexts, namely schools, universities, firms, or organisations.

Launched in April 2008 for a period of three years, RED-INK involves three partners: NewMinE Lab, a laboratory of the Faculty of Communication Sciences, Università della Svizzera italiana (as leading house - Prof. Lorenzo Cantoni), the *Institut für Wirtschaftspädagogik* (IWP) of the University of St Gallen (Prof. Dieter Euler) and the *Centre de Recherche et d'Appui pour la Formation et ses Technologies* (CRAFT) of the Swiss Federal Institute of Technology, Lausanne (Prof. Pierre Dillenbourg).

"These three universities are leaders in the field of educational technologies in Switzerland, and merge three different perspectives", explains Dr Luca Botturi, executive director of RED-INK and a member of NewMinE Lab. "In Lugano we study the impact of technologies on communicative



A presentation held during a seminar run by RED-INK.

processes; St Gallen deals with the importance of learning practices inside organisations; while Lausanne concentrates on the technological aspects of human-computer interaction".

The RED-INK doctoral school, a community of academic researchers and PhD students – 15 doctoral students in total, five of whom located at USI –, constitutes an interdisciplinary research team on a national scale.

Besides a training module intended primarily for PhD candidates, there are research modules which support research projects investigating specific issues.

Courses (all of which are intensive) take on different configurations: some are residential seminars, run as classes with direct teacher-student contact; others are held on-line; others still are developed in the shape of interviews available on-line. "We want to put together an array of teaching resources as a portfolio or repository of all the contents created in the course of the doctoral school. The purpose is to make them accessible and usable by other educational or training institutions", Botturi explains.

NewMinE Lab

Under the directorship of Prof. Lorenzo Cantoni, New Media in Education Laboratory (NewMinE Lab) is affiliated to USI's Institute for Public Communication and Education. The Laboratory conducts research activities and assessments of the impact of new technologies on education and training; it runs monitoring and testing operations on the latest technological innovations in education; and supplies documentary resources for the role of new media in education. It also provides advisory services and operational support / technical assistance to public institutions and companies for the implementation and appraisal of educational experience in the area of eLearning.

NewMinE Lab's work in progress

RED-INK acts as a forum for several lines of research explored by the doctoral students of NewMinE Lab, USI. One of the chief avenues of research is the role of communication in the context of receptivity to eLearning. Statistical data point to a high drop-out rate among students registered for on-line degree programmes. The economic implications of this phenomenon are clear, inasmuch as grants are allocated to institutions on the basis of students' attendance. Research in this area, therefore, is looking for ways of improving the communications channels within the organisation, in order to buck the trend and achieve the best return on investment.

"At the moment we are designing an eLearning system for Banca Popolare di Sondrio. This bank is planning to launch the use of play-stations in training the new recruits while assuring them a good integration in their workplace. This is a typical case in which a new approach can boost an educational process", Botturi explains.

A second avenue of research tackles the study of team communication. Educational projects regarding eLearning cannot be undertaken by a single person; they require a whole set of skills that are more easily deployed as part of an interdisciplinary team structure or which involve several organisational levels. If educational



The RED-INK research team. Left to right: Professor Lorenzo Cantoni, Dr Luca Botturi, with PhD students: Andreas Schmeil, Silvia de Ascaniis, Chrysa Rapanta, Emanuele Rapetti, and Luca Mazzola.

quality is to be guaranteed, therefore, it is vital to work out the degree of communicative interaction existing between course designers and those responsible for the course content.

This USI Lab, moreover, hosts two research projects with European Union funds, in particular under the Seventh Framework Programme and the Community Action Programme for Lifelong Learning.

While the first of the two projects focuses on the study of technologies for personalising the learning experience (GRAPPLE), the second focuses on designing a collaborative environment for eLearning in architecture (OIKODOMOS).

Projects in the region

Besides the theoretical, there is an applied component to NewMinE Lab's research. Two projects conducted in the region deserve a special mention: the first is a technology section entitled "Internet e Valli" featured in the daily, *Giornale del Popolo*, which presents on a monthly basis (it began in April 2008) aspects of digital culture in several contexts, such as tourism industry, videogames, plagiarism in schools. The second project, conducted in association with the schools of Greater Lugano, concerns the introduction of technological applications into teachers' methods. A technological treasure hunt was organised at the end of May, which used mobile phones and involved primary school children of the fourth and fifth year, and first-year secondary school pupils from the Valleys. These pupils were guided to discover certain items of cultural heritage and politically- and economically-relevant institutions (e.g. the Town Hall and the Post Office) in Lugano, through the use of a technological tool that is familiar to them. The initiative turned out to be a resounding success: as was borne out by the excellent marks it was awarded (an average of 9.5 out 10) by teachers, parents, and other personnel in attendance.

Enquiries:
 Luca Botturi
 NewMinE Lab - New Media in Education Laboratory
 USI-Facoltà di scienze della comunicazione
 Via G. Buffi 13
 CH-6904 Lugano
 Tel. +41 58 666 46 74
 e-mail: luca.botturi@lu.unisi.ch

Web addresses:
www.com.unisi.ch
www.newmine.org
www.red-ink.ch
<http://red-inklings.blogspot.com>