

Virtual Campus and e-Learning

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Abstract

This paper aims to present the Virtual Campus designed and implemented at the University of Bucharest as well as the present status of the “eLearning”. These two objectives are included in the general strategy approved by the Senate’s Decision of 11 April 2002, in order to promote the IT&C in education, within our University.

The Virtual Campus was open in July 2002 and was tested by the staff of the Department for Open Distance Learning, Continuing Education and Professional Conversion, CREDIS. Now, the Virtual Campus is currently used by our students, academic and administrative staff, and guests from other universities in Romania and abroad. Meanwhile, the eLearning system was taken into consideration and the first courses designed and produced at CREDIS were the course modules used as learning resources for the training activities focused on the ECDL Certificate.

IC&T in education

The IT&C (Information Technology and Communication) policy was designed having in mind three objectives:

1. IT&C for All
2. to adapt the activity of the staff and the institution to the digital requirements
3. to educate the future specialists for the IT jobs and market.

Having the objective to raise the level of knowledge about Information Technology and increase the level of competence in using personal computers and common computer applications for all the students and staff of the University, we decided to apply and to become ECDL Test Centre (<http://ecdل.credis.ro>).

Endorsed by many Governments, learning institutions and leading corporates in Europe and around the world, ECDL/ICDL has become the leading formal computer skills certification sought by students, workers, employers and the general public (<http://www.icdl.org>). In education, the ECDL programme in Europe in particular has been evaluated and approved by many Governments as a policy framework for the development of Information Technology in schools. The programme has been adopted to prepare school students for their participation in the Information Technology society.

The ECDL/ICDL consists of seven modules:

1. Basic Concepts of IT
2. Using a Computer and Managing Files
3. Word Processing
4. Spreadsheets
5. Databases
6. Presentation
7. Information and Communication

During the academic year 2002/2003 different target groups have started the training and have obtained the first ECDL Module Certificates: 100 persons working as

secretaries within faculties/departments, students and teachers of the university, students and in-service teachers from the high schools.

Virtual Campus

The Virtual Campus was designed to provide a complete, scalable, Web-based, eLearning platform with focus on curriculum delivery, learner assessment and personalized feedback. Our Virtual Campus was open in July 2002 and was tested by the staff of the Department for Open Distance e Learning, Continuing Education and Professional Conversion, CREDIS. Now, it is currently used by our students, academic and administrative staff, and guests from other universities in Romania and abroad.

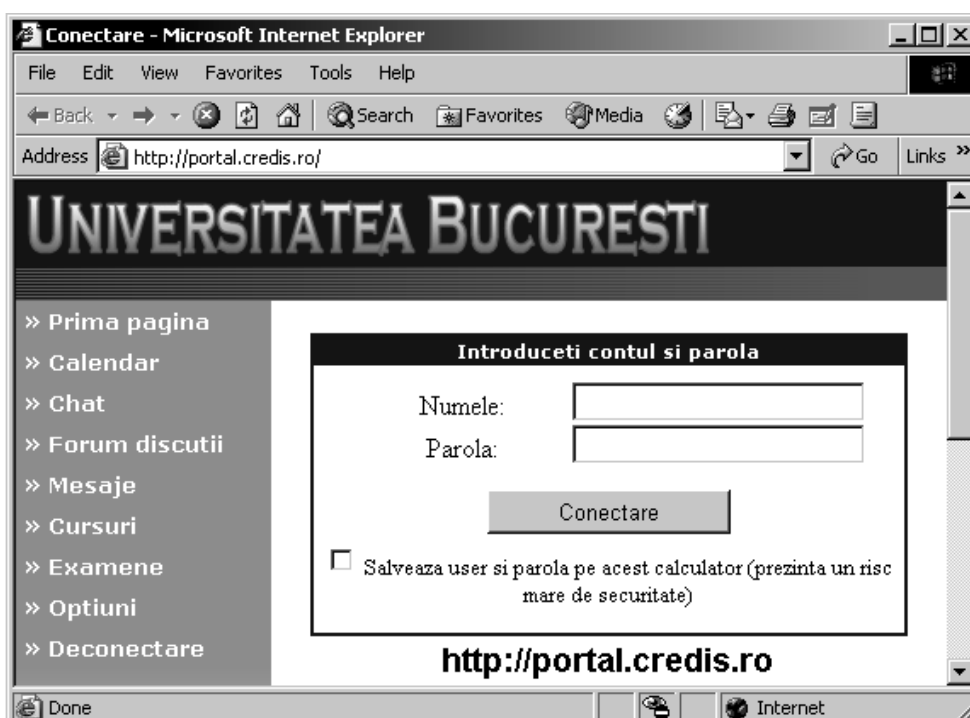


Figure 1. Virtual Campus

The entry point for the Virtual Campus is presented in the Fig. 1 and can be found at the address <http://portal.credis.ro>. The services already implemented are listed on the left side of the Fig. 1: news, calendar (for the person and for the institution), chat, forums, internal messages, and on-line courses in eLearning format, on-line examination, portal options and logout.

The administrators of the portal provide the students the user-name and the password. The students are enrolled in different groups that have a number of forums, available for asynchronous discussions on various topics. The chat service is specially designed for synchronous communications. One year of using this platform showed us how important is a portal in supporting bi-directional communication between students and tutors.

The internal messages are flowing only inside the server which is hosting the Virtual Campus and has the facility to send/receive attached files. This service is used by the ODL students to receive the subjects for TMAs, Tutor Marked Assessments and to send

the tutors their reply. The tutors analyze the papers, make comments and send them back to the students.

The “eLearning” system

Computer-Based Training (CBT), Internet-Based Training (IBT), Web-Based Training (WBT) and more recently the eLearning (eL) are different opportunities to modernize the learning/teaching systems. The eLearning can be CD-ROM-based, Network-based, Intranet-based or Internet-based. It can include text, video, audio, animation and virtual environments. It is self-paced, hands-on learning and it can be a very rich learning experience comparing with the level of training in a crowded classroom.

The model used for eLearning courses could be seen in the Fig. 2, which is a screen capture from the course “Internet - Information and Communication”. The left side of the screen is allocated to pictures, animation or simulation. The student can control this applications, he can repeat them until he understand the “educational message”. The right side usually contains the text for self-study. The buttons allow the student to the personalize the study, to go forward or backward, to jump to an other paragraph or to an other chapter of the course. Every course has also a self-evaluation service which provides the results of the evaluation just in time.

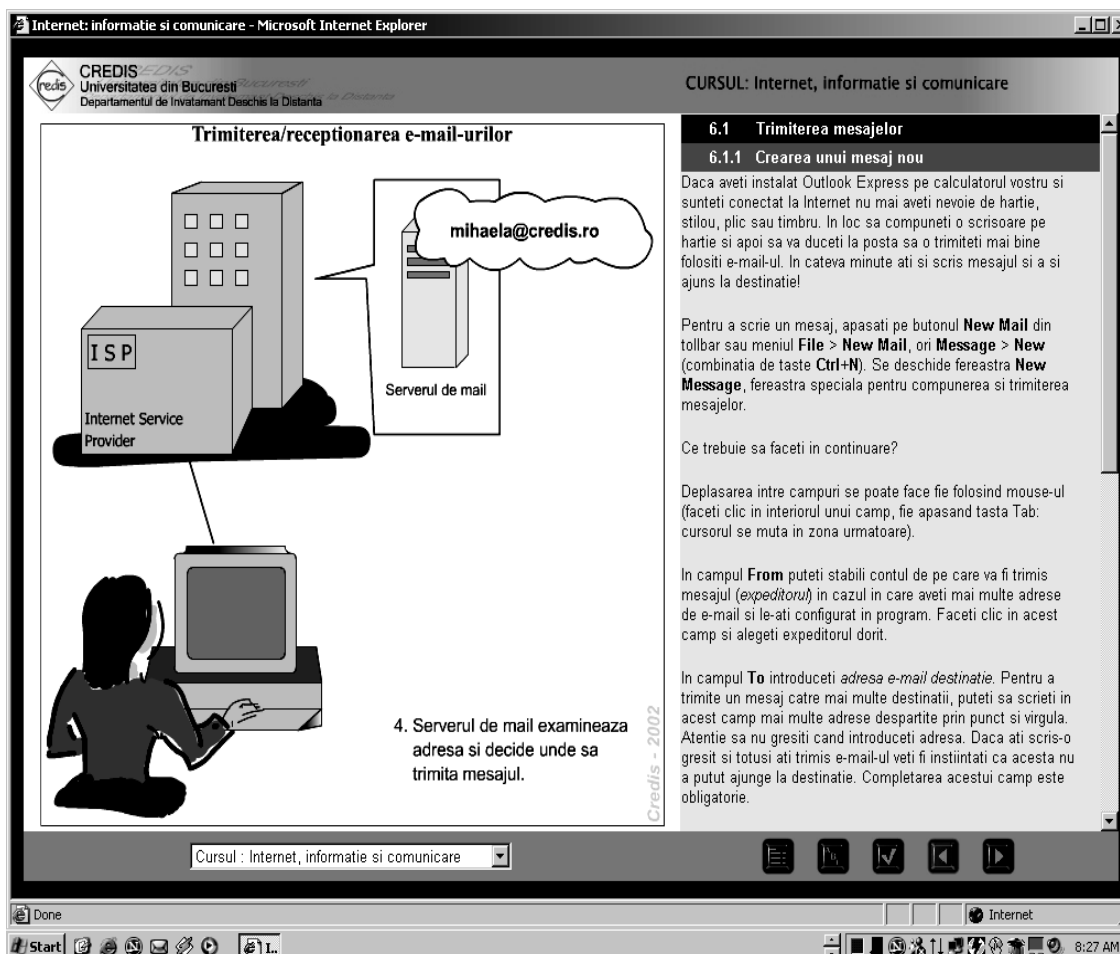


Figure 2. “eLearning” course model

The staff of the Department CREDIS has designed and produced the first course

modules in eLearning format for training courses targeted to the ECDL Certification. They were implemented on the portal in October 2002 and they were used by 100 administrative staff of the University, 140 students from the Faculty of Biology, 70 students from the Faculty of Pedagogy and Education Sciences etc. The access point for these courses is included in the portal. Nowadays, the Department CREDIS has more than 40 courses in eLearning format, most of them in the area of Information Technology.

The eLearning has benefits over traditional classroom training like:

- ✓ It's less expensive to produce. Synchronous programs will have costs associated with tutoring and management, but will still be lower than traditional courses.
- ✓ It's self-paced. The eLearning courses have a modular structure that allow the student to go through smaller blocks of training that can be used and absorbed for a while before moving on.
- ✓ It moves faster. The learners can skip the material they already know/understand and move onto the issues they need training on.
- ✓ eLearning eliminates the problems associated with different instructors teaching slightly different material on the same subject.
- ✓ It can work from any location and any time. The student can go through training sessions from anywhere, usually at anytime. This system can make learning possible for people who never would have been able to attend the academic courses.
- ✓ It can be updated easily and quickly. It is cheaper to update the eLearning resources on the server than reprinting manuals.
- ✓ It can lead to increased retention. There is also the ability to revisit or replay sections of the training that might not have been clear the first time around.
- ✓ It can be easily managed for large groups of students, spread all over the country.

Public-Private Partnership

Some of the courses were obtained through the public-private partnership that we have established with valuable international partners. Those programs are very good examples of the potential of the eLearning systems for globalization.

The Department CREDIS is Regional and Local Academy for the CNAP – CISCO Networking Academy Program (<http://cisco.netscad.net>).

The CNAP is a comprehensive e-learning program, which provides students with the Internet technology skills essential in a global economy. The Networking Academy program delivers Web-based content, online assessment, student performance tracking, hands-on-labs, instructor training and support, and preparation for industry standard certifications. There are more than 300,000 students enrolled in 140 countries, studying the same curriculum and passing the same examinations. The CISCO Certificates obtained in Romania are recognized all over the world.

The Department CREDIS is the first Romanian universities included in the Microsoft IT Academy Program and has access to the MOC courses.