

# Case study report

Benchmarking of virtual campuses



Benchmarking of Virtual Campuses Project  
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<b>Abstract:</b>	The document presents the virtual campuses that have been subject of study. This institutions have contributed to the validation of the benchmarking system.
<b>Keyword:</b>	Institutional organisation, context of the virtual campus, start-up phase, design principles, communication facilities, learner services and implication, type of delivery, evaluation system.





# **Benchmarking of Virtual Campuses**

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## **Deliverable 1 Case study report**

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## **Introduction**

On the basis of the five case studies written during the first project year, the Benvic consortium has asked six new institutions to fill in a case study grid. The questions correspond mainly to those used for the first case studies, adding some general questions at the beginning of the case study.

The following six cases have been analysed:

1. University Politehnica of Bucharest, Bucharest, Romania
2. Dirección General de Ordenación Educativa, Gobierno de La Rioja, Logroño Spain
3. Novosibirsk State Pedagogical University, Novosibirsk, Russia
4. Universidade do Porto, Porto, Portugal
5. ICON Italian Culture on the Net, Pisa, Italy
6. IPAK Institute for Symbolic Analysis and development of Information Technologies, Valenje, Slovenia

The results of these case studies allow the Benvic consortium to enlarge the Benvic club, as it was planned from the beginning of the project.

## **Case Study description**

### **1. University Politehnica of Bucharest, Bucharest, Romania**

#### **SOME PREVIOUS INFORMATION ABOUT YOUR ORGANISATION**

**1. WHAT'S YOUR INSTITUTIONAL ORGANISATION?**

Traditional university or business organisation on a single site using virtual arrangements for education and training

**2. WHAT KIND OF CO-OPERATION HAVE YOU SET UP?**

*(multiple answers possible)*

Partnership of departments within a single institution

**3. ON WHICH UNIVERSITY LEVEL IS THE VIRTUAL CAMPUS PROVIDED AND MANTAINED?**

University level

**4. AT WHAT STAGE IS YOUR VIRTUAL CAMPUS?**

In a Start-up phase- a virtual environment which is starting up

**5. WHAT ARE YOUR TARGET GROUPS?**

*(multiple answers possible)*

4 Academic graduate students

5 Academic postgraduate students

6 Professionals -continuing education

7 Company trainees

**6. WHAT IS THE STATISTICAL DATA FOR THE LAST YEAR?**

□ Numbers of courses: 9



- Numbers of subjects: 2
- Numbers of learners: approx. 200
- Age distribution (%): -
  - 1. under 18 \_\_\_\_\_
  - 2. 18-22 \_\_\_\_\_
  - 3. 22-50 \_\_\_\_\_
  - 4. 50-60 \_\_\_\_\_
  - 5. over 60 \_\_\_\_\_
- Gender distribution (%):
  - 1. Male \_\_\_\_\_
  - 2. Female \_\_\_\_\_

Comments:

Number of subjects as highlighted in the next item.

There is no data available about the age and gender distribution

## 7. WHAT SUBJECTS ARE TAUGHT?

*(multiple answers possible)*

- 4 Computer Science
- 5 Engineering

## CASE STUDY DESCRIPTION

### 1. THE CONTEXT OF YOUR VIRTUAL CAMPUS

#### 1.1 The originating organisation and its historical and socio-economic environment.

*(description of the institution is likely to be in the institution's website)*

The University Politehnica of Bucharest (UPB) is the largest higher education institution in Romania. Its foremost mission is engineering training at all levels (B.SC, M.SC, Ph.D., lifelong learning) by imparting knowledge and practical skills at the same time as encouraging creative thinking, the engineer's magic wand that allows him/her to answer the demands of the market economy and the challenge of breakthrough technology. UPB has also a large offer in post-graduate studies in many fields with more than 1900 post-graduation courses operating.

In the same time UPB is not only a transmitter but also a creator of science and technology. UPB keeps constant contact with other universities all around world and participates in educational and research programmes of the European Commission, World Bank and other bodies, as well as in

the life of international academia as a member of the most prestigious academic organisations such as the International Association of Universities (IAU), the International Association of University Presidents (IAUP), the European University Association (EUA), AUF, CIGRE.

The research and development activity takes place in chairs, departments, research and development centres and in centres for technological transfer. Moreover, some research institutes are, or will be affiliated to UPB. All these research units are subordinated to the university, but they are financially autonomous and have decisional rights in accordance with their standing. They do participate on a competitive basis to get grants and research contracts from the Romanian Government, European Commission, World Bank and other financing bodies.

## **1.2 A historical view of education in the organisation.**

The University POLITEHNICA of Bucharest (UPB) is the most important technical university in Romania. Its traditions are connected to the founding of the first higher technical school in 1818 by Gheorghe Lazar. Born in Avrig, Gheorghe Lazar studied in Sibiu, Cluj and Vienna. In 1817-1818 he endeavoured to convince the local noblemen of the need for supporting a modern national school in the Romanian language.

Thus, on 24 March 1818, by a Royal Edict, the premises of Saint Sava Abbey were converted into the new school. Later, in 1832 this school was reorganised, including four cycles, in accordance with the provisions of Organic Ordinance. Among other faculties, the one dealing with exact sciences included courses such as applied trigonometry, geodesy, mineralogy, engineering graphics, descriptive geometry, mechanical elements applied to ordinary machines, principles of building roads and bridges, elements of architecture, etc. The graduates were obliged either to work for three years for the state, or to return the grant received. In 1862, the ruler Alexandru Ioan Cuza had established by another Royal Decree a set of clearly defined rules for the organisation of civil engineers, the hierarchy of engineers or conductors, their salaries, and the conditions for admission and promotion.

An important figure in the "School of Bridges, Roads and Mines" was Gheorghe Duca. As early as 1887, he analysed the content of courses, finding the weaknesses of the school, as well as the best solutions to improve its academic level. In those times, a substantial condition was the severity imposed on the conduct of students, in addition to evaluation. Students obtaining insufficient results, or having an erratic course attendance, were quickly removed from the school. Indeed, at the beginning, the preparatory year had no admission tests. An admission test was introduced in 1881. The top priority was the quality of candidates; the number selected was less important. Gheorghe Duca tried and succeeded to bring the best professors to the "National School of Bridges and Roads." Among them, we should mention David Emanuel (Elementary Mathematics), Spiru Haret (Higher Algebra and Analytical Geometry), C. M. Mironescu (Statistics and Engineering Graphics), Constantin Istrati (Physics), or Anghel Saligny (Bridges and Roads). Moreover, Gheorghe Duca himself was considered the greatest authority in railways at the end of 19th century. This was perhaps a turning point: Romania clearly demonstrated that it was capable of achieving on its own what had been deemed only obtainable abroad, namely the training of highly qualified science and engineering specialists. The year 1890 also represented a

momentous point, with the creation of a new National School of Bridges and Roads commission. Its main role was to issue equivalency certificates for the engineering diplomas obtained abroad, thus transforming this national school into a model for evaluating higher technical studies.

Nicolae Vasilescu-Karpen was appointed director of the School in February 1920. As a direct result of his endeavours, the government approved the establishment of Polytechnic Schools in Romania, conceived as higher education institutions, similar to universities, with the aim of engineering training under the Ministry of Public Works.

Not surprisingly, the first Polytechnic School was set up by transforming the "National School of Bridges and Roads" into the "Polytechnic School of Bucharest". In its initial stage it consisted of four sections: Civil Engineering, Mechanics and Electricity, Mines and Metallurgy, the Industrial Section

In addition to the Polytechnic School, there were Institutes for Engineers within Universities in this period. For instance, the University of Bucharest hosted an institute for electrical engineering, an institute for industrial chemistry and another one for agricultural and food chemistry.

Another important corner stone was the decree 3799 of 1938 stating that higher education could only be provided by Universities, Polytechnic Schools, or Academies for Commercial Studies. As a direct result, the Academy of Higher Agricultural Studies, The Academy of Architecture, The Institute of Industrial Chemistry and Agricultural and Food Chemistry, respectively, were introduced in the frame of "Bucharest POLITEHNICA". The change of name from "Polytechnic School of Bucharest" into "POLITEHNICA of Bucharest" was accompanied by other changes as well. The POLITEHNICA depended on the Ministry of National Education (instead of the Ministry for Public Works), the former director became Rector of POLITEHNICA, the different sections became Faculties, their presidents in turn, became Deans etc.

Another important transformation took place in 1948, when several faculties or even specialities became independent, or in some cases moved to other towns. As such, many universities, institutes or faculties have their roots in the old "POLITEHNICA of Bucharest". The following establishments were initially faculties or departments at "POLITEHNICA" University of Bucharest: The University for Civil Engineering - Bucharest; Silviculture Faculty - Brasov; The Agronomy Institute - Bucharest; The School of Mines - Petrosani; The University for Gas and Oil - Ploiesti; The Architecture Institute - Bucharest; Faculty for Food Chemistry - Galatzi; Faculty for Textile Industry - Iassy.

The name for our school was "The Polytechnic Institute of Bucharest". Today, on the resolution of the Senate (November 1992), The Polytechnic Institute of Bucharest turned into University POLITEHNICA of Bucharest, preserving the name "POLITEHNICA", proudly used by generations of students.

## **2. DESCRIPTION OF THE VIRTUAL CAMPUS**

### **2.1 Design principles: what are the policy objectives, which is/are the target group/s, etc.**

The UPB Virtual Campus objectives are to accompany UPB in his process of institutional, organisational, pedagogical and economic innovation; to design and implement a platform that will foster the inter-institutional collaboration at national and international level; to establish the capacity of quality content production and quality services provision in a national and international partnership context; to build a training system for higher education teachers and trainers on the use of ICT for learning; to establish a quality system covering higher education institutions, competencies, learning resources and services based on the transfer of European experiences and knowledge.

## **2.2 How formally/explicitly is the notion of Virtual Campus articulated? Is there a formal statement/declaration? Are all actors aware of its existence?**

The UPB Virtual Campus was launched under the UPB Senate Decision at the beginning of 2000-2001 academic year. The UPB Senate sent a memo to all academic staff to inform them about the initiative and ask for their feedback regarding strategy to be adopted for the set-up and development of the UPB Virtual Campus.

### **2.3 Which infrastructure has been set up?**

The operation is based on the use of the Internet as the delivery vehicle for all activities. The infrastructure is based on a distributed architecture involving two core servers, one collaboration server, one database server and several content servers.

Presently, a dial-in server is under development.

### **2.4 What software is being used?**

A distance learning delivering platform Lotus Learning Space 5.0 (LLS) installed over the IBM DB2 7.1 database is used.

### **2.5 How is the Virtual Campus structured?**

There is a main centre that includes the web server, core servers, collaboration servers and database server and several departmental centres that manage the content servers.

The main centre also includes a content production group that offers services for the whole university from a technological and pedagogical point of view.

### **2.6 Which actors are involved in the initiative (level/position? number of actors in total)**

The Virtual Campus initiative is supervised by the university Rector and was co-ordinated by a group of professors that are experts in the field of ICT and distance learning technologies. Presently, it is managed by the eLearning Services Unit of the Department for Continuing Education and Distance Learning.

### **2.7 Which communication facilities are used? (video-conferencing, audio-conferencing, Internet, learning platform, special software,...)**

The asynchronous activities take place using the Internet by using a web-based distance learning management system (LLS) and the regular e-mail service. While the synchronous activities take place using the collaboration features of LLS (audio and video conferencing, whiteboard, chat, follow-me).

### **2.8 How is communication managed and delivered?**

The interaction between the students and tutors and between the students is done using e-mail messages, discussion boards and live sessions.

### **2.9 How are classes taught? What subjects are taught?**

The pilot courses were designed using two strategies: full online and mixed mode. Presently, the subjects are on Microelectronics, Computer Sciences, Mechanics and Chemistry.

### **2.10 What kinds of materials are available? How are materials delivered?**

The teaching materials for the pilot courses are posted on the web in html format being accessible through Internet. Some courses also contain multimedia applications that are available for download or on CDs.

### **2.11 Are any innovative learning methods applied? (group work, project work, problem solving,...)**

Depending on the topic of the course, the tutors can assign students to work individually or in groups for solving a design project or homework.

### **2.12 How is the Virtual Campus managed, i.e. what mechanism exists for co-ordinating the initiative organisation-wide? Which actors are involved?**

The Virtual Campus is presently managed by the eLearning Services Unit that takes care about the communication infrastructure, servers' administration and content development.

## **3. LEARNERS SERVICES AND IMPLICATION**

### **3.1 Which services have been set up for learners (administrative, technological help etc)?**

Before following an online course the learners need to take a short course in how to use the LLS system. They can also access an info desk when needed.

Presently, they benefit only from the services offered by LLS: the learners can sign-in for a course and can access their marks and grades.

### **3.2 How are learners tutored and guided? How many students does each tutor have?**

The learners are tutored and guided using both asynchronous and synchronous activities (e-mail messages, discussion boards, office hours based on chat or live session).

Each tutor is assigned to approx. 20 students.

### **3.3 How is their work assessed?**

At the end of the course the students need to pass a final test and, when appropriate, to produce a design project.

### **3.4 What accreditation mechanisms have been established?**

The accreditation mechanism is under construction.

## 4. EVALUATION SYSTEM

### **4.1 Which evaluation approach has been adopted: what are the objectives of evaluation? who or what are the subject? which actors are involved? what criteria, methods and tools are being used to monitor/evaluate the progress/success of the initiative?**

The evaluation approach for the initiative development is under construction.

For the pilot courses the evaluation criteria was: average final mark and the average time of completion.

### **4.2 Are evaluation results available? What has changed for the target group(s) since the Virtual Campus initiative was started? In what way did they benefit from the initiative? What kind of new knowledge was gained by the initiators (maybe the plan did not work the way they wanted it to work; what did they change during the process?)**

No. The students received the initiative very well as the virtual campuses offered them a higher degree of flexibility in taking the courses.

### **4.3 What were the innovative aspects of the learning activities that can be applied again? What other side effects has the initiative had so far (other organisations carry out initiatives with the same concept/approach/method etc.) Are there any future plans for continuing/expanding the initiative?**

The UPB is the main player in the Romanian eUniversity initiative that will eventually include in all Romanian universities.

## **2. Dirección General de Ordenación Educativa, Gobierno de La Rioja, Logroño, Spain**

### **SOME PREVIOUS INFORMATION ABOUT YOUR ORGANISATION**

#### **1. WHAT'S YOUR INSTITUTIONAL ORGANISATION?**

Regional education administration with responsibilities over non-university education in La Rioja

#### **2. WHAT KIND OF CO-OPERATION HAVE YOU SET UP?**

Partnership involving other institutions from several different countries

Comments: We lead one Leonardo project (e-know-net) and participate in another one (ReDMEIS) to acquire knowledge in this area of work

#### **3. ON WHICH UNIVERSITY LEVEL IS THE VIRTUAL CAMPUS PROVIDED AND MANTAINED?**

Will be provided and maintained by the regional education administration

#### **4. AT WHAT STAGE IS YOUR VIRTUAL CAMPUS?**

4 In a Start-up phase- a virtual environment which is starting up

Comments: we do NOT have a virtual environment just yet

#### **5. WHAT ARE YOUR TARGET GROUPS?**

*(multiple answers possible)*

4 Academic undergraduate

5 Professionals -continuing education

6 Non-academic or vocational in framework of lifelong learning

#### **6. WHAT IS THE STATISTICAL DATA FOR THE LAST YEAR?**

Not applicable. We have NOT started courses yet.

#### **7. WHAT SUBJECTS ARE TAUGHT?**

Not applicable. We have NOT started courses yet.



## CASE STUDY DESCRIPTION

### 1. THE CONTEXT OF YOUR VIRTUAL CAMPUS

#### **1.1 The originating organisation and its historical and socio-economic environment.** *(description of the institution is likely to be in the institution's website)*

The Dirección General de Ordenación Educativa y Universidades is part of the Government of La Rioja. It deals with the organisation of the educational system in La Rioja and promotes innovation programmes, such as the use of new didactic methods –including virtual training. Nowadays we are creating a VLE focused on teacher- and vocational-training.

La Rioja is a small region in the north of Spain (3,043 km<sup>2</sup> and 250,000 inhabitants). It is one of the richest regions in Spain. Its economy is based on small industries, agriculture (especially vegetables and vineyards) and different services –increasingly so in the tourist sector.

#### **1.2 A historical view of education in the organisation.**

La Rioja has been in charge of their education system for only the last 3 years, but all of the staff in the Dirección General de Ordenación Educativa y Universidades have worked in the field of education for several years –many in the education administration before La Rioja assumed responsibilities in this field.

### 2. DESCRIPTION OF THE VIRTUAL CAMPUS

#### **2.1 Design principles: what are the policy objectives, which is/are the target group/s, etc.**

Target groups: teachers (for teacher training activities) and students (specially in vocational training). The objective is to have the possibility of distributing knowledge at any time, to anybody anywhere –without the limitations of geographical location (for example, teachers living and working in rural areas, far from one of our teacher training facilities)

#### **2.2 How formally/explicitly is the notion of Virtual Campus articulated? Is there a formal statement/declaration? Are all actors aware of its existence?**

Yes, it will be formally introduced to the different sectors of our education system here (teachers, students, parents –who will gradually be able to make use of it) and to the public in general.

#### **2.3 Which infrastructure has been set up?**

None so far.

#### **2.4 What software is being used?**

None so far

## **2.5 How is the Virtual Campus structured?**

Not applicable just yet

## **2.6 Which actors are involved in the initiative (level/position? number of actors out of total)**

Directly responsible is the Department Head for Innovation Programs and Teacher Training. The political responsibility lies with (the decision is made by) the Director General for Ordenación Educativa y Universidades, all with the knowledge and approval of our Minister of Education.

## **2.7 Which communication facilities are used? (video-conferencing, audio-conferencing, Internet, learning platform, special software,...)**

Not applicable just yet.

## **2.8 How is communication managed and delivered?**

Not applicable just yet.

## **2.9 How are classes taught? What subjects are taught?**

Not applicable just yet.

## **2.10 What kinds of materials are available? How are materials delivered?**

Not applicable just yet.

## **2.11 Are any innovative learning methods applied? (group work, project work, problem solving,...)**

Not applicable just yet.

## **2.12 How is the Virtual Campus managed, i.e. what mechanism exists for co-ordinating the initiative organisation-wide? Which actors are involved?**

Not applicable just yet.

## **3. LEARNERS SERVICES AND IMPLICATION**

### **3.1 Which services have been set up for learners (administrative, technological help etc)?**

Not applicable just yet.

### **3.2 How are learners tutored and guided? How many students does each tutor have?**

Not applicable just yet.

### **3.3 How is their work assessed?**

Not applicable just yet.

### **3.4 What accreditation mechanisms have been established?**

Not applicable just yet.

## **4. EVALUATION SYSTEM**

### **4.1 Which evaluation approach has been adopted: what are the objectives of evaluation? who or what are the subjects? which actors are involved? what criteria, methods and tools are being used to monitor/evaluate the progress/success of the initiative?**

Not applicable just yet.

### **4.2 Are evaluation results available? What has changed for the target group(s) since the Virtual Campus initiative started? In what way did they benefit from the initiative? What kind of new knowledge was gained by the initiators (maybe the plan did not work the way they wanted it to work; what did they change during the process?)**

Not applicable just yet.

### **4.3 What were the innovative aspects of the learning activities that can be applied again? What other side effects has the initiative had so far (other organisations carry out initiatives with the same concept/approach/method etc.) Are there any future plans for continuing/expanding the initiative?**

Not applicable just yet. We are currently in the planning stage, but hope to soon to acquire the technology and start with some pilot courses: firstly here on site with staff from our Dirección General, then to reduced groups of teachers, and then slowly implement the platform on a wider scale.

### **3. Novosibirsk State Pedagogical University, Novosibirsk, Russia**

#### **SOME PREVIOUS INFORMATION ABOUT YOUR ORGANISATION**

##### **1. WHAT'S YOUR INSTITUTIONAL ORGANISATION?**

- Traditional university or business organisation on a single site using virtual arrangements for education and training

##### **2. WHAT KIND OF CO-OPERATION HAVE YOU SET UP?**

*(multiple answers possible)*

- Partnership of departments within a single institution
- Partnership involving other institutions in a local geographical area
- Partnership involving other institutions in a Region
- Partnership involving other institutions in a single country
- Partnership involving other institutions from several different countries

##### **3. ON WHICH UNIVERSITY LEVEL IS THE VIRTUAL CAMPUS PROVIDED AND MANTAINED?**

- Faculty level
- University level

##### **4. AT WHAT STAGE IS YOUR VIRTUAL CAMPUS?**

In a Start-up phase- a virtual environment which is starting up

##### **5. WHAT ARE YOUR TARGET GROUPS?**

*(multiple answers possible)*

- Academic undergraduate
- Academic graduate students

- Academic postgraduate students
- Professionals -continuing education

## 6. WHAT IS THE STATISTICAL DATA FOR THE LAST YEAR?

- Numbers of courses: 3
- Numbers of subjects: 8
- Numbers of learners: 25
- Age distribution (%):
  - 1. under 18 20
  - 2. 18-22 80
  - 3. 22-50 -
  - 4. 50-60 -
  - 5. over 60 -
- Gender distribution (%):
  - 1. Male 20
  - 2. Female 80

## 7. WHAT SUBJECTS ARE TAUGHT?

*(multiple answers possible)*

- Humanities
- Psychology
- Computer Science
- Economics
- Science
- Social sciences
- Education
- Other

## CASE STUDY DESCRIPTION

### 1. THE CONTEXT OF YOUR VIRTUAL CAMPUS

**1.1 The originating organisation and its historical and socio-economic environment.**  
*(description of the institution is likely to be in the institution's website)*

Throughout the world, universities are increasingly using telematics and the Internet for teaching. Nowadays the government of the Russian Federation sets new, higher standards for the quality of its universities. Similarly, Siberia is seeking a proper position in the field of virtual education in Russia.

NSPU is a standard university teaching the school leavers. The students are between 16 and 50 years old. Today it has about 24,000 students: about 5,000 full-time students and 19,000 part-time (distant) students.

Degrees offered:

- 5-year undergraduate professional programme leading to the Specialist Diploma
- 3-year postgraduate research work leading to a thesis to the Candidate of Science degree

NSPU offers degrees in pedagogy with following specialities:

- Institute of Philology, Media and Psychology.

Majors in: Russian and Literature (Philology); Russian and a Foreign Language (English, German, French); Corrective Psychology (Education of Specific Learning Disabilities); Journalism

- Psychology Department.

Majors in: Psychology

- Foreign Languages Department

Majors in: English; German; French

- Pre-school Psychology and Education Department

Majors in: Pre-school Education and Psychology; Pre-school Specific Learning Disabilities Psychology and Corrective Pedagogy

- Primary School Department

Majors in: Primary School Pedagogy and Methodology; Social Pedagogy

- Business Technologies Department.

Major-ins: Business Technologies; Advertising; Public Relations

- Fine and Applied Arts Department.

Majors in: Fine and Applied Arts and Crafts (specialisation: Design and Computer Design)

- History Department.

Majors in: History and Culture

- Natural Sciences and Geography Department

Majors in: Biology; Chemistry; Geography

- Mathematics Department.

Majors in: Mathematics and Computer Science

- Physics Department.

Majors in: Physics

International Projects: Toulon University (France), Hokkaido University (Japan), Portsmouth Linguistic Centre (UK), Shangyan and Yagntai Universities (China)

The aim of NSPU is to provide students with traditional university education using the newest informational technology based on open and distance learning.

The creation of the Virtual Campus will have an additional chance to prevail in the beginning regional competition and make university studies available to all members of society in Siberia.

## **1.2 A historical view of education in the organisation.**

The Novosibirsk State Pedagogical University is a fully accredited university established in September 1935.

From the beginning, and according to the government's educational offer, the NSPU has provided traditional pedagogical university studies in Siberia.

At present, society faces a need to base education not only on personal communication between teacher and student, but on an innovative teaching and learning system with the following characteristics:

- according to the Russian cultural, social and linguistic reality
- using an innovative educational model and new technologies
- collaborating with the other universities in Siberia and Russia
- offering regional services throughout the region of Siberia

The Virtual Campus of NSPU is being created in response to the new situation and to fulfil new needs in education. This response is based on a flexible and open educational model, which takes advantage of the possibilities of information society technologies.

## **2. DESCRIPTION OF THE VIRTUAL CAMPUS**

### **2.1 Design principles: what are the policy objectives, which is/are the target group/s, etc.**

The Virtual Campus will be the tool that provides content and facilitates communication between students, educators, administrative and management staff.

The objectives of the VC are:

- Accessibility. Training access will be brought into every student's home.
- Learning model. Improving the learning models to be applied to the new environment such as virtuality. Teachers become not only instructors but also facilitators.

The target groups are:

- 4 undergraduate students
- 5 postgraduates

secondary school teachers (continuing education)

### **2.2 How formally/explicitly is the notion of Virtual Campus articulated? Is there a formal statement/declaration? Are all actors aware of its existence?**

The Virtual Campus has to be the main tool for the development of the University. All members of the educational community will make daily use of it.

As a platform, the VC structure allows shared training space, which makes it possible to create a distance educational community. Students will get attention, communicate with classmates and tutors, take part in virtual work and forums, wherever they happen to be.

### **2.3 Which infrastructure has been set up?**

The Virtual Campus will be based entirely on the client-server web technology, which integrates applications by using the same interface.

### **2.4 What software is being used?**

*Microsoft Windows'95/98* – Windows'95/98 is the operating systems widely used in Russia. It is possible to use Windows 2000 Professional.

*Microsoft Office Pro* –In order to guarantee compatibility, Microsoft Office Pro has been chosen as the common tool.

*Internet Web Browser* –There are two main browsers on the market -Microsoft Explorer and Netscape Navigator. Either can be used as a web browser in the Virtual Campus.

### **2.5 How is the Virtual Campus structured?**

The Virtual Campus is based on the structure of a traditional university.

Through the Virtual Campus students will be able to use on-line educational materials, library resources, and communicate with professors or other students. The specific functions of the Virtual Campus (mailboxes, HTML Hyperlink, application Hyperlink) give it high adaptability to the educational process.

The technical structure of the Virtual Campus will be based on the following systems:

- *The user platform.*

Microsoft Windows'98 or Windows'2000 Professional, WWW browsers (version 4.0 or higher).

- *The communication system.*

Internet transport protocol TCP/IP.

The server platform is connected to the Internet via high-speed connection and can support a large number of concurrent users.

The user connects via a dial-up connection.

- *The server platform.*

Recommended servers are Windows 2000 Server (or Advanced Server), Lotus Domino R5 with user platforms Lotus Notes (for Intranet administration needs), Lotus LearningSpace as a learning server platform.

### **2.6 Which actors are involved in the initiative (level/position? number of actors out of total)**



The NSPU is structured and working as a traditional university. The teaching and learning process takes place within the traditional and distance education thanks to the following actors: Rector, management staff (departmental & administration)

### **2.7 Which communication facilities are used? (video-conferencing, audio-conferencing, Internet, learning platform, special software,...)**

The communication is based on web technology with e-mail exchange, web-conference (news) and multimedia learning software.

### **2.8 How is communication managed and delivered?**

The main tool for interaction within the University is an Intranet and Internet based communication platform. The system will be personalised: each person will have individual access, to gain the permissions for each feature on a personal basis.

### **2.9 How are classes taught? What subjects are taught?**

Classes are taught traditionally and partly virtually and take place in the University teaching area.

### **2.10 What kinds of materials are available? How are materials delivered?**

For each subject all students are supplied with study materials (print, Web-based, CD-ROMs, computer programmes). All materials are delivered directly to a student at the University or by regular mail.

Most of the offers are still in a development phase, so detailed statements about the kind of materials can not yet be made.

### **2.11 Are any innovative learning methods applied? (group work, project work, problem solving,...)**

Group work and problem solving methods are included in most of the project offers.

### **2.12 How is the Virtual Campus managed, i.e. what mechanism exists for co-ordinating the initiative organisation-wide? Which actors are involved?**

The Rector and management staffs at the charge of the institution have control and manage the whole project.

## **3. LEARNERS SERVICES AND IMPLICATION**

### **3.1 Which services have been set up for learners (administrative, technological help etc)?**

Most of these service offers are still in traditional ways.

### **3.2 How are learners tutored and guided? How many students does each tutor have?**

Students are assigned a tutor for each course and subject with a maximum of 25 students per semester.

### **3.3 How is their work assessed?**

They are mainly assessed through a survey / test and by the level of knowledge at the end of each semester.

### **3.4 What accreditation mechanisms have been established?**

Students have to accomplish a final exam at the end of the semester or the course.

## **4. EVALUATION SYSTEM**

### **4.1 Which evaluation approach has been adopted: what are the objectives of evaluation? who or what are the subjects? which actors are involved? what criteria, methods and tools are being used to monitor/evaluate the progress/success of the initiative?**

The virtual campus will be evaluated by means of surveys and forums for all members of the community (faculty, students, management staff, and administrators).

### **4.2 Are evaluation results available? What has changed for the target group(s) the Virtual Campus initiative started? In what way did they benefit from the initiative? What kind of new knowledge was gained by the initiators (maybe the plan did not work the way they wanted it to work; what did they change during the process?)**

Evaluation results are not available at start-up phase of the VC.

### **4.3 What were the innovative aspects of the learning activities that can be applied again? What other side effects has the initiative had so far (other organisations carry out initiatives with the same concept/approach/method etc.) Are there any future plans for continuing/expanding the initiative?**

The Virtual Campus has to be the main tool for the development of the university.

Due to vast territory of Siberia, the VC will be able to provide those students access to the University who cannot presently study full-time because of problems of time or geographical location.

NSPU will take advantage of new technologies to introduce pedagogical changes in the educational process.

## 4. Universidade do Porto, Porto, Portugal

### SOME PREVIOUS INFORMATION ABOUT YOUR ORGANISATION

#### 1. WHAT'S YOUR INSTITUTIONAL ORGANISATION?

Traditional university or business organisation, with sites which are geographically separated, and which uses a virtual environment to link activities in these various sites.

#### 2. WHAT KIND OF CO-OPERATION HAVE YOU SET UP?

*(multiple answers possible)*

- Partnership of departments within a single institution
- Partnership involving other institutions in a Region
- Partnership involving other institutions in a single country
- Partnership involving other institutions from several different countries

Comments: We have partnerships involving faculties of our university, involving some faculties and other Portuguese and foreign Universities. These partnerships are not only concern distance learning and virtual environments but concern the use of new communication and information technologies among teaching and learning practices.

#### 3. ON WHICH UNIVERSITY LEVEL IS THE VIRTUAL CAMPUS PROVIDED AND MANTAINED?

- University level

Comments: The Faculty of Engineering has its own learning platform (LUVIT), but it's only for internal experiments and studies. In the rest of the University the WebCT platform is used and is provided by the Rectorate.

#### 4. AT WHAT STAGE IS YOUR VIRTUAL CAMPUS?

- In a Pilot phase - a virtual environment which is used frequently but where there is still some major development

**5. WHAT ARE YOUR TARGET GROUPS?***(multiple answers possible)*

- Academic undergraduate
- Academic graduate students
- Academic postgraduate students
- Professionals -continuing education

**6. WHAT IS THE STATISTICAL DATA FOR THE LAST YEAR?**

- Numbers of courses:   7
- Numbers of subjects:   3
- Numbers of learners:  318
- Age distribution (%):
  - 1. under 18
  - 2. 18-22   90
  - 3. 22-50   10
  - 4. 50-60
  - 5. over 60
- Gender distribution (%):
  - 1. Male   40
  - 2. Female   60

**7. WHAT SUBJECTS ARE TAUGHT?***(multiple answers possible)*

- Humanities
- Psychology
- Computer Science
- Economics
- Medicine
- Science
- Architecture
- Engineering
- Other

## CASE STUDY DESCRIPTION

### 1. THE CONTEXT OF YOUR VIRTUAL CAMPUS

#### 1.1 The originating organisation and its historical and socio-economic environment. (description of the institution is likely to be in the institution's website)

The University of Porto is a state university, founded on 22nd March 1911 by the Provisional Government of the Portuguese Republic. There are three Faculties: the Faculty of Exact Sciences (Mathematics, Physics and Chemistry and Historic and Natural Sciences), the Faculty of Medicine (with an affiliated School of Pharmacy) and the Faculty of Commerce. A School of Engineering was affiliated to the Faculty of Sciences.

Currently more than 25,000 students study in the 15 schools which are part of the University. The schools have a high level of autonomy: the Faculty of Architecture, the Faculty of Fine Arts, the Faculty of Sciences, the Faculty of Nutrition and Food Science, the Faculty of Sport Science and Physical Education, the Faculty of Law, the Faculty of Economics, the Faculty of Engineering, the Faculty of Pharmacy, the Faculty of Arts, the Faculty of Medicine, the Faculty of Dentistry, the Faculty of Psychology and Education Science, the Abel Salazar Institute of Biomedical Sciences and the Management School.

Further information can be found on the website: <http://www.up.pt>

#### 1.2 A historical view of education in the organisation.

The overall mission of the University of Porto is Teaching and Learning (T&L) and Research and Development (R&D) activities.

The development of strong links with the community has been one of the University's major concerns. It is also committed to developing international relations, taking part in several University networks and cooperation groups.

### 2. DESCRIPTION OF THE VIRTUAL CAMPUS

#### 2.1 Design principles: what are the policy objectives, which is/are the target group/s, etc.

We use a virtual learning platform: WebCT.

The target groups are the non-graduated students.

We now have courses for graduate students.

We also have courses in cooperation with the Continuing Education Department (this year we are going to test the first course to be developed in our University with the co-operation of a Private Corporation).

#### 2.2 How formally/explicitly is the notion of Virtual Campus articulated? Is there a formal statement/declaration? Are all actors aware of its existence?

We don't have a "pure" Virtual Campus. At this stage we have a platform that teachers and students can and should use to complement the classical lectures.

Not all the teachers are aware of the existence of this in the University yet.

We try to promote the "Virtual Campus" among teachers and students in the Office of support to the Distance Learning.

### **2.3 Which infrastructure has been set up?**

The Rectorate created an Office comprising 3 people who work full-time and 2 co-ordinators working part-time.

### **2.4 What software is being used?**

WebCT is our learning platform.

### **2.5 How is the Virtual Campus structured?**

Subjects are distributed by Faculty. Each subject's web page contains an area on course material, email, forum, calendar, and tests.

### **2.6 Which actors are involved in the initiative (level/position? number of actors out of total)**

3 people working full-time at the Rectory: sciences, engineering and humanities based formation.  
2 people working part-time with Sciences Education and Microbiology based formation. (One of our co-ordinators has a Masters in Multimedia Technology in our University)

### **2.7 Which communication facilities are used? (video-conferencing, audio-conferencing, Internet, learning platform, special software,...)**

The communication between the staff and the teachers is done by email, by phone and face-to-face meetings.

Between the staff and the students it is done by an email account especially created to give technical support to the students, which is in the Learning Platform.

The subjects are delivered to the students using the Learning Platform – WebCT.

### **2.8 How is communication managed and delivered?**

See previous response.

### **2.9 How are classes taught? What subjects are taught?**

Teachers still do classic teaching, and they put on the web: quizzes, relevant documents, simulations and animations.

The online course does not yet enter in the final evaluation.

## **2.10 What kinds of materials are available? How are materials delivered?**

Power Point presentations from the classes (pdf format and web pages)

Course materials (web pages or pdf )

Exercises (self test , multiple choice, quizzes, short answer exercises)

## **2.11 Are any innovative learning methods applied? (group work, project work, problem solving,...)**

Groups in the platform sometimes organise students.

The innovations this year are related to the form in which we delivery the contents. In some cases we reduced the amount of text and image and we replaced it with simulations and animations. We now have great expectations regarding the success of our strategy of adopting games as a valid instructional method in superior education.

## **2.12 How is the Virtual Campus managed, i.e. what mechanism exists for co-ordinating the initiative organisation-wide? Which actors are involved?**

Our Virtual Campus is still very small.

It is not a Virtual Campus in the sense that the students are self sufficient in their learning. Students still depend on teachers and on lectures.

The Virtual Campus is managed in the rectorate by 5 people who keep a daily track on the students.

## **3. LEARNERS SERVICES AND IMPLICATION**

### **3.1 Which services have been set up for learners (administrative, technological help etc)?**

They have technological help provided by the Office of Support to distance learning education.

### **3.2 How are learners tutored and guided? How many students does each tutor have?**

The teachers guide the learners: in some cases the teachers guide in the classes and sometimes they use the communication tools of the learning platform.

The tutoring isn't really a necessity because the courses are only for each faculty and complementary.

### **3.3 How is their work assessed?**

Our teaching is still very traditional. Teachers use the online version as a additional help and not an evaluation tool. Therefore students' online work is not assessed.

However, in the Office we study the students' participation and involvement in the online course very carefully, because we consider it of major importance for improving the course every year.

### **3.4 What accreditation mechanisms have been established?**



None

## 4. EVALUATION SYSTEM

### **4.1 Which evaluation approach has been adopted: what are the objectives of evaluation? who or what are the subjects? which actors are involved? what criteria, methods and tools are being used to monitor/evaluate the progress/success of the initiative?**

The people who work in the office only make the evaluation centred not on the performance of the students but in the effectiveness of the online course.

We try to evaluate the motivation of the students, the use of the online help, the technical support, and the course content.

### **4.2 Are evaluation results available? What has changed for the target group(s) since the Virtual Campus initiative started? In what way did they benefit from the initiative? What kind of new knowledge was gained by the initiators (maybe the plan did not work the way they wanted it to work; what did they change during the process?)**

The evaluation results are available for the teachers.

In some cases the online course is now of more spread use; some teachers use the computer in their practical classes to solve problems and tests.

Some teachers abandoned giving paper copies to the students and they now obtain all the contents online.

In some cases teachers weren't satisfied with the results and they are this year changing the entire online course. They are substituting web pages of text for a few animations and simulations that are more motivating for students.

### **4.3 What were the innovative aspects of the learning activities that can be applied again? What other side effects has the initiative had so far (other organisations carry out initiatives with the same concept/approach/method etc.) Are there any future plans for continuing/expanding the initiative?**

The plan is to have more and more teachers co-operating with us.

Using different strategies to make their online courses.

In the future we hope to have online courses that are only available online with no need for the classical lecture, but that's not currently the objective of the University.

At present we are trying to gain the confidence and motivation of teachers and experimenting with their ideas.

We are working towards an homogeneity of contents in order that students use the online courses in a logical way and not have very different designs between courses.

## **5. ICON Italian Culture on the Net, Pisa, Italy**

### **SOME PREVIOUS INFORMATION ABOUT YOUR ORGANISATION**

#### **1. WHAT'S YOUR INSTITUTIONAL ORGANISATION?**

- Institution or business organisation fully based on a virtual environment.

#### **2. WHAT KIND OF CO-OPERATION HAVE YOU SET UP?**

- Partnership involving other institutions from several different countries

Comments: Institutions from different countries are involved in non-core partnerships.

#### **3. ON WHICH UNIVERSITY LEVEL IS THE VIRTUAL CAMPUS PROVIDED AND MANTAINED?**

- via a University network

#### **4. AT WHAT STAGE IS YOUR VIRTUAL CAMPUS?**

- In a Pilot phase - a virtual environment which is used frequently but there is still some major development to be done.

#### **5. WHAT ARE YOUR TARGET GROUPS?**

*(multiple answers possible)*

- Academic undergraduate
- Academic graduate students
- Academic postgraduate students
- Professionals -continuing education
- Company trainees
- Non-academic or vocational in framework of lifelong learning

## 6. WHAT IS THE STATISTICAL DATA FOR THE LAST YEAR?

- Numbers of courses: 1
- Numbers of subjects: 1
- Numbers of learners: 100
- Age distribution (%):
  - 1. under 18 \_\_\_\_\_0
  - 2. 18-22 \_\_\_\_\_11
  - 3. 22-50 \_\_\_\_\_80
  - 4. 50-60 \_\_\_\_\_8
  - 5. over 60 \_\_\_\_\_1
- Gender distribution (%):
  - 1. Male \_\_\_\_\_24
  - 2. Female \_\_\_\_\_76

Comments:

## 7. WHAT SUBJECTS ARE TAUGHT?

- Humanities

## CASE STUDY DESCRIPTION

### 1. THE CONTEXT OF YOUR VIRTUAL CAMPUS

#### 1.1 The originating organisation and its historical and socio-economic environment. (description of the institution is likely to be in the institution's website)

ICON - Italian Culture on the Net - is a Consortium of Italian Universities: Bari, Cassino, Catania, Florence, Genoa, Milano Statale, Padua, Parma, Pavia, Perugia for foreigners, Pisa, Rome "La Sapienza", Rome "Tor Vergata", Roma Tre, Salerno, Siena per Stranieri, Teramo, Turin, Trento, Benice; the Libera Università di Lingue e Comunicazione IULM of Milano, the Istituto Universitario Orientale of Naples, the Scuola Superiore di Studi Universitari "S. Anna" of Pisa di Pisa and the Consorzio NET.T.UNO.

#### 1.2 A historical view of education in the organisation.

ICON is a Consortium of Italian Universities with the mission to promote and disseminate, through telematic communication, the culture and image of Italy all over the world.

## **2. DESCRIPTION OF THE VIRTUAL CAMPUS**

### **2.1 Design principles: what are the policy objectives, which is/are the target group/s, etc.**

Through the educational portal [www.italicon.it](http://www.italicon.it) ICON offers a unique combination of services and resources: Degree Courses in Italian Culture and Language, officially recognised and jointly run through telematic communication by the 22 Italian Universities that form the ICON Consortium. Italian language courses, Digital Library, Museum, Encyclopaedias, Interactive community and educational services.

Target groups: non-Italian citizens or Italian citizens residing abroad, who are interested in Italian language and culture. Moreover, Italian citizens residing in Italy and Italian organisations are the target audience of the ICON professional courses.

### **2.2 How formally/explicitly is the notion of Virtual Campus articulated? Is there a formal statement/declaration? Are all actors aware of its existence?**

The notion is formally articulated: the combination of services and resources offered by ICON is called "educational portal" on official ICON publications, aimed at all actors, All the said community services and resources are delivered through the Virtual Campus at the web site [www.italicon.it](http://www.italicon.it)

### **2.3 Which infrastructure has been set up?**

Interactions are conducted through a web site with back office (hosted and partially administered by an Internet Service provider and a second contractor). ICON has established a central facility for text editing and co-ordination.

### **2.4 What software is being used?**

E-learning platform developed in-house by a contractor.

### **2.5 How is the Virtual Campus structured?**

Root: information accessible to all visitors

Inside: areas devoted to the Degree Course, including forums for students and staff; collection of materials; areas devoted to the language courses.

### **2.6 Which actors are involved in the initiative (level/position? number of actors out of total)**

ICON is a consortium including 22 Italian universities, the Scuola Superiore di Studi S. Anna and the Consorzio Nettuno. The president of ICON is Marco Santagata; the Vice-President is Artemio Enzo Baldini; the director is Mirko Tavoni. ICON's organs and operational structure include the

Assembly of Consortium members (i.e. The representatives of the 22 founder universities), a Board of Administration, an Executive Committee, a Teaching and Scientific Council, a College of Auditors.

**2.7 Which communication facilities are used? (video-conferencing, audio-conferencing, Internet, learning platform, special software,...)**

Internet learning platform, developed in-house. All contents and part of the interaction are available through ordinary web browsers (some courses require a software player for multimedia files).

**2.8 How is communication managed and delivered?**

Communication is both managed and delivered through the web site. Occasional information is given by e-mail. This information is provided by the students' tutors or from institutional figures.

**2.9 How are classes taught? What subjects are taught?**

Students have to study online didactic modules, to answer multiple-choice tests and to write short papers evaluated by the tutors. The tutors assigned to a class provide students with guidance in studying the teaching modules that form part of their chosen degree programme; the tutors provide the students with explanations, stimulate them to become aware of the relations between one module and the other, suggest interpretative approaches, encourage students to engage in research, assign and correct written homework (in Italian, of course). Thus, the teaching activity is not only designed to transmit the knowledge embodied in the modules, but also to help students to develop interpretative ability and operational knowledge.

**2.10 What kinds of materials are available? How are materials delivered?**

Didactic modules are available. Students can read them directly on the site, or download them.

**2.11 Are any innovative learning methods applied? (group work, project work, problem solving,...)**

Students can contact their tutors through web forum conferencing; they can also share messages with their colleagues in their virtual classrooms or in informal spaces.

**2.12 How is the Virtual Campus managed, i.e. what mechanism exists for co-ordinating the initiative organisation-wide? Which actors are involved?**

A central co-ordination unit supervises both production of materials and tutors' work.

### **3. LEARNERS SERVICES AND IMPLICATION**

### **3.1 Which services have been set up for learners (administrative, technological help etc)?**

Students are supported mainly by their tutors. Students are also backed by the Students Affairs Office, by a contact for didactical help and by a technical help desk.

### **3.2 How are learners tutored and guided? How many students does each tutor have?**

Each tutor is responsible for 25 students.

### **3.3 How is their work assessed?**

Students' work is assessed following guidelines established by the Teaching and Scientific Council. Tests and papers for the exams at the end of each semester are graded by regular commissions according to the official rules that are effective for Italian universities.

### **3.4 What accreditation mechanisms have been established?**

The Scientific Teaching Committee evaluates students' requests for crediting of pre-existing competencies. Credits earned during the Degree Course are fully acknowledged in the Italian university system.

## **4. EVALUATION SYSTEM**

### **4.1 Which evaluation approach has been adopted: what are the objectives of evaluation? who or what are the subjects? which actors are involved? what criteria, methods and tools are being used to monitor/evaluate the progress/success of the initiative?**

Learning objectives are fully declared for the Degree Course, for every module of the Degree Course itself and for every language course. Evaluation of the courses will be monitored by the ICON organs on the basis of the results obtained by the students.

### **4.2 Are evaluation results available? What has changed for the target group(s) since the Virtual Campus initiative started? In what way did they benefit from the initiative? What kind of new knowledge was gained by the initiators (maybe the plan did not work the way they wanted it to work; what did they change during the process?)**

Since the first course is still in progress, evaluation results are not available at the moment.

### **4.3 What were the innovative aspects of the learning activities that can be applied again? What other side effects has the initiative had so far (other organisations carry out initiatives with the same concept/approach/method etc.) Are there any future plans for continuing/expanding the initiative?**

Participants in the ICON initiative have gained extraordinary first-hand experience in the building of e-learning structures. ICON plans to develop and widen its initiative in the near future.



## **6. IPAK Institute for Symbolic Analysis and development of Information Technologies, Valenje, Slovenia**

### **SOME PREVIOUS INFORMATION ABOUT YOUR ORGANISATION**

#### **1. WHAT'S YOUR INSTITUTIONAL ORGANISATION?**

- Traditional university or business organisation on a single site using virtual arrangements for education and training

#### **2. WHAT KIND OF CO-OPERATION HAVE YOU SET UP?**

- Partnership involving other institutions from several different countries

#### **3. ON WHICH UNIVERSITY LEVEL IS THE VIRTUAL CAMPUS PROVIDED AND MANTAINED?**

- Departmental level

#### **4. IN WHICH STAGE IS YOUR VIRTUAL CAMPUS?**

- Established - a virtual environment fully established and positioned in the market

#### **5. WHAT ARE YOUR TARGET GROUPS?**

*(multiple answers possible)*

- Academic undergraduate (x)
- Professionals -continuing education (x)
- Company trainees (x)
- Non-academic or vocational in framework of lifelong learning (x)

#### **6. WHAT IS THE STATISTICAL DATA FOR THE LAST YEAR?**

- Numbers of courses: \_\_\_\_9
- Numbers of subjects: \_\_\_\_
- Numbers of learners: \_\_\_\_96

- Age distribution (%):
  - 1. under 18 \_\_\_\_\_
  - 2. 18-22 \_\_\_\_\_32
  - 3. 22-50 \_\_\_\_\_67
  - 4. 50-60 \_\_\_\_\_1
  - 5. over 60 \_\_\_\_\_
  
- Gender distribution (%):
  - 1. Male \_\_\_\_\_57
  - 2. Female \_\_\_\_\_43

Comments:

## 7. WHAT SUBJECTS ARE TAUGHT?

*(multiple answers possible)*

- Computer Science

## CASE STUDY DESCRIPTION

### 1. THE CONTEXT OF YOUR VIRTUAL CAMPUS

#### 1.1 The originating organisation and its historical and socio-economic environment. *(description of the institution is likely to be in the institution's website)*

The Institute for Symbolic Analysis and Development of Information Technology was established three years ago by four SME doing business in IT. The main goal of the institute is development of new forms and methods in education to test and offer ODL in the field of IT.

The main research work is in the field of education and economic development using IT, particularly the Internet.

The Institute is trying to organise strong collaborations with SME whose business area is information technologies and who need consultancy and continuous education.

#### 1.2 A historical view of education in the organisation.

During these three years the institute has established strong relationships with West Valley College in Saratoga Silicon Valley and organised a pilot course in Digital Media which was used by American teachers as a distance learning course. This year we started regular ODL for a West Valley certificate in digital media. The teachers are from West Valley College and Slovenia.

At the same time, the Institute is organising distance learning for students of Computer Science at Sarajevo University. We offered courses in Computer Process Control and XML Content and

Data. In the academic year 2001/2002 we have 30 students from Sarajevo enrolled on the XML course. The activity at Sarajevo is organised in support of improving Bosnia and Herzegovina. We have also organised several meetings and workshops about distance learning, the new economy, and creating jobs in 21<sup>st</sup> century.

## **2. DESCRIPTION OF THE VIRTUAL CAMPUS**

### **2.1 Design principles: what are the policy objectives, which is/are the target group/s, etc.**

The objectives are to develop a network of ODL centres in Slovenia where students can get access to IT equipment and the Internet and basic face-to-face help.

The main target group are unemployed people and those who want to acquire new knowledge needed in order to get a job or a better position. For that group we are offering education on certificate level.

In the long term we want to organise a network of similar centres in South-eastern Europe.

We plan to offer specific distance learning courses (like Computer Process Control and XML content and data) for traditional universities using our experience teaching at Sarajevo.

### **2.2 How formally/explicitly is the notion of Virtual Campus articulated? Is there a formal statement/declaration? Are all actors aware of its existence?**

The Institute proposed several certificate programmes to the governmental agency for professional education. We expect that the programmes will be improved next year. We have established long term collaboration with our American partner and the University of Sarajevo.

In this framework, the Institute Learning Centre was established and we are working on organising a network in Slovenia. The main function of this Centre is to give support to the governmental agency for development of SME in Slovenia.

The Institute publishes a quarterly newsletter "Challenges" which is distributed to 2000 addresses (educational institutions, Chamber of Commerce, Local Development Agencies, research institutes, industrial partners).

### **2.3 Which infrastructure has been set up?**

We have IT equipment, internet connection, software and library open to the students.

### **2.4 Which software is being used?**

For distance learning we are using Blackboard.com. For project work, students use Photoshop, Dreamweaver, Flash and other tools for web development.

### **2.5 How is the Virtual Campus structured?**

-

### **2.6 Which actors are involved in the initiative (level/position? number of actors out of total)**

The initiative came from four local SME which established the institute. The institute was later strongly supported by the Governmental agency for Development of SME. At the same time, the number of SME supporting institute has grown to 10.

## **2.7 Which communication facilities are used? (video-conferencing, audio-conferencing, Internet, learning platform, special software,...)**

We are using the Internet (e-mail, website *www.delodoma.net*) Blackboard as the learning platform and chats for online communication with students.

## **2.8 How is communication managed and delivered?**

Tutors are organising direct communications with students using *www.blackboard.com* and e-mail. The administrative part of communication is going online (mail and our website) and is part using classical mail to get original documents to the students.

Tutors have to send reports and marks after course is finished to the Learning Centre.

## **2.9 How are classes taught? What subjects are taught?**

The following classes were thought:

Computer Process Control

XML content and Data

Introduction to Digital Media

Information and Content Design

Web Development 1, 2, 3.

The students get all information, educational material on Blackboard. They have to complete assignments in defined deadlines, develop midterm and final projects and to communicate weekly in chats.

## **2.10 What kinds of materials are available? How are materials delivered?**

There are basic materials for each course, which can be downloaded from the Blackboard. Teachers are sending some handouts by mail.

The assignments are on the Blackboard. Teachers are sending feedback on assignments and student projects by mail to every enrolled student.

## **2.11 Are any innovative learning methods applied? (group work, project work, problem solving,...)**

The main part which students have to complete are the midterm and final projects. Projects are real commercial problems that have to be solved in the group and be presented to the teacher. To get certificate every students has to prepare a portfolio with at least the commercial projects (they have to find a customer). The portfolio is presented to a jury.

Some topics are really difficult to organise online like graphical preparation for the web, digital colours and typography were organised face-to-face in the form of workshops or summer schools.

We are trying to develop a dynamic learning model, which has to resolve problem of fast changing technologies and to prepare students to work on real problems immediately after they completed the programme. To reach that goal we are trying to develop strong relationships with industrial partners.

## **2.12 How is the Virtual Campus managed, i.e. what mechanism exists for co-ordinating the initiative organisation-wide? Which actors are involved?**

The Virtual Campus is managed by the Institute and Committee comprising members from industry, the Chamber of Commerce and the National Agency for SME development.

### **3. LEARNERS SERVICES AND IMPLICATION**

#### **3.1 Which services have been set up for learners (administrative, technological help etc)?**

Students can get administrative, technological (access to equipment, software), library with on-line catalogue (developed in XML) services. If they have problem in understanding subjects they can communicate with tutors (mail, phone and face to face meeting), support in finding work, participation in small projects

#### **3.2 How are learners tutored and guided? How many students does each tutor have?**

There are 30 students guided by a tutor. Before semester starts, students get information about the material criteria, what will be learned. Their work is monitored by tutors and they get feedback after every collection of assignments. Suggestions and help can be done online through chats every week and if necessary the tutors can be reached individually using e-mail.

#### **3.3 How is their work assessed?**

The most important part are group and individual projects which students have to produce during the semester. The students have to do a certain amount of homework exercises and do some traditional exams too.

#### **3.4 What accreditation mechanisms have been established?**

The classes which we reproduce for Sarajevo students are part of the Computer Science Curriculum in Sarajevo .

Digital Media study is offered by West Valley College, Saratoga, California using accreditation mechanisms established in California.

### **4. EVALUATION SYSTEM**

#### **4.1 Which evaluation approach has been adopted: what are the objectives of evaluation? who or what are the subjects? which actors are involved? what criteria, methods and tools are being used to monitor/evaluate the progress/success of the initiative?**

We started with a pilot project, which was evaluated by teachers and students. We are using different questionnaires to get feedback from students, and face-to-face meetings (Slovenia is small so it is not difficult to organise them). The objectives of these activities are to improve education, to find better approaches, and how to use technology most efficiently. We discuss progress with tutors and we try to resolve problems and find improvements as soon as possible.

- 4.2 Are evaluation results available? What has changed for the target group(s) since the Virtual Campus initiative started? In what way did they benefit from the initiative? What kind of new knowledge was gained by the initiators (maybe the plan did not work the way they wanted it to work; what did they change during the process?)**

The evaluation results will be available next year.

- 4.3 What were the innovative aspects of the learning activities that can be applied again? What other side effects has the initiative had so far (other organisations carry out initiatives with the same concept/approach/method etc.) Are there any future plans for continuing/expanding the initiative?**

We are developing dynamic learning where all participants are committed to a culture of possibility, support and ideas where all voices have value, and working together so that any dream may be realised.







