

# Tempus



TEMPUS JEP

POGESTEI - POST-GRADUATE STUDIES FOR EUROPEAN INTEGRATION AT THE FACULTIES OF LAW AT THE UNIVERSITIES OF BELGRADE, NIS AND NOVI SAD

## **E-LEARNING STUDY VISIT** **University of Maribor, 30 March – 4 April 2007**

### **PROGRAMME OF THE STUDY VISIT**

Friday, 30 March 2007

Arrival of the study group

Monday, 2 April 2007

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|---------------|--|
| 9.30 – 10.00  | Preliminary meeting on the programme of work, ECERS Institute, Krekova 2   |
| 10.30 – 13.00 | Working meeting at the Faculty of Law, Mladinska 9<br>1. Information on the proposal of the E-learning support of the POGESTEI programme<br><i>Prof. Dr. Lilić and other members of the study group from Serbia</i><br>2. Information on the technical and software capacities of the Faculty of Law in Maribor including the library<br><i>Mag. Lesjak, Mrs. Čokl</i> |
| 14.00         | Lunch  |
| 15.30         | Short meeting at the ECERS Institute   |

Tuesday, 2 April 2007

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|--------------|--|
| 9.30 – 12.00 | E-learning and informational infrastructure capacities of the University of Maribor, presentation of the concept and the practical implementation, University of Maribor, Slomškov trg 15<br><i>Dr. Dinevski, Mag. Klojčnik, Mag. Lesjak</i> |
| 13.00        | Working lunch  |

Wednesday, 4 April 2007

Departure of the study group

### **CONTACTS**

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# E-LEARNING

Duration: Month 18 – Month 36 (Feb 07 – Aug 08)

## ACTIVITY 1

### **E-LEARNING - INTRODUCTION OF THE “TECHNOLOGY ENHANCED LEARNING” PRINCIPLES TO THE EDUCATION PROGRAMME POGESTEI**

#### *Description of the activity:*

The e-learning portal for the education process will be introduced.

Structured in the groups the following tools will be provided by the e-learning portal:

#### 1. Contents of the E-learning portal

- Syllabus and curriculum
- Info on Professors/lecturers
- Courses: there is a possibility for each course to insert course content /presentations, additional literature and links to relevant internet sites. Students can download course contents from those pages. Other aspects of communication between students and professors are via e-mail, discussion forums, real time chat /with the support for private rooms and different themes/. Possibility for work in workgroups – lecturers can assign groups with the shared materials.
- Productivity tools: calendar (events posting and announcements, task assignments, etc.)/, bookmarks (private comments and shared ones)
- Students information desk
- Search
- Helpdesk

#### 2. E-learning portal support tools - Administration tools

- Authentication /IP restriction, UN and password for each participant for access for individual courses, encrypted logins
- Course authorization /with different access levels based on pre defined roles like students, lecturers, administrators/

#### 3. Installation of the video-streaming communication

- Technical equipment for video-streaming communication will be introduced at the Faculties in Belgrade, Novi Sad and Niš. It is envisaged that in the first year of the study implementation some video-lectures of Professors from Consortium Universities will be carried through for students in Serbia and Montenegro.

#### *The consortium member/s or experts who will carry out the activity:*

- Faculty of Law, University of Belgrade
- Faculty of Law, University of Novi Sad
- Faculty of Law, University of Nis
- University of Maribor, Department of Information and Technological Development
- ECERS, Maribor

#### *Target group/s:*

- Students from Serbia and Montenegro
- Teaching staff from Serbia and Montenegro

- Administrative structures of the consortium members.

*Inputs:*

- 1 CS administrator for the information system
- 1 web site designer
- Travel: 2 administrators for e-learning from CS to University of Maribor for 1 week training: 2 times international travel, 2 costs of stay for a week
- Equipment:
  - 1 server for web site
  - 15 PCs (5 PCs at each University in CS)
  - 3 cameras (one for each University in CS) – for conference hall transmission - bigger
  - 3 cameras for PC transmissions
  - 3 LCD Projectors (one for each University in CS)
  - 3 printers (one for each University in CS)

**ACTIVITY 2**

**PREPARATION OF STUDYING MATERIAL FOR E-LEARNING**

*Description of the activity:*

- Professors will prepare contents of their subjects, instructions, guidelines and other necessary particularities aimed at helping students to find all the necessary information about the study on the internet.
- Professors will regularly monitor the contents of the website, supplement and up-date the information.

*The consortium member/s or experts who will carry out the activity:*

- Faculty of Law, University of Belgrade
- Faculty of Law, University of Novi Sad
- Faculty of Law, University of Nis

*Target group/s:*

- Students from Serbia and Montenegro

*Inputs:*

5 professors working on preparation of the material  
photocopying (app.1500 pp), electronic publishing

**MILESTONES IN THE WORKPLAN:**

- Collection of offers for equipment October 2006 – December 2006 (at 3 Faculties in CS);
- Purchase of Equipment in December 2006;
- Beginning of the set-up of E-learning portal – February 2007;
- Travel of 2 CS experts for internet administration to Maribor University – March 2007
- Preparation of contents for the portal – September 2007 – March 2008
- Launch of POGESTEI E-learning portal - April 2008 – month 32)

TEMPUS JOINT EUROPEAN PROJECT  
POST-GRADUATE STUDIES FOR EUROPEAN INTEGRATION AT THE  
UNIVERSITIES OF BELGRADE, NIŠ AND NOVI SAD – POGESTEI

**E-LEARNING**  
**INTRODUCTION OF THE “TECHNOLOGY ENHANCED LEARNING”**  
**PRINCIPLES TO THE EDUCATION PROGRAM POGESTEI**  
**(MODULE 6)**

**PRELIMINARY ASSESSMENT**

by

**The e-Learning Team**

**Prof. dr Stevan Lilić, University of Belgrade School of Law**  
**Petar Pavlović, BSc, University of Belgrade School of Law**  
**Mira Čatipović, BSc, University of Belgrade School of Law**

**November 2006**

**1. OVERVIEW**

**1. Activity I: Structure of e-Learning Portal.**

- 1.1. Contents of the E-learning portal
- 1.2. E-learning Portal support tools
- 1.3. Installation of the video-streaming communication
- 1.4. Consortium member/s or experts who will carry out the activity
- 1.5. Target group/s
- 1.6. Inputs

**2. Activity II: Preparation of Study Material for e-Learning**

- 2.1. Consortium member/s or experts who will carry out the activity
- 2.2. Target group/s
- 2.3. Inputs
- 3.1. Equipment offers (October- December 2006)
- 3.2. Purchase of Equipment (December 2006)
- 3.3. Beginning of e-Learning Portal set-up (February 2007)

- 3.4. Travel of 2 experts for Internet Administration to Maribor University (March 2007)
- 3.5. Preparation of contents for e-Learning Portal (September 2007- March 2008)
- 3.6. Launch of POGESTEI e-Learning Portal (April 2008)

## 2. PRELIMINARY ISSUES

**1. Do existing faculty programs already have e-learning in their plans or should the system be elaborated?**

- 1.1. The existing programs at the faculties still do not have operative e-learning projects and new systems have to be elaborated.
- 1.2. To understand what needs to be done to establish and implement an e-learning system, issues have to be identified and relations between them need to be established (e.g. equipment, procedure, target groups, tools, inputs/outputs, etc.).

**2. Users of the e-Learning system**

- 2.1. The preliminary student enrollment policy issue here is whether or not e-learning will be accessible to all enrolled students or a separate student group.
- 2.2. In consultations and Internet research it is advisable that e-learning (and thus distance learning) be accessible to all students.
- 2.3 The preliminary conclusion is that e-learning should be accessible to all enrolled students as a supplementary for of activity.

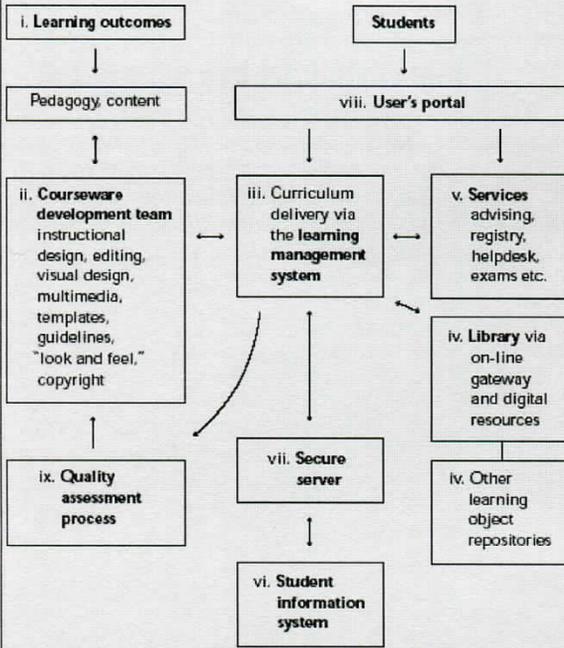
**3. Objective of e-Learning.**

- 3.1. One of the definitions of e-learning states that e-learning means the use of Internet as a support tool in studies, in order to achieve interaction between course materials, teachers and students.
- 3.2. Bearing this Internet mind, a system that would utilize as many Internet options as possible (http, e-mail, discussion groups and forums, real time chat, blog, wiki, webcast/media stream/rss, social bookmarking); as well utilize the already accessible information and material for a more quality oriented study.

### 3. E-LEARNING PORTAL

#### 1. Contents of the e-Learning Portal

Figure 1.



1.1. Ideally, the learning outcomes (i) are translated into course content, resources and an approach to the teaching and learning process that will enable a student to achieve those outcomes. Once these basic parameters have been thought, the courseware development team (ii) will share the responsibility of translating the theory and intentions into courseware and online learning functions to be delivered by the learning management system (LMS) (iii), which interfaces with the library and other digital resources (iv), related services (v), and the student information system (SIS) (vi) through a secure server (vii) that can authenticate the student login.

1.2. From the students' point of view, they will connect to the LMS and the related services through a user-friendly users' portal (viii), so that, with a single login, they can have access to their courses and can be linked to all related resources and services.

1.3. Finally, to ensure ongoing improvement, an evaluation process for the effectiveness of the system, based on achievement of the learning outcomes and students' feedback is in place, in the form of an independent quality assessment process (ix), which also feeds back into the development cycle.

*(Alan Davis, Theory and Practice of Online Learning - Developing an Infrastructure for Online Learning, Athabasca University).*

#### 2. Syllabus and curriculum

2.1. Standards for e-learning syllabi and curricula to be elaborated.

#### 3. Productivity tools

3.1. Calendar of events, posting and announcements, task assignments, bookmarks (private comments and shared ones) to be elaborated.

### 4. TECHNICAL ISSUES

#### 1. Technology

1.1 Technical preconditions for a successful e-learning system, include:

- Reliable hardware

	<ul style="list-style-type: none"> <li>▪ Reliable software</li> <li>▪ Quality Internet links</li> <li>▪ System security</li> <li>▪ Quality administration (administrators, web programmers, etc.)</li> </ul>
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<p><b>2. Location and administration</b></p>	<p>2.1 The technical issue that needs to be addressed as a preliminary policy issue is whether each member of the consortium will develop its own e-learning portal with assistance of the e-learning group, or will there be one portal for all consortium members that would be centralized (i.e. one server).</p> <p>2.2. It would be very useful if the Portal had a link with the student administration software (e.g. applying for exams, payments, etc.), although this would be out of the immediate capacities of this project.</p> <p>2.3. At this stage, probably the best choice would be the location of the central Portal at the Faculty of Law Internet Belgrade, as it fulfills the most preconditions, including the network infrastructure (i.e. 1Gb internal highway, router, optical links with the central University hub, back-up power). The Law Faculty in Belgrade also has an experienced program and maintenance team that has set up an information system used by both students and faculty members for administrative and academic purposes.</p> <p>2.4 If there is not to be an official e-learning server at each faculty, then each faculty must have at least one server or computer on which courses can be tested and developed before they are put up on the portal. This server could also be used to train all included in the e-learning development, i.e. both administrators and teachers. In this case, the server needs not fulfill the high quality standards for hardware and software, link reliability, administration and security.</p>
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**5. HARDWARE + SOFTWARE**

<p><b>1. Server</b></p>	<p>1.1. The selection of the computer that would</p>
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serve as the server at this moment is not the crucial issue. Any computer of a brand name for server functions would satisfy the planned needs (e.g. HP ProLiant ML, IBM eServer Xseries, etc.).

1.2. The service needs 24/7, with UPS support, the server and network equipment need to be such (router, switches, modems, etc.) that they can endure power surges.

1.3. The server needs to be equipped with the necessary software:

- Server operative system (e.g. (Windows 2003, Linux, or Unix), on which the choice will be made;
- Web server (e.g. Internet Information server, Apache or other);
- Content Management System<sup>1</sup> that would need to be installed in order to administer the portal;
- Learning Management System<sup>2</sup> and Course Management System as the central part of the e-learning software package (management and presentation of the contents, monitoring, student accessibility, etc.);
- Server data bases (e.g. Microsoft SQL Server, MySQL, Oracle, etc.).

1.4. Support services (discussion groups/fora, real time chat, blog, wiki, webcast/media stream/rss, social bookmarking), which are subject to agreement on the level of the project, the choice of institutions and the teacher as the creator of the course material.

## 2. Lab for Material Production

2.1. Multi-media computer (3-4) with:

- printer;
- scanner;
- digital camera;
- web camera;
- microphone.

2.2. Web software for audio/video production

<sup>1</sup> Comparative overview: [http://en.wikipedia.org/wiki/Comparison\\_of\\_content\\_management\\_systems](http://en.wikipedia.org/wiki/Comparison_of_content_management_systems)

<sup>2</sup> Comparative overview: [http://www.edutools.info/item\\_list.jsp?pj=4](http://www.edutools.info/item_list.jsp?pj=4) or [http://www.brandon-hall.com/publications/lmskb/lmskb\\_compare.shtml](http://www.brandon-hall.com/publications/lmskb/lmskb_compare.shtml)

	<p>(text processing, pictures, sound, video recordings, etc.) of the following type (for example):</p> <ul style="list-style-type: none"> <li>▪ Microsoft Office text processor;</li> <li>▪ Adobe Acrobat for PDF;</li> <li>▪ ABBYY Fine Reader for OCR (optical character recognition);</li> <li>▪ Microsoft, Macromedia or other standard web tool;</li> <li>▪ Adobe Photoshop for picture processing;</li> <li>▪ Sony Media - Sound Forge (ex Sonic Foundry) for sound processing;</li> </ul> <p>Macromedia or Adobe Premier package for flash animation and video processing.</p>
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<p><b>3. E-learning classroom</b></p>	<p>3.1. The e-learning-classroom would serve for recoding and airing online/real-time material.</p> <p>3.2. The e-learning-classroom needs to support a needed level of interaction between the participant and material, for example through chat or audio and visual links for which the following is needed:</p> <ul style="list-style-type: none"> <li>▪ high quality web camera;</li> <li>▪ microphone;</li> <li>▪ projector and screen;</li> <li>▪ quality internet link;</li> <li>▪ computer (at least 1) that would serve for recording and airing material, communication, internet links, etc.</li> </ul>
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### **Activity II Preparation of Studying Material**

*The delivery medium is not the determining factor in the quality of learning; rather, the design of the course determines the effectiveness of the learning (Rovai, 2002).*

<p><b>1. Introductory seminar</b></p>	<p>1.1. Introductory Seminar with the topic of e-learning for as many consortium teachers and assistants as possible (also outside the project) that would be trained, through a series of presentations on the subject of e-learning, services and tools, experience, teaching methods, etc.</p> <p>1.2. The goal of Seminar would be to affirm e-learning methodology and technology.</p>
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	1.3. Alternative to the seminar would be an e-learning booklet.
<p><b>2. Course for teachers in the Tempus project (one in Belgrade, Nišu and Novi Sad)</b></p>	<p>2. 1. Course for teachers in the Tempus project (one in Belgrade, Niš and Novi Sad):</p> <ul style="list-style-type: none"> <li>▪ Basics (text processing, Internet, e-mail, search, library access, etc.);</li> <li>▪ Introduction to the Portal and basic knowledge for course realization (material publication, calendar of events, tests, monitoring student work, interaction, etc.).</li> </ul> <p>2.2. Use of other tools:</p> <ul style="list-style-type: none"> <li>▪ training of at least one course designer/developer at each consortium member;</li> <li>▪ how to achieve this and what is needed (theoretical knowledge and technical skills);</li> <li>▪ the use of on-line training possibilities for course designer/developers (e.g. eLA the Croatian e-learning Academy) or visit and/or take the course abroad (UBC one of the best e-learning centers, and creators of the most used LMSa – WebCT).</li> </ul>
<p><b>Human Resources</b></p>	<p><b>To be elaborated</b></p>