# Some Issues on e-Learning Implementation in EHEA with Respect to Virtual and Physical Mobility

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### **Professional background**

- Teacher at the Technical University of Kosice (www.tuke.sk)
  - eight Faculties, approximately ten thousands students
  - subjects "Information Systems in Industry", "Management Skills"
- Involvement in several EU projects in last decade
  - Coordinator & Contractor of two EU projects (Socrates ODL, Tempus)
  - around 14 institutions across Europe with total budget cca 600.000 EUR
- Director of software company I.C.T., Ltd. (www.uLern.com)
  - development of e-learning platform and portal solutions
  - development of multimedia training packages

#### **Content**

- e-Learning Opportunities & Threats
- Some Notes and Recommendations
- Case Study University e-Learning Implementation



### Some Opportunities of e-Learning

- Routine activities of teachers are automated (e.g. test evaluation)
- ii. The teacher is more in position of <u>advisor</u> ("good friend") and in position of <u>developer</u> of multimedia training materials.
- The teacher can ask students to study lecture in advance, following he can have <u>more time</u> for explanations or personnel <u>contact</u> with students.
- iv. Students have available <u>multimedia database</u> of knowledge on Internet.
- v. Students are not forced to memorize information (too much available) but to work with information in <u>creative</u> way.
- vi. Elimination of dependency on <u>time and place</u> of education, especially suitable for disabled persons.
- vii. Development of <u>database of knowledge</u> with possibility of course sharing and last but not least, building of <u>transparency of EHEA</u>.

### Some Threats of e-Learning

- Teacher's personality including <u>human contact</u> is crucial for any educational process and it <u>cannot be replaced</u> by only technology.
- Web as filtered environment students can be <u>anonymous</u>, they can become very good technicians but with <u>low empathy</u> and social feeling.
- Time-consuming and <u>expensive</u> course development, teachers have to do their "normal" job <u>plus</u> e-learning.
- iv. At present, too <u>static</u> learning programs and problems with <u>proper</u> pedagogical approaches.
- v. Technical requirements and limitations as low bandwidth, etc., can threat equal opportunities and social cohesion.
- vi. Web <u>security threats</u> no central control, no embedded "immunity",
- vii. Possibility to build a <u>closed environment</u> "a la Matrix".

### A major strategic goal in Europe

"to become the most competitive and dynamic knowledge-driven economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion".

Lisbon European Council, March 2000

#### What are the threats?

If we want to be "the most competitive" (de facto "a world ruler"),

we will get a <u>responsibility</u> for developing regions a countries, and we should not think only on our "better jobs",

following, we should be more in position of "servant" as of "ruler".

In mentioned context, HOW should we educate a next generation?

HOW should we use ICT, e-learning, virtual universities, etc.?

...to ensure "sustainable growth" and "social cohesion"...

#### **General Recommendation**

From ethical and didactical point of view, teacher's personality including <u>human contact is crucial</u> for any educational process and it cannot be replaced by <u>only</u> technology.

#### **BUT AT THE SAME TIME**

Specialized ICT supported services as easy-to-use portal solutions will provide opportunities to build more transparent EHEA with well balanced blended learning that should support creativity, personnel development, and social cohesion of all parties.

#### **General Recommendation**

To promote substantial <u>research effort</u>
on <u>proper implementation</u> of e-learning technologies in EHEA
with special emphasis on <u>social and ethical consequences</u>.

#### **Recommendations in details**

NOT to build too "high-tech" and sporadic virtual universities, BUT user-friendly ICT services for all (e.g., course sharing portals),

NOT to educate very "narrow" specialists without social competences, BUT students with both technological and social competences,

NOT to separate e-learning from face-to-face learning,
BUT preferably use "blended learning" with simple and useful portals,

NOT to separate Virtual Mobility from standard Erasmus program, BUT use Virtual Mobility as ICT support of standard Erasmus program

#### **Additional Recommendation**

One of the main conclusions of the Barcelona conference (on teachers-ICT) was that the problem is often not a lack of willingness but a <u>lack of time</u>.

In the actual teaching situation teachers have to do their "normal" job <u>plus e-learning</u>.

<u>Structures</u> should be developed to make sure that this kind or work is similarly appreciated in academic environment as teaching or research.

### Concept of "Blended Mobility"

e-Learning became successful when <u>"blended</u>" concept was introduced, i.e., combination of face-to-face meetings with ICT support of e-learning.

Students prefer Physical Mobility because of <u>foreign language</u> training, <u>cultural exchange</u>, and new course knowledge as well.

From this point of view, Physical Mobility is partly a quite expensive <u>"tourism agency</u>".

How to reduce "tourism costs" and intensify course training?

### Concept of "Blended Mobility"

#### **IMAGINE:**

A student will look on video lectures of foreign Professor through well developed <u>Course Sharing Portal</u> and he will decided...

"Yes, he is my guide..."

Student will use <u>Virtual Mobility</u> to enter specific course, and finally, after two months of using of e-learning provisions, he will enter <u>Physical Mobility</u> for 2-3 weeks to <u>personally</u> discuss and consult all topics with Professor.

And what will we get?

Reduction of costs, international experience, quite intensive training, AND no lack of "human contact" that is crucial for any educational process.

#### Valuable source of Recommendations...

## Studies in the Context of the E-learning Initiative: Virtual Models of European Universities (Lot 1)

(Final Report to the EU Commission, DG Education & Culture, March 2004)

The Danish consultancy PLS RAMBOLL Management has carried out a strategic study of virtual models of universities for the European Commission, DG Education and Culture during 2002-2003. The aim of the study was to provide the Commission with a report concerning the current and potential future use of ICT by European universities.

"Universities are recommended either to develop a specific ICT strategy or to integrate ICT into their general university strategy."

#### on University e-Learning Implementation

- e-Learning Implementation at the Technical University of Kosice (Slovak Republic, Central Europe)
- Coordinated by Rector of the University and Dean of the Faculty of Electrical Eng. & Informatics, financially supported by Ministry of Education of Slovak Republic and by private company I.C.T., Ltd.
- A case of quite large educational institution with eight Faculties and approximately ten thousand students (www.tuke.sk).
- The University e-learning implementation projects:
  - Project 2002 (finished)
  - Project 2003 (finished)
  - Project 2004 (on-going)

#### **General Issues on e-Learning Implementation**

- i. Careful <u>analysis</u> and <u>planning</u> regarding to business drivers, content, learners, technology, tracking, etc.
- ii. Secure <u>executive sponsorship</u> and <u>financial funding</u> (or who is going to pay for this?).
- Select <u>technology</u> (long-term impact) and <u>content</u> (off-the-shelf courses, custom courses, or custom courses using outsourcing).
- iv. Gain <u>acceptance</u> from both employees and their managers (start small to build confidence, involve instructors early on, make training, trial projects, involve external skills, etc.).
- v. Ensure <u>enterprise-wide</u> implementation aimed at making a significant impact.
- vi. <u>Evaluate</u> and <u>measure</u> your institutional benefits.

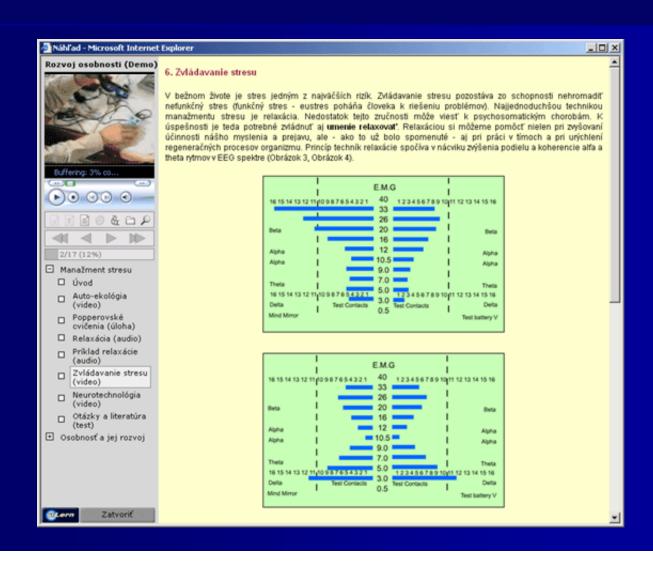
#### e-Learning Implementation at the TU Kosice - Project 2002

#### Main achievements:

- Analysis of e-learning implementation at the University resulting to the selection of <u>common e-learning platform</u> (possibility of adaptation, Slovak localization, reduction in price, etc.)
- Development of three <u>University e-Learning Centres</u> supporting educational and development activities of eight Faculties.
- Courses for University teachers focused on development and design of e-learning courses on selected platform.

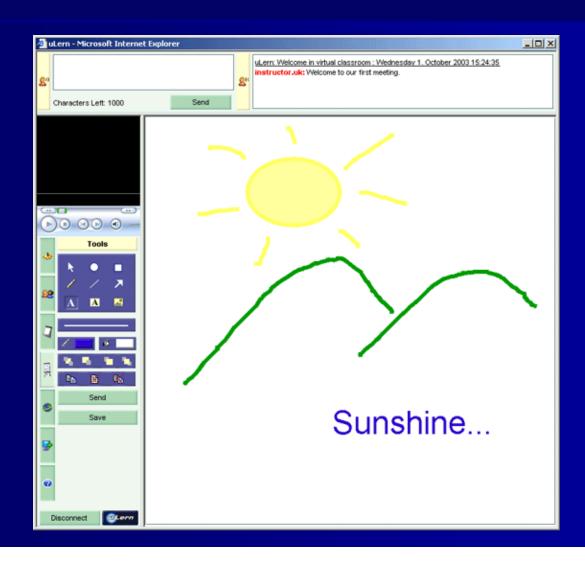
### **Choice of the Web Learning Environment**

uLern platform (www.uLern.com) - Lecture window



### **Choice of the Web Learning Environment**

**uLern platform – Virtual Classroom (Whiteboard)** 



#### e-Learning Implementation at the TU Kosice - Project 2003

Aimed at continuous support of e-learning activities:

- Building the <u>University e-Portal</u> as a central point for e-learning activities.
- Development of specialized course "e-Learning ABC" that deals with basic knowledge in the field of e-learning technology and didactics.
- Courses for University teachers focused on development and design of e-learning courses.
- Development of <u>pilot e-learning courses</u> (around 40 during one semester).
- Implementation of the <u>Quality Assurance System</u> for course development.
- Establishment of the <u>University e-Learning Board</u> coordinating activities of eight Faculties.

University e-Portal (based on technology uLern Portal 1.0)



#### e-Learning Implementation at the TU Kosice - Project 2004

#### Main outcomes should be as follows:

- <u>Evaluation</u> of e-learning experiences and suggestion of <u>adaptations</u>.
- Human resources development including <u>courses</u> for teachers, seminars, and workshops.
- Optimalization and <u>adaptation</u> of common e-learning platform, <u>integration</u> with the University information system, off-line synchronization of courses, etc.
- Further development of e-learning courses and their use in online teaching and training.

...we are still on beginning...

#### **Recommendations for e-Learning Implementation**

- I. Teachers and students have enough skills to use PC & Internet.
- II. Teachers and students have available quality technical facility, i.e., hw/sw/Internet connection and <u>user-friendly</u> environment.
- III. Teachers are well <u>trained</u> and <u>motivated</u> (financially as well).
- IV. Students are well <u>trained</u> and <u>motivated</u> (good level of courses).
- v. <u>Support</u> of management of institution incl. finances.
- vi. Daily <u>patient</u> work, do not expect very fast results, as bonus you will get a systemized database of knowledge.
- vII. e-Learning is only technology that should support <u>creativity</u> and <u>personal development</u> of students and teachers. We must avoid to be the "modern slaves" of technology.

### Thank you for attention...

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