Document title:	Report on Study Visit to Vienna University of Technology (TUWien), Austria
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I GENERAL REMARKS

Study visit to Vienna University of Technology (http://www.tuwien.ac.at) was organized jointly with study visit to University of Vienna and is one of the visits from Croatian representatives to European consortium partners realized within the framework of the EQIBELT project. This visit was performed in second round of study visits which are directed to visit of the EU consortium members e-learning centers with purpose to learn best practices, to have on-site practical overview and experience on organization and delivery of support in field of e-learning. In process of establishing e-learning support center at Croatian consortium members universities of great importance are all experiences and knowledge on operational, technical and pedagogical issues on e-learning support centers gathered from EU consortium member institutions.

The host of the study visit and the organizer of the program were **Peter Gabko**, **project manager at Extension Centre of Vienna University of Technology and EQIBELT project contractor.** He welcomed us at Extension Centre and presented us scheduled program of our visit.

Topics of the program were e-learning at the Vienna University of Technology, establishment and organization of university e-learning support centre, practices in developing of e-learning courses and technical and didactical support in e-learning. The program included presentations prepared and delivered by employees of Vienna University of Technology involved in the e-learning education programs in the institution. Presentations were held by:

- **Dr. Franz Reichl**, Head of Extension Centre: Implementation of e-learning at TU Wien, milestones, university support
- **Eva Obermüller,** E-learning Centre: Marketing, web-site, co-operations
- **Service: Johann Kainrath,** Central Information Service: Excursion in Central Information Service, IT Infrastructure, Networks, Services

- ♣ Andreas Hruska, Katarzyna-Anna Potocka, E-learning Centre: Technical aspects, Moodle, programming, support
- **Dr. G. Csanyi**, E-learning Support Centre: Didactical aspects, support

Each of presentations was followed by discussion.

Visit was well prepared and organized by Vienna University of Technology, providing contacts with high competent experts and very useful discussions on topics relevant to project goals and objectives.

II FACTS FROM PRESENTATIONS & REFLECTIONS ON DISCUSSIONS:

Dr. Franz Reichl Implementation of e-learning at TU Wien, milestones, university support

Dr. Reichl presented history of implementation of e-learning at TU Wien and their experience with implementation of e-learning.

E-learning Centre was established in 2004 together with E-learning Board according to the new university law. Aim was to support to the university's E-learning activities and ensure sustainability in context from project to services.

Short term objectives:

- information: web portal, events (E-learning Days)
- Networking among activists
- E-learning elements in initial education

Medium to Long Term objectives:

- services to support e-learning activities
- re-use of e-learning material
- increased use of ICT in education
 - o centrally supported and maintained LMS Moodle (from 2006)
 - o simplification of administration by interfaces among systems
- increased quality and efficiency in education
 - o qualification of teachers and tutors
 - o services for "rapid content creation"
 - support for teachers and students
 - establishing quality standards
- marketing and motivation
- commercial use of learning material
- change attitudes: application of e-learning as a matter of course

At the moment there are 11 persons working at the E-learning centre, 8 of them fully employed. Their background is from different disciplines.

Support is based according to the following issues:

- to reduce obstacles and barriers for teachers
- to be context-sensitive
- to be problem and solution oriented

to have low threshold

Center provides integrated and multi-level support network.

Support activities:

- online FAQs
- short explanations
- online articles
- helpdesk (e-mail, telephone)
- consultancy
- qualification of teaching staff
- coaching
- support for generating projects

E-learning platform – TUWEL, based on Moodle, is available for teachers and students from 2007. Present version of Moodle is 1.8.

Center provides qualification for teaching staff in e-learning (technical and pedagogical issues) by organizing workshops (different levels, different topics).

Center is conducting important issues like internal procedures for quality assessment by regular evaluation of lecturers by the students as well is organized specific evaluation for courses with e-learning elements.

In 2007 Center decided to make analysis of the status of e-learning at TUWien.

Within the TUWEL established is a module – Learning Quality Management System which provides possibility for feedback and reminders.

There are some legal issues which still needs the answers such as: who owns e-learning material, who may use it and under what terms and conditions.

Center also works on content synergies in order to re-use learning material in different courses (intra- and inter- universities).

One of the activities of E-learning centre is e-tutoring. Centre organizes course "Practice of e-tutoring" which lasts for 3 days and gives a basis instruction for e-tutors. E-tutors are coached, consulted and supervised during their occupation. Center works also on development of additional modules for qualification of tutors and teachers.

Eva Obermüller, E-learning Centre: Marketing, web-site, co-operations

Center maintains its web pages: http://elearning.tuwien.ac.at on which can be found various information regarding e-learning.

Center provides helpdesk to the users but not 24x7. Questions by e-mail are answered within 24 hours on working days and helpdesk has working hours.

This year in March there will be organized 4th e-learning day on topic "Off the mainstream" and given 3rd e-learning awards. E-learning award is given to the courses that use e-learning technologies in the best way; amount is 10.000 euros and can be divided to the four courses at most.

Andreas Hruska & Katarzyna-Anna Potocka: E-learning Centre: Technical aspects, Moodle, programming, support

Mr. Hruska presented TU Wien e-learning platform –TUWEL which is connected with university information system.

TUWEL structure:

- ☑ Moodle activities: exercise, test, forum, chat...
- ☑ Content internal: lecture notes, templates, examples...
- ☑ Content external: links to Mediendatebank, iChemlab, CMS/Websites
- ☑ TUWEL Services E-learning Consulting Content Creation Support

University has provided computer classrooms and about 400 places with connection to internet. Wireless LAN is established at the whole university. Center doesn't work on core development of Moodle, but just built add-ins and interfaces on the LMS and forward it to the academic community.

At the moment (February 2008) there were about 13.000 active users and 169 courses. Center has made some statistic modules to monitor the activities on the e-learning platform.

Center performs high availability by using multiple redundant servers in different locations with automatic failover.

Following issues are integrated in e-learning platform:

- mathematical notation
- multimedia Plugin
- syntactic Highlighting of Code
- Jmol Molecular renderer

Perspectives for 2008

- Terms of use for TUWEL
- Faculty specific TUWEL course creation workshops
- E-learning tutorials
- Train the trainer program
- Extension of the of the E-Learning service website
- Enhancement and faculty specific development of TUWEL/moodle add-ins
- Content strategies
- **K. Potocka** is a software engineer working in the E-learning Centre. She is working on enhancement and faculty specific development of TUWEL add-ons and modules. She presented:
 - checkmark assignment
 - scheduler activity

Checkmark assignment provides identical deadlines for all students which can be adjusted by teachers. Before the lesson starts the teacher knows which exercises were solved. This activity enables automatic calculation of the grades and print view with student relevant information.

Scheduling is another activity developed for scheduling of oral and written exams, consulting hours and other appointments and to create timeslots for teachers, to set deadlines for un-/assigning, gives a possibility to print overview table and possibility to view students without chosen timeslot.

Also Center developed 3 possibilities for the students' un-enrollment:

- students can un-enroll without permission
- un-enrollment must be permitted by teacher
- there is no possibility for un-enrollment from the course.

Dr. G. Csanyi, E-learning Support Centre: Technology Enhanced Learning - Didactical aspects, support

E-learning centre provides technical as well as didactical support to the teachers. Main goal is to organize courses and learners, to stimulate learner's activities and facilitate learner's collaboration. Emphasis is put on improved communication between teachers and learners we well as between learners themselves. New possibilities that have come out form using elearning are also feedback and answers to learners and assessment of learner's achievements. At TUWIEN recommended are blended learning courses. In teachers contracts e-learning component is included but it has not been officially settled yet. University acknowledge teachers efforts in e-learning but not officially.

Center supports all those who practice e-learning whether they use central platform or their own installation of platform.

Main goals in didactical aspects of e-learning are:

- to foster active learning
- to foster self-directed learning
- to foster development of competencies

Basic questions which come to didactical support from teachers are:

- What are the best methods to design a TEL course according to my learning objectives?
- Which technology tools are available to realize my didactical ideas?
- How to create high quality content for TEL?
- How can I apply the chosen tools in an effective and efficient way?

E-learning Centre policy:

- support whatever is possible
- concentrate on efficient solutions

Support is organized through workshops, helpdesk, personal consultation, website, e-learning day/ impulse. Based on gained experience today there are more questions directed towards helpdesk and consultation and the less participants on workshops and organized events. Conclusion is that there is a need for immediate answer and that formal offers don't meet the real needs. The Center should focus on analyzing of really existing teaching activities and individual needs and interests.

Research questions:

- Who practices technology enhanced teaching
- Who would like to practice technology enhanced teaching but feels or is handy-capped?
- What are the teachers actually doing when technology enhanced teaching?
- Which kind of support do teachers and students expect from e-learning centre?

Analysis of activities and needs is conducted by

- informal talks with teachers and students
- formal interviews with teachers and students
- e-mail survey

Most teachers want to learn only by "try and mistake" because teaching is a "private" matter.