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OPEN SOURCE LEARNING MANAGEMNET SYSTEMS AT CIVIL ENGINEERING AND ENVIRONMENTAL DEPARTMENT: TELECAD AND MOODLE

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What will be all about?

- Why Open Source?
- TeleCAD what is all about?
- What is CURE?
- Why moodle?
- Moodle in the European projects
- What have we got and what is missing?



Why Open Source?

Tested platforms

- FirstClass
- Learning Space
- WebCT
- Oracle i-learning

Problems with platforms listed above

- Expensive!
- Hard to administrate
- Horrible hardware requirements



TeleCAD – what is all about?

• The TeleCAD project (Teleworkers Training for CAD Systems' Users, 1998-2001) was co-financed by European Union Leonardo da Vinci Programme and developed in the consortium of 6 institutions from four countries Greece, Finland, Italy, Poland.

• The main goals of the TeleCAD project were:

- to develop an Internet based platform for the dedicated distance education course preparation and delivery,
- to enable distance work for students, tutors and managers of distant courses.



How the idea was born?

- The idea of the course evolved from the AutoCAD course.
- The course has been delivered for students from Civil Engineering Department at Gdansk University of Technology since 1995.
- It covers basics of drawing using the AutoCAD program. During the course students prepare a series of drawings, at different levels of complication.
- For the final assessment students have to draw a project using all introduced techniques.



TeleCAD – more details

- Finally it was decided that the TeleCAD course should have been consisted of 10 modules covering basics of drawing in AutoCAD.
- Every module includes a set of tasks that should be done by students, with description of appropriate solution.
- The course materials were prepared as HTML pages to be acquired by the WWW or from the CD-ROM. Additionally the TeleCAD course incorporates a module about basics of teleworking.
- Students are supposed to prepare a project in groups. The final assignment of the course is a project which must be delivered by internal e-mail to the tutor.
- To prove that the student actually was an author of the drawing, he may be asked to make some changes to the project in the presence of the tutor.



TeleCAD =LMS

Course Information	Requirements
%-C-400000000000000000000000000000000000	Timetable
	Staff Information
	Students list
	Announcements
	FAQ
Course Materials	Guide for learner
	AutoCAD handbook online
	Teleworking survey online
	Library of drawings
	Library of links
Assignments	Requirements, forms and deadlines for assessments Class book
	The quiz
Communication	Bulletin Board
	Discussion list
	E-mail



TeleCAD - interface





TeleCAD - usage

TeleCAD.	Number of participants
Pilo: international 2000/2001	89
Pilot PT. 2000/2001	35
TeleCAD exam - sem 2 - 2000/2001	240
TeleCAD exam - sem 4 - 2000/2001	166
TeleCAD extra mural sem 4 2000/2001	62
Tel::CAD extra-mural - sem 3 - 2001/2002	24
Tel=CAD extra-mural - sem 4 - 2001/2002	40
TeleCAD exam - sem 2 - 2001/2002	259
TeleCAD in summer 2002	4
TeleCAD exam - sem 3 - 2002	64
TeleCAD extra-mural - sem 3 - 2002	39
TeleCAD exam - sem 2 - 2003	30C
TeleCAD extra-mural - sem 4 - 2003	53
TeleCAD post-graduate study - sem 1 - 2003/2004	23
TeleCAD in summer 2003,2004	39



What is CURE?

- A research project supported by the European Commission under the Fifth Framework Programme and contributing to the implementation of the Key Action 'The City of Tomorrow and Cultural Heritage' within Energy, Environment and Sustainable Development (EESD) Contract No: EVK4-CT-2002-80005.
- The main objective of the CURE project (Centre for Urban Construction and Rehabilitation: Technology Transfer, Research and Education, 2002-2006) is to promote the aspects related to urban construction and rehabilitation by conducting technology transfer, research and education activities.



CURE - objectives

- One of the major objective of the CURE project is to teach the methods related to sustainable urban construction and rehabilitation, such as:
 - Advanced mechanics of urban structures.
 - Effective use of building materials.
 - Optimizing of constructing process.
 - Optimal urban land use planning.
 - Innovative building systems.
 - Rehabilitation of existing urban building stock.

Among several innovative features which were planned to be introduced in the field of education the most challenging one was the extensive use of distance education (in English and Polish languages) based on modern information and communication technologies (ICT).



DECTUG in CURE

- Distance Education Centre at Gdansk University of Technology (1997-2004), one of the European network enterprises was invited to join the project as a partner.
- Having a long term professional experience in the area of training based on Internet and multimedia it was planned to develop and deliver the distance education courses in the field of urban engineering within 2 work packages: WP1 - International PhD studies, WP2 - Postgraduate studies.
- In the CURE project the TeleCAD was chosen as the first LMS for supporting Postgraduate Studies (MSc).
- The upgrading handbook with CD ROM and online materials were developed.



AutoCAD handbook CD/online

Książka z CD-ROM-em dostępna jest w księgarni Politechniki Gdańskiej



WERSJA POLSKA dia AutoCAD PL

WERSJA POLSKA dla AutoCAD EN

Oferta wydawniotwa Mikom



Why moodle?

- After 4 years of usage and no money for upgrading TeleCAD system was not sufficient enough to fulfill new projects expectations.
- In order to find a solution several open source software had been tested before the final decision was made.
- As a result of experiments and tests Moodle was chosen as the most effective and user friendly solution.
- Moodle is a Course Management System (CMS) a software package designed to help educators create quality online courses. Such e-learning systems are also called Learning Management Systems (LMS) or Virtual Learning Environments (VLE).
- One of the main advantages of Moodle over other systems is a strong grounding in social constructionist pedagogy.



Our first Moodle community support

Translation Moodle interface to polish was done by two students of Faculty of IT on Gdańsk University of Technology

Polish Translation

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Adam Pawełczak, Poznań, 2003-09-21



EMDEL project (Leonardo da Vinci, 2001-2004)





CURE project (Research Framework Programme 5, 2002-2005)



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CURE project (Research Framework Programme 5, 2002-2005)





Thanks to the EMDEL project the following courses were developed/adopted and opened for GUT students

- Teleworking and AutoCAD
- Project Management
- Meeting of Generations ICT for Adults
- Introducing into Distance Learning
- Basic of Adult Learning
- How to Communicate with other People?
- How to be an Effective Volunteer?
- What is a Multipurpose Community Telecentre?
- IT in Human Resource Management



Thanks to the CURE project the following courses were developed/adopted and opened for GUT students

- Ethics online
- Basics of Computer Methods,
- Contemporary architecture: creation and perception
- Basics of Programming in Matlab
- Problems of contemporary civil engineering, architecture, town planning and transportation
- Steel Structures
- Industrial Engineering
- Structural Dynamics.

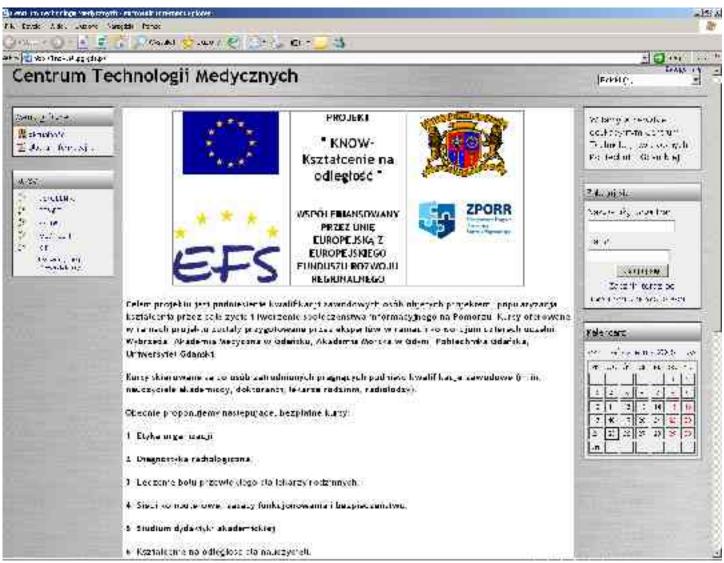


What have we got and what is missing?

- After closing Distance Education Centre LMS Moodle was moved to several locations.
- The most active users are from Applied Physics and Mathematics, Architecture, Chemistry, Civil and Environmental Engineering and Electronics, Telecommunication and Informatics Faculties.
- It should be stressed that the majority of subjects are offering in a blended learning mode.
- Finally moodle has become LMS and project management platform for EFS project.



KNOW – Learning in distance





Thank you very much for your attention

Questions, comments, remarks warmly welcome

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