# **TELMAE Online Courses for Educators and Teachers**

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#### **ABSTRACT**

TELMAE Online courses were developed during the project, funded by the Ministry of Education, Czech Republic. The courses consisted of 5 modules, focused mainly on existing Virtual learning environments, tools for communication and collaboration, tools for controlling and monitoring student's progress, etc.

More then 70 university teachers and 11 tutors from different countries (Czech Republic, Norway, Canada, Australia and UK) have been participating in 3 runs of online courses (from November 2000 till March 2001). Some statistical results, the experience, sustainability and internationalization is described in the paper.

## **INTRODUCTION**

The main aim of the Telmae project was (according to the governmental conception of information policy at schools) to enable educators and university teachers, who are supposed in the near future to organise, to manage or to develop and tutor online courses, to obtain their own experience with online learning, to judge the advantages and the limitations of different VLE and to give them the possibility to incorporate effectively these new ways of learning into the practice of their schools.

In the frame of the project the Telmae online course was developed. Before registration all interested educators were informed about the duration of the course, the level of necessary skills, time needed and other conditions of the course (e.g. the course was organized in a fully online way, without any face to face meeting, kick-off workshop, etc).

Table: 1
Basic characteristics of the Telmae online course

Basic characteristics	Online course (80 hours of the learner time
Target group:	Educators and teachers
Supposed level of knowledge and skills::	E-mail, web (browsing and searching), editing text, pictures
Necessary technical background of the participant:	The Internet access, audio card + microphone

### **SPECIFICS OF THE TARGET GROUP**

(69 Educators, University teachers aged from 25 to 60) Prague Universities (Charles University and Czech Technical University) were less interested in these forms of education than educators from private educational institutions and other university teachers, compared to the number of employees (teachers). The reason is probably in the specific position of regional universities and educational institutions, which feel the necessity for co-operation with regional enterprises and the responsibility for solving the problem of unemployment, which is incredibly high in the regions, compared to Prague.

Table: 2
The composition of participants

University	Number of active participants in %	
Charles University (Prague)	20,59	
Czech Technical University (Prague)	4,41	
Others	75	

## **DESCRIPTION OF THE COURSE**

Telmae Online course was developed in the virtual learning environment Learning Space 3.5 (Lotus Notes). This system has been used by the developers (Laboratory of Online Learning at Faculty of Mathematics and Physics, Charles University, Prague) since 1998. The course, especially Modules 2 and 5 were developed in cooperation with foreign experts, mainly from Norway and Canada. The Telmae course consists of 5 Modules. Four modules are written in the Czech language, the last one, dedicated to the review of experience from abroad is written in English to enable easier communication with foreign tutors.

Table: 3
The list of basic units and subunits of the Telmae course

MODULE 1			
Principles and basic features of online learning,			
1.1 Examples and basic definitions			
1.2 Comparison with traditional forms of education			
MODULE 2			
General principles of collaborative learning and			
cooperative work in online learning/			
2.1 Tools for collaborative learning and cooperative work			
2.2 Psychological and Educational Aspects of online			
cooperation and communication in online learning			
MODULE 3			
Virtual Learning Environments - general view and			
description of frequently used VLEs			
3.1 Course material development and presentation in			
different VLEs			
3.2 Communication and collaboration in different VLEs			
3.3 Assessment strategy in different VLEs			

3.4 Testing and surveying in different VLEs			
MODULE 4			
Tools for controlling and management in different VLEs			
4.1 Controlling and monitoring in Learning Space			
4.2 Controlling and monitoring in Pathware			
4.3 Controlling and monitoring in WebCT			
MODULE 5			
Experience from different countries			
5.1 Interfaces for telelearning (Install and explore			
ExploraGraph )-Aude Dufresne - Canada			
5.2 Teleconferencing and streaming video - Hilding			
Sponberg - Norway			
5.3 Experience from University at Deakin - Elizabeth			
Stacey - Australia			
5.4 Compare Forums for teachers in UK - Chris Abbott - UK			

All course materials were developed in multimedia form (hypertext with audio/video records, screencam records, animations, etc.). For better orientation and navigation of participants/learners in the used virtual learning environment (Learning Space) we used many screencam records.

The Telmae course was based on learners activities, planned with respect to the aims of the course - to enable participants to obtain their own practical experience with different tools, different VLE, their advantages and their limitations.

The course contained 43 different activities, mainly assessments, tests, selftests and 2 surveys. The examples of assessments follow:

Table: 4
The example of assessments in the Telmae course

Video conference-active participation

Groupware

Soc.-psych. aspects (due: 01/20/2001)
VLE and database (due: 01/23/2001)
Evaluation of VLE (due: 01/24/2001)
Comparative engines (due: 01/25/2001)
VLE and personal needs (due: 01/26/2001)
Concept mapping tool (due: 01/27/2001)
VLE - where, when, how? (due: 01/28/2001)

Links - multimedia (due: 01/29/2001)

Teaching material design (due: 02/01/2001)

Comparing VLE from designer point of view (due: 02/02/2001)

Descriptors for online tests(due: 02/12/2001)
Tools for monitoring of students activities

**Evaluation of the course run** 

Registre yourself into the system Pathware (from 01/28/2001 to

Explore the First class at Deakin University (from 02/06/2001 to 02/18/2001)

Explore and evaluate ExploraGraph (from 02/08/2001 to 02/18/2001)

The target group was very diverse, that is why the quantity of activities (assessments) was so high. The participants in all runs were divided into 3 groups which were asked to participate in different activities and to fill in different assessments.

### **GENERAL RESULTS**

Number of registered participants: 69

Active participants: 83% from registered participants

Passive participants: 8,6%

Semi-passive participants (passively studied (according the server records), but never filled

in any assessments): 7, 4 %

Active participants: 59% men, 41%women

Successful participants: 18% from active participants (from it 58 %women, 42 % men)

### **Evaluation of the Assessments**

The pilot run was the most successful one. The rate of successful participants in the pilot run was app. 65%. The reason was probably in the composition of participants: they were mainly experienced people who were really interested in the problem. All of them (excluding one) had personal experience with online learning, high motivation and a good level of active English - which was not necessary for studying the course itself but very helpful in filling the assessments and browsing and searching the web.

Table: 5
Evaluation of the assessments

	Pilot run	First run
Number of active participants	11	23
Average number of credits	1181	508
Maximum of credits	1894	2175

The most successful participant obtained 81% of possible credits, for absolutorium of the course we asked more then 60 percent. Participants (generally, excluding pilot run) preferred more passive assessments (writing, comparative activities, participating in videoconferences, etc) to creative ones (development of their own tests, teaching materials, audio/video records, etc). Is the creativity of our educators so low? Are they so shy? They explained it with the lack of time. But for skilled enough people these were time-saving activities. Are their technical skills in this area so bad?

### **Evaluation of the Communicative Activities**

The most significant difference, we found, is between the number of messages per participant. Pilot run participants were practically twice as communicative as the 1st run learners and three times more successful (see Table: 6).

Table: 6
Evaluation of communication activities

Evaluation of communication activities				
	Pilot run	First run		
the whole number of messages	271	284		
Duration of the course	64 days	65 days		
number of messages per day	4,2	4,4		
number of messages per participant	24,6	12,3		

While the pilot number of active participants was quite stable (see Figure: 1), in other runs there was a noticeable decrease of active participants after the first 1-2 weeks.

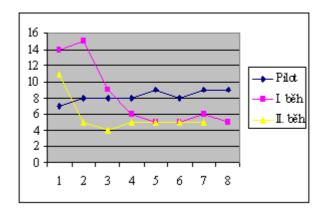


Figure: 1
The graph shows the number of active participants (submitting messages including assessments) in different periods (weeks) of the course duration.

There is no significant difference between the communicative activities of men and women. The more successful participants were communicating more often.

We didn't find any significant difference between educators related to their different backgrounds. Among successful participants were people with informatics background as well as medical doctors and language teachers.

## **CONCLUSIONS**

Educators are very interested in new ways of teaching and learning. They have practically no or very low personal experience with online learning.

In general - they have no (or very bad) estimations of their own technical skills and time possibilities.

The language barrier (and the shyness connected with that) is higher than we expected. The participants communication with experienced foreign tutors in module five was practically nil or very low. Videoconferencing (using streaming video) involved a limited number of participants (5) but only some of them in an active way.

Most of them (70 %) have no (or very slow) Internet connection from their home, so they cannot work online during weekends and evenings - the time that is supposed (and preferred) to be the time for online learning.

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