e-Taster Project: Bulgarian Case Study on Pilot Delivery of e-Learning Courses

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Abstract: This paper aims to shed light on the results of the e-Taster Minerva Project implementation. To that end, the study briefly outlines the achieved contributions to the investigation for developing a competitive virtual educational area of Europe. As a demonstration of the above the paper presents the analysis of the pilot delivery of the Bulgarian language versions of the e-learning taster courses developed in the frame of the Project. The analysis is a part of the survey and evaluation of the taster's delivery in Bulgarian language. It shows some statistics on courses piloting in relation to students' group profile, background, needs, satisfaction, etc. It includes the users' feedback and suggestions about e-courses content and e-learning environment.
Key words: e-learning, e-learning environment

INTRODUCTION

At present a world-wide movement is rapidly developing. This shows the need of an educational revolution through the use of e-learning methods, new educational tools and Web-accessible multimedia content. Such a revolution has not yet occurred to its full extent for the educational innovations require a new educational culture, mind-set as well as overcoming considerable informative and psychological barriers.

The e-Taster project (Short, free on-line courses, "tasters" for multilingual, international delivery, 116684-CP-1-2004-1-HU-MINERVA-MPP, Socrates Programme, Minerva Action) was developed with the aim to contribute exactly to the fulfillment of these requirements, by giving the possibility for the general public to taste the e-learning [2]. Twelve short on-line e-learning courses, developed in the frame of the Project, are freely accessible in multilingual format [4] for everyone who is interested in learning, who wants to know what an e-learning is, for those who want to find out how useful an e-learning course could be. The full portfolio of the courses in 10 languages is being developed into partnership with academic organizations from 10 countries and delivered via the COEDU learning environment [1] – an advanced multilingual e-learning platform (Mimoza Communication Ltd., Hungary).

The subjects of "taster" courses are chosen out of the following categories:

- European Studies – basic information and knowledge about EU (e.g. get closer to European programmes; project management; vocabulary etc.);
- Skill development – encouraging employability, offering „key competencies, new skills for the new millennium";
- Practical knowledge for everyday life – focusing on families, old-aged, disabled, handicapped people.

The topics of the 12 taster courses, as well as their levels are selected from different thematic areas in order to meet the needs of the diverse target groups.

This paper presents the analysis of the pilot delivery of the Bulgarian language versions of the developed e-learning taster courses [3]. The breakdown embraces the most significant data for the following four courses: e-Europe, Taste of e-Learning, ICT for Everybody and Time Management. The analysis is a part of the survey and evaluation of the taster's delivery in Bulgarian language and shows some statistics on courses piloting in relation to students' group profile, background, needs, satisfaction, etc. It includes the users' feedback and suggestions about e-courses content and COEDU e-learning environment.

The four pilot courses are carried out with students from Mathematics and Informatics Faculty at the University of Plovdiv. The pilot learners are from different specialities as Informatics, Software technologies and Education in informatics and information technologies at school at bachelor and master degrees in full-time and part-time education. 27 students are registered in the courses and 24 are finished successfully the course in which they have been enrolled as follows e-Europe – 5, Taste of e-Learning – 5, ICT for Everybody – 6 and Time Management – 8.

The next section shows the results from the feedback analysis through questionnaires accomplished with successfully finished learners.

FEEDBACK ANALYSIS

1. Identification

Course participants are mainly at the age between 18-25 years (75%) and others are between 26-30 years – 12.5% and 31-40 years – 12.5%. The number of male and female students is almost equal (45.8% men and 54.2% women).

2. User identification

All learners have computers at home, and 96% of them – Internet connection. All learners also have a mobile phone and most of them (88%) use it every day, and only 8% use it very rarely. All students use a computer every day, even 92% of them use a computer more then once a day. Almost all (96%) use Internet applications every day. 46% have attended computer/online courses earlier.

3. Learning results

Students give high rating to the Internet as an instrument for learning (87% think that it is very useful, 13% – useful).

Table 1. Course evaluation from the point of view of the learning results

	Rating	Average
1.	The idea and goals of the course	4.5
2.	The course met all of its stated objectives	4.2
3.	The course content was clear	4.2
4.	The course content was concise	4.2
5.	The course content was logically organized	4.2
6.	Exercises and activities of the course	4.1
7.	The working methods used in the course	4.4
8.	You followed and evaluated your own learning during the course	4.0
9.	Possibilities and features of the learning environment	4.3
10.	You had the opportunity to practice the new knowledge/skills through course activities (i.e.: exercises, games, simulations, quizzes)	4.1
11.	The workload of the course was optimal	3.5
12.	The way this course was delivered was an effective way for you to learn this subject matter	4.2
13.	The course met your requirements	3.5
14.	The course related to your everyday work	3.2
15.	Your knowledge and/or skills increased as a result of this course	3.1
16.	The knowledge and/or skills gained through this course are directly applicable to your job	3.2
17.	Your job performance will improve as a result of this course	3.0

It is proposed to the students to evaluate courses from 1 (disagree) to 5 (fully agree) according to 17 different indicators from the point of view of the learning results. Table 1 shows the average results from the evaluation.

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The learners give good evaluation of the courses as a whole – the average evaluation on all indicators is 3.9, as low evaluations on separate indicators are limited in number.

The idea and the goals of the course as well as the used working methods and potential of the learning environment are given the highest grade. Learners give good evaluation to the achievement of the stated objectives, clearness, conciseness and logical organization of the course learning content, and the entire effectiveness of learning the course subject matter. The evaluations for exercises, the opportunities for practical application of the new knowledge and skills through course activities and learning quality of the students during the course are also good. The evaluations of the course workload and if the course corresponds to students' requirements are a little bit more reserved.

There are various students' opinions concerning course relation to the everyday work, the increase of the knowledge and skills as a result of passing through the course, the opportunity for direct application of the gained knowledge and skills through the course to student job and improvement of the job performance as a result of the course. The evaluations according to these indicators depend on course theme, and the differences in the students' opinions come from the fact that all students study Informatics and the work of most of them is in this field but the theme of only one e-taster course has direct connection with this field.

4. Usefulness

A little bit more than half of the learners (58%) didn't have problems with the learning environment, and the problems of the remaining 42% of the learners are caused by broken hyperlinks in Bulgarian version of the courses, as well as with cyrilization of the forum and the test in one of the courses.
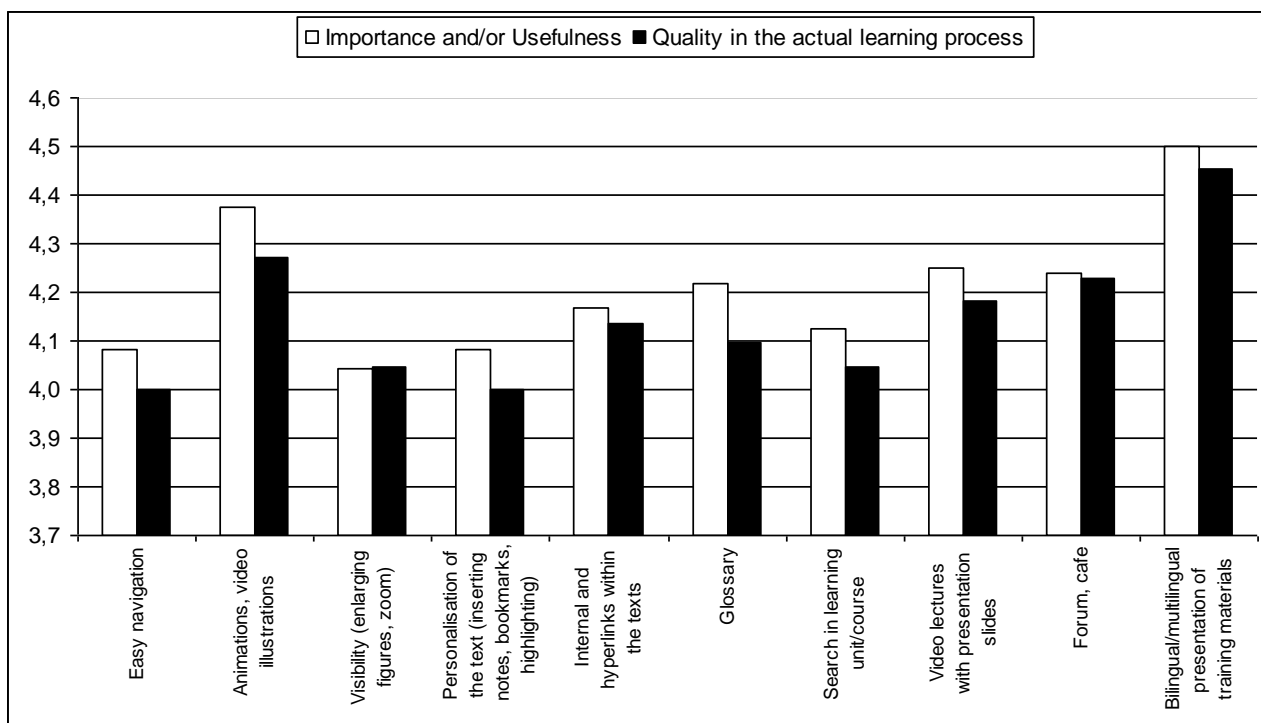
Figure 1. Evaluation of the functions/elements for e-learning

Figure 1 shows the average values of evaluations (from 1 - useless/not important to 5 - useful/important) given from students about some functions and elements for e-learning from the point of view of importance and/or usefulness and quality in the actual learning process. The evaluations are between 4.0 and 4.5, which shows that learners consider e-

taster courses very useful and important. The highest grade is given to the animations and video illustrations, as well as multilingual presentation of training materials.

5. Attractiveness

The students' opinion about what other tools they would like to be included in the e-learning environment is explored. The results (in %) are given in Table 2, where 1 means I don't know/no opinion; 2 – Never; 3 – Maybe; 4 – I'd prefer it sometimes; 5 – I'd love it.

The most desirable tools to be included are the opportunities for instant messaging (IM) and personalised information area (Wiki) – 2/3 from learners would love them and the bigger part of the rest would prefer them sometimes. The opportunity about RSS feeds is also quite attractive – a little bit more than half of the students consider that would love it and the bigger part of the rest would prefer it sometimes. According to the learners the opportunity about mobile phone text messaging (SMS) will not be of a great use – the highest is the percentage (29%) of the students who answered that they would never include it, 25% are not sure if they would like it, and 25% think that they would prefer it sometimes.

Table 2. Evaluation of the usefulness of other tools that could be included in the e-learning environment

	1	2	3	4	5
SMS with selected information (like words from glossary)	17%	29%	25%	25%	4%
IM communication with other users who are online at that moment	4%	0%	8%	17%	71%
RSS feeds (information coming to you in short format and with the link to the website) with information which you consider useful from the course	4%	4%	4%	33%	54%
Wiki (creation of personalised information area) with information which you know and you can add so other users can see it and learn from it	4%	4%	4%	21%	67%

Almost all students (96%) liked the course that they have learned and 88% of the students would recommend the course.

There is an interest to learn other themes as e-Taster courses in the area of computers, programming, graphical design, 3D modelling, artificial intelligence, data bases, computational linguistic, technics, psychology, music and other themes connected to the professional realization of students. Some of the proposed themes by the learners are: Photoshop CS2, CorelDraw, AutoCAD, Web-programming, Windows applications, How to choose a field/sphere where we could find professional realization (Help for professional orientation), How to write a CV, How to give a job interview, How to cope with difficult situations in the family, Education of children, Solving problems/problematic situations at school, etc.

CONCLUSIONS AND FUTURE WORK

From the opinions and proposals of the learners about the Internet as a means for learning, e-Taster environment and pilot courses we can do following conclusions:

- the trend, almost all people to have computers and Internet connection at home, lead to increasing their role in learning;
- Internet is very useful and attractive learning tool and in many cases it is preferred because of its flexibility: learners can choose freely their place, time, pace and way of learning;
- e-Taster is a powerful learning environment, which meets most of the learners' requirements;

- the various functions for e-learning given from e-Taster are highly appreciated by the users and give the opportunity for easy and convenient learning of materials, as well as practical exercises for faster studying;
- the users liked the pilot courses and want new themes to be added.

To improve the attractiveness of the environment and the quality of the courses, it is necessary to address the following issues: broken hyperlinks, use of the cyrillic alphabet in the forum, improving e-mail capabilities, adding tools with user's preferences.

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