

Marek Bednarski, Uniwersytet Warszawski
Anna Grabowska, Politechnika Gdańska
Łukasz Sienkiewicz, Politechnika Gdańska

E-learning course "International comparative studies on SMEs"

Introduction

E-learning course "International comparative studies on SMEs" has been developed under the Leonardo da Vinci program (International comparative studies and course development on SME). The project was inspired by a previous Leonardo project entitled "A European Diploma in SME Management" (Ref.: F/98/1/65657/PI/I.1.1,a/CONT). The objective of that pre-project was to develop a European SME Management diploma equivalent to a French Maitrise. Five EU countries participated, led by the University of Paris X-Nanterre, with Hungary subsequently joining the project as a silent partner. The overriding conclusion derived from this project was that the major obstacles in the way of developing multiple diplomas in the field of SMEs stem from the often important discrepancies of the SME environments in the different countries. So the afore mentioned project developed the curriculum and the diploma by focusing on the necessary competencies rather than the systems themselves. With well-defined competencies that could be transferred from one country to another, the consensus on the diploma equivalency was relatively easy to achieve.

But when it comes to the real trans-national mobility of graduates into SMEs, a major impediment arises from the traditionally different working conditions of the SMEs in different countries (legislation, financing conditions, training and retraining possibilities, validation of the professional experience). The previous Leonardo project overcame this by introducing a long students work placement in one of other participating countries. A costly endeavour – available to only a tiny group of the European student/graduate and SME population.

On a basis of previous project experiences the following actions for the new project were proposed:

- Developing a detailed framework for the description of national SME systems by the Institute of Sociology of the Hungarian Academy of Sciences in close collaboration with the country representatives and the Confederation of the Hungarian Industrials and Employers. The descriptions is based upon available national data and indicators in each partner's country and is detailed enough to characterise appropriately the national systems.
- Producing the national descriptions in the form of a modular teaching curriculum. The national curricula should be submitted in the local language and in English.
- Translating the curricula into e-learning material, using compatible e-learning platforms suggested by the Steering Committee of the project.

Developing training material - general concept

The aim of the project was to develop both national and comparative training materials (curricula) for SMEs in 8 EU countries.

The course of the project can be divided into two main activities:

1. exploration,
2. exploitation (for example development of web-based training curricula).

The exploration phase was constituted by the research process designed fully in line with the original aim of the project: development of teaching curricula. It was agreed upon that the teaching material should be based on both 'desk-top' and empirical research results. During one of the first meetings the research team agreed on the use of combined both quantitative and qualitative research methods:

1. Statistical analysis of the SME sector, which allows to get a general view on the situation of SMEs within the national economies;
2. Description of legal and financial environment of SMEs;
3. Description of national training system (supply side);
4. Company case studies (4 case studies per country).

Sector specific case studies were based on statistical data and secondary analysis of other researches, interviews with stakeholders and company cases based on interviews with managers/owners and employees of the companies.

The guidelines and the combined research methods were expected to be flexible and standardized at the same time. The rationale for this was to provide a good basic material for developing the training curricula.

In order to develop training materials the project was divided into specific tasks. The deadlines and responsible groups were precisely stated (Table 1). Controlling and modification of the project timetable would not be possible without Face to Face meetings and workshops (Table 2).

In addition to formal meetings partners also used a direct type of communication and exchange of experiences in form of personal consultations.

Table 1. Tasks, responsibility, deadlines

Task	Responsibility	Deadline
National Report (draft)	National research teams	31 January 2005
National Report (final)	National research teams	31 March 2005
Comparative Report (draft)	Hungarian research team	30 September 2005
Web-based national curricula (draft)	National training material developer teams	10 May 2005
Web-based national curricula (final)	National training material developer teams	10 July 2005

Testing the web-based national curricula in pilot groups	Pilot groups	September 2005
International web-based curricula (draft)	Hungarian training material developer team	31 January 2006
International web-based curricula (final)	Hungarian training material developer team	31 March 2006

Table 2. Workshops - dates and location

Workshop	Date and location
Brief review of final National Reports. Design and finalising the guideline of the Comparative Report. Design of the national curriculum (web-based training material) with participation of e-learning developers (structure, content, technical specifications).	7 – 8 April 2005 Bratislava
Finalising the Comparative Report. Evaluation of the experiences of pilot e-learning groups based on national web-based training materials.	November 2005 Paris
Evaluation of comparative training materials (content, piloting, etc.)	May 2006 (Location of the conference is open)

Electronic template for e-learning course and introducing LMS

On the basis of requirements developed by Hungarian partner the following contents (modules) of the Polish version of e-learning course were proposed (Table 3).

Table 3. Contents of e-learning course

WELCOME PART 1. INTRODUCTION 2. POSITION OF SMEs IN NATIONAL ECONOMY 3. LEGAL – FINANCIAL AND INSTITUTIONAL FRAMEWORK 4. KNOWLEDGE – SKILL SUPPLY AND DEMAND 5. LESSONS FROM THE SECTOR FOCUSED ON CASE STUDIES 6. CONCLUSIONS 7. REFERENCES 8. CHECKING KNOWLEDGE (FINAL TEST) 9. COURSE EVALUATION

One of the most important issues while one is building an e-learning course is to choose the most convenient Learning Management System (LMS) which is the target group well oriented and will not generate an extra cost not only in pilot implementation, but also in the future, when EU funds will not cover the project expenditure.

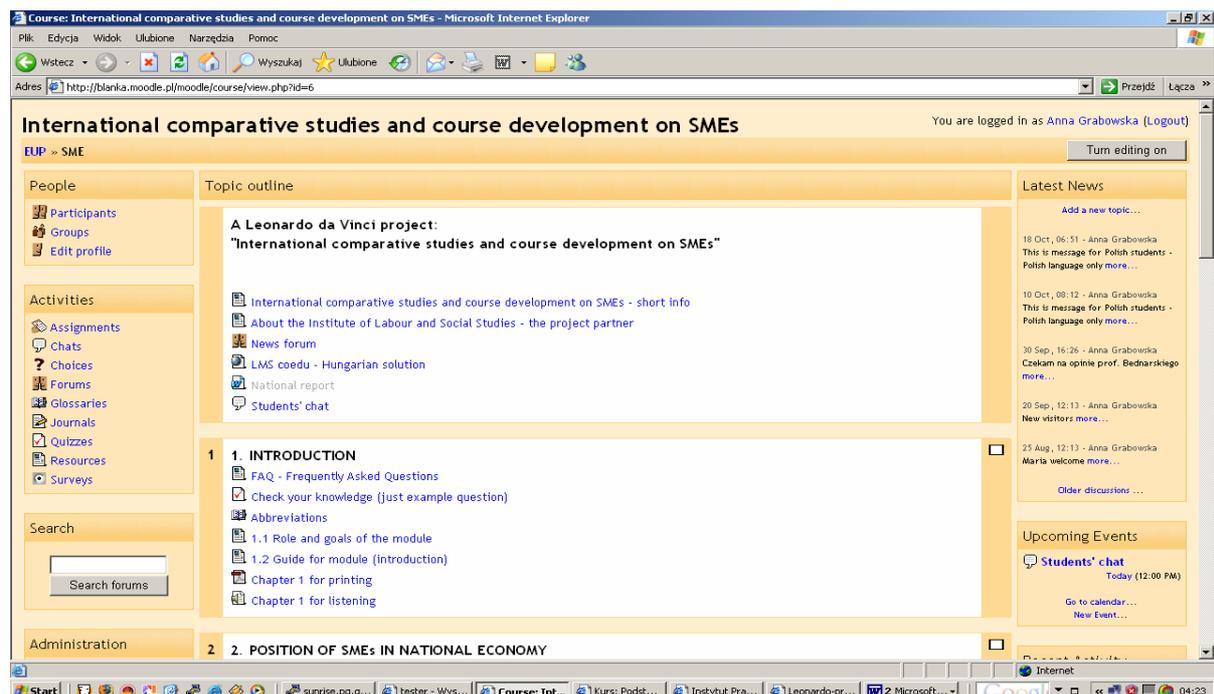
The following issues had been taken into account before decision concerning LMS choice was made:

- ✓ The general cost of LMS including license, administration, ICT infrastructure;
- ✓ Availability of Polish language interface;
- ✓ Recognition of the LMS software at the e-learning market (numbers of implementations);
- ✓ User-friendly interface from the user and administrator point of view.

Finally Moodle was chosen as the Learning Management System and hosting solution was recommended in the pilot implementation.

The question: what kind of LMS should be offered after closing the project is still open. The realistic and the most convenient solution should be based on the circumstances and possibilities available in the institution responsible for the course delivery in the future.

Fig. 1. The main page of e-learning course "International comparative studies on SMEs" in moodle



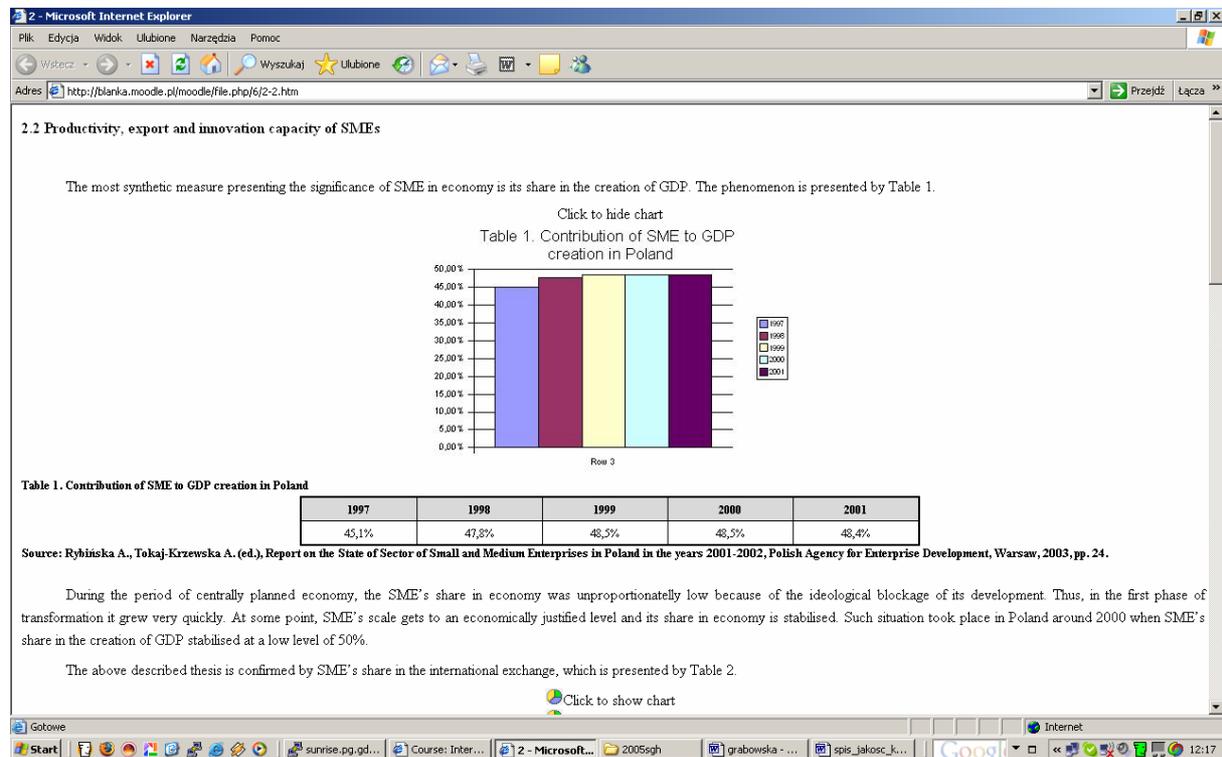
Final remarks

While thinking about pilot course and further course delivery the target group should be chosen properly. In Polish case, a group of students from Civil Engineering and Environmental Faculty has taken part in the pilot course. The first students' task was to look for information for the investor from abroad in order to present the rules, Polish law, obstacles, cases etc. They should have tried to

gather very precise and realistic data (Fig. 2). Then they should evaluate the course from the usability point of view.

The next group which is planned to take part in the course are students from Economic Faculty from Gdansk University of Technology.

Fig. 2. Example screen from the course "International comparative studies on SMEs"



While delivering e-learning course one should remember that:

- ✓ The role of ICT is supportive and not central in learning, the appropriate choice of technology can facilitate learning and enrich learners' experiences.
- ✓ Designing an effective technology enhanced learning environment is a difficult task, which could be eased by employing modern e-learning standards and by using relevant support tools, including course and content management systems.
- ✓ The most important issue is quality of content and services offered.

As far as ICT solution (LMS + administration) is concerned the most convenient is hosting one.

In order to ensure and to improve the quality of the e-learning course the evaluation tool should be introduced. The questionnaire will be based on experiences in previous European projects¹.

¹ A. Grabowska, *Searching for evaluation procedures for Web based courses – cases from EU projects*. In: *Proceedings. 12th EDEN Annual Conference. The Quality Dialogue. Integrating Quality Cultures in Flexible, Distance and eLearning*. Rhodos. Greece, 15-18 June 2003. Ed: dr Andras Szucs, dr Erwin Wagner, dr Costas Tsolakidis, Rhodos 2003, pp. 226-231.

Abstract

The Leonardo da Vinci project: "International comparative studies and course development on SMEs" was inspired by a previous Leonardo project entitled "A European Diploma in SME Management" (Ref.: F/98/1/65657/PI/ I.1.1,a/CONT). On the basis of previous project experiences the new actions were proposed based on developing a detailed framework for the description of national SME systems. The description was prepared using available national data and indicators in each partner's country. It was proved that a major impediment arises from the traditionally different working conditions of the SMEs in different countries (legislation, financing conditions, training and retraining possibilities, validation of the professional experience). Then the national report was converted into the form of a modular teaching curriculum. The national curricula was submitted in the local language and in English. The next step was to transfer the curricula into e-learning materials, using compatible e-learning platforms suggested by the Steering Committee of the project. In the article the whole process of developing national reports and converting them into e-learning course is described.

Info o autorach

Marek Bednarski jest profesorem Wydziału Nauk Ekonomicznych UW i Instytutu Pracy i Spraw Socjalnych. Jego zainteresowania naukowe dotyczą problematyki przekształceń własnościowych polskich firm oraz promocji drobnej i średniej przedsiębiorczości.

Anna Grabowska jest adiunktem na Wydziale Inżynierii Lądowej i Środowiska oraz kierownikiem Autoryzowanego Centrum Szkoleniowego Autodesk Politechniki Gdańskiej. Jej główne zainteresowania to zarządzanie projektami z dziedziny kształcenia na odległość oraz modelowanie, projektowanie i ewaluacja systemów LMS. Autorka uczestniczyła i nadal uczestniczy w licznych projektach międzynarodowych (Phare, Socrates, Leonardo da Vinci, 5 Program Ramowy, Interreg). W latach 1997-2004 była kierownikiem Centrum Edukacji Niestacjonarnej Politechniki Gdańskiej.

Łukasz Sienkiewicz jest absolwentem SGH, doktorem nauk ekonomicznych w zakresie nauk o zarządzaniu. Zatrudniony na stanowisku adiunkta na Wydziale Zarządzania i Ekonomii Politechniki Gdańskiej oraz w Instytucie Pracy i Spraw Socjalnych. Jego zainteresowania obejmują teorię i praktykę zarządzania zasobami ludzkimi oraz problematykę małych i średnich przedsiębiorstw. W obszarach tych zaangażowany jest w realizację i koordynację szeregu projektów badawczych, szczególnie finansowanych ze środków UE.