



Virtual Training Centre for Shoe Design

Project information

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Executive Summary

The main **reason** for the VTC-Shoe project proposal comes up to the changing needs in training in terms of both quantity and quality. In order to foster use of information and communications technologies in their national footwear industry, the VTC-Shoe partners engage a common challenge to support quality improvements in vocational education and training systems, by focusing on the development of innovation and good practice. The **aim** of the project is to implement footwear design training content into a virtually designed and served training centre which is accessible over internet, and thus, e-learning can be realised as an innovation in this field.

The **objectives** of the project are:

- 1) Setting up a functional training centre in a virtual space in order both to develop training services for lifelong learning and to share good practice in footwear design;
- 2) Adapting the collected materials so as to enhance the new curriculum (up to intermediate level) satisfying the requirements in a modern and innovative e-learning content;
- 3) Helping to improve and upgrade competences and skills of the VET colleges and schools training staff and exchange experiences over the virtual training centre;
- 4) Enabling the participating partners to extend the common educational qualifications of footwear design technologies, the accreditation of the skills and knowledge of footwear design techniques acquired within the network created between partner institutions.

Virtual Training Centre for Shoe Design is on the internet to supply training for footwear design and pattern making. The equipment, methods, curriculum and techniques currently used in footwear design training by partners have been observed, collected and evaluated. The selected materials have been used to create a new, efficient, and innovative training tool at basic and intermediate level, developed into a website to form a virtual training centre (<http://www.vtcforshoedesign.com/>).

The VTC-Shoe project attempted to design the competency-curriculum for VET under the area of a Virtual Training Centre. The study research was conducted in order to identify and explore the usefulness of the questionnaire tool in finding a suitable presentation form for a competence-based curriculum. The questionnaire was developed based on planned curricula structure and on preliminary interviews with some experts from footwear industry and potential trainers and trainees from Romania, Greece and Turkey. After its development with the partners in the project, it was applied on VTC-Shoe content development, and modified accordingly with the feedback obtained from piloting courses.

The curriculum and the content developed based on this curriculum stand on four parts. The first part is about Foot. The second part is dedicated to Footwear. The third part deals with Measurements and Tools. The last part is about Design and Pattern Making. The VTC-Shoe site uses tools that support learning objectives (Address data base, Animations/Videos, Self tests, Design collection, Press/News, Links) and it gives the opportunities for learning by doing, as the users can adopt their own rhythm for learning. The site has innovative approaches to delivering a high demanding for practices and exercises content. Pedagogy is focused both on the content and the learning process. The users achieve both theoretical knowledge and practical skills in footwear pattern making. They have the opportunity to use this educational software to solve specific problems, for example to design a new footwear product as development of classic constructive types. Each lesson/unit is given by step-by-step techniques and it is introduced to the trainee by giving the Unit descriptor, Topics and Content. The knowledge regarding footwear design is progressively transferred to the learner, from simple to complex.

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1. Project Objectives

The overall and specific aims of the projects have been set up under the rationale increasing the Footwear sector competitiveness by orientating the needs for training in footwear design to an e-learning content development, providing lifelong learning and continuing education opportunities. ICT-related skills in the footwear design are also vital for the competitiveness of the footwear sector from and for increased job opportunities and employment.

The specific objectives are as follows:

1. The project aims to contribute to the development of quality lifelong learning and to promote high performance, innovation and a European dimension in system and practice in the field: VTC-Shoe project intends to improve vocational and educational training curricula on footwear design in Romania, Turkey and Greece by focusing on the development of innovation and good practice. The results of partners' common developments are to be transposed into a virtual centre, making it available on European level. By accessing the new created footwear design training course, trainers and teachers, footwear designers, adult learners, as well as trainees and apprentice can keep up to date with skills and knowledge necessary for high performance and innovation, both in training and footwear design. Based on availability into virtual common space of the innovative e-learning materials and training methodologies training materials, the project can make its contribution to development of single European information space.
2. To help promote creativity, competitiveness, employability and the growth of an entrepreneurial spirit: In a world increasingly based on knowledge and information, education and training are put at the core of the European footwear industry agenda. The footwear companies need to make learning a lifelong endeavour deal with their **employees** of all ages continuously developing their skills. By creating a new e-learning content and functional web service the Virtual Training Centre for Shoe Design will help both workers and footwear companies transforming the way they learn, interact and work in order to meet the footwear sector needs for competitiveness, employability and the growth of an entrepreneurial spirit.
3. To support the development of innovative ICT-based content, services, pedagogies and practice for lifelong learning: ICT-related skills in the footwear design are also vital for the competitiveness of the footwear sector from and for increased job opportunities and employment. The concrete aim of the project is to **develop a modern virtual training centre in footwear design** for: 1) training the trainers, trainees at the college and technicians and apprentices for footwear design, 2) preparing footwear design technicians as intermediates having common measurable qualities the industry is seeking. VTC-Shoe project will create a common ICT-based content and will help for upgrading competences and skills of teaching staff and exchange experiences over the virtual training centre.
4. To support improvements in quality and innovation in vocational education and training system, institution and practices: This can be achieved through improving the qualifications and competences of the trainees in this field and it is directly related to the well-designed and programmed curriculum to be carried out on footwear design. In addition, considering that education is a dynamic process, it will be possible through this project, through its dynamic and continuous characteristics, to improve the quality of vocational and technical education, and accession to vocational training will be carried out.

2. Project Approach

Through the educational programme and new teaching methods to be developed by implementing footwear design training content into a virtually designed and served training centre which is accessible over internet, e-learning are realised as an innovation in this field. The project is to promote and reinforce the contribution of vocational training to the process of innovation through the virtual training centre to be formed in this field and its application as a new and good example for virtual learning in national vocational training systems. Appropriate training/learning materials, including for less qualified workers, to improve skills can create and new e-learning tools for training.

The main products of the project are the Communication Website, the Address Database, the Common Curriculum, Virtual Training Centre for Shoe Design (VTC-Shoe) and the Manual. The project designated each product as the chain to develop the latest product. Thus, the products have been developed step by step and each product has been developed based on the output produced by the previous one. Therefore, the Communication Website helped the formation of the Address Database, the Address Database helped the development of the Common Curriculum, the Common Curriculum helped the development of the VTC-Shoe, and manual has been produced based on the VTC-Shoe.

The main deliverables developed during the lifecycle of the projects have been tested and evaluated during the pilot training meetings organized at least twice in each partner country. These meetings have addressed the target groups that will potentially use the project products. The qualities of the products have been evaluated by the trainers and trainees as well as by sector representatives chosen from each partner. Each product has been used during the lifecycle of the project by the partners and target groups through questionnaires, training meetings and dissemination activities at national and international level. The feedbacks from these activities have been taken into account and the modifications required have been made for the quality assurance of the products. The multilingual aspect of the products has been considered and the training meetings in each country have helped the quality assurance of the versions of the products in the native languages of the partners.

The course content has been developed using ICT. The computer technology and the software this technology requires have been used by a qualified software team. Thus, the technology used in the course is advanced and will be updated according to the proposal to keep up with the new developments in technology. The overall course can be divided into two categories: theoretical lessons and practical ones. The theoretical ones are based on the texts clarifying the main points accompanied by pictures. The theoretical ones have texts accompanied by pictures, videos and animations. These lessons have been organized and developed in such a way as to address beginners and intermediate levels of trainees, even to the designers.

The content of the course is original and it has been developed by the competent authors who have both expertise in the field and experience of teaching and training. Thus, the authors have taken both the content and methodology and pedagogy in the development stage. The training meetings have supported the quality and competence of the courses with the confirmation by the trainees, trainers and designers of this field.

The results of the project can be used initially at the footwear design training centres of the partners. This also enables target groups, target sectors and potential users to be aware of the results. Through the organisations for which they are members, this valorisation is expected to be realised. Furthermore, some activities carried out by partners for Valorisation ensure the project result to be used fully.

3. Project Outcomes & Results

Electronic or paper-based products/ output / results

A- Electronic Products:

1- Communication Website: <http://www.virtual-shoedesign.com>



2- VTC-Shoe (The main website): <http://www.vtcforshoedesign.com>



3- The VTC-Shoe: Demo CD in English, Romanian, Turkish and Greek

B- Paper-based products:

1- Detailed project work plan

2- Consortium agreements

- 1- Contract between P1 and P2
- 2- Contract between P1 and P3
- 3- Copyright and IPR Agreement

3- Dissemination strategy

4- Partnership Meeting Schedules

- 1- Kick-off Meeting Schedule (29.01.2008-01.02.2008 - Iasi, Romania P1)
- 2- Study Visit and Meeting Schedule (07-12 may, 2008, Konya, Turkey P2)
- 3- Financial Managerial Meeting and Study Visit Schedule (24-30.07.2008– Chania, Greece P3)
- 4- Steering Meeting Schedule (16-20 December 2008 - Istanbul, Turkey P2)
- 5- Partnership Meeting Schedule (26-29 May 2009 - Konya, Turkey P2)
- 6- Monitoring and Partnership Meeting Schedule (10-14 August 2009 – Konya, Turkey P2)
- 7- Partnership Meeting Schedule (25-28 October 2009- Iasi, Romania P1)
- 8- Final Partnership Meeting Schedule (01-05 December 2009- Berlin, Germany)

5- Partnership Meeting minutes

- 1- Kick-off Meeting Minutes (29.01.2008-01.02.2008 - Iasi, Romania P1)
- 2- Study Visit and Meeting Minutes (07-12 may, 2008, Konya, Turkey P2)
- 3- Financial Managerial Meeting and Study Visit Minutes (24-30.07.2008– Chania, Greece P3)
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6- Quality Assurance (Auditing)

- 6.1. Report on the project management
- 6.2. Financial auditing Report
- 6.3. National Meeting Reports (report on national Team Meetings)
- 6.4. External auditing reports
 1. Content Evaluation Report (P1)
 2. Content Evaluation Report (P2)
 3. Content Evaluation Report (P3)
- 6.5. Training Meeting Reports
 1. Training Meeting Report 1 (P1)
 2. Training Meeting Report 2 (P1)
 3. Training Meeting Report 1 (P2)
 4. Training Meeting Report 2 (P2)
 5. Training Meeting Report 1 (P3)
 6. Training Meeting Report 3 (P3)

7- Effective data acquisition tools

1. Data Collecting Form
2. Questionnaire for Common Curriculum

8- Wide range of participation from different sectors and related bodies assuring the quality and sustainability of the project (Report on the Participation Range)

9- Collection of all questionnaire results (from partner countries) directly in one database-report (Report on Questionnaire Results)

10- Communication data for target groups and sectors (Address Booklet)

11- Country reports about the current status of Shoe Design training (programmes, detailed structure of the programmes, national legislations etc.) in partner countries:

1. Country Report (P1)
2. Country Report (P2)
3. Country report (P3)

12- Common Curriculum

13- Stages of Work on the Common Curriculum

1. The common curriculum frame agreed by all partners
2. Draft forms of the common curriculum prepared by each partner based on the common data base
3. The final form of common curriculum for Shoe Design training

14- Partner assessments about the final WP3 reports

15- Collected sample material, resource documents and media to be used in the content development process.

16- Modified final documents and modules to have a common description of the VTC-Shoe: A common description of VTC-Shoe based on User Manual

17- Final report on the content development to be a basis for the development of VTC-Shoe: A report based on the approach and methodology

18- An interactive simulation programme used in the development of VTC-Shoe in English: Report on the Use of Software programmes with an Annex

19- The test results obtained by the teachers/trainers who will be responsible for testing and editing: A Report on the test results of the first training meetings

20- The VTC-Shoe (Virtual Training Centre) for Shoe Design in English: Printed Content of the lessons in English

21- Test course results for the final evaluation of the product: Report on the results of the second training meetings

22- User Manual in English

23- User Manual in Romanian

24- User Manual in Turkish

24- User Manual in Greek

25- Common Curriculum in English

26- Common Curriculum in Romanian

27- Common Curriculum in Turkish

28- Common Curriculum in Greek

29- The testing course results obtained from the short piloting courses for both target sectors/groups and potential final users.

30- Report about the valorisation conferences carried out by each country.

31- Report about the valorisation meetings in each country.

32- Report on valorisation towards other groups (politicians, professionals, social partners and media) in each country.

33- Report on the educational fair activity

34- Papers, presentations and book chapters published

- 1- Participation in the INTED2008 Conference (3rd-5th March, 2008, Valencia, SPAIN, www.iated.org/inted2008)
- 2- Participation in the 5th International Seminar on Quality Management in Higher Education (11-14 June 2008, Tulcea, Romania)
- 3- Participation in the ICVL 2008 International Conference on Virtual Learning (October 31 - November 2, 2008, Constanta, Romania, <http://www.icvl.eu/2008>)
- 4- Participation in the ICERI 2008 International Conference of Education, Research and Innovation (17-19 November 2008, Madrid, Spain. <http://www.iated.org/iceri2008>)
- 5- Participation in m-ICTE2009 International Conference on Multimedia and Information and Communication Technologies in Education (22-24 April, 2009, Lisbon, Portugal, <http://www.formatex.org/micte2009>)
- 6- Participation in the 13th International Conference: Inventica 2009 (4-6 June, 2009 Iasi, Romania)
- 7- Participation in ENMA Education 2009 International Conference (17-19 June 2009, Bilbao, Spain)
- 8- Participation in IHEPI 2009, International Conference & Workshops on Higher Education, Partnership and Innovation (7-9 September, 2009, Budapest, HUNGARY, <http://www.ihepi.net>)
- 9- Participation in the ICVL 2009 - The 4th International Conference on Virtual Learning, (October 30-November 1, 2009, Iasi, Romania)
- 10- Exhibition: Participation in the ICVL 2009 EXHIBITION - The 4th International Conference on Virtual Learning, (October 30-November 1, 2009, Iasi, Romania)
- 11- Participation in CNIV ROMANIA 2009: Conferința Națională de Învățământ Virtual, (October 30-November 1, 2009, Iasi, Romania)
- 12- Demonstration- ONLINE EDUCA BERLIN 15th International Conference on technology Supported Learning & Training (December 2-4, Berlin, Germany)
- 13- A book chapter of 21 pages, titled "ICT Use in VET: The Virtual Training Centre for Shoe Design as a Model", authors: Mihai A., Sahin M., was published in Technology, Education and Development book, editors: A. Lazinec and C. Calafate, ISBN 978-953-307-007-0, p. 321-342

35- Copyright and IPR Agreement of partners

36- Reports on the National Dissemination activities

1. National Dissemination Report (P1)
2. National Dissemination Report (P2)
3. National Dissemination Report (P3)

37- Samples from Dissemination Materials

4. Partnerships

This partnership consists of one partner from Romania “Gheorghe Asachi” Technical University of Iasi (Faculty of Leather and textile Engineering) as P1 and beneficiary of the project, one partner from Turkey (Technical Science College of Selcuk University) as P2 and the coordinator, and CAD Laboratory of the Technical University of Crete as partner P3. This partnership aims at cooperating in developing and improving the common training module in footwear design over a Virtual Training Centre.

The project consortium has been set up based on the partners’ national and European acknowledgment in training and research. The partnership comprises of members both from the training sectors with strong support from the Governing bodies of each country. This can produce a strong partnership with knowledge and information on the requirements for training and the industry. Thus, through the support of the Governing bodies, the partnership can achieve the successful implementation of the project together with support in the valorisation and accreditation activities. Through dissemination seminars and conferences, a number of colleges and/or SMEs either can start pilot using the methods or join the consortium as users. Through participation in national and international conferences, training institutions and other key players can show active interest in acquiring and using this distance learning module.

“Gheorghe Asachi” Technical University of Iasi (P1), the promoter of the project had two main responsibilities: the overall financial management of the project and the content development of the lessons for VTC -Shoe. The project had a coordinator, Technical Science College of Selcuk University (P2), just at the proposal stage. The coordination had two dimensions: one is between the partners and the other one is between the partnership and the Executive Agency. The coordinator has been in contact with the partners and the Executive Agency to provide a running collaboration. Technical University of Crete (P3) is not directly providing training related to footwear design within its curriculum but it is a CAD laboratory with experience in footwear design and product development.

The partnership constructed a communication website for communication (<http://www.virtual-shoedesign.com>). The planned activities, the announcements, the public project documents have been uploaded and made public on the site. In addition, the site has a special management system assigned for each partner. This system has a username and password for each partner. Partners can exchange confidential documents on this system. Other means of communication like telephone, fax, and especially emailing have been used to provide communication between the managers. The communication between managers and steering committee members has worked adequately enough.

This partnership dwells on the cooperation with the partners and the affiliated sectors in Turkey, Greece and Romania, all partners having necessary skills, knowledge, expertise and experience of the organisation in transnational cooperation. They are already involved in many transnational projects.

Considering that the partners of this project are from Romania, Turkey and Greece, the meetings between the project managers and the staff in a co-working environment in order to produce a common training tool to be used all over Europe is of high importance. This is an indication of being European and working for Europe integration on the European values. The partners have always been in contact for collaboration and coordination to form an integrated environment at European level.

5. Plans for the Future

Each project partner understands the dissemination and valorisation not merely as a duty but also as a possible resource for further activities. Thus, a special emphasis is given for perfect valorisation activities in order to assist the utilisation of the project outcomes in the follow-up phase. Valorisation is considered as an integral part of the whole project as a continuous activity. It starts within the partners and extended to national and European level.

In the long term, trainers will broaden their training ability by means of communication over virtual training centre; trainees and apprentices will have better employment opportunities in their countries and especially in other partnering countries; technicians will be a subject to life long learning and e-learning as a member of modern society; designers will be more creative by contributing their creative feedbacks.

As target sectors, educational institutions will need to modify their existing training methods and techniques in the light of the new curriculum, and distance learning approach will provide them with a better, cost-effective training, which would have been impossible without high cost, numerous staff and workshops. The footwear manufacturers will be able to customise their training content according to their own training requirements, which may differ from one manufacturer to another.

As potential users, the training organisations, the Small and Medium Sized Enterprises, and the universities, colleges, vocational schools, training centres will be able to increase easily the number of trainees and in this way they will contribute to the employment.

When the financial support of the European Union has been used up, works on the project will be continued depending on the budget to be allocated by partners.

The results of the project can be transferred to similar fields such as furniture, textile, air conditioning etc. The experiences and knowledge gained during the process of this project can be used in developing and improving other training programmes in particular in the area of new information technology applications in related sectors. The final form of the training programme will be publicised on the co-ordinating organisations' website. In addition, through meetings, workshops and conferences and seminars to be held with the related institutions, the results will be introduced to other sectors. As this type of learning is virtual and based on distance learning, it will be possible to have access in all geographical contexts.

6. Contribution to EU policies

As this project contributes to e-learning by providing new training tools, it will create new job opportunities for the individuals in partner countries and thus this will contribute to employment exchange in EU. These activities are inline with European strategies for vocational training. As emphasised at LEARNTEC 2005 (Karlsruher Messe- und Kongress-GmbH, Tuesday 02nd of November 2004), "E-Learning has become indispensable for corporate training, but the fascination of SMEs for web-based learning is still quite limited. Further education and training figures rarely on the priority list, and in most of the cases, a training department does not even exist."

1- The project is in accord with the Lisbon Education & Training Progress Indicators

a) Teachers and Trainers Age distribution of teachers together with upper and lower retirement age: The internet based platform within the VTC-Shoe project offers to trainers/teachers the possibility for continuing development of their skills and competences. The innovative solutions for training in footwear design as well as the innovative pedagogical methodologies will keep them up to date with the new technologies in order to have a longer active professional life.

b) Lisbon Key Competences Digital competences: The Virtual Training Centre for Shoe Design uses powerful and valuable eLearning tools. Its impact on vocational training in both academic and industrial environments will be very significant and beneficial. The project will promote and reinforce the contribution of vocational training to the process of innovation through the virtual training centre to be formed in this field and its application will set up a new and good example for virtual learning in national vocational training systems. Appropriate training/learning materials, including for less qualified workers, to improve skills will be create and new e-learning tools for training and quality management in VET will be develop.

2- The project is in accord with the LLP Horizontal policies: LLP Horizontal policies promoting equality between men and women and contributing to combating all forms of discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation contributing to combating all forms of discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation

Within the footwear industry, the majority of workers are women and account for about 40% to 50% of all employees. Our project will open new training opportunities for women. However, the e-learning footwear design course developed within the Virtual Training Centre is an equal opportunities course, combating all forms of discrimination based on sex and will be open to both man and women.

3- The project is in accord with the Complementarities with other policies in terms of Employment: One of the major problems of the footwear industry at the moment is that the overall level of skills and qualifications needs to be raised and, therefore, it is also necessary for training modules to respond to the continuous evolution in the workplace so as to confront the problem of unemployment and increased competition. VTC-Shoe project proposal comes up to the changing needs in training, in terms of both quantity and quality, designed for promoting employment on the footwear industry. Training materials offered by the VTC-Shoe internet platform will help both unemployed people to find a job in footwear companies, and worker to up to date their skill for getting a better position.

