

Project development

Test lessons have been prepared for all modules following project agreed templates. The final structure of the training program and the first test lessons are available on the internal communication platform. Throughout this process partners have shared experiences with their approach to the development of new module materials, especially concerning the planning process so that lesson's contents, movies, images and practical tasks for students are well aligned and follow naturally the operation of the software.

The designed structure of the INGA training course is ensuring the balance of content, for example Modules I and II are focusing on practical exercises and activities whereas Modules III and IV have greater mix of theory and practical activities. It is also enabling agreed presentation style and movie/image formats.

The Online Learning Platform became operational for all partners. Test lessons and supportive movies have been transformed into e-learning content and uploaded on the OLP, being prepared for alpha and beta testing.

The next meeting will take place in Porto, Portugal in February 2015.

Posters, Papers and Presentations in Events

- Poster at the One-Day Conference "Footwear and Orthotic Research & Innovation for Healthier Feet" organized by the EU project SOHEALTHY in Manchester, UK
- Presentation at other LLP projects' first meetings: iFiscus, Lexsha, Uisel, eCity
- Paper and presentation at the 10th International Conference on eLearning and Software for Education – ELSE 2014, Bucharest, Romania
- Presentation at Regional Event "Leather is My Job", Bucharest, Romania
- Poster at the 13th International Exhibition of Research, Innovation and Technological Transfer "INVENTICA 2014", Iasi, Romania
- Poster MOMAD exhibition, Madrid, Spain
- Paper and presentation at CORTEP 2014 conference, Poiana Brasov, Romania
- Paper and presentation at ICAMS 2014 conference, Bucharest, Romania
- Poster at Co-Shoes International Workshop, Alicante, Spain
- Editorial in the quarterly newsletter issued by the Spanish Observatory of Technology Foresight

Upcoming Events

- The 15th AUTEX World Textile Conference, Bucharest, Romania, June 10 – 12, 2015, <http://www.autex2015.ro>
- The 3rd INTERNATIONAL LEATHER ENGINEERING CONGRESS, Innovative Aspects for Leather Industry, May 21-22, 2015 Izmir, Turkey, <http://www.iafli.ege.edu.tr/>

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This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

ISSUE

02

OCTOBER
2014

Creative Transfer of Competence in 3D Footwear CAD to VET Professionals

Project development

The second meeting of INGA 3D project took place in Iasi, on 6th and 7th of May, organised by partner TUIASI. The third meeting was organised by partner University of Salford on 21st and 22nd October.

INGA 3D partners have made good and practical progress. Installation of Icad3d+ software and initial training were successfully completed in TUIASI, IED, VC and University of Salford, being fully supported by INESCOP and RED 21. One working package (WP3) was finalised and two deliverables were completed: Integrated Report and its Published Version. The Guideline for "Definition of functionalities of the Online Learning Platform" was released.

Partner's findings within the national reports represented the starting point for defining the matrix of skills, competences and knowledge. Based on this matrix, the structure of the INGA 3D course was established. For all modules the units and individual lessons have been defined and aligned with objectives and knowledge, skills and competence descriptions. Minor adjustments to module structure have occurred during development of course content. These focused on making the module units follow more closely the INGA3D+ software steps.



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Skills and Competencies in Footwear CAD

INGA 3D partners investigated the provision of Footwear CAD study/training programs in Romania, UK, Spain and Portugal.

The goal of this research was to explore what skills and competences need to be acquired by VET professionals in order to perform teaching/training activities in footwear CAD. This was achieved by mapping the existing best practice in teaching/training courses.

The main conclusions, based on the feedback of VET professionals and representatives of the main training organisations and footwear companies in all partner countries, revealed that:

- There is a clear gap between the existing formal education, knowledge updating and/or specialization footwear VET professionals.

- In terms of vocational training systems and practices applied in different countries, a discrepancy among the levels of training provided by various VET schools, universities and training centres was observed.
- Lack of training/teaching resources on Footwear CAD to be used by VET professionals.
- VET professionals should have an effective connection both with the industry and with the CAD software company.
- Trainers are usually more focused on the technical aspects rather than in the creative and innovative features.
- INGA 3D training course on Footwear CAD is found to be valuable for universities, VET schools, colleges and training centres.

<http://inga3d.eu/>

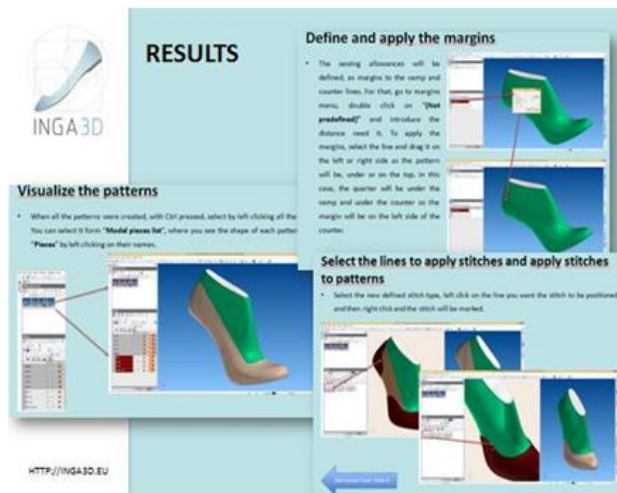
The new Erasmus+ programme aims to support actions in the fields of Education, Training, Youth and Sport for the period 2014-2020.

The Erasmus+ Programme Guide for the 2015 General Call for Proposals was published in English on 06/10/2014, with further language versions to follow at the end of October.

The Programme Guide provides detailed conditions for participating in the call for proposals, as well as information on the priorities for funding. It constitutes an integral part of the call for proposals.



Source:
http://ec.europa.eu/programmes/erasmus-plus/tools/national-agencies/index_en.htm#



The desk research and the feedback of experts participating in questionnaires and semi structured interview sessions gave us the possibility to summarise ideas for further developments of the INGA curriculum and training contents:

- To up-skill teaching staff from secondary/tertiary education for applying new Footwear CAD technologies in their classes
- To train staff from footwear companies for performing training/tutoring activities in Footwear CAD technologies toward their own employees – train the tutors/trainers
- To produce training/teaching content for creating knowledge, skills and competences, that are necessary to cope with the European/global trends of the footwear industry on creativity, innovation and new CAD technologies
- To experiment various learning scenarios in order to maximize the number of potential users by designing the INGA 3D training program and content in a modular manner.
- To contribute to increasing the attractiveness of the VET study/training programs in the field of footwear design and technology

- To encourage and to motivate VET teachers, trainers and tutors to stimulate innovative thinking and creativity among their students/trainees
- To motivate university graduates to choose a career as teacher in VET schools.

Similar to other domains of engineering (for example, automotive industry, mechanical industry, textile industry, etc.), the software for applications in the footwear industry is very complex. The process of learning is becoming very difficult if the teacher/trainer does not understand this complexity and if he/she is not able to transform this complexity into learning procedures and tools based on pedagogical and methodological approaches oriented toward the learner's needs for learning. Furthermore, the teacher should be able to make the difference and the transfer between various modules; therefore he/she should have in-depth knowledge of all facilities of such dedicated software.

A distinctive feature of the INGA 3D education and training comprises a mix of health and fashion concepts, enabling students to work using CAD in both domains.

Peer Learning Scenarios on Footwear CAD

Several challenges occurred during the INGA 3D's structure and content development process:

- have some sort of separation between 'fashion' and 'health' footwear or try to combine these at least to some degree throughout all modules
- decide which are "core modules/skills" that are common to both fashion and health, and which are specific to each fashion and health pathway.

The INGA 3D training content, its supportive guide as well as the online learning platform will be developed tested and evaluated in line with the best practices identified by partners in their institutions, countries and elsewhere in Europe.

Following the experts' opinion, the new training course on 3D Footwear Computer Aided Design is found to be beneficial for VET schools, colleges and training centres in partner countries as well for footwear companies.

Find out more at
<http://inga3d.eu/>



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INESCOP (Spanish Footwear Technological Institute) is a non profit-making organisation created in 1971. Its members include more than 500 companies throughout Spain. It is a service organisation developing a series of scientific and technical activities of great interest to the Spanish footwear industries. These activities cannot normally be undertaken individually by the companies due to their small size. INESCOP has a staff of more than 140 professionals including experts in chemistry, physics, computer science, electronics, telecommunications, art and design, robotics, etc. The activities of INESCOP are closely related to the footwear industry. It provides direct services, transfers knowledge and researches on subjects of general interest.

Main know-how. The Institute's activities include:

- Material testing,
- Technical assistance,
- Standardisation and certification,
- Applied research,
- Advanced technologies development,
- Specialised training,
- Information and documentation.

INESCOP has experience in the development and management of RTD projects at a national and international level and as a result, more than 1000 companies are users of INESCOP's technologies, in particular in the fields of CAD/CAM, materials (adhesives, polymers), advanced technologies (customisation technologies), 3D digitisers for feet and lasts/outsoles, environmental technologies (leather tanning, waste treatment, waste water).

INESCOP owns 20 patents on different systems, most of them have been transferred to the industry and are under exploitation. Since 2001, INESCOP develops a line on customisation of tools for specific groups, like diabetic feet patients, thus combining materials with design technologies and biomechanics, for which a specific facility is available with gait and movement analysis.

More information at:
www.inescop.es



Red 21 is a company that is continuously expanding. It has over 17 years experience, dedicated to sales, distribution and CAD/CAM systems technical support for footwear industry.

The company's targets are to provide the shoe industry with innovating systems that will allow companies to reduce costs, to improve the quality and to optimise the productivity of the sector, by analysing the needs of each company in particular.

Having worldwide distribution, RED 21 has set more than 1700 licenses all over the world.

The CAD systems that the company offers are supported and developed by Instituto Tecnológico del Calzado (INESCOP), where over 140 professionals advice and provide specific services to the shoe industry and their designers since 1971.

Services. Red 21 offers to their clients a wide range of products and services:

- 3D Plus: Shoe design in 2D or 3D
- Sole 3D: soles design in 2D or 3D
- Sipeco 2D: Creating pieces, grading and cutting materials
- Cutting plotter
- Software for footwear management. ERP for footwear

Red 21 also offers full services of technical support and periodic software updating and supplied machinery maintenance. Also, the company provides tailored and intensive training all over the world.

Find out more at:
<http://www.red21.es/en/>



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