

ICT-Based Content in Textile Training

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One of the Leonardo da Vinci Operational Objectives is to facilitate the development of innovative practices in the field of vocational education and training other than at tertiary level, and their transfer, including from one participating country to others. This will support the transfer of the development of innovative ICT-based content, services, pedagogies and practice for lifelong learning from one EU country to another. In this way, training and further training activities in the acquisition and the use of knowledge, skills and qualifications in one country will facilitate personal development, employability and participation in the European Labour Market on the part of transferring country. This will also support improvements in quality and innovation in vocational education and training systems, institutions and practices, all of which will lead to improvement in the Quality of VET systems and practices. The objective of this paper is to introduce a textile training tool, as software, consisting of four modules: Pattern Construction, Fashion Design, Pattern Grading and Sewing. The emphasis is on the first module as it is under transfer now into Turkish and Romanian, and the multi-language aspect of these modules as a part of their contribution to "Learning to learn", one of Lisbon Key Competences.

Keywords: Textile Training, ICT-based content, Fashion Design

1. Introduction

Improving their quality and effectiveness in a fast track world with greater demands than before in professions and skills is one of the concrete future strategic objectives in relation to education and training systems in the EU. This improvement covers the continuing education and training for teachers and trainers in terms of development of skills for the knowledge society, ensuring access to ICT for everyone, increasing recruitment to scientific and technical studies, and making the best use of resources. Facilitating the access of all to education and training systems is the second strategic objective, which includes open learning environment, making learning more attractive, and supporting active citizenship, equal opportunities and social cohesion. One of the Leonardo da Vinci Operational Objectives is to facilitate the development of innovative practices in the field of vocational education and training other than at tertiary level, and their transfer, including from one participating country to others. This will support the transfer of the development of innovative ICT-based content, services, pedagogies and practice for lifelong learning from one EU country to another. In this way, training and further training activities in the acquisition and the use of knowledge, skills and qualifications in one country will facilitate personal development, employability and participation in the European Labour Market on the part of transferring country. This will also support improvements in quality and innovation in vocational education and training systems, institutions and practices, all of which will lead to improvement in the Quality of VET systems and practices.

It is a fact that advanced computer and information network technology has revolutionized our teaching and learning approaches and methods and this also changed the learning environment. Thus, ICT strategy is very important and training organisations using ICT are significantly ahead in all respects. In addition, integration of ICT and e-learning is politically important in the EU in terms of internationalisation and globalisation of education, student demand and interest in increasing the quality of education through ICT.

The European textile/clothing (TC) sector will require industrial networks for specialised, high value added products in response to the growing complexity of today's market requirements for product design and development. The multi-stage value chain of the textile and clothing industry is dominated by SMEs, which have been traditionally co-operated in communities and clusters presenting geographical and cultural proximity. Product development in the fashion industry in Europe is undergoing a dramatic change and it changes the way companies are coming together in this new collaboration landscape [1]. One of the major problems of the clothing 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 [2]. A very recent survey report identified a lack of skilled staff at 42% as one of the strongest change drivers in the clothing industry, while 42% of clothing companies reported difficulty in filling vacancies due to skill shortages. Only about half of those

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realize that a further increase in skill needs is expected and would now like to plan in-house training [3]. In general, small and medium companies have the biggest problems concerning access to adequate training, as they cannot afford experienced training programmes. They are not well informed on existing training schemes and they fear more than bigger companies interruptions of their production process.

2. Fashion Design

Fashion design is the applied art dedicated to clothing and lifestyle accessories created within the cultural and social influences of a specific time [4]. The first fashion-designer is known to be Charles-Frederick-Worth. As Wikipedia reads "around the start of the twentieth-century, fashion magazines began to include photographs and became even more influential than in the past. In cities throughout the world these magazines were greatly sought-after and had a profound effect on public taste. Talented illustrators—among them Paul Iribe, George Lepape and George Barbier—drew exquisite fashion plates for these publications, which covered the most recent developments in fashion and beauty".

And World War II caused many radical changes in the fashion industry. A new youth style emerged in the Fifties, changing the focus of fashion forever. As the installation of central heating became more widespread the age of minimum-care garments began and lighter textiles and, eventually, synthetics, were introduced [5]. Recently creativity of a career in fashion design draw many people to the fashion design training and thus the training organisations has made Coursework in a fashion design program typically includes knowledge about Color, Textiles, Sewing and tailoring, Pattern making, Fashion history, CAD (Computer-aided design), Clothing design (menswear, footwear, etc.) in an effort to create training tools in this field.

3. Fashion Design - Telestia Trainer: Simplified Method Fashion Design (CD-ROM)

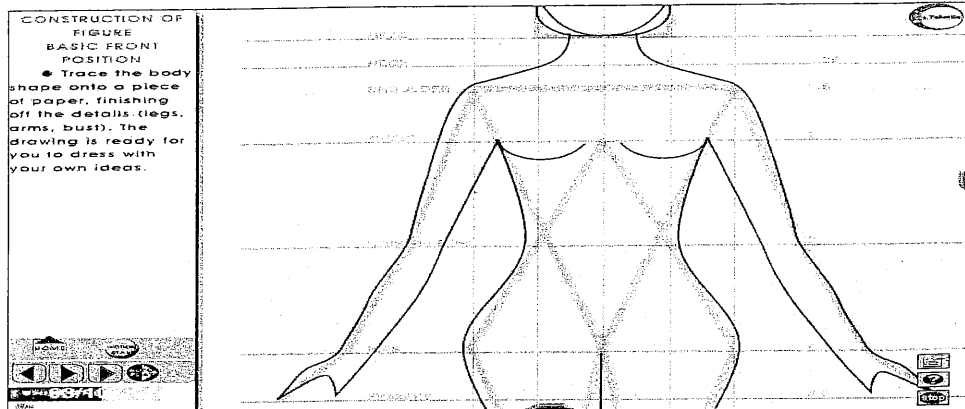
"The Fashion Design Telestia Trainer" is delivered through interactive multimedia software and is based on a revolutionary method that allows even those who find drawing difficult to express their ideas visually. The course includes separate sections, which show you how to design the basic figure in various poses, how to draw garment parts and how to draw the dressed figure. With visual terminology you can learn how to recognise and design different parts of the garment. Whereas in the second part of the course you can learn how to apply design principles and the theory of creative design in order to make your own design collections, as well as techniques of textile and garment illustration.

Fashion like any other form of art, is served by its artists and its craftsmen. It's high time this distinction is made, in order to understand the essence of the matter. Both artists and craftsmen, however, need to possess necessary knowledge and skills in order to become successful in their chosen field. This tool tries to combine the skills of the craftsman with the aesthetic rules that the artist adheres to within Fashion Design. It teaches principles of Fashion Drawing in a very simple and quick way. So, it is useful to a Fashion Designer, a Stylist, a Manufacturer, a Wholesale Buyer/ Seller, a Retailer, a Fashion Journalist, a Modelist/ Pattern-Cutter and a Dressmaker/ Tailor.

While a certain amount of talent is required to be a Creative Designer, talent in Fashion Drawing is not absolutely necessary in order to become successful in the other relative fields. Fashion Drawing is the medium through which ideas are visualised, and thus, can develop from original conception to production and the fashion market. It is a kind of language through which communication is achieved between the various levels of fashion production. Fashion Drawing is the medium by which ideas are transferred to all levels of production with absolute clarity. These skills are essential to anyone occupied within Fashion. In this era of mass production and quick response Fashion Drawing is all the more necessary. It is known that the founder of Haute - Couture, Worth, did not have sketching skills and had to transfer his ideas by modelling on a stand every time.

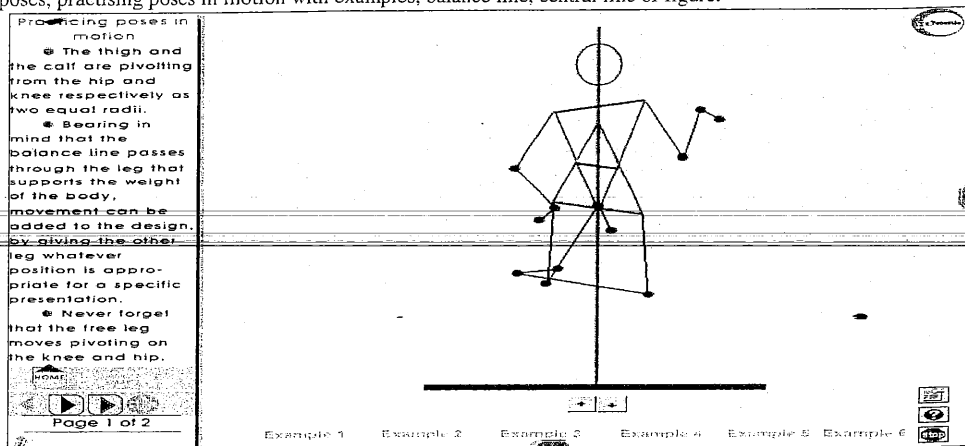
3.1. Figure Construction

This lesson includes the construction of basic front position, construction of figure basic front position, construction of figure basic $\frac{3}{4}$ pose, back pose, small scale front, back and $\frac{3}{4}$ poses, male figure, children's figures, examples of different poses.



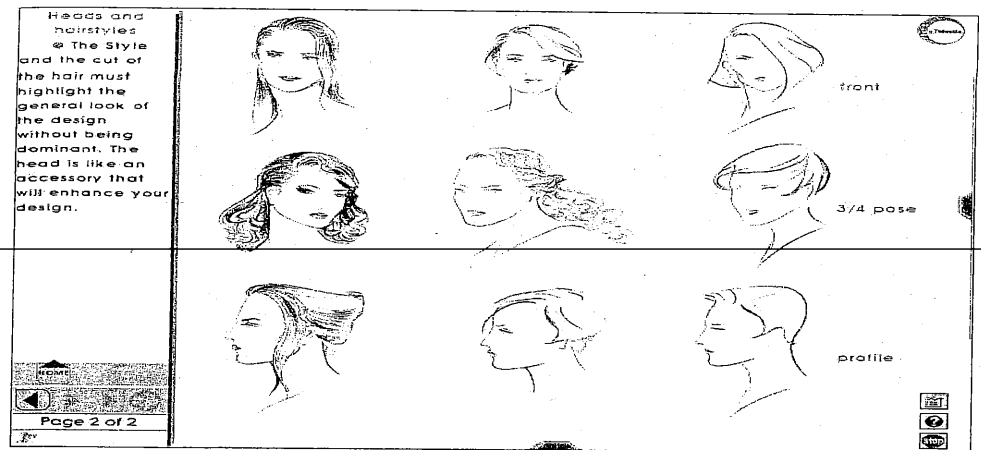
3.2. Poses in Motion

This lesson includes leg movement: front position, leg movement: 3/4 pose, arm movements: 3/4 and front poses, practising poses in motion with examples, balance line, central line of figure.



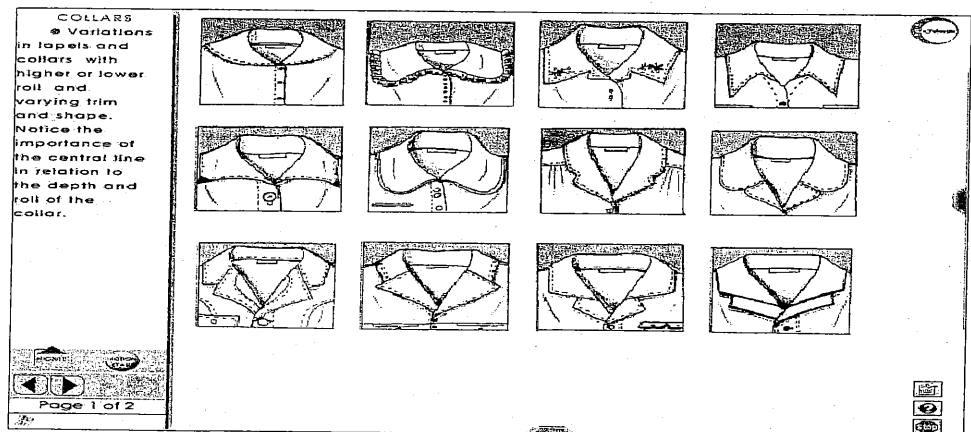
3.3. Head, Hands and Feet

This lesson consists of Hands, feet and shoes, head: front pose, head: side profile, heads and hairstyles, male head.



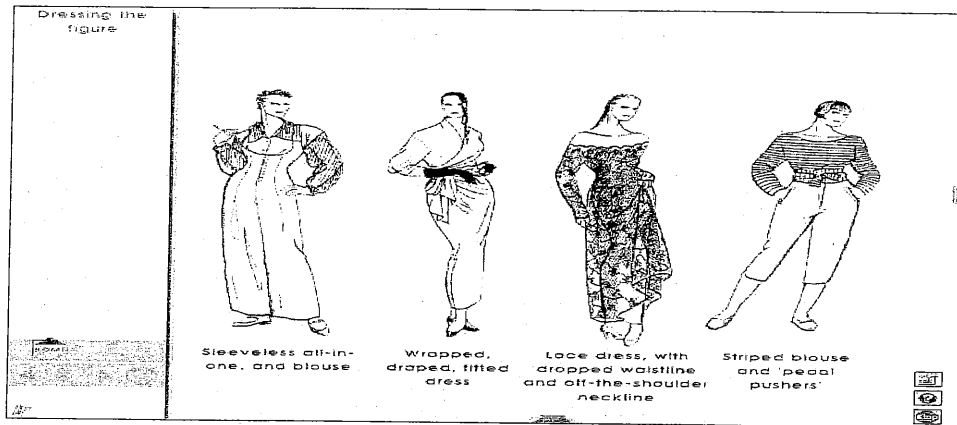
3.4. Garment Parts

This lesson covers skirts, trousers, short sleeves, long sleeves, necklines, collars, openings, closers and fastenings, bodices, jackets, long jackets, coats, belts, cuffs, pockets, details and elements of men's wear,



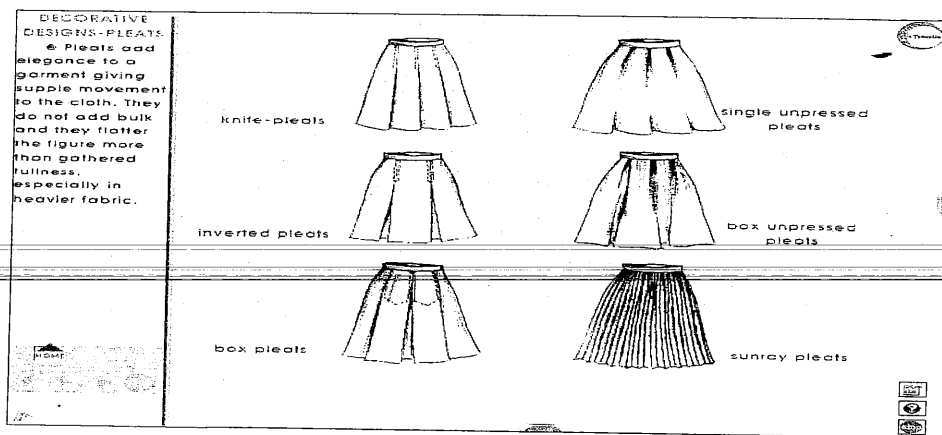
3.5. Dressing the Figure

This part includes various silhouettes and their relation to the body, pose and style, poses and male figure dressing, examples of dressed children's figures.



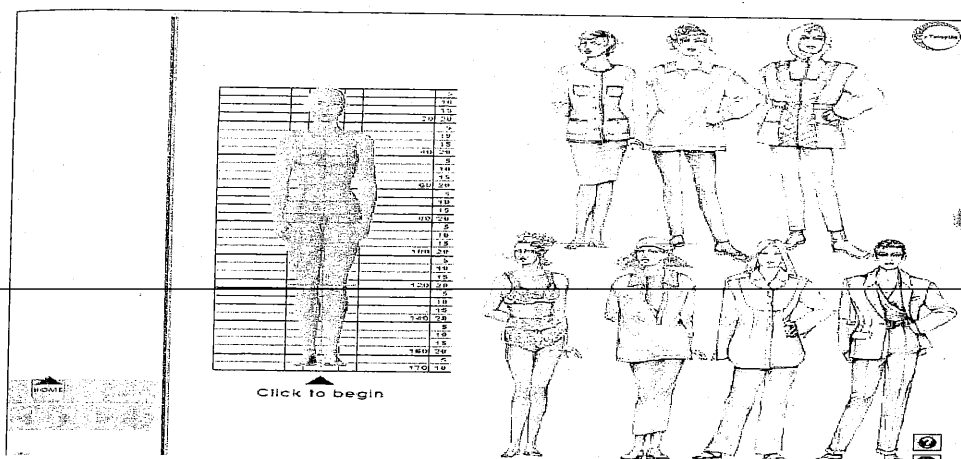
3.6. Technical Features

This lesson is about seams, decorative designs, pleats, frills and bows.



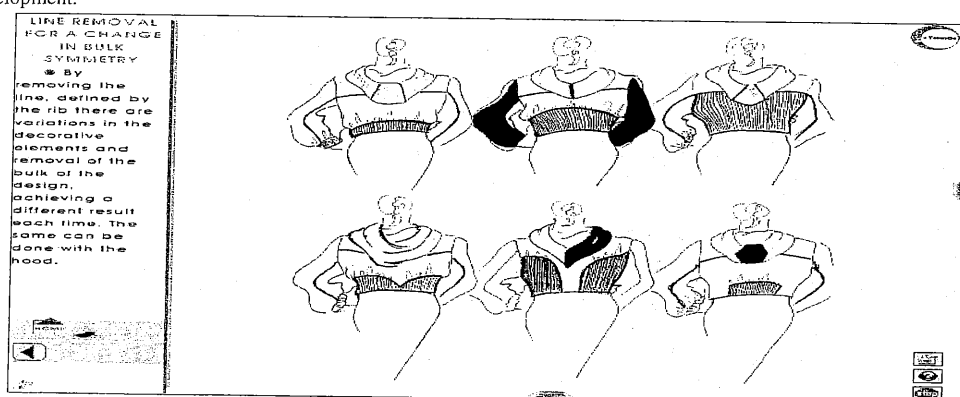
3.7. Technical Drawing

The coverage of this lesson is Basic principles in technical drawing, seven representative examples: Chanel suit, knitted jumper, bulky casual jacket with quilted plastron and a hood, lingerie set, bra and brief, loose knitted blouse, lightly loose long shirt, two-piece trouser suit.



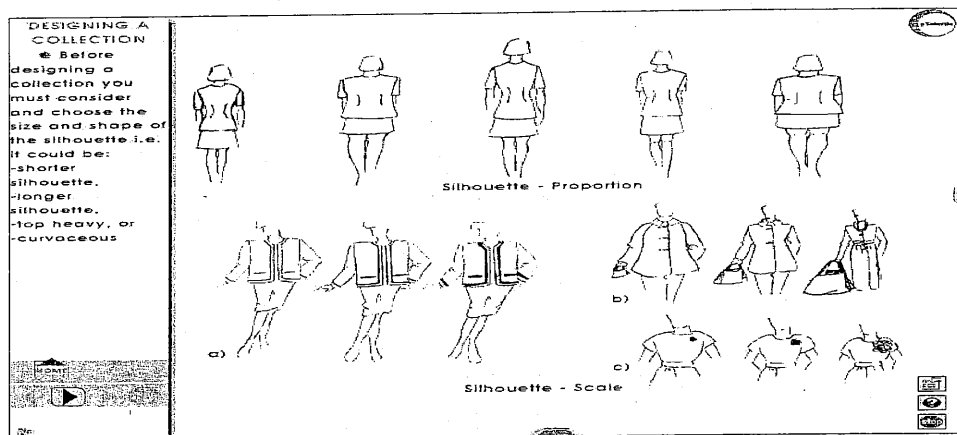
3.8. Design Principles

This lesson consists of basic principles of fashion design, line, lines in symmetry, direction, colour gradation, line removal for a change in bulk symmetry, repetition, combinations, symmetry in volume, and gradual development.



3.9. Body Types

The last lesson is about designing a collection, aesthetics: basic principles for the organisation of a capsule wardrobe, age, colours, personal colours, the petted figure, the tall figure, the thin figure, the heavily bond figure, heavy bones below the waist, and heavy bones above waist.



4. Conclusion

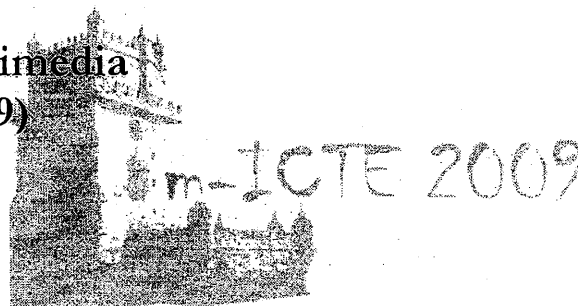
Product development in the fashion industry in Europe is undergoing a dramatic change and it changes the way companies are coming together in this new collaboration landscape.¹ One of the major problems of the clothing industry at the moment is that the overall level of skills and qualifications needs 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. Fashion Design-Telestia Trainer: Simplified Method Fashion Design (CD-ROM) is a training tool in fashion design and it is now under transfer through the LdV Project Excellence in Textile through "Fashion Express" (Project no: LLP-LdV-TOI-2007-TR-061) [4]. The training tool is in already English, German, French, Italian, Spanish, and Greek. At the beginning of 2010, Turkish and Romanian versions will be introduced to vocational education and training.

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CERTIFICATE OF WORK PRESENTATION

The Organizing Committee of the V International Conference on Multimedia and ICT in Education (m-ICTE2009), held at *Universidade Nova de Lisboa* (Portugal), during 22-24 April 2009, hereby declares that

Mehmet Sahin

has publicly presented and defended the following accepted contribution "ICT-based content in textile training" within the Scientific Program of the Conference, under the Poster presentation mode.

For it to be included on the timely effects, this certificate is issued in Lisbon, Portugal, on 24 April 2009.

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