

TRAINING IN TEXTILE: A TRANSFER OF INNOVATION PROJECT AS ELEARNING TOOL

Assoc. Prof. Dr. Yavuz ERİŞEN
Assoc. Prof. Dr. Nadir ÇELİKÖZ
Assist. Prof. Dr. Mehmet ŞAHİN

Faculty of Vocational Education
Selcuk University, Konya-TURKEY

ABSTRACT

Distance education is becoming an increasingly common and accepted form of learning as the introduction of Information Communication Technologies (ICT) makes the possibilities of Communicating across distances of space and time. Distance Education is unique as it encourages a more flexible learnercentric approach and provides opportunities for learning anywhere and anytime. Therefore, today, there are many private and public, non-profit and for-profit institutions worldwide offering distance education courses from the most basic instruction through to the highest levels of degree and doctoral programs. Vocational education is one of the most common fields where distance education in any form is used. The aim of this paper is to present a distance education tool in vocational education where the Telestia products were transferred into Turkish and Romanian. The products are are a) Pattern Construction, b) Fashion Design, c) Pattern Grading, d) Fashion Express pattern making, e) Sewing, f) e-Telestia (on line training school, specialising in clothing and fashion courses). They are all based on the same principles and use them to cover the needs of the specific subject every time. Among these products, two training modules, TELESTIA AB: Fashion Express and Pattern Making, were transferred into Turkish and Romanian under a Transfer of Innovation project.

Key Words: Textile training, Distance education, Fashion design, Pattern construction.

INTRODUCTION

It is now a fact of the modern age that distance education is becoming an increasingly common and accepted form of learning. Distance education is made possible, even desirable, by advances in technology which allow a teacher to instruct students in multiple locations. Distance education allows not only a teacher but also a learner to overcome the boundaries of space and time. There is a challenge in defining the distance aducation as Shale (Shale, 1988, p. 25) remarked: "Distance education is beset with a remarkable paradox - it has asserted its existence, but it cannot define itself." Despite the debate about distance education, there is no doubt that distance education is different from other instructional approaches. Garrison and Shale (1987, p. 10-11) defines distance education as an education type that offers a minimum set of criteria and allows more flexibility. They suggest that:

- distance education implies that the majority of educational communication between teacher and student occurs non contiguously
- distance education involves two-way communication between teacher and student for the purpose of facilitating and supporting the educational process
- distance education uses technology to mediate the necessary two-way communication.

Although distance education dates back to 1728 in USA, when an advertisement in the Boston Gazette was seeking students for lessons to be sent weekly, distance education in modern sense started with the development of postal services in the 19th century. Printed materials were posted to the learners before electronic technology got the step further and lessened the workload. The first catalog of instruction films appeared in 1910 (Reiser, 1987) and in 1913, Thomas Edison proclaimed that, due to the invention of film, "Our school system will be completely changed in the next ten years" (Saettler, 1968, p. 68). The 1940s saw great interest in television by educators and by 1948 only five U.S. educational institutions were involved in television. In the late 1960s and early 1970s, microwave technology developed, costs went down, and universities began to set up microwave networks. Finally, the 1990s experienced the emergence of digital media and with the introduction of Internet into education in all respects, distance education was not regarded as "distance" any longer. However, the history of distance education shows a field that appears to be in a constant state of evolution. New ideas and technologies balanced a steady resistance to change and nontraditional education tried to blend with traditional education to meet the challenge of constantly changing learning theories and evolving technologies. In spite of the fact that technology appears to be against distance education, it is clear that recent developments in technology have removed some of the disadvantages in distance education. As Bates (1984) suggests, new technologies promise "a wider range of teaching functions and a higher quality of learning, lower costs, greater student control, more interaction and feedback for students" (p. 223). When the sources about education are studied, it is clearly seen that efficient and effective utilization of modern information and communication technologies is possible through "distance education", which can be regarded as a solution for inequalities of opportunity, life-long education and taking advantage of learning technologies and individual learning (Kaya et al., 2004). In addition, digital technologies for learning, such as self-paced learning modules, multimedia case studies, simulations, video tutorials, and communications and assessment tools, can increase the array of learning opportunities for adult students and their teachers. The development of computers and the internet have made distance learning distribution easier and faster and have given rise to the 'virtual university, the entire educational offerings of which are conducted online. A study by Gehlauf, Shatz and Frye (1991) on the reaction of teachers to the teaching experience in the traditional classroom compared to interactive television shows teachers wanting to cling to more traditional approaches but finding these methods not as effective, teachers feeling the need to be better organized, and feeling the need for training for distance education teaching.

Distance Education in fact is an essential part of lifelong learning concept. In this context, as announced on the official webpage of the European Commission (http://ec.europa.eu/education/index_en.htm), the Leonardo da Vinci Programme funds practical projects in the field of vocational education and training. Initiatives range from those giving individuals work-related training abroad to large-scale co-operation efforts. Part of the European Commission's Lifelong Learning Programme, this programme funds many different types of activities of varying scales. These include 'mobility' initiatives enabling people to train in another country, co-operation projects to transfer or develop innovative practices, and networks focusing on topical themes in the sector. The people able to benefit from the programme range from trainees in initial vocational training, to people who have already graduated, as well as VET professionals and anyone from organisations active in this field.

The Leonardo da Vinci Programme funds several types of projects ("actions") related to vocational education and training: 'Mobility' actions enable people to travel abroad to have a learning or training experience. In "Partnerships", organisations working in the vocational education and training sector from different European countries can work together in various types of small-scale partnerships. Partnerships should involve the business side.

In "Multilateral projects", as larger-scale actions, organisations from different countries work together to develop working practices in the vocational education and training sector. "Development of innovation" projects, under Multilateral projects, improve training systems by producing innovative approaches to vocational education and training such as teaching materials, courses and methodologies. In addition, "Transfer

of innovation" projects help to spread the most promising new developments. The aim of Leonardo da Vinci Multilateral Projects "Transfer of Innovation" is to improve the quality and attractiveness of Vocational Education and Training (VET) in the participating countries by transferring existing innovations to new legal, systemic, sector, linguistic, socio-cultural and geographic environments through working with transnational partners. Innovation transfer projects generate synergies by exploiting existing VET innovations (no "re-inventing the wheel"). In this context, the Telestia products are the ideal modules as the available tools of distance education in vocational education. The products are a) Pattern Construction, b) Fashion Design, c) Pattern Grading, d) Fashion Express pattern making, e) Sewing, f) e-Telestia (on line training school, specialising in clothing and fashion courses). They are all based on the same principles and use them to cover the needs of the specific subject every time. Among these products, two training modules, TELESTIA AB: Fashion Express and Pattern Making, were transferred into Turkish and Romanian under the project titled "Excellence in Textile through "Fashion Express" (LLP-LdV-TOI-2007-TR-061).

PROJECT ACHIEVEMENTS

The project achieved much more than the objectives were stated initially, because it made a lot of adaptations that were very lengthy and more costly to address the needs realised in both the countries, after the initial trainings. It went into a lot of trials and deep analysis of the needs and adapted the material to the needs identified. This however was more than expected because it required much more work both on the part of the original project team and in relation to translation by the Romanian and Turkish partners.

The Overall Contribution of the Trans-National Work

In conclusion, the transfer of multimedia material into other languages and cultures is not an easy task. This becomes even more difficult when there is the issue of special terminology with terms and definitions. Especially in Fashion and Clothing, some of them may have been borrowed from other languages and may have mixed or unclear meanings in the new surrounding or sector jargon. All this requires great care so misunderstandings are avoided. At the same time, it is important that a new technological approach must consider the willingness of the new culture to comprehend and accept it. This makes all important more extensive use of multimedia and any other design and presentation technique that will make the material clearer and more appealing. In our case, a product that was already in five languages was transferred in two others and that was a gigantic task in relation to comprehension of detailed terminology. This was achieved after a lot of cooperation trying to make clear to the translators what each term really meant for the specific sector.

The Impact Factor

With this project, two training modules were transferred and incorporated in the course structures of the transnational partners. They were tested in use to record skills being lost in pattern making and fashion design, and to find a way to use advanced multimedia IT to simplify the training procedure in a clear and appealing way for both the amateur and the professional. It was agreed that they could meet the need for an eLearning media that could integrate traditional much needed skills, rapidly becoming extinct, into innovative training methods using advanced technology and distance learning media, with a European accreditation option, in order to meet rapid changes in workforce requirements.

In terms of Strategic Impact, these modules were observed to have a very powerful impact on the target groups in the partner countries. The current driving forces in the sector are related to design rather than traditional factors, such as raw material prices or production efficiencies. These training tools helped to improve competitiveness and enhance the capability of meeting short lead times in production and design with effective, standardised and customised results and for lower budgets. In addition, they lead to increased consumer response to clothing products.

This project has transferred a training tool in the textile training which is a virtual training tool. The tool is an e-learning training material that can be regarded as an innovation in Turkey as it will combine ICT use and interactive training in vocational training organizations. The trainers and trainees can have access to this virtual environment, and this in turn will lead to an innovative approach and methodology in the VET system in Turkey. Since the interactive training tool is ICT based, it can encourage ICT use in VET organizations in the partner countries Turkey and Romania.

Contribution to EU Policies

The training tool developed under this project contributes to EU policies because it aims to support participants in training and further training activities in the acquisition and the use of knowledge, skills and qualifications to facilitate personal development, employability and participation in the European Labour Market. It also wants to support improvements in quality and innovation in vocational education and training systems, institutions and practices. Finally, the tool aims to enhance the attractiveness of vocational education and training and mobility for employers and individuals and to facilitate the mobility of working trainees. In addition, the trainers and other sector representatives who participated in the training sessions got knowledge about this new approach and method used in the training tool and thus we can say that the products in a way supported participants in training and further training activities in the acquisition and the use of knowledge, skills and qualifications to facilitate personal development, employability and participation in the European Labour Market. Finally, they noticed that the products transferred are to support improvements in quality and innovation in vocational education and training systems, institutions and practices.

Leonardo da Vinci Operational Objectives

The benefits of the tool are also in parallel with the LdV operational objectives. The participants of the training meetings were mainly the trainers who became aware that the products are 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. Thus, they found that the products can support the development of innovative ICT-based content, services, pedagogies and practice for lifelong learning. The training tool improves the quality and increases the volume of mobility throughout Europe of people involved in initial vocational education and training and in continuing training, so as to increase placements in enterprises to at least 80.000 per year by the end of the LLP. It also improves the quality and to increase the volume of co-operation between institutions or organisations providing learning opportunities, enterprises, social partners and other relevant bodies throughout Europe. In addition, it facilitates 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.

The tool also supports the development of innovative ICT-based content, services, pedagogies and practice for lifelong learning. Since the products transferred are based on distance learning methodology using the facilities of ICT use, they can help improve the quality of VET systems and practices. In addition, they can be used as basis for all the textile related training organizations. In this case, these VET organizations are forced to improve the training system according to the methods and approach presented here. This will lead to practice focusing on quality.

Lisbon Key Competences

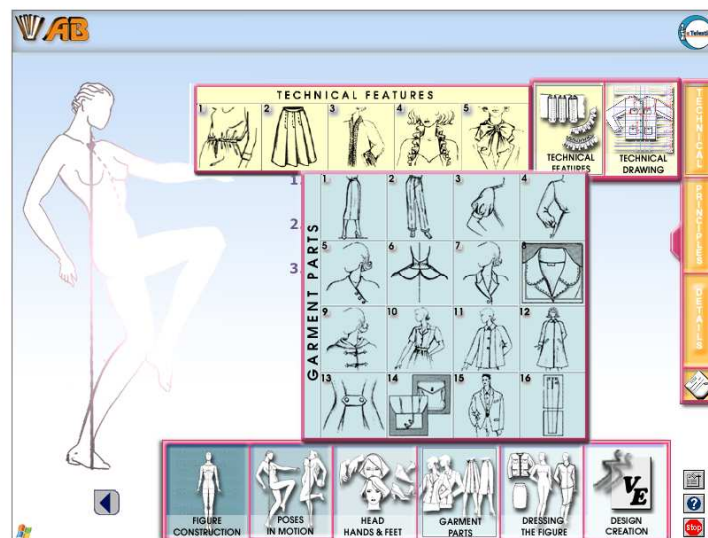
The key competences determined and presented under Lisbon Key Competences are Communication in the mother tongue, Communication in the foreign languages, Mathematical competence and basic competences in science and technology, Digital competence, Learning to learn, Interpersonal, intercultural and social competences and civic competence, Entrepreneurship and Cultural expression. Since these products can be used by any one who wishes to learn about pattern construction and fashion design in textile, they can be a source for these individuals. Thus, they encourage "learning to learn" with its approach, content and design.

THE MODULES TRANSFERRED

The following awards were given to the modules transferred:

- the Europrix quality seal award, 2002.
- the European Seal of Excellence Award in Multimedia (Platinum) 2005.
- and named one of five best practice e-learning projects of Leonardo Da Vinci in Europe, 2007.
- the First Cool Stuff of 'hot technologies transforming the industry' in the SPESA exhibition in Miami in 2007.

Module 1: Fashion Design



The Fashion Design course provides training in six areas:

- Basic Figure drawing and poses
- Drawing garment parts
- Drawing a dressed figure
- Technical drawing of garments with respect to pattern making principles
- Design principles to understand the theory behind creative design
- Illustration tips to enhance your drawing skills with shade, colour and a variety of illustration techniques.

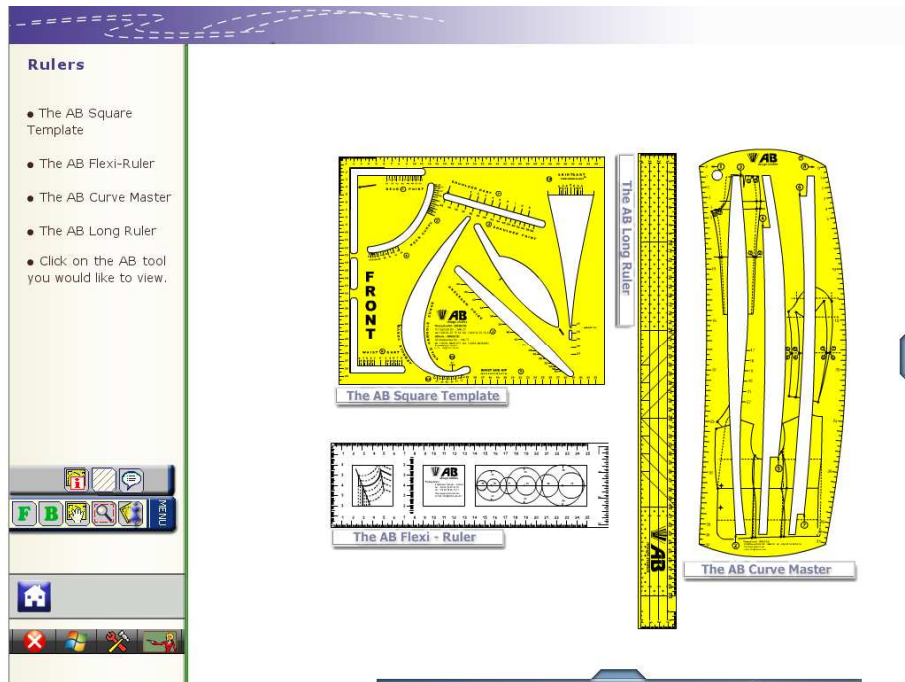
The full programme for Fashion Design contains all these areas in two sections. You can study both or either depending on the level you want to reach in Fashion Design. The sections covered in this fashion design online course are: Fashion Design Technical and Fashion Design Creative. The course is suitable for individuals wishing to develop these skills for a career in fashion, for those who would like to draft and design for their own personal use, and also for use by Colleges and Institutes of Further Education to supplement their curriculum and offer students alternative study media, facilitating the tutors job.

The course has already been endorsed and used by the following Organizations, Colleges and Universities:

- Manchester Metropolitan University, UK
- Colegg Gwent, Wales, UK
- Skillfast-UK, Sector Skills Council for Apparel, Textiles & Footwear, UK
- Educatel: Formation a Distance, France

- Fachhochschule Albstadt Sigmaringen, Germany
- Enterprise Skills, Australia

Module 2: Pattern Making



The Pattern Making (Pattern Construction) course provides training in three areas:

- Drafting: How to construct block patterns and pattern adaptation to develop your own styles ready for assembly.
- Lay planning: How to lay out your pattern on your chosen fabrics.
- Assembly: Basic sewing and assembly instructions.

The Pattern Making courses can be complemented with the Optional Tools that come as an extra to the course. The pattern cutting system has been available for over 30 years and has been tested and used by thousands all over the world. There is no limit to your design ideas! Learn how to create your own styles and how to bring your ideas to life. The full program for Pattern Making (Pattern Construction) contains three complete sections: Womenswear Pattern Making, Menswear Pattern Making and Childrenswear Pattern Making. Each sub-section can be studied as a separate complete course. In each section, there are common parts, which is why if you choose to study only one section and then decide to study another section, you will benefit from a reduced price. It is more cost effective to register for the complete course rather than to purchase each section individually. The course is suitable for individuals wishing to develop these skills for a career, for those who would like to learn pattern making for their own personal use, and also for use by Colleges and Institutes of Further Education to supplement their curriculum and offer students alternative study medias facilitating the tutors job. The course has already been endorsed and used by the following Organizations, Colleges and Universities:

- Manchester Metropolitan University, UK
- Colegg Gwent, Wales, UK
- A.F.P.A., France
- Skillfast-UK, Sector Skills Council for Apparel, Textiles & Footwear, UK

- Educatel: Formation a Distance, France
- Fachhochschule Albstadt Sigmaringen, Germany
- Enterprise Skills, Australia

CONCLUSION

The concept of the project was to transfer the successful results of the clothing and fashion training TELESTIA CDs into the Turkish and Romanian languages considering the local and special needs of every country in training and for its industry. The transfer was carried out and, in this way, the project team served their organizations by contributing to multilingualism and internationalism targets. Finally, the tangible results transferred were (a) CD for Pattern Construction (Turkish and Romanian), (b) CD for Fashion Design (Turkish and Romanian), (c) Book: Pattern Construction in Turkish and (d) Book: Pattern Construction in Romanian. The modules are also available online based on membership rule set out by the product owner. Although the modules are distance education tools, the product centre always serves to trainees by giving seminars so that they can find solutions to the problems they might encounter while learning.

IJONTE's Note: This article was presented at 3rd International Conference on New Trends in Education and Their Implications - ICONTE, 26-28 April, 2012, Antalya-Turkey and was selected for publication for Volume 3 Number 3 of IJONTE 2012 by IJONTE Scientific Committee.

BIODATA AND CONTACT ADDRESSES OF AUTHORS



Yavuz ERIŞEN is Assoc. Prof. Dr. at the Faculty of Vocational Education, Selcuk University, Konya, Turkey. He has been teaching; Teaching and Learning Strategies, Curriculum Design and Instruction, Assessment and Evaluation, Instructional Design. He has been involved in LdV projects focusing on virtual training and curriculum development as Manager.

His research interests are curriculum design for vocational and technical education, lifelong learning, and quality standards in education.

Assoc. Prof. Dr. Yavuz ERIŞEN
Faculty of Vocational Education
Selcuk University
Konya, TURKEY
E. Mail: erisenyavuz@gmail.com



Nadir ÇELİKÖZ is Assoc. Prof. Dr. and Vice Dean at Faculty of Vocational Education, Selcuk University, Konya, Turkey. He has been teaching Research Methods in Education, Curriculum Design and Instruction, Assessment and Evaluation, Educational Statistic, Test Construction. He has been involved in LLP projects focusing on multiple intelligence theory, measurement and assessment as researcher and instructor.

His research interests are curriculum design for vocational and technical education, needs assessment, theories of learning, multiple intelligences and lifelong learning.

Dr. Nadir ÇELİKÖZ
Faculty of Vocational Education
Selcuk University
Konya, TURKEY
E. Mail: ncelikoz@selcuk.edu.tr



Mehmet ŞAHİN is Assist. Prof. Dr. at the Faculty of Vocational Education, Selcuk University, Konya, Turkey. He has been teaching Research Methods and Techniques, Curriculum Design and Instruction, Assessment and Evaluation in addition to vocational language teaching. He has been involved in LdV projects focusing on virtual training and curriculum development as coordinator and instructor.

His research interests are curriculum design for vocational and technical education, virtual training, blended learning and lifelong learning.

Assist. Prof. Dr. Mehmet ŞAHİN
Faculty of Vocational Education
Selcuk University
Konya, TURKEY
E. Mail: mesahin@selcuk.edu.tr

REFERENCES

Bates, A.W. (1984) *Broadcasting in Education: An Evaluation* London: Constables.

Evans, T., & Nation, D. (1993). *Reforming open and distance education: Critical reflections*. London: Kogan Page.

Garrison, D.R., & Shale, D. (1987). Mapping the boundaries of distance education: Problems in defining the field. *The American Journal of Distance Education*, 1(1), 7-17.

Gehlau, D.N., Shatz, M.A. & Frye, T.W. (1991). Faculty perceptions of interactive television instructional strategies: implications for training. *The American Journal of Distance Education* 5(3), 20-27.

Kaya, Z., Erden, O. Cakır, H. ve Bağırşakçı, N.vB. (2004). Preparation of web-based presentation of distance education need unit of the introduction to distance education course (Uzaktan eğitimin temelleri dersindeki uzaktan eğitim ihtiyacı ünitesinin web tabanlı sunumunun hazırlanması). *Turkish Online Journal of Educational Technology (TOJET)* 3. Available at <http://www.tojet.net>.

Lewis, R. (1992). What is open learning? In A. Tait (Ed.), *Key issues in open learning* (pp. 11.23). Harlow, UK: Longman.

Mason, R. (1998). *Globalising education: Trends and applications*. London & New York: Routledge.

Paul, R. H. (1990). *Open learning and open management: Leadership and integrity in distance education*. London: Kogan Page.

Reiser, R. A. (1987). Instructional technology: A history. In R.M. Gagne (Ed.) *Instructional technology: Foundations* (pp. 11-48). Hillsdale, NJ: Lawrence Erlbaum Associates.

Saettler, Paul (1968). *History of Instructional Technology*. New York: McGraw-Hill.

Shale, D. 1988. Toward a reconceptualization of distance education. *The American Journal of Distance Education* 2 (3): 25-35.