

# ERASMUS+ PROJECT: TEXTILE AND CLOTHING KNOWLEDGE ALLIANCE

## Future textile and clothing managers for export, marketing, innovation, sustainability and entrepreneurship oriented companies - TECLO

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**REZUMAT.** În decembrie 2014, paisprezece parteneri din opt țări au format un consorțiu în cadrul proiectului intitulat „Viitorii manageri ai companiilor orientate către export, marketing, inovare, sustenabilitate și antreprenoriat (TECLO)”: o Alianță a cunoașterii în textile și confecții, co-finanțată de Comisia Europeană în cadrul programului Erasmus+. Datorită schimbărilor permanente care au loc în sectorul de textile și confecții, cerințele calificărilor profesionale în acest sector se modifică și ele. Curricula în domeniul textilelor și confecțiilor trebuie să evolueze și să se orienteze către antreprenoriat, inovare și management, astfel încât noua generație de manageri să dețină noi competențe într-o perspectivă internațională mai largă, bazate pe o conștientizare a problematicei legate de promovarea produselor, inovarea non-tehnologică, sustenabilitate și leadership. Proiectul TECLO are în vedere nevoile de noi competențe și abilități cerute de industria europeană de textile și confecții. În acest context, principalele rezultate ale proiectului vor fi materializate în: dezvoltarea de metode sectoriale pentru anticiparea cunoștințelor, competențelor și abilităților necesare în sectorul de textile și confecții; realizarea curriculei la nivelul UE pentru noul profil profesional al managerilor din sectorul de textile și confecții (TECLOM), înzestrat cu abilități sociale, antreprenoriale și de management mai avansate; dezvoltarea și pilotarea unui curs tip MOOC pentru managerii (TECLOM).

**Cuvinte cheie:** curriculum în textile și confecții, competențe manageriale, inovare non-tehnologică, MOOC.

**ABSTRACT.** On December 2014 a consortium of fourteen partners from eight European countries joined the project titled “Textile and Clothing Knowledge Alliance. Future textile and clothing managers for export, marketing, innovation, sustainability and entrepreneurship oriented companies (TECLO)”: a two years Knowledge Alliance, co-founded by European Commission under the Erasmus+ program. Due to the ongoing changes in the textiles and clothing sector, the qualification requirements of are also changing. Textiles and clothing curricula should evolve to an increasing focus on entrepreneurship, innovation and management, thus a new generation of managers can bring new skills, a more international perspective and more awareness of issues related to export promotion, marketing, non-technical innovation, sustainability and leadership. In order to answer the textiles and clothing European industry new skills needs, TECLO project main outcomes are going to be: the development of sectorial methods for anticipation of skills needs; the set-up of the EU curricula of the new professional profile of the Textiles and Clothing Managers (TECLOM), endowed with more advanced social, entrepreneurial and management skills; the development and pilot of a MOOC for the new TECLOM.

**Keywords:** textiles & clothing curricula, managerial skills, non-technical innovation, MOOC.

## 1. INTRODUCTION

Textiles and clothing, one of the most important sectors of activity in Europe with more than 3 million persons employed, has been severely affected by crisis and restructuring processes. Globalisation of production and the competitiveness of emerging countries, impact of the financial crisis, lack of

qualified staff, lifestyle changes and environmental issues in that respect pose huge challenges, especially to textiles and clothing industry.

If looking at the ongoing changes can be seen that the qualification requirements are changing throughout the sector, while the higher education provision is no more able to offer suitable solutions. Thus, active measures must be implemented across

the EU in order to provide the sector with know-how for a better anticipation and positive management of change, better adapting to the sector's future skills need.

This project focuses on the three main problems affecting the textiles and clothing industry: consumer demand, innovation and sustainability.

In order to overcome sectoral constraints two conditions are essential. The first one is leadership with a good external orientation and network, a realistic vision accepting constraints, perseverance in the execution of strategy and patience in reaping its financial fruits, motivational skills towards workers with a fine understanding of alignment of marketing, production, finance and human resources.

The second condition leads to the first one. Competitive firms have a strong external orientation and management with multidisciplinary skills. Management education combining professional and transversal or strategic skills associated with entrepreneurship.

The skills shortage is an important constraint. More social dialogue is required at all levels to address the skills shortage and to set road-maps for innovation and action plans. This requires intense European networking between universities and industry.

In this context, the European Commission has introduced the **New Skills for New Jobs initiative**, with the aim to serve as a guide in launching further EU and other actions to promote the strategic management of human resources and to foster stronger synergies between innovation, skills and jobs, taking into account the global context and encouraging adaptations to national and regional level.

Modernization of T&C curricula, especially in the Textiles and clothing sector, can make the difference. The curriculum should evolve to an increasing focus on entrepreneurship, innovation and management. A new generation of managers can bring new skills, a more international perspective and more awareness of issues related to export promotion, marketing, non-technical innovation, sustainable supply chain management and leadership.

## 2. MAIN OBJECTIVES OF THE TECLO PROJECT

The TECLO alliance was created in order to:

- improve sectorial identification and anticipation of skill needs and their integration into HEI provision;
- develop the needed managerial skills considering the European labour market changes;

- help universities develop curricula that are relevant and meet the needs of the sector, equipping graduates with the right skills and mind-sets for the labour market, by promoting closer cooperation with the textiles and clothing employment sector.

TECLO objectives are the modernisation of Europe's higher education systems in the field of textiles and clothing through a better anticipation of skill needs based on development of sustainable partnerships between education and employment, which are highly needed.

This Alliance will result in a facilitated sector adaptation during crisis processes through a better anticipation and positive management of change, via the training of a new generation of strategic managers able to foster stronger synergies between innovation, skills and jobs, taking into account the global context and encouraging adaptations to national and regional levels in a sustainable way.

The strategy that will be developed will be focused on overall key objectives of:

1. Enhanced innovation in higher education, business and in the broader textile and clothing environment, via (1) jointly developed new learning and teaching methods centred on learners and really problem-based, and (2) jointly developed solutions for challenges and problems affecting the sector. Focus on: export oriented management, non-technological innovation, marketing innovation, re-engineering of processes according to sustainability, CSR and Quality.

2. Improved entrepreneurship mind-set and skills in the new generation of managers of the sector, via innovative approaches of transversal skills learning throughout higher education programme developed in cooperation with enterprises. Focus on entrepreneurship skills, namely: leadership, risk-taking and creativity.

Textiles and clothing industry is hugely dominated by SMEs. Due to these specific circumstances, strategic and visionary skills as well as initiative-taking are even more important for future textiles and clothing managers of SMEs and micro enterprises, i.e. top management and company owners/entrepreneurs, but also including different specialist managers, such as HRM, finance, sales, and R&D management.

TECLO aims at creating a new professional profile for the textiles and clothing sector: the Future textile and clothing Manager for export, marketing, innovation, sustainability and entrepreneurship oriented companies (TECLOM), endowed with innovative management skills, tools and intervention methods needed in order to face the main trends affecting the sector (Globalisation, Competitiveness

of emerging countries, Financial crisis and Environmental issues).

### 3. METHODOLOGY

The **TECLO** consortium is composed of the following fourteen organizations:

Link Campus University (Italy), Universiteit Gent/ Department of Textiles (Belgium), Material Connexion Italia Srl (Italy), Associació Agrupació d'Empreses Innovadores Tèxtils (Spain), Universitat Politècnica de Catalunya (Spain), Technological Education Institute of Piraeus (Greece), A Fotopoulou GLP (Greece), Creative Thinking Development (Greece), "Gheorghe Asachi" Technical University of Iasi (Romania), Asociatia Absolventilor Facultatii de Textile-Pielarie din Iasi (Romania), University of Ljubljana (Slovenia), Fundacja Rozwoju Przedsiębiorczosci (Poland), CIAPE - Centro Italiano per l'Apprendimento Permanente (Italy), Maison de la Promotion Sociale (France).

The methodology proposed for achieving the objectives consists in the following steps:

- Development of sectoral methods for anticipation of skills needs;
- Design and implementation of specific initiatives that stimulate employers to co-invest and participate in the activities of higher education institutions, research and business centres to address new skills requirements;
- Development of a new flexible, innovative learning approach and delivery method for the textiles and clothing HEI sector, taking into account barriers existing among SMEs and micro enterprises

and based on experiential learning / real-life situations in which students take a more active involvement in their education;

- Set up of the EU curricula of the new professional figure of the Future Textiles and clothing Manager (TECLOM), endowed with more advanced social, entrepreneurial and management skills. The new European Qualification Framework of the TECLOM, in terms of knowledge, skills and competencies needed in order to be able to: Implement export oriented strategies; Implement non-technological and marketing innovation; Re-engineer processes according to sustainability, CSR and Quality; Pursue change and efficiency through innovative entrepreneurship skills.

- Development of flexible devices for validation, transfer and recognition of entrepreneurship skills, using ECVET principles;

- Providing the sector with a **Massive Open Online Course (MOOC)** for the new TECLOM – with a strong use of simulation and real-life situations;

- Pilot the MOOC among textiles and clothing university students and managers (8 Learning Labs);

- Set up of a European Development Network for TECLOM pooling the assets of universities, research centres, SMEs and large companies together.

### 4. EXPECTED RESULTS

#### 4.1. Short Term Results

The expected short term results of the TECLO project and the target groups as potential beneficiaries are presented in the following tables:

Table 1. Short term results for Higher education institutions in the textiles and clothing fields

Results	Qualitative indicators
<ul style="list-style-type: none"> <li>● 1 report: Anticipating skills in textiles and clothing industry</li> <li>● 1 report: A strategy for future knowledge intensive and innovative T&amp;C SMEs</li> <li>● 1 report: 10 Competitive advantages of partnerships among companies, higher education institutions, research and business centres</li> <li>● 1 EQF of the "Textiles and clothing Manager for Efficient and Innovative SMEs"</li> <li>● 1 European Development Network for cooperation between HEIs and companies within the T&amp;C sector</li> <li>● 1 MOOC for future textiles and clothing managers for Efficient and Innovative SMEs</li> </ul>	<ul style="list-style-type: none"> <li>- Improved capacities to attract and form human potential</li> <li>- Higher involvement of employer associations and trade unions in the definition of curricula</li> <li>- Modernized curricula with an increased focus on entrepreneurship and management, and the capability to respond to changing needs in the sector</li> <li>- Improved capacity to offer the 'soft skills' for process innovation, especially important to SMEs trying to close the productivity gap</li> <li>- Flexible, innovative learning approaches and delivery methods improving quality and relevance while expanding student numbers</li> <li>- Enriched teaching, improved learning experiences, support to personalised learning,</li> <li>- Facilitated access through distance learning</li> <li>- Improved capability to play a full part in the knowledge triangle (higher education, research and innovation) and to engage in projects focusing on reinforced cooperation with enterprises.</li> </ul>

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*Table 2. Short term results for SME's from the textiles and clothing sector*

Results	Qualitative indicators
<ul style="list-style-type: none"> <li>● 1 report: 10 Competitive advantages of partnerships among companies, higher education institutions, research and business centres</li> <li>● 1 Manifesto of competitive advantages</li> <li>● 1 Label for knowledge intensive SMEs</li> <li>● 150 Agreements for Knowledge intensive textiles and clothing SMEs</li> <li>● 1 European Development Network for cooperation between HEIs and companies within the Textiles and Clothing sector</li> </ul>	<ul style="list-style-type: none"> <li>– Higher involvement in the definition/validation of CV as well as in the design and delivery of Programmes</li> <li>– Higher skilled staff, esp. management, able to implement export, marketing, innovation, sustainability and entrepreneurship oriented strategies</li> <li>– HE curricula responding to changing needs in the wider economy</li> </ul>

*Table 3. Short term results for HE students and graduates from textiles and clothing sector*

Results	Qualitative indicators
<ul style="list-style-type: none"> <li>● 1 MOOC for future textiles and clothing managers for Efficient and Innovative SMEs</li> </ul>	<ul style="list-style-type: none"> <li>– Equipped with the right skills and mind-sets for the labour market</li> <li>– Higher focus on critical competences:</li> <li>– Strategic and visionary management</li> <li>– Intercultural competences in many functions</li> <li>– Network-based value chain management</li> <li>– International marketing and branding</li> <li>– Interdisciplinary and multi-skilled engineering</li> <li>– Quality-oriented production</li> <li>– Ecological knowledge as a cross-occupational competence</li> <li>– Increased soft skills – combining the ability to work across cultural barriers and environments; communication and entrepreneurial skills; sensitive to social responsibility</li> <li>– Increased employability</li> </ul>

*Table 4. Short term results for education and training institutions, public administrations and other stakeholders (political decision makers, managers, researchers etc.)*

Results	Qualitative indicators
<ul style="list-style-type: none"> <li>● 1 report: Anticipating skills in T&amp;C industry</li> <li>● 1 report: A strategy for future knowledge intensive and innovative textiles and clothing SMEs</li> <li>● 1 EQF of the “Textiles and clothing Manager for Efficient and Innovative SMEs”</li> <li>● 1 European Development Network for cooperation between HEIs and companies of the T&amp;C sector</li> </ul>	<ul style="list-style-type: none"> <li>– More social dialogue throughout the sector to address the skills shortage and to set road-maps for innovation and action plans</li> <li>– Improved possibilities for networking between higher education, research and business centres to address new skills requirements</li> <li>– Increased ‘eco-system approach’, pooling the assets of universities, SMEs and large companies together.</li> </ul>

### 4.2. Long Term Results

The expected impact that the TECLO Knowledge Alliance will produce on the main beneficiaries, can be summarized as follows:

**a) Higher education institutions in the textiles and clothing fields** will benefit from: higher involvement of employer associations and trade unions in the continuous definition of curricula; modernized curricula with an increased focus on entrepreneurship, management, and the capability to respond to changing needs in the sector (new EQF based on real sectoral companies' problems); flexible, innovative learning approaches and delivery methods improving quality and relevance while expanding student numbers, widening participation to diverse groups of learners.

**b) SME's from the textiles and clothing sector** will be more involved in the definition/validation of CV as well as in the design and delivery of Pro-

grammes and – consequently – of higher skilled managers able to promote the most crucial strategies for the sector growth (export, marketing, innovation, sustainability and entrepreneurship - oriented) through specific HE curricula responding to changing needs. They will be also more motivated to engage in partnerships with HEIs and research centres (Decalogue of advantages, Label and Agreement for Knowledge intensive textiles and clothing SMEs).

**c) HE students and graduates from textiles and clothing sector** will be equipped with the right skills and mind-sets for the labour market (MOOC based on real SME's exigencies), with the proper soft and entrepreneurial skills, and will see their employability increased.

**d) Education and training institutions, public administrations, sectoral observatories, associations and research centres and other stakeholders** will see an increased social dialogue throughout the

sector to address the skills shortage and to set road-maps for innovation and action plans, through improved possibilities for networking between higher education, research and business centres to address new skills requirements

## 5. CONCLUSIONS

This project will improve the competitiveness of the European Higher Education system through an acquired capability to encouraging SMEs to co-invest and participate in the definition of curricula, through the creation of attractive models of learning provision about the most needed skills for the future, enabling learning everywhere and at any time, and creating the new figure of “Future Textiles and Clothing Manager”, able to bring innovation within SMEs. The project will

develop, calibrate and exploit tools answering to everyday work problems. Moreover, it will create the Developmental Network for transnational sharing of experience among SMEs managers, researchers and university teachers in the field, whose innovativeness stands in the clear, simple and operative way in which contributions will be presented.

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