

Integrating Companies in a Sustainable Apprenticeship System

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Output Intelectual 2

National validated WBL curriculum

Portugal

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Introduction

In 2007, Portugal National Qualification Agency (current ANQEP, IP) was created in articulation with the European Qualification Framework, aiming at coordinating the National Qualification System, jointly with other competent bodies in the area of vocational education and training (in particular the Ministry of Education, and the Ministry of Labour and Solidarity).

The National Qualification System covers all programs leading to obtain formal qualifications, and it's supervised by both mentioned Ministries.

The National Catalogue of Qualifications includes school-based VET programs (although with a work-based learning component), which are dependent on the Ministry of Education and Science, and work-based VET programs which are financed by the IEFP – Employment and Vocational Training Institute, dependent on the Ministry of Labour. The first type of programs belongs to the Vocational Education System and the second one to the so-called Learning System.

What does exist in terms of VET programs in the educational systems?

- Vocational training of double certification (Education and Training Courses CEF) for young people who have completed the 2nd cycle of basic education (5th and 6th grades) or who are attending the second (last) year of that cycle. These courses provide a level 2 qualification according to the NQF.
- Vocational training of double certification (Education and Training Courses CEF) and Vocational Courses for young people (13 years old) as part of the 3rd cycle of basic education: these courses have a modular structure and a duration of between one and two years. They provide level 2 qualification according to the NQF and give access to general secondary education and to vocational programs of secondary level.
- Vocational training of double certification (Education and Training Courses CEF) and Vocational Courses for young people (from 15 years) as part of higher secondary education: these courses are devoted to students who have completed the 3rd cycle of basic education. They are three years long and provide level 4 qualification according to the NQF and a diploma of secondary education.
- Professional Training Courses: these programs are intended for students who have completed the 3rd cycle of basic education and did not concluded their secondary education. The maximum workload is 3,100 hours and the technical training workload is 1,600 hours. 420 hours out of those 1,600 hours should be at least devoted to workbased learning. These courses last three years and provide level 4 qualification according to the NQF and a diploma of secondary education.

Completion of Education and Training Courses, Vocational Courses and Professional Training Courses of secondary level give access to post-secondary non-tertiary vocational education (Technological Specialization Courses – CET) and to higher education.

• Post-secondary non-tertiary vocational education for young people with 18-19 years and for young adults until 23 years: these courses have a duration of one year and





provide level 5 qualification, according to the NQF. The candidates to these courses are youngsters with diplomas of secondary education or equivalent, students with 10th and 11th grades and frequency of the 12th year, holders of level 3 qualifications and holders of technological specialization diplomas or degrees of higher education. Technological Specialization Courses are mainly provided by Polytechnic Institutions (higher education) and other certified institutions.

What does exist in Employment System?

These programs belong to the so-called learning system, which was launched in 1984 as an alternative to the traditional training system. Initially, it was intended to support the qualification and certification of young people who, for various reasons, prematurely abandoned the education system. It is a double certification system, where there is strong interaction between theoretical and practical training components. Practical training is mainly in company/in sectoral training centres work-based learning.

The learning system depends exclusively upon the Employment and Vocational Training Institute (IEFP). In this work-based learning system companies are recognized as privileged spaces for training, since they allow students' learning in a real work environment. In these courses, learning processes are divided into four components: socio-cultural, scientific, technological and practical. The workload of these programmes varies between 2,800 and 3,700 hours, depending on the specificities and the degree of complexity of the learning process. The workload of in-company training cannot be lower than 40% of total workload, varying though between 1,100 and 1,400 hours.

The venues where these programmes can be taught are:

- Public secondary schools which perceptive authorization (Professional Training Courses).
- Private vocational schools with license (Professional Training Courses).
- Vocational Training Centres overseen by the IEFP (Learning Courses).
- Companies with professional training centres, authorized by the IEFP and certified by ANQEP (Learning Courses).

In the case of public secondary schools and private vocational schools, they must stablish agreements with companies in order to students carry out the compulsory work-based learning period.

1. Footwear Qualification Framework in Portugal

The **National Qualifications Framework (NQF)** is a single reference tool to classify all the qualifications produced in the national educational and training system. It's an instrument articulated with the EQF for lifelong learning.

The NQF comprises **8 Qualification Levels**, each one defined by a set of indicators that specify the **learning outcomes** corresponding to the qualifications at that level in terms of Knowledge, Skills/competences and Attitudes

The NQF adopts the qualification levels and respective descriptors of the **European Qualifications Framework (EQF)**.

National Catalogue of Qualifications http://www.catalogo.anqep.gov.pt/ is a dynamic instrument for the strategic **management of non-higher** national qualifications, managed by ANQEP (National Agency for the Qualifications) aiming at:

- regulating of the double certification training offer
- promoting of the effectiveness of public financing
- integrating unique **qualification references** for double certification training and for processes of recognition, validation and certification of competences (RVCC)
- including a large number of qualifications for **39 education and training** areas and presents the associated Professional Profile and Training References for each qualification

The National Catalogue of Qualifications http://www.catalogo.anqep.gov.pt/ available on the internet for all people wanting to consult it and a valorous tool for the training planning and certification.

para uma oferta relevan	te e certificada !	Catálogo Nacional de Qualificações (CNQ)
	 ▶ Destaques ▲ Referenciação dos Cursos Profissionais ao Catálogo Nacional de Qualificações - Circular nº 3/ANQEP/2018 2018-02-21 	
	 Integração no Catálogo de qualificações baseadas em resultados de aprendizagem nas áreas da Hotelaria e Restauração, Turismo e Lazer, Comércio, Gestão e Administração e Secretariado e Trabalho Administrativo 2016-06-08 	Conselhos Setoriais para a Qualificação
M	 Informações Foi publicada no Boletim do Trabalho e Emprego (BTE) a 120ª alteração ao Catálogo Nacional de Qualificações 2018-12-29 	Quadro Nacional de Qualificações (QNQ)
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• www.catalogo.anqep.gov.pt		
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Qualificações		
Qualificações	Técnico	N Outras Pesquisas
Qualificações	Técnico S42 - Indústrias do Têxtil, Vestuário, Calçado e Couro	Outras Pesquisas Oualificações adaptadas - Pessoas com
Qualificações	Técnico 542 - Indústrias do Têxtil, Vestuário, Calçado e Couro 542	 Outras Pesquisas Qualificações adaptadas - Pessoas com Deficiências e Incapacidades
Qualificações UFCD	Técnico 542 - Indústrias do Têxtil, Vestuário, Calçado e Couro 542 Nível 4 Nível 4	Outras Pesquisas Qualificações adaptadas - Pessoas com Deficiências e Incapacidades
Qualificações UFCD Isquisar Qualificações Designação da Qualificação Área de Educação e Formação Código da Área Nível de Qualificação do QNQ Nível de Qualificação do QEQ	Técnico 542 - Indústrias do Têxtil, Vestuário, Calçado e Couro 542 Nivel 4 Nivel 4 Nivel 4	Outras Pesquisas Qualificações adaptadas - Pessoas com Deficiências e Incapacidades
Qualificações UFCD	Técnico 542 - Indústrias do Têxtil, Vestuário, Calçado e Couro 542 Nível 4 Nivel 4 Nivel 4	Outras Pesquisas Qualificações adaptadas - Pessoas com Deficiências e Incapacidades

The objectives of the National Catalogue of Qualifications are:

- To promote the **production of critical competences** for the competitiveness and modernisation of the economy and of organisations;
- To facilitate the construction of learning paths that ensure school and professional progression;
- To enable the recognition of qualifications irrespective of the manner in which they are acquired;
- To contribute towards the development of a legible and flexible framework that favours the **comparability of qualifications on both a national and international level**.

The National Catalogue of Qualifications includes:

- 310 qualifications: 110 Level 2 (operator); 156 Level 4 (Technician); 44 Level 5 (Specialized Technician)
- 22 adapted qualification (for people with special needs)
- 30 qualifications for Textile, Cloths, Leather and Footwear;
- Modularised qualifications

According to the National Catalogue of Qualifications the main VET profiles (which correspond to specific programs) in the footwear sector are the following:

- Footwear Manufacturing Technician Level 4 (NQF)
- Technician of Footwear and Leather Goods Production Management Level 4 (NQF)
- Technician of Footwear and Leather Goods Machines Maintenance Level 4 (NQF)
- Footwear Patter Making Technician Level 4 (NQF)
- Footwear Manufacturing Operator Level 2 (NQF)
- Footwear Designer Level 5 (NQF)

For qualifications level 4 (9 years school required) it's available:

- Curriculum for VET schools (key skills + hard skills 1100h)
- Curriculum for Apprenticeship (key skills 980h + hard skills 1000h + WBL not specific curricula of 1500h)

For qualifications level 2 (6 years school required) it's available:

• Curriculum of 600h – 850h?

There's no detailed curricula for WBL component.





2. ICSAS approach to curriculum design for piloting

Although in Portugal there exist VET programs in the education system and in the employment system, as described above, the first ones have a reduced component of in-company training, therefore in reality they are not work-based learning programs. In fact, in the case of the footwear sector, the work-based learning programs belong all to the learning system, controlled by the Employment and Vocational Training Institute (IEFP).

Another fact to retain is that in Portugal and for VET programs there is no employment contract between the student/trainee and the entity in which the in-company training is carried out. Students/trainees are covered by a school insurance paid by schools (school-based system) or the labour administration (learning system). In the case of learning system there is a learning contract between the company and the student/trainee (there is no employment contract; students/trainees are not employees of the company). There is no financial compensation in the form of salary.

Taking into account the goals of the project, the most relevant program could be:

- Footwear Manufacturing Operator,
- Footwear Manufacturing Technician,
- Footwear Patter Making Technician

and

• Footwear Designer.

The first one is level 2 (basic education level), the second two are mid-level (secondary education) programs and the last one is a high-level (post-secondary non-tertiary) program. In addition, it should be underlined that the Footwear Manufacturing Technician level 4 corresponds to a profile where the production is entirely manual, close to craftsmanship and **not adequate to the nowadays footwear industry** needs.

For this purpose, the first curriculum is the most appropriate to be a basis of the curriculum for the national piloting under the scope of ICSAS.

Therefore, the most adequate curriculum to be the basis to set up the new WBL curriculum is the following:

• Footwear Manufacturing Operator – EQF level 2

It was recognized and certified by ANQEP (National Agency for Qualification and Employment) after the approval of the sectorial counselling group for fashion industries, involving all technical experts and social partners;

It was published in the Employment and Labour Gazette n.º 29 in 8th August 2013;

General Description: To perform all footwear cutting, stitching preparation, stitching, closing, assembling/lasting and finishing operations, using different materials, equipment and techniques, in accordance with the quality standards, maintenance, environment, health and safety requirements.

Activities:

The profile involves activities to be performed by the operator, knowledge that he/she has to get, skills and competences that he/she has to demonstrate, as following:

- 1. To cut he different pieces of the footwear model.
 - To analyse the raw-material, identifying the defaults and surface defects;
 - To do the nesting positioning the moulds /cutting devices on the rawmaterial's surface, having into account the defaults previously detected and signalized, in order to optimize the raw-material
 - To cut the pieces using a knife, clicking machine and automatic cutting machine
- 2. To do all pre-stitching operations, namely skiving, splitting, crimping, punching, folding, apply reinforces, metallic accessories,
- 3. To perform all stitching operations with column and flat stitching machines
 - To program the equipment according to the material and the operation technical description
 - To select the machine accessories, putting them in the right place and adjust them to the machine
 - To put accurately he pieces to stitch on the machine, and to guide all the stitching operation
- 4. To perform all the assembling operations, included in Cemented footwear construction
 - To mould the stiffener and toe puff
 - To apply glue in due upper surfaces
 - To last the fronts, sides and backwards using adequate equipment
 - To rough and apply glue to the treated surfaces of soles and uppers
 - To bond sole/bottom directly to the assembled upper
 - To apply the heels
 - To stitch the sole/bottom to the upper
- 5. To perform all finishing operations, namely, to clean, to brush, to polish, to ink the edges, to apply the due finishing products, using the adequate tools and the adequate products, controlling the quality of the work done and proceeding to the necessary adjustments.

Knowledges:

Notions about:

- ICT at user level
- Environment, security and hygiene at work
- Workplace organization

Good knowledge about:

• Portuguese Language





- Raw materials Characteristics and behaviours
- Footwear Components manual processes and technology manufacturing
- Footwear Cutting processes
- Footwear Pre-stitching processes
- Footwear Stitching processes
- Footwear assembling processes
- Footwear finishing processes
- Quality control Procedures and standards

Deep knowledge about:

- Footwear Manual cutting techniques
- Footwear Manual pre-stitching techniques
- Footwear Manual stitching techniques
- Footwear Manual assembling techniques
- Footwear Manual finishing techniques

Skills/Competences:

- To identify and recognize the characteristics and behaviours of the raw materials
- To identify and recognize the different types of defaults of the raw-materials
- To identify and characterize the footwear components manufacturing process
- To apply cutting methods and techniques
- To apply pre-stitching and stitching methods and techniques
- To apply assembling methods and techniques
- To apply finishing methods and techniques
- To identify and use the adequate machines and tools involved in the stitching processes
- To optimize the leather and other materials cutting
- To detect defaults regarding footwear pieces and components
- To detect defaults of the equipment
- To perform equipment and tools cleaning processes and conservation
- To apply footwear manufacturing quality control procedures and standards
- To apply environment, security and hygiene at work procedures and standards

Attitudes:

- To be able to adapt to different organizational contexts
- To be able to adapt to new technologies and materials
- To be able to organize his/her own workplace
- To be able to take the initiative to find adequate solution to the problems solving at operational level
- To be able to work in a team and to cooperate toward common aims.

Characterization of the Training curriculum:

Training curriculum is composed by 3 parts namely: sociocultural component, technological component and practice component.

- Sociocultural component (key skills development): depending on the methodology of training adopted, it can achieve 650 hours and involves modules related to the domain of Portuguese as a native language, communication in other foreign language, normally English, personal development, social and cultural development and ICT aspects.
- **Technological component:** it's indeed the vocational part and represents 850 hours and it's detailed below.
- In-company training involves 120 hours of training supervised by company tutors.

Modules /Training Units	Duration (Hours)
8430 - Footwear models technology and applied materials for footwear	25
8431 - Processes and techniques of footwear Cutting	50
8432 - To apply footwear cutting techniques in different materials and pieces	50
8433 - Cutting of different footwear models	50
8434 - Footwear splitting and crimping operations	25
8435 – Stamping, referencing and marking operations	25
8436 - Skiving, punching and reinforcing footwear pieces	50
8437 – Folding and bonding Footwear models' pieces	50
8438 – Preparation for stitching different footwear models	50
8439 – Stitching, materials and equipment	50
8440 - Processes and techniques of footwear Stitching	50
8441 – To apply stitching techniques to different footwear models	50
8442 – Stitching of different footwear models	50
8443 - Application and modelling of footwear lasting reinforces	25
8444 - Footwear assembling - cemented	50
8445 – Preparation of soles and uppers' surfaces	25
8446 – Lasting footwear soles and uppers	50
8447 – Assembling of different footwear models	50
8448 - Footwear finishing	50
8449 - Footwear Packing and Quality Control	25
TOTAL	850

Detail of the Technological component:

In the construction of the national curriculum for the work-based learning piloting, national requirements and values were taken into account together with the partners CTCP, ADC and the companies involved and the and advisory board composed by IEFP (Public Institute for the Training and Employment, regulation body) and APPICCAPS (Footwear Associations) under the eye and lessons learnt of Germany and Spain experiences.





A question should be answered: "What should be learnt via WBL."



WBL curricula in PT should be completely innovative, and include a very high transferability potential to other companies.

3. Portuguese approach to Curriculum design in ICSAS

The approach used by the Portuguese partners to build the new WBL curriculum can be schematized into 6 steps to know:



1st STEP – Implementation of LSA (Learning Station Analysis)

LSA – Learning Station Analysis

It was held in the partner CARITÉ, according to a defined methodology, by CTCP and ADC/CFPIC, consisting in the description of the activities and identification of potential of learning



They were found 10 learning stations (LS) related to the 5 core spheres of activity (cutting, stitching, lasting, assembling, finish) and 6 learning stations related to the peripheral spheres (design, technical development, production planning, quality assurance) and both sets were described according to the methodology.

10 LS related to core spheres:

- Mechanical cutting
- Automatic cutting
- Stitching preparation
- Stitching
- Lasting preparation
- Lasting





- Sole attaching
- Finishing
- Packing
- Quality Control

6 LS related to peripheral spheres:

- Design
- Development
- Planning
- Production management
- Quality management
- Supply chain management

2nd STEP – Needs and Objectives

- Determine the sector needs: manufacturing skills
- Define activities and tasks that the new job profile should meet: to be able to cut, stitch, assembly and finish footwear models

3rd STEP – Desk research

It was held a "desk research" on Portuguese reality concerning:

- the existing curricula in VET (for Footwear) and how is it available to training entities and companies
- national regulations / rules regarding curricula design (contents, assessment, etc.) approach to LO and K, S/C, A
- analysis on what parts of the curricula are able to be taught inside the companies and by who (companies' trainers?)
- analysis of the certification issues

Existing qualifications / curricula are the following according to already mentioned above:

- Footwear Manufacturing Operator Level 2 (NQF)
- Footwear Manufacturing Technician Level 4 (NQF)
- Technician of Footwear and Leather Goods Production Management Level 4 (NQF)
- Technician of Footwear and Leather Goods Machines Maintenance Level 4 (NQF)
- Footwear Patter Making Technician Level 4 (NQF)
- Footwear Designer Level 5 (NQF)

It was analysed the time load, the structure, the learning venues and pre-requirements.

4th STEP – Discovering the companies' learning potential through LSA

For each Core and peripheral spheres were assigned specific good practices encountered in the company that can constitute potential of learning and be able to substitute the classical training.

10 LS related to Core spheres:	Good practices / specificities
Mechanical cutting	High-end materials, leather economy threshold,
Automatic cutting	Leather pieces control after cutting with the cardboard pieces from the pattern making. State-of-art equipment
Stitching preparation	Special requirement in terms of quality, high-end materials,
Stitching	State-of-art equipment. Specific requirements in terms of quality, use of high-end materials, specific models
Lasting preparation	Specific quality requirements, state-of-art equipment,
Lasting	Different construction types, high-quality
Sole attacking	Production variables, products, equipment
Finishing	Special techniques and finishing products. High-end quality finishing
Packing	Specificities from the clients (private label)
Quality Control	Procedures

6 LS related to peripheral spheres:	Good practices / specificities
Design	Private label. A creative sector and planification of own brands.
Development	Technical sheets (technical information, very detailed), use of CAD technology. It's a very wide sphere, defined and documented
Planning	Procedures, specific software,
Production management	Procedures, managements systems implemented,
Quality management	Specific procedures, certification according ISO 9001,
Supply chain management	Interconnections with other areas, specific software





5th STEP – Analysing variables for piloting

- Possible future integration in apprenticeship system? Duration 1000-1500?
- Cover all Learning Stations or focus on some of them most important and constituting needs for the company? It was decided to focus on the Production: Cutting, Stitching, Assembly, Finishing
- What is the target-group? Employed, between 18-30, with 6 or 9 years school
- Option: Companies specificities or more transferability? It was decided to apply for transferability
- In the VET component and on the specificity of the WBL component.

6th STEP – Drafting the curriculum (based on)

- Total duration: 1000 hours
- Modular training, based on Level 2 "Footwear Manufacturing Operator" (http://www.catalogo.anqep.gov.pt/Qualificacoes/Referenciais/1123)
- Pick up from the existing level 2 curricula the learning units which are more interesting and needed for the company in piloting
- 75% of WBL delivered by tutors and 25% of theoretical learning delivered by certified trainers from VET school.
- After the training: automatic certification of VET component (https://www.youtube.com/watch?v=jmfW0Mke5YERVCC (recognition, Validation, Certification of Competences) process)
- All the trainees enrol in RVCC (recognition, Validation, Certification of Competencs) process to validate the skills acquired through the WBL (for te overall job profile), according to the rules
- Both components to be delivered in the company
- To validate this plan near the Advisory Board and the company involved CARITÉ

4. The curriculum – Final version to be tested

DURATION: 1000 hours / Theory = 250 hours / Work Based-Learning = 750 hours

Profile / curricula from National Catalogue of Qualification: Footwear Manufacturing Operator / Level 2

Cutting/ Learning stations: CUTTING

- Theory / VET school = 50 hours
- Work Based-Learning / Company + VET school monitoring = 200 hours
- Total = 200 hours

	Unit	Duration	Local /
(0	prresponding to the Curricula in National Catalogue of Qualifications)	(h)	delivered by
8431	Processes and techniques of footwear Cutting	50	Company,
	Objectives:		delivered by
	 To identify the different footwear model pieces 		VET school
	 To identify materials used 		
	To describe manual and mechanical techniques of footwear		
	cutting		
	Contents:		
	Manual cutting:		
	Equipment and tools		
	Cutting technique		
	Marks to guide the stitching		
	Mechanical cutting:		
	Equipment and tools		
	 Types of cutting dies 		
	Cutting methodology		
	Automatic cutting:		
	 Technology and equipment 		
	Software		
	 Projection of image/nesting 		
	Cutting methodology		
	Changing tools		
	Ergonomic and workplace organization		
	Environment, security and health		
	Preventive maintenance		
	Work Based-learning:	150	Company
	 Application of shoe cutting techniques in different parts and 		delivered by
	materials		inside company
	 Cutting of different models of footwear 		tutors
	 Splitting and crimping footwear pieces 		and monitored
	 Stamping and marking of footwear pieces 		by
			Research
			Centre
			+
			VET School





Learning Stations STITCHING PREPARATION & STITCHING:

- Theory / VET school = 100 hours
- Work Based-Learning / Company + VET school monitoring = 300 hours
- Total = 400 hours

	Unit	Duration	Local /
(corres	ponding to the Curricula in National Catalogue of Qualifications)	(h)	delivered by
8436	Skiving, punching and reinforcing footwear pieces	50	Company /
	Objectives:		delivered by
	• To identify and characterize different operations and their		VET school
	aim		
	• To perform skiving, punching and apply reinforcements in		
	Footwear cutted pieces		
	 Apply the due ergonomic and health and security measures 		
	 Apply the due preventive maintenance rules 		
	 Control and evaluate the own performance 		
	Contents:		
	 Different types of skiving operations 		
	• How to skive pieces of Footwear models: techniques and		
	equipment		
	• How to punch pieces of Footwear models: techniques and		
	equipment		
	 To apply reinforces in the pieces of Footwear models 		
	• To apply skiving, punching and reinforcing according to the		
	requirements		
	 Ergonomic and workplace organization issues 		
	 Preventive maintenance of the equipment 		
	Quality control		
8440	Processes and techniques of footwear Stitching	50	Company /
	Objectives:		delivered by
	• To identify and characterize different types of stitches		VET school
	• To identify materials and accessories for the stitching,		
	considering the correlation: material, thread, needle.		
	• To identify different stitching processes and techniques		
	considering different types of materials and the use of		
	different equipment		
	• To identify and describe the operations of preparation,		
	regulation and setting of the equipment used.		
	Contents:		
	• Manual stitching techniques: type of stitches, threads,		
	needles;		
	• Different stitching techniques considering different types of		
	stitches and different stitching machines;		
	• Different types of needles: characterization and selection		
	considering the material and type of stitch		
	 Stitching techniques using equipment 		
	Point formation		

 Preparation, regulation and setting parameters of the 		
equipment.		
Work Based-learning:	300	Company /
 Stitching, materials and equipment 		delivered by
 Folding and pointing operations 		inside company
 Preparation of sewing of different models of footwear 		tutors
 Application of techniques in different pieces of footwear 		and monitored
 Sewing of different models of footwear 		by
		Research
		Centre
		+
		VET School

Learning Stations ASSEMBLY & FINISHING:

- Theory / VET school = 100 hours
- Work Based-Learning / Company + VET school monitoring = 300 hours
- Total = 400 hours

	Unit	Duration	Local /
(cc	rresponding to the Curricula in National Catalogue of Qualifications)	(h)	delivered by
8444	Footwear Lasting and Assembly	50	Company,
	Objectives:		delivered by VET school
	lasting the front, sides and back parts of the upper		
	• To perform the lasting of the front, sides and back parts of the upper in basic Footwear		
	 To apply principles of ergonomics, workplace organization and health and security at work 		
	To control and assess the quality of the work developed		
	Contents:		
	 Lasting of the front, sides and back parts of the upper in basic Footwear: operations, materials, equipment 		
	Types of adhesive		
	 Bonding technology and equipment 		
	 To perform the lasting of the front, sides and back parts of the upper in basic Footwear considering materials, setting and regulation of the equipment, techniques and quality requirements 		
	 To apply principles of ergonomics, workplace organization and health and security at work 		
	 To apply preventive maintenance of the equipment 		
	To control and assess the quality of the work developed		
8448	Footwear Finishing	50	Company,
	Objectives:		delived by VET
	• To identify and characterize different types of footwear		school
	finishing		





 To identify and characterize different materials and products used for footwear finishing To apply finishing techniques in different footwear models To apply principles of ergonomics, workplace organization and health and security at work To control and assess the quality of the work developed 		
Contents:		
• Different types of footwear models: analysis of the different types of finishing		
 Traditional finishing types: waxy, oily, plasticized, etc. 		
Technology of materials and finishing products		
 Finishing techniques and equipment 		
Perform different finishing operations		
• Apply principles of ergonomics, workplace organization and		
health and security at work		
 Apply preventive maintenance of the equipment 		
Control and assess the quality of the work developed		
Work Based-learning:	300	Company /
 Application and molding of shoe-fitting reinforcements 		delivered by
 Preparation of the surfaces of the soles and uppers 		inside company
• Fixing of soles to uppers		tutors
Assembly of different models of footwear		and monitored
 Quality control and packaging of footwear 		by
		Research
		Centre
		+
		VET School

The methodology and results envisage the following impact:

- active people upskilled
- youngsters increasing their employability
- final proposal to create the job profile and qualification referential of the level 2 Footwear Manufacturing Operator into level 4 Footwear "Industrial" Manufacturing Technician

Some proposals to improve National Qualifications Catalogue:

- Curriculum Footwear Manufacturing Technician Level 4 (NQF) to make it more adapted to the real needs of the industry according to the actual state-or-the-art
- Footwear Manufacturing Operator Level 2 (NQF) to upgrade the qualification to level 4 at least Footwear "Industrial" Manufacturing Technician
- Titles of curriculum / qualifications to change in order to capture more youngsters
- To include additional modules in level 4 and level 5 qualification related to Comfort Footwear and Sustainability (or a new qualification for Comfort & Healthy Footwear – Level 5
- To include WBL curricula

How to improve:

• National Skills Council for the Fashion Industries, includes public institutes, ANQEP, social partners, CTCP and CFPIC/ADC is the adequate instance to propose changes.

Stakeholders involved in the curriculum design for ICSAS

- Centro Tecnológico do Calçado de Portugal CTCP
- Centro de Formação Profissional para a Indústria do Calçado CFPIC/ADC
- Fábrica de Calçado CARITÉ, Lda.
- IEFP Public Institute for the Employment and Professional Training (regulatory body)
- APICCAPS Footwear and Leather Goods Association

(both last stakeholders compose the project Advisory Board)

Validation process:

The Curriculum was validated by the Advisory Board who participated in its definition and the company CARITÉ, specially the trainers/tutors in a special session of dissemination and validation of project methodologies (Please see participants list and agenda n annexes).





Annexes

- Global Referential of "Footwear Manufacturing Operator" level 2
- RVCC Referential (for the Recognition, Validation and Certification of Competences)
- Validation session: Agenda and Participants List