

Erasmus Plus Programme – KA2 Strategic Partnership in the field of School Education

## **RoI of WBL and apprenticeships**

## **Return on Investment of Work Based** Learning and apprenticeships

Project № 2017-1-SK01-KA202-035375

the information contained therein
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### Introduction

SMEs are Europe's motor for growth and employment. They represent 99% of all businesses in the EU and account for two thirds of EU28 employment. The availability of skilled labour is an important prerequisite to their prosperity. Nonetheless, there is a mismatch between the skills the labour market demands and those that the education and training system provides.

Realising this mismatch, the European Commission has identified that quality work-based learning and apprenticeships can be an efficient way of addressing labour market imbalances.

In countries, where there is a well-established apprenticeship system, such as UK, Austria and Germany, SMEs contribute strongly to the training of the future work force through their involvement in work based learning and apprenticeship schemes. On the contrary, in countries with more school based systems, like Slovakia, Spain, Portugal, Greece and Bulgaria, the engagement of SMEs in the supply of placements is more challenging as they lack the support systems and fail to realise both the financial and social benefits.

The SMEs awareness of the cost-benefit analysis deriving from the work-based learning is therefore crucial in order to determine their participation to the apprenticeship system.

Based on this need, project "Return on Investment of Work Based learning and apprenticeships" (project N°: 2017-1-SK01-KA202-035375) suggests the development of a return on investment (RoI) model and digital tool that will allow European SMEs to calculate and visualise how investment on WBL and apprenticeships can manifest to multiple benefits.

The innovative force of the project is the focus of its model to SMEs needs as well as the integration in the model and the digital tool of both SMEs-related benefits as well as society-related ones in order to clearly demonstrate the multilevel outcomes derived from work-based learning & apprenticeship practices.

The direct target groups are SME's entrepreneurs, managers and staff as well as VET providers (vocational training centres, professional schools, employment centres) that cooperate with SMEs for the provision of WBL and apprenticeships. At second level, it targets VET stakeholders and policy makers, national representatives of European networks as well as VET practitioners and experts.

The expected project outputs are as follows:

- A model for the calculation of RoI of WBL and apprenticeships by SMEs

- A digital online tool that will demonstrate in visual way the RoI model

- A Good Practices Guide addressed to SMEs, giving guidance on how to design, implement and monitor profitable apprenticeship practices which can benefit the enterprise, the apprentice and the entire society.

- Creation and promotion of an apprenticeship-friendly SMEs badge to increase the engagement of companies in the provision of WBL.

- Promotion of VET – SMEs cooperation, through experimentation and validation of the RoI model.

- Organisation of promotional events addressed to SMEs entrepreneurs, VET centres and stakeholders that are interested to apply and promote the RoI model and tool.

The project is implemented from November 2017 till October 2019 by 8 partners from 8 different EU countries in order to create results that will have European wide applicability and impact, including countries that are still lacking in the engagement of SMEs in WBL (Slovakia, Spain, Portugal, Greece, Bulgaria), taking benefit from countries that are more advanced (UK and Italy) and using the technological know-how of others (Cyprus).

The project partnership consists of the following institutions:

- 1. Technical University of Kosice (TUKE), Slovakia –project coordinator
- 2. KLUB PO UPRAVLENIE NA ZNANIYA, INNOVACII I STRATEGII (KISMC), Bulgaria
- 3. M.K. INNOVATION LTD (COIN), Cyprus
- 4. AINTEK SYMVOULOI EPICHEIRISEON EFARMOGES YPSILIS TECHNOLOGIAS EKPAIDEFSI ANONYMI ETAIREIA (IDEC S.A), Greece
- 5. EUROPEAN DIGITAL LEARNING NETWORK (DLearn), Italy
- 6. CENTRO DE FORMAÇÃO PROFISSIONAL PARA O COMÉRCIO E AFINS (CECOA), Portugal
- 7. POLITEKNIKA IKASTEGIA TXORIERRI S.COOP (PIT), Spain
- 8. SOCIAL VALUE NETWORK (SVUK), UK

### 1. Work-based learning and apprenticeships

In the European States, there has been pressure on the development and unification of vocational education systems (Ertl, 2002). Among the factors behind it are social and economic changes and global economic trends. European union plays an important role in this field. Education policy has always been an important tool in achieving economic goals. All measures in the field of education and training are designed to ensure the global economic competitiveness of the European Union. Most countries in Europe have become interested in the development of vocational training due to growing specialization in the economy. Employers want workers with knowledge of the entire workflow and the ability to deal with the risk and unpredictable situations at the workplace (Brockmann et al, 2008). Different policies and models of vocational education are applied across Europe.

In Germany and Denmark, the VET system is state-regulated and focuses mainly on young people at the secondary level of education. In these countries, there is a dual system of education, where practical training is provided by companies and theoretical by schools. VET in these countries has a high status in society and is considered a good alternative to academic education (Sabates, 2010). VET systems in Romania and Italy are in the process of moving towards a more marketdriven system, with some intervention by the state. In these countries, academic education is preferred, vocational training has a low status and is not perceived as an equal alternative to academic education (Sabates, 2010). VET in the UK is market driven and there is no uniform VET structure. VET in the UK is more flexible than German or Scandinavian systems but has a lower status in society (Preston et al, 2008). An important element of the development of vocational training in Europe was the agreement of the national ministries of education. First was the Bologna Declaration in 1999, which was signed by ministers of education from 29 European countries. Second was the Copenhagen Declaration, signed in 2002 by 31 ministers. These declarations focused on creating a unified framework of qualifications and competences, training, creating common quality criteria for learning and improving access to education. The result of these initiatives was the creation of a system for the transparency of qualifications (EUROPASS). the credit transfer system (ECTS, ECVET) and the European Qualifications Framework (EQF) (Powell et al, 2010).

Work-based learning (WBL) and apprenticeships provide additional options to tackle the issue of youth unemployment. One of the main causes of youth unemployment is a significant mismatch between the skills and competences currently required by employers in the labor market and those acquired by young people through education system. The European Commission identified its strategic document "Rethinking Education: Investing in skills for better socio-economic outcomes" work-based learning and apprenticeships as a key strategic priority for reconciling learning and skills with the aim of reconciling the demand and skills of young people on the labor market required or offered respectively. The focus is on small and medium-sized enterprises, as this group of companies accounts for up to 99% of all businesses in the European Union and employs 2/3 of all employees (European Commission, 2012). Work-based learning is considered to be a powerful tool for developing work skills and promoting labor productivity. Implementation of this type of education and training requires an active approach of business to this issue. The model of work-based learning consists of activities such as apprenticeship, dual education programs or internships defined by a specific set of skills to be acquired over a certain period and having a specific funding mechanism. All of these activities focus on young people and improve their skills (OECD, 2017). Work-based learning and apprenticeships help young people to gradually transition from school to work (CEDEFOP). Training in education is a successful form of workplace learning and greatly facilitates the transition from education and training to work. Research suggests that countries with a strong Vocational Education and Training system and apprenticeship have a lower unemployment rate for young people (EAfA, 2017).

### 2. Description of VET in ROI project participating countries

#### 2.1 Bulgaria

Bulgaria has undergone a significant economic transformation over the past three decades. The country still has a problem with youth unemployment and also a high rate of early school leavers from education and training. Therefore, Bulgaria seeks to modify the education system. Vocational training oriented to the labor market is the basis of the reform of the Bulgarian education system. The aim is to find a match of the skills needed by the private sector and those developed by the school system and to improve conditions for quality VET. The VET Act has changed 22 times over the past 13 years. These constant changes have impeded consistency in VET development and testify to a lack of relevance between the model set out in 1999 and reality of the VET system. None of the changes in legislation have targeted improving VET's quality. Analysis of the quality assurance system in VET in 2011, commissioned by the Ministry of Education, concluded that VET provision was insufficient and inconsistent, and not in line with the European Parliament recommendation on quality assurance. VET is funded from the state budget, municipal budgets, national and international programs, sponsorship, donations, and own income. Vocational training is provided at the secondary level (EQF 4, EQF 3, EQF 2) and post-secondary level (EOF 5). National Vocational Education and Training (VET) policy is coordinated by the Ministry of Education and Science.

#### 2.2 Greece

Greece is the largest economy in the Balkans, and an important regional investor. In Greece there is a problem with unemployment and a large proportion of unemployed people are graduates of secondary schools and universities. Greece seeks to improve the education system and training. The major weaknesses and challenges in the field of VET in Greece can be summarized as follows: a) Higher dropout rates in comparison with General Education, b) multiplicity and complexity of legal framework, c) lack of continuity and focus in the design and implementation of VET related policies and d) problematic linkage with the labour market. VET is in the process of transformation in Greece. The Youth Action Plan seeks to integrate education with practice, improve vocational education and training and improve apprenticeships. Today, young people continue to see vocational education as a last resort, despite unceasing efforts by the authorities to present it as an alternative of equal value with general education. The Ministry of Education is responsible for the implementation of VET policy, assisted by the National VET Committee, which is made up of secretaries-general from key ministries. The Institute of Educational Policy is responsible for drawing up curricula. VET is offered in Greece at the secondary level of education (EQF 4) and at the secondary level (EQF 5). VET is funded primarily from the state budget and from European sources.

#### 2.3 Italy

The Italian economy is one of the biggest in the world for exports and it is dominated by the SMEs, Small and Medium Enterprises, while the number of the big industries is low. In Italy there is a high risk of poverty and low employment. There is also a high rate of people without employment, education or training. VET in Italy focuses mainly on services, manufacturing and construction. Over the last 10 years, many laws concerning the apprenticeship have been approved at national and regional levels. Introducing continuous changes often applied in non-homogeneous manners, these laws increased confusion, both in students and companies, instead of supporting the apprenticeship diffusion. The most recent reform (2014) focuses mainly on adjusting the work contract system. The aim is to create a unified system of employment contracts to help with employment. VET programs are offered in Italy at post-secondary level (EQF 5, EQF 4) and at secondary level (EQF 4, EQF 3). VET is funded by national and regional funds. Every year the Ministry of Labour and Social Policies transfers the financial resources for apprenticeship training activities to the Regions and the Autonomous Provinces. The Ministry of Education, Universities and Research, the Ministry of Labor, Regions and Autonomous Communities, and the social partners are responsible for VET in Italy. The Ministry of Education defines the framework for VET. The Ministry of Labor and Social Policy sets a framework for regional vocational training. Regions and Autonomous Provinces are also responsible for the planning, organization and provision of apprenticeships.

#### 2.4 Portugal

Portugal is a developed country with a high-income, advanced market economy and high living standards. Low level of education is one of the key factors explaining the lack of productivity of Portugal compared to the European partners. In the late 1970s, the Institute for Employment and Vocational Training (IEFP) was created in order to put in practice of employment and training policies with increased attention to the local needs. Government authorities have begun to create the conditions for incorporating the practical component of training into the education system. VET in Portugal is offered at post-secondary level (EQF 5, EQF 4) and secondary education (EQF 4, EQF 2). Despite the fact that a National Qualification System has been set up to help develop VET, the number of young people enrolled in vocational education and training in Portugal remains low when comparing to general studies but the number of Adults enrolled in VET is very high (around 65%) comparing to general education or other forms of qualificationi. The central government has an overall responsibility for vocational education and training in Portugal. The Ministry of Labour, through the Institute for Employment and Vocational Training (IEFP), is responsible for training through apprenticeship programmes, continuing vocational training and active labour market measures implementation. The Ministries of Education and Labour share equal responsibility over the National Agency for Qualification and Vocational Education (ANQEP), the National Agency being responsible for coordinating the implementation of policies regarding education and training of young people and adults, as well as to ensure the development and management of the National System for the Recognition, Validation and Certification of Competences. Regional authorities for non-higher education and VET are responsible for the implementation of policies at local level. The costs of education and VET are covered almost entirely by public funding through contributions from the State budget (Orcamento de Estado – OE), the Social Security Budget (Orçamento da Segurança Social – OSS) and the European Social Fund (ESF).

#### 2.5 Slovakia

The Slovakian business economy is heavily dependent on SMEs as they provide 72 % of employment and 67 % of value added, well above the respective EU averages of 67 % and 58 %. Slovakia has a strong VET tradition, with about 70% of all upper secondary learners participating in VET programmes. Being among the most open in the EU and with a high employment share in manufacturing cars and electronics, its economy relies heavily on vocationally skilled people. Slovak education and training system is based on the 1970s model, aimed at providing all learners with at least upper secondary education, mainly through school-based VET. In total, 32.6% of the available training places were filled in 2015/16. VET institutions build on a long tradition that dates back to the Czechoslovakian system before 1970s that provided for a strong link between VET schools and state-owned enterprises. The Act on VET (The Act n. 61/2015 on Vocational Education and Training in Slovakia) was accepted by the Slovak National Council in 2015. The aim of the new act is to enable a smooth transition of secondary vocational schools from education to the labour market and reduce the risk of unemployment for young graduates. Self-governing

regions are responsible for maintaining public secondary VET schools and for regulating inflow of learners in their territory. The education ministry supports schools by providing regulations for content, pedagogy, and staff qualifications. Some VET schools are under the responsibility of the interior and health ministries. VET in Slovakia is offered at the secondary level (ISCED 253, ISCED 354) and at post-secondary level (ISCED 454, ISCED 554).

#### 2.6 Spain

Spain has developed through various stages to become a leading European and world economy. Services now account for almost three quarters of economic production in Spain. . Unemployment for those aged 15-24 rose dramatically during the crisis and is still a chronic problem. The past 40 years have seen a progressive intensification of measures to increase the attractiveness of vocational education in Spain and a growing focus on the educational and socioeconomic value of a skilled workforce. VET in Spain although existing in various forms since the start of the industrialised period was formally introduced into the educational system in 1970 within the Law of General Education. In 2002, the creation of the Spanish VET National Qualification System "Sistema Nacional de Cualificaciones y Formación Profesional" - SNCFP (under Law 5/2002) consolidated the systemic approach to vocational education and unified programmes aimed at creating and linking future skilled workers, quality training provision and the workplace. As part of employment policies, several measures have been taken in 2015 to tackle high unemployment due to economic crisis; the effectiveness of these measures is part of the political debate. New legislation (Act 30/2015) sets a new scenario for developing VET in the employment system. The framework for the collaboration between training centre and company is established by the corresponding Educational Ministry in each autonomous region. VET in Spain is provided at postsecondary level (EQF 3, EQF 4, EQF 5). Educational competences are distributed between the central government (education ministry) and the regions (education departments). The Ministry together with the regional education authorities implement the national standards, whereas regions have executive and administrative powers in their territory. VET in Spain is funded from the state budget.

	Types VET	Secondary level	Access to the next level/tertiary education	VET /combining VET and gen. education	Post-secondary Level	Access to tertiary education	VET /combining VET and gen. education	Funding	Responsibility for VET	
		EQF 2 (ISCED 351)	YES/NO	combined				<ul> <li>the State budget</li> <li>the municipal</li> </ul>		
Bulgaria	WBL, dual	EQF 3 (ISCED 354,	YES/YES	combined	EQF 5 (ISCED 453)		NO	VET	<ul><li>budget</li><li>donations</li><li>own revenue</li></ul>	<ul> <li>Ministry of Education and Science</li> </ul>
		EQD 3 (ISCED 351)	NO/NO	combined				<ul> <li>national and international</li> </ul>		
		EQF 4 (ISCED 354)	YES/YES	combined				programmes		
Greece	WBL, apprenticeships	EQF 4 (ISCED 354)	YES/YES	combined	EQF 5 (ISCED 655, ISCED 453)	EQF 5 (ISCED 655, ISCED 453)	NO	VET	<ul> <li>the State</li> <li>budget</li> <li>European funds</li> </ul>	<ul> <li>Ministry of Education</li> <li>Institute of Educational Policy</li> </ul>
	-rp-compo	EQF 4	NO/NO	VET				(European Social Fund)		
Italy	WBL, apprenticeships	EQF 4 (ISCED 354)	YES/YES	VET	EQF 5 (ISCED 554)	NO	VET			

## 2.7 Comparison of VET system in ROI project participating countries

		EQF 4 (ISCED 352)	NO/NO	VET				<ul> <li>the State budget</li> </ul>	<ul> <li>A National Committee</li> </ul>
		EQF 3 (ISCED 353	NO/NO	VET	EQF 4 (ISCED 453)	NO	VET	<ul> <li>the regional funds</li> <li>the provincial funds</li> </ul>	
		EQF 2 (ISCED 254)	YES/NO	VET	EQF 4 (ISCED 354)	YES	combined		A central
Portugal	WBL, apprenticeships	EQF 4 (ISCED 344, ISCED 354)	YES/YES	combined	EQF 5 (ISCED 454)	YES	combined	<ul> <li>the State budget</li> <li>the Social Security Budget</li> <li>the European Social Fund</li> <li>municipality funds</li> </ul>	government The Ministry of Labour (Institute for Employment and Vocational Training, IEFP) The Ministries of education and labour
		ISCED 354	YES/YES	combined	ISCED 554,			<ul> <li>the State budget</li> </ul>	<ul> <li>Ministry of Education</li> </ul>
Slovakia	WBL, apprenticeships, dual	ISCED 454 ISCED 353 ISCED 554 ISCED 354	YES/YES NO/NO YES/YES YES/YES	combined VET VET VET	ISCED 454	NO	VET	<ul> <li>the European funds (European Social Fund)</li> <li>private resources</li> </ul>	<ul> <li>A self-governing regions</li> </ul>
Spain		ISCED 353 ISCED 354	YES/NO YES/YES	combined VET	ISCED 554 (higher VET, sport	NO	VET		

		ISCED 354 (sports programmes)	NO/NO	VET	and art and design programmes)		<ul> <li>the State</li> <li>budget</li> </ul>	<ul> <li>Ministry of Education</li> </ul>
	WBL,	programmes)					<ul> <li>municipality funds</li> </ul>	<ul><li>A regional</li><li>education</li></ul>
appre	renticeships, dual	ISCED 354 (arts and design programmes	NO/NO	VET			European Social     Fund	authorities

## 3. Methodology

The first intellectual output of the project (O1) is a **Model for the calculation of the return on investments of WBL and apprenticeships for SMEs**. The model will provide the theoretical framework for the elaboration of a digital tool (O2), while ensuring at the same time that it responds to SMEs' needs. The suggested model will be targeted to SMEs in order to motivate and engage them in the provision of WBL and apprenticeships.

The SMEs decision to engage in the supply of WBL and apprenticeship training is determined by the cost-benefit ratio of such an investment. From an early desk research during the proposal preparation phase, the following inputs for the RoI calculation partners have been identified:

SMEs related costs (indicatively):

-wages of apprentices: regular, irregular wage payments, compensation for any living expenditure;

-training costs: e.g. training personnel and supplies' costs;

-recruitment and administrative costs: including financial and capital costs;

-quality costs: correction of mistakes' costs, quality assurance costs;

-infrastructure costs;

-other costs: fees, duties and taxes;

SMEs-related benefits (indicatively):

-the value of apprentices' productive work for skilled and unskilled tasks;

-higher productivity percentage during the apprenticeship period;

-increased firm's reputation: increase in local/regional/national clients, positive customers feedback;

-saved hiring costs;

-eventual training subsides;

Society-related benefits, which SMEs have no knowledge about but should also be considered (indicatively):

-increased local/regional/national employment rate;

-increased local/regional/national youth employment rate;

-social inclusion of vulnerable categories;

-economic return: reduction of public expenditure in VET;

-wage returns: higher apprentices' wages compared to non-apprentices' ones;

-acquisition of hard and soft skills by the apprentice;

-facilitation in school-to-work transition;

-increased entrepreneurship among young people;

-better quality of work;

-improved professional status and career development among young people;

-better job satisfaction;

The Model to be developed is based on:

- the parameters that arose from the initial research and are listed above;

- further research into 6 participating countries (Bulgaria, Greece, Italy, Portugal, Slovakia, Spain);

- synthesis of the results and extraction of the common attributes for the development of a European wide applicable model.

The tasks leading to the production of the "Model for the calculation of the return on investments of WBL and apprenticeships for SMEs" were divided as follows:

- 1. Preparation of the Guideline for qualitative research
- 2. Focus groups in 6 partner countries organisation
- 3. National research reports (qualitative part) elaboration
- 4. Preparation of the Guideline for quantitative research
- 5. Questionnaire survey in 6 partner countries
- 6. National research reports (quantitative part) elaboration
- 7. Synthesis report elaboration
- 8. Development of a model for ROI

Technical university of Košice (TUKE), Slovakia was leader of the activity 1-7. TUKE provided the research methodology to partners, collected the national reports and developed the Synthesis report. SVUK, UK and CECOA, Portugal provided expert feedback on the Guideline for research.

The research focussed on Synthesis report preparation started in November 2017. In December 2017 the Guideline for qualitative research has been prepared. The focus groups in Slovakia, Greece, Italy, Bulgaria, Portugal and Spain were organised in January 2018. The first part of national reports which included results of focus groups has been prepared by six ROI project partners in January 2018. Based on the results of the focus groups, the methodology for quantitative research has been prepared by the end of January 2018. The questionnaire survey has been carried out in Slovakia, Greece, Italy, Bulgaria, Portugal and Spain in February-March 2018. Altogether 120 organisations have been researched which resulted in the final version of National reports preparation. Based on the National reports TUKE, Slovakia elaborated Synthesis report. This Synthesis report serves as basis for the preparation of the ROI model. Based on the Synthesis report, CECOA, Portugal will develop a comprehensive Model for the return on investments of WBL and apprenticeships.

The Synthesis report includes the most important and relevant outputs from National reports.

For more information see: Annex 1: The Guideline for research Annex 2: National report Bulgaria Annex 3: National report Greece Annex 4: National report Italy Annex 5: National report Portugal Annex 6. National report Slovakia Annex 7: National report Spain

### 4. Results from focus groups

#### 4.1 Description of Focus Groups

During January 2018, project partners organized focus groups with representatives of the ROI project's target groups. The focus groups were organized by the project partners from Slovakia, Greece, Italy, Bulgaria, Portugal and Spain. Representatives of different types of organizations such as big multinational companies which are a forerunner of the dual education, SMEs, organization supporting WBL, VET providers, trainers and students took part in the focus groups.

In order to protect the respondent's confidentiality in qualitative research, the anonymity of both respondents and company has been maintained by removing the contributor's and company names.

The respondents received the national translation of the questions for qualitative research one week before focus groups have been carried out. The focus groups in some countries have been recorded with prior approval of all participants.

#### 4.2 Main results from focus groups

There are very similar definitions of work-based learning and apprenticeships in all countries participating in the project. In all countries WBL and apprenticeships are associated with practical training of students in companies. However, there are differences concerning the way of implementing policies, the national framework and the level of development of WBL and apprenticeships.

#### Support measures

According to the respondents from all partners' countries participating in the focus groups, the best ways how to promote WBL and apprenticeship to SMEs are:

- economic benefits provision, like subsidies/tax reduction for SMEs;
- less bureaucracy;
- improve funding structures for WBL and apprenticeships;
- close cooperation between VET schools and SMEs;
- the Government should cover the expenses;
- Company should invest on students;
- there should be more regulations with respect to quality assurance and monitoring of practical training in enterprises to students and adults;
- improve awareness of SMEs about WBL;
- promoting the status of certificates for WBL students.

#### Main benefits of an effective work-based learning:

- the apprentices get prepared for professional life. They take lessons in practice, make mistakes, fix them and generally, improve their abilities;
- the VET schools and Training centres will cooperate more easily between each other;
- decrease the skills miss-match;
- increase the job opportunities;
- increase the quality of the VET education offer;

- increase languages skills especially in company open to the world;
- increase the intergenerational exchange;
- better match between needs of business and employees' skills;
- graduates have a certain job and a possibly of faster career progression;
- faster integration of students into work teams;
- acquiring work habits and working discipline;
- well prepared future workers.

#### Main obstacles for an effective work-based learning:

- the WBL is not created in line with VET curricula;
- the supervision and monitoring of the student;
- lack of financial resources;
- too much bureaucracy and documentation;
- many changes in the law;
- the parents' involvement is not always positive;
- high schools are not interested in dual education;
- poorly prepared school graduates.

#### Measures implemented to improve the work-based learning:

- cooperation with the social partners for a new national legislation;
- cooperation between the different levels of governance.

#### Main costs associated with WBL:

- salaries, social insurance, health insurance of students;
- wages for supervision and trainers;
- time costs;
- recruitment;
- promoting dual education/marketing /advertising;
- material costs.

The most of participants in the focus groups from all countries agreed that there is a lack of structures in the system of communication and cooperation between VET and companies. Participants also said that there is a lack of support for companies that provide apprenticeships for disadvantaged or they did not have any information about that.

Also, according to the focus groups participants, companies are not sufficiently motivated and supported to assign qualified trainers and tutors to their apprentices in all countries except Bulgaria and Spain.

#### Social value/impacts and the outcomes of apprenticeships and WBL

Focus groups participants understand "social value/social impact/SROI" as:

- the way it influences the SMEs, the students and the business in general;
- employability and increase of the social and professional skills and competences;
- more social cohesion between the different actors involved;
- intergenerational exchange;

- social value a value that cannot be expressed in financial terms;
- social benefits loyalty of the employee;
- Corporate Social Responsibility of the company involved in WBL as it contributes to its better image.

The focus groups participants pointed out that in some countries the current system is scarcely available to SMEs and it is necessary to understand why their efforts to engage in the system are mostly not successful. The key problem is the low willingness of schools, students and their parents, both for financial and attitude reasons. Apart from SMEs, it would be necessary to better understand the attitudes of schools and students and to raise awareness of the benefits of WBL as well as apprenticeships and vocational training in general to all stakeholders potentially involved (SME, schools, VET providers, students, parents, etc).

Besides the changes that result from a WBL and/or apprenticeship the significance of the impact of every ROI indicator should be better understood. It would be interesting to investigate if, after the WBL experience, SMEs create feedback loops with the schools to address the market needs to shape the subject and/or the methodology of the school subjects in order to close the gap of the skills mismatch. In addition, it would be useful to investigate the importance those social skills have in their company, and how they can be increased through a WBL experience and, finally, how organizations and companies evaluate whether students at the end of the WBL experience have reached the objective of their learning agreement stipulated at the beginning of the working experience.

It was pointed out that the following problems exist:

- not enough information provided by the career guidance centres;
- not enough control over the quality of training provided by the Vocational training centres for adults;
- not enough activity from the side of the business for ensuring opportunities for WBL;
- no available information about students and adults involved in practical training in enterprises, as well as assessments about quality achieved.

It would be very useful to:

- evaluate companies perceptions on the most evident aspects of apprenticeships and also wider considerations that they may not have taken into account such as the social and longer term impact of apprenticeship training;
- consider the various systems of WBL and specific advantages/disadvantages of each e.g. FCT(work based module) or Dual system;
- to list individual advantages to uncover perhaps unseen advantages;
- to explore the global knowledge of existing facilities and support for apprenticeships (legal, logistical, practical, financial, educational...) and to evaluate what would be required in each aspect to further facilitate apprenticeships in companies;
- to value the multiple (immediate and long term) social returns (for the wider economy, society, education, young people, employment, prosperity...);
- to evaluate availability of staff (if/how many/with what confidence) to train apprentices in companies;
- to explore what is lacking/what would be needed in companies from staff point of view.

For more information of results of the focus group in each participating country see Annex 2 -7.

### 5. The main results from SMEs survey

Questionnaire survey was answered by 120 enterprises from Slovakia, Greece, Italy, Bulgaria, Portugal and Spain between February and March 2018. Most of them were from category of small and medium-size enterprises. The enterprises operates in many kinds of sectors e.g. automotive, accommodation, boarding, electro technical industry, food industry, transportation, metallurgy and chemical industry, retail trade. Most of the enterprises that participated in the survey are certified to provide dual education, WBL or apprenticeships.

#### **5.1 Evaluation methodology**

Respondents were asked to answer to several question most of them in a 1-7 point Likert scale. After that the median values and mode values were calculated. The median is the value which separates the higher half of a data sample from the lower half and the mode determines which value occurs most frequently in the sample. Because 7-point scale system was used, the midpoint is number four. Therefore any average resulting in a number greater than four – is considered neutral value – could be concluded as overall agreement, while a value below four would indicate disagreement.

The IQR (inter-quartile range) value was calculated as well. It means that the responses were listed in numerical order, and then they were divided into four equal groups. The last number in each group is referred as the quartile. After that, the first number from the third was subtracted, to give the called inter-quartile range or IQR. This indicates that the respondent's opinions are not so far apart (if value is one or two), but it shows that the statement drew strongly to polarized responses if value is three or four (see Table 1).

Strongly disagree	1
Disagree	2
Somewhat disagree	3
Neither agree or disagree	4
Somewhat agree	5
Agree	6
Strongly agree	7

Table 1 Assigned points to Likert scale

Table 2 shows numbers of respondents by country.

Country	Number of respondents
Bulgaria	20
Greece	29
Italy	20
Portugal	11
Slovakia	20
Spain	20
Total	120

Table 2 Number of respondents by country

#### 5.2 The main results from quantitative survey

Below analysis of the results obtained by surveyed question is provided:

#### 1. Is your company involved in WBL and/or apprenticeships provision?

Most of surveyed companies are involved in dual education, WBL or apprenticeships. One type of this kind of education is provided by 95 (79%) companies, 15 (12%) companies do not provide any kind of education, but they are considering it. Only 9 (8%) of the respondent companies do not provide any kind of education because they do not have an interest and one respondent did not know if the company provides dual education.



Figure 1 Company involved in WBL and/or apprenticeships provision

#### 2. Do you have institutional policy on WBL and/or apprenticeships provision?

Most companies have their own institutional policy on WBL or apprenticeships. Overall, 75 (62%) companies have their own institutional policy on WBL or apprenticeships, 26 (22%) companies do not have any policy, but they are considering it and nine (8%) companies have no policy and they do not have an interest in it.



Figure 2 Numbers of companies with institutional policy on WBL and/or apprenticeships

3. 3a. In your opinion, WBL and apprenticeship in a companies

Table 3 shows results obtained in terms of company effects deriving from WBL and apprenticeships, presenting the median value, the modes value, the IQR (inter-quartile range) and an overall opinion for each item.

The item "does not bring value for money" reached an IQR value over 2. It means that responses to this question were strongly polarized and respondents had very different opinions about the item.

The rest of the items reached a value of IQR two or less, so in these items, responses are not so far apart and opinions of respondents are not so different.

WBL gives the opportunity to get to know future employees. This item has a strong agreement among respondents. A similar agreement was also obtained on items "has a better employee candidate pool, leading to lower future training costs", "ensures availability of skilled workers by investing in the future workforce" and "has a positive impact on organisation's performance", and "contributes to reducing the cost of external recruitment and internal induction (introducing staff to a new job and organisation").

The respondents had a neutral opinion about the contribution of WBL to staff retention and work satisfaction, bringing value for money, bringing more benefits than costs, and bringing more risks than benefits.

#### Table 3 Company effects

COMPANY EFFECTS	median	mode	IQR	Overall agree/disagree
has a positive impact on organisation's performance	6	6	1	agree
contributes to higher productivity by hiring the former WBL trainees	5,5	6	1	agree
enhances organisation's profitability	5	5	2	agree
contributes to reducing the cost of external recruitment and internal induction (introducing staff to a new job and organisation)	6	6	2	agree
increase staff morale (overall outlook, attitude, satisfaction, and confidence that employees feel at work)	5	5	2	agree
gives the opportunity to get to know future employees	6	6	2	agree
enhances company image and reputation	5	6	2	agree
increases staff retention and work satisfaction	5	6	2	agree
provides an effective way to address the problem of inadequate skills supply	5	6	2	agree
has a better employee candidate pool, leading to lower future training costs	6	6	1	agree
ensures availability of skilled workers by investing in the future workforce	6	6	1	agree
does not bring "value for money"	4	5	3	neutral
brings more benefits than costs	5	5	2	agree
brings more risks than benefits	3	2	2	disagree
is investment in future skills rather as a way to sustain low-cost production	5,2	6	2	agree
trainees bring innovation into the WBL experience, in particular digital skills	5	5	2	agree
trainees bring innovation into the WBL experience, in particular open sources programs	4	4; 5	2	neutral

According to the respondent's opinions, there are other effects of apprenticeships or WBL to companies:

- WBL is very necessary because students get practical experiences and they learn to use the latest technology that schools are not able to provide;
- saving state costs for technical provision of practical training;
- a significant increase in the employment of graduates;
- greater adaptation to jobs with more specific functions;
- reduces costs but increases risks;
- there is a negative effect outputs when the apprentice is not ready for this experience;
- it burdens with additional responsibilities the existing employees because they have to train the apprentices.

#### 4. 4a. In your opinion, the WBL and apprenticeship in society

Table 4 shows results obtained regarding society effects. According to the methodology set for this survey, a value of median less than four means overall disagrees, a value of median more than four means overall agreement and if the value of median = 4 it means the neutral opinion of respondents.

There was a strong agreement between respondents that apprenticeships and WBL increases employability through more effective preparation of learners for the labour market, foster the acquisition of soft and employability skills and contributes to the development of more relevant and integrated curricula at schools. The last item "improves active citizenship" has three different modes

There was an overall agreement, that apprenticeships or WBL reduce youth unemployment, as the value of median of this item was close to 5. There was a strong polarization of responses because IQR value is at level 3. There was an overall agreement for all other items.

SOCIETY EFFECTS	median	mode	IQR	Overall agree/disagree
increases employability through more effective preparation of learners for the labour market and fostering the acquisition of soft and employability skills	6	6	1	agree
contributes to developing more relevant and integrated curricula at schools	6	6	1	agree
reduced youth employment	5	6	3	agree
higher inclusion in society, helps social integration and participation, particularly for vulnerable groups	5	6	2	agree
higher inclusion in society, helps to keep dropout rates low	5	6	2	
higher economic return through reducing public expenditure and freeing up funds for other priorities	5	4	2	agree
a better social cohesion and cooperation in the region	5	5	2	agree
higher societal trust since governments, companies and citizens contribute to improving the provision of opportunities and results	5	4	2	agree
improves intergenerational exchange	5	6	1	agree
improves active citizenship	5	4; 5; 6	2	agree

#### Table 4 Society effects

According to the respondent's opinions, there are other society effects of apprenticeships or WBL:

- better engaging in community;
- it activates trust between business customers and apprentices in case the company goes on recruiting later;
- greater interaction between the labour market and the education system, where contributions may be made for an assertive adaptation of curricula of some of the courses offered.

#### 5. 5a. In your opinion, the national legislation on WBL and apprenticeship

Table 5 shows median, mode, IQR value and overall agreement or disagreement regarding each of the item proposed related to national legislation on apprenticeships and WBL.

Respondents have a neutral overall opinion about all items in this part of the questionnaire. There were strongly polarized responses in items "has appropriately set the WBL financial framework" and "is more suited to larger companies than SMEs".

SUPPORT, ENVIRONMENT	median	mode	IQR	Overall agree/disagree
has established a structured, continuous dialogue and cooperation between all apprenticeship partners including a transparent method of coordination and decision-making	4	5	2	neutral
safeguards the rights and responsibilities of the main partners (vocational education and training providers, employers, apprentices and social partners)	4	5	2	neutral
duly involves employer and employee representatives in questions of apprenticeship content, assessment and certification	4	5	2	neutral
has appropriately set the WBL financial framework	4	2	3	neutral
is motivating to engage both companies and vocational education and training providers	4	5	2	neutral
is more suited to larger companies than SMEs	4	4	3	neutral

Other opinions of respondents regarding national legislation on dual education, WBL and apprenticeship are as follows:

- national legislation on WBL and apprenticeship is not good;
- is very complicated;
- conditions for dual education regulated by legislation are not attractive for companies and schools;
- it is mainly suitable for large automotive companies not for SMEs;
- currently, schools make decisions about place of practice for students, but it should be the students' decisions;
- not enough students of dual education for large companies;
- too many administrative duties for companies;
- it is not homogeneous, not organized, not flexible;
- it is necessary to request more clearly the participation of all those involved in the search for improvement of existing laws.

## 6. Please indicate 3 support measures that you know would make apprenticeships more attractive and accessible to SMEs and would motivate companies to take on apprentices?

In this part of the questionnaire, respondents suggested to mainly focus on areas related to Government support, dissemination activities, financial support and cooperation between companies and schools.

Respondents provided the following recommendation of measures:

#### 1. State support

#### a. Financial support

- the state to take over to contribute to the salary of the people to be recruited;
- grant for the complete insurance of the apprentice, grant for the largest part of the apprentice's salary;
- tax concessions for companies involved in dual education, WBL or apprenticeships;
- direct financial support for companies;
- co-financing of machines/tools within innovation (machine fleet modernization).

#### b. Non-financial support

- support by State institutions;
- ability to work after the end of the apprenticeship with reduced employer contributions for at least 5 years;
- less bureaucracy;

- motivation for recruitment.

#### 2. Education process

- standardization of process;
- ability to find candidates through electronic methods;
- longer duration in parallel with the studies;
- more guidance for tutors and simplification of the process;
- dual education in companies should be only for higher grades, because there is a risk to incorporate young students into the manufacturing process whereas the students do not have the necessary technical skills after graduation in the elementary school;
- to strengthen practical education in non-dual education (one day a week is not enough);
- to hire students into dual education through company itself;
- the theoretical preparations of practical lessons should be provided by the school, not by the company;
- an obligation that the student stay working in the company after completing his studies (for example; 3 years);
- student training on machines provided and trained by manufacturer;
- direct contact with the final product;
- an obligation for secondary vocational school participated in dual education;
- adjustment of study programs according to the requirements of companies.
- to build workrooms and supply good working equipment.

#### 3. Dissemination and awareness of WBL

- better promotion of dual education;
- better awareness of students, parents and schools about WBL and local companies
- counsellors at elementary schools;
- to increase the number of schools and students interested in dual education, WBL or apprenticeships;
- good mentors and teachers;
- formal recognition of the receiving entities and recognition at the tutor's level such as a formal certification.
- 7. In your opinion, are SMEs with no prior experience with apprentices able to work on WBL and apprenticeships

Table 6 shows items related to the SMEs and their ability to organise dual education, WBL or apprenticeships. First and second item in this part of the questionnaire reached IQR value at level 2, so the respondents' opinions are not so far apart from each other. Another two items reached IQR value at level 3, it means that respondents' opinions are very far apart from each other.

Respondents have a neutral opinion about the possibility of SMEs to host dual education or WBL. SMEs are interested in easier and shorter form of WBL or apprenticeship according to the respondent's opinion. Respondents agreed that SMEs with no prior experience with apprentices have the capacity to host WBL and they are interested in easier and shorter form of WBL or apprenticeship. SMEs with no prior experience with apprentices do not get sufficient financial support according to the respondents.

	median	mode	IQR	Overall agree/disagree
have the capacity to host WBL	5	5	2	agree
are interested in easier and shorter form of WBL or apprenticeship	5	4	2	agree
get sufficient financial support	3	2	3	disagree
get sufficient non-financial support	4	4	3	neutral

#### Table 6 SMEs with no prior experience with apprentices

#### 8. Perception of companies

Table 7 shows items related to the perception of companies at a system level. There is a strong agreement that SMEs require more information about apprenticeship since they do not have a clear idea of the different forms of WBL.

Companies are not sufficiently motivated and supported to assign qualified trainers and tutors to their apprentices according to the respondents' opinions. There is a neutral opinion of respondents about items "companies that provide apprenticeships for disadvantaged learners are sufficiently supported", "sufficient broad range of awareness-raising activities aiming at the promotion of the vocational education and training and apprenticeships attractiveness are implemented", "there is systematic cooperation between vocational education and training schools or training centres and companies that ensure sufficient support to SMEs through business-education partnerships at the local level", "the current content of work-based learning programmes takes into account the changing skill needs in companies and society" and "SMEs create feedback loops with the VET providers to address the market needs". There was a polarization of responses as well. It means that responses in five items were very different.

PERCEPTION OF THE SYSTEM WORKING	median	mode	IQR	Overall agree/disagree
SMEs require more information about apprenticeship since they do not have a clear idea on the different forms of WBL	6	6	1	agree
companies that provide apprenticeships for disadvantaged learners are sufficiently supported	4	3	3	neutral
companies are sufficiently motivated and supported to assign qualified trainers and tutors to their apprentices	3	2	3	disagree
sufficient broad range of awareness-raising activities aiming at the promotion of the vocational education and training and apprenticeships attractiveness are implemented	4	4	3	neutral
there is systematic cooperation between vocational education and training schools or training centres and companies that ensure sufficient support to SMEs through business-education partnerships at the local level	4	5	3	neutral
the current content of work-based learning programmes takes into account the changing skill needs in companies and society	4	3	3	neutral
the adaptation of the school curricula to the SMEs needs which are strictly related to the market is missing	5	4	2	agree
SMEs create feedback loops with the VET providers to address the market needs	4	4	1	neutral

#### Table 7 Perception of the system working

#### 9. In your opinion, which are the 3 main success factors that contribute to effective workbased learning?

According to the respondents' opinions, success factors that contribute to effective apprenticeships and WBL contain factor related to State support, cooperation between stakeholders, benefits to the companies or technical equipment for companies.

Respondents reported the following factors:

#### 1. Interest of students and companies in WBL

- the intention of the enterprise to contribute to the learner's knowledge and education;
- real participation of the company offering the position and willingness to invest time to train the apprentice;
- desire to learn students lack of motivation to learn;
- a financial motivation for students;
- real interest of employers and students in dual education and WBL;
- a promotion of this kind of education.

#### 2. Working environment

- qualified trainers, cooperation between schools and companies;
- students receive new experiences by older colleagues;
- qualified workforce after graduation (students should stay working in the company after graduation);
- technical equipment students should come into contact with modern machines;
- good working atmosphere.

#### 3. State support and cooperation

- state support;
- benefits for companies and students;
- financial support for companies;
- adjustment of study programs according to the requirements of companies;
- communication between school and company;
- involvement and commitment of SME, close monitoring by the entity that places the trainees and motivation of the trainees.

## 10. 10a. In your opinion, which are the main obstacles for effective work-based learning in your company?

Table 8 shows obstacles regarding the implementation of dual education, WBL, and apprenticeships in companies. Respondents agreed that optimal public policy support does not exist. The biggest problems for companies are lack of a legal structure and data, too much bureaucracy and documentation and lack of interest and engagement of the students. There was a neutral opinion about obstacles related to the informal recognition of WBL, high financial costs having impact on profits and high time cost having an impact on profits.

#### Table 8 Company obstacles

COMPANY OBSTACLES	median	mode	IQR	Overall agree/disagree
optimal public policy support does not exist	5	5	2	agree
formal recognition of WBL	5	6	2	agree
informal recognition of WBL	4	4	2	neutral
low interest of vocational and education training schools in WBL	5	5	2	agree
degradation of apprenticeship and vocational and education training school in public eyes	5	5	2	agree
poaching of WBL learners - some firms will invest in training whilst others recruit the trained workers	5	5	2	agree
lack of a legal structure and data (i.e. legislation determining the status or insurance of trainees, challenge of measuring learning outcomes)	5	6	2	agree
ensuring the quality of WBL; use of appropriate quality control mechanisms	5	5	1	agree
lack of support and commitment for WBL from companies and vocational and education training schools	5	5	2	agree
workplace supervision and training, availability of good trainers and mentors	5	5	3	agree
low involvement and capacity of chambers of commerce and other professional associations	5	5	2	agree
negative perceptions of WBL (e.g. as a second-best educational alternative)	5	5	3	agree
high financial costs having impact on profits	4	4	2	neutral
high time cost having an impact on profits	4	4	1	neutral
too much bureaucracy and documentation to provide in order to start the WBL experience	5	7	2	agree
lack of interest and engagement of the students, most of the time students don't have a real idea of what the company is doing	5	6	2	agree

Other obstacles:

- SMEs think that WBL is directed to large companies;
- high cost of destroyed tools;
- low awareness of parents and students, low interest of schools;
- bureaucracy, insufficient drafting of the law;
- non-linking between study programs and the labour market;
- lack of time;
- differences in the level of education received by apprentices;
- lack of adequate information from apprentices or training providers prior to their placement.

#### 11. 11a. In your opinion what kind of support do companies need for WBL

Table 9 shows items related to support needed by companies to be engaged in WBL and apprenticeships. There is the overall agreement for each item in the table. The values of median, mode, and IQR show a strong agreement toward all kind of support measures proposed. It is clear that companies will appreciate all kinds of support.

According to the respondents' opinion, the most needed support is related to the development of mentor guidance, to the creation of teaching and learning resources, flexible educational framework, higher public investment into the system to cover design and delivery of WBL projects

and individual students, reduction in the direct cost of programmes to employers and cooperation between VET schools and SMEs abroad.

SUPPORT NEEDED FOR COMPANIES	median	mode	IQR	Overall agree/disagree
staff development	5	5;6	1	agree
development of ICT platform/ guide/website	5	5	2	agree
development of mentor guidance	6	6	1	agree
support network and tutorial groups	5	5	2	agree
creation of teaching and learning resources	6	6	1	agree
employer training offered by the higher education/training institutions	5	6	2	agree
reduction in the direct cost of programmes to employers	6	6	1	agree
development of WBL partnerships and effective communication with the professional and the apprentices	6	6	1	agree
flexible educational framework for development of WBL projects designed to address the company needs	6	6	1	agree
research undertaken by relevant Sector Skills Councils, and support for the internal validation process	5	5	2	agree
higher public investment into the system to cover design and delivery of WBL projects and individual students	6	6	1	agree
Possibility to cooperate between VET schools and SMEs abroad	6	6	2	agree

#### Table 9 Support for WBL

Other kinds of support suggested by respondents were:

- the allocation of tutors;
- training schools should have supporting legislation to initiate collaboration protocols with companies;
- less bureaucracy, better cooperation with schools;
- not to impose a financial burden on employers with a lot of regulations;
- companies should not be responsible for studying materials;
- Slovak system of dual education should be inspired by system in countries as Austria, Switzerland;
- practical lessons for students at schools;
- direct financial support, support for trainers and mentors;
- support in hiring students;
- flexible curriculum at schools.
- 12. Do you know any institution in your country which provides support for WBL and employer engagement activities (e.g. Work-related Learning Service or Centre for Workbased Learning Partnership or The Employer Engagement Unit)

43 (36%) respondents know some institution which provides support for WBL and employer engagement activities and 77 (64%) does not.

Figure 3 Recognition of institutions providing the support for WBL



#### Slovakia

Respondents know institutions such as Slovak Chamber of Commerce, Automotive Industry Association of the Slovak Republic, Republic Employers' Union, State Institute for Vocational Education, Union of Wood Processors of the Slovak Republic, "Asociácia zamestnávateľských zväzov a združení".

#### Greece

Respondents in Greece recognize the following institutions: Career offices of universities, OAED (LABOR FORCE EMPLOYMENT ORGANIZATION), Universities, Apprenticeship schools of OAED, ATLAS, Structure of Employment and Career, VET canters.

#### Bulgaria

Respondents in Bulgaria recognize following institutions: Ministry of education and science, VET trainers, National agency for VET and WBL – NAVET.

#### Portugal

Respondents in Portugal recognize the following institutions: CECOA, IEFP, Escola João de Barros, Grupo Escola D.Pedro V, Associação Empresarial de Ansião; Centro de Negócios de Ansião; Instituto Pedro Nunes; Centro Qualifica da Escola Tecnológica e Profissional de Sicó (Avelar).

#### Spain

Respondents in Spain recognize the following institutions: CEBEK and EGAZ Txorierri.

#### Italy

Respondents in Italy recognize the following institutions: Manpower, Adecc, Employment centres and private employment agencies and GESFOR.

#### 13. In your opinion, what are the costs associated with WBL?

Table 10 shows costs items associated with apprenticeships and WB. Items in the table are sorted according to the companies' opinion about costs associated with apprenticeships or WBL. The highest costs associated with dual education or WBL are regular wages of apprentice's costs. This item was considered as a cost by almost all respondents. The next item associated with apprenticeships or WBL are time costs, supervision/mentoring costs and administration costs. Next are the preparation of qualified mentors and trainers, tools and materials. Lastly follows, irregular wages of apprentices.

COSTS	Yes	No	l do not know
regular wages of apprentices	82	22	16
time costs	79	28	13
supervision/mentoring costs	76	30	14
administration costs	76	31	13
preparation of qualified mentors and trainers	74	29	17
tools and materials	73	33	14
quality costs: correction of mistakes' costs, quality assurance costs	66	34	20
recruitment and administrative costs: including financial and capital costs	65	35	20
allowances paid to trainees	64	35	21
infrastructure costs	51	45	24
opportunity cost	47	42	30
compensation for any living expenditure of apprentices	43	57	20
fees, duties and taxes	40	55	25
fees for off-the-job training	39	57	24
irregular wages of apprentices	37	48	32

#### Table 10 Costs items associated with dual education and WB

Other costs associated with apprenticeships or WBL according to the respondent companies:

- corporate scholarship;
- health care;
- promotional activities;
- learning materials.

# 6. The main recommendation for O1. Model for Return on Investment of WBL and apprenticeships preparation

Based on results from focus groups and SMEs survey, following recommendations were selected. Selection of items included in recommendations was based on an overall agreement of respondents and participants from all counties.

#### **6.1 SMEs related costs**

- preparation of qualified mentors and trainers;
- the cost of promoting dual education, marketing and advertising;
- wages costs for employees who provide practical training (lecturers, teachers);
- WBL costs depend on the field in which the company operates (IT sector wages costs, car production technology);
- infrastructure, rooms;
- the cost of tools and materials;
- supervision/mentoring costs;
- administration costs;
- quality costs: correction of mistakes' costs, quality assurance costs;
- time costs;

- recruitment costs;
- regular wages of apprentices.

#### 6.2 SMEs-related benefits

- graduates of dual education who remain in the firm after graduation;
- faster integration of graduates into company's work environment;
- students are able to work in several positions within the company;
- reducing the cost of external recruitment and internal induction (introducing staff to a new job and organization);
- opportunity to get to know future employees;
- effective way to address the problem of inadequate skills supply;
- lower future training costs;
- higher productivity by hiring the former WBL trainees;
- enhancement of company image and reputation;
- positive impact on organisation's performance and profitability.

## 6.3 Society-related benefits, which SMEs have no knowledge about but should also be considered

- increased employability through more effective preparation of learners for the labour market and fostering the acquisition of soft and employability skills;
- developing more relevant and integrated curricula at schools;
- higher inclusion in society, helps social integration and participation, particularly for vulnerable groups;
- improvement of intergenerational exchange;
- high societal trust since governments, companies and citizens contribute to improve provision of opportunities and results;
- reduces youth employment;
- improved active citizenship.

#### 6.4 Other recommendation

In relation to apprenticeships, as apprenticeships can lead to good employment outcomes, it is suggested to stimulate the further development of apprenticeships as a benefit to employers, students and VET providers:

- ensure that the term 'apprenticeship' is used as a brand, associated with quality learning and working environments, for example to create a «seal» of good European practice of companies that support students in the learning system;
- stimulate further engagement of employers (and SMEs) in the development and implementation of apprenticeships (e.g. financial incentives and support in organising work-based learning) and make them aware of the benefits of expanding the apprenticeship system in their sector in terms of recruitment and the alignment of education to the needs of labour market;
- ensure that apprenticeships are also used by groups that are currently underrepresented (which differs by country);
- ensure the quality of learning in the workplace by means of establishing agreements between providers and employers and assuring the quality of the in-company trainers and mentors;
- establish agreement between social partners at EU-level and Members State level on issues related to employment contracts for apprentices and fair payment, balancing the interests of the apprentices and the employers (keeping employers interested in offering apprenticeships). This agreement should inform the development of a European level

definition of the concept of apprenticeship that can be used to improve the data availability and quality on apprenticeship systems in Europe.

The Model for Return on Investment prepared by the project consortium should take into consideration the real need for:

- informing companies in a clear and simple way about of the opportunities, possibilities and benefits of WBL and apprenticeship collaboration at national/regional level;
- to demonstrate visible benefits: pooling of skilled labour, reduced recruiting costs, huge benefit of getting to know apprentices before hiring, workforce relief, renovation in digital (other technological) skills offered by student apprentices etc.

## 7. Annexes

Annex 1: The Guideline for research Annex 2: National report Bulgaria Annex 3: National report Greece Annex 4: National report Italy Annex 5: National report Portugal Annex 6. National report Slovakia Annex 7: National report Spain

<sup>&</sup>lt;sup>i</sup> Source: Estatisticas da Educação 2015-2016 – Adultos. Direção-Geral de Estatisticas da Educação e Ciência.