

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

Rol of WBL and apprenticeships

Return on Investment of Work Based Learning and apprenticeships

Project Nº 2017-1-SK01-KA202-035375

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein

Document description

Document Name	National Research Report - Portugal
Version	V03
Date	20/03/2018
Author(s)	Vanda Vieira
	CECOA – Centro de Formação Profissional para o Comércio e Afins

CONTENT

1.	. Country facts about Portugal	5
	1.1. Overall Historical Context	5
	1.2. Portuguese Political System	6
	1.3. Statistic Profile of Portugal	6
2.	. Labour market description	12
3.	. Economic sectors and enterprise description	14
4.	. VET in Portugal	16
	4.1. Historical context	16
	4.2. Types of Vocational Education Programmes	17
	4.2.1. Compulsory education: basic and secondary levels	
	4.1.1.1. VET at basic level	17
	4.1.1.2. VET at secondary level	18
	4.2.2. Pos-secondary non tertiary education	20
	4.2.3. Higher education: universities and polytechnics	
	4.2.4. VET for adults	21
	4.2.5. VET for vulnerable groups	22
5.	. Practical training at the workplace (PTW): current arrangements	23
	5.1. The Law on Apprenticeship	23
	5.2. Financing	26
	5.3. Place of the PTW in the ET system	28
	5.4. Governance structures	30
	5.4.1. Promoting workplace learning	31
	5.5. Training content and learning outcomes	31
	5.6. Cooperation among learning venues	32
	5.7. Participation and support to companies	33
	5.7.1. SMEs basic-figures	33
	5.7.2. Skills and innovation	33
	5.7.3. Raising skills	34
	5.7.4. Developing vocational education and training (VET)	35
	5.8. Requirements and support to teachers and mentors	37
6.	. The main results from focus group	38
	6.1. Description of Focus Group (e.g. date and location, participants)	38

	6.2. Country/System level	38
	6.3. Cooperation between VET and Companies' level	41
	6.4. Companies' level	. 42
	6.5. Students' level	43
	6.6. Social value/impacts and outcomes of apprentices and WBL	45
7.	The recommendations for further research – questionnaires survey for SMEs	47
8.	The main results from SMEs survey	48
	The main recommendations for O1. Model for Return on Investment of WBL and oprenticeships preparation	
5	References	66

1. Country facts about Portugal

1.1. Overall Historical Context

Portugal is a sovereign state located mostly on the Iberian Peninsula in southwestern Europe. It is the westernmost country of mainland Europe, being bordered to the west and south by the Atlantic Ocean and to the north and east by Spain. Its territory also includes the Atlantic archipelagos of the Azores and Madeira, both autonomous regions with their own regional governments. At 1.7 million km2, its Exclusive Economic Zone is the 3rd largest in the European Union and the 11th largest in the world.

Portugal is the oldest state on the Iberian Peninsula and one of the oldest European nation-states. Portugal as a country was established in the aftermath of the Christian Reconquista against the Moorswho had invaded the Iberian Peninsula in 711 AD.

After the Battle of São Mamede, where Portuguese forces led by Afonso Henriques defeated forces led by his mother, Theresa of Portugal, the County of Portugal affirmed its sovereignty and Afonso Henriques styled himself Prince of Portugal. He would later be proclaimed King of Portugal at the Battle of Ourique in 1139 and was recognised as such by neighboring kingdoms in 1143.

In the 15th and 16th centuries, Portugal established the first global empire, becoming one of the world's major economic, political and military powers. During this period, today referred to as the Age of Discovery, Portuguese explorers pioneered maritime exploration, notably under royal patronage of Prince Henry the Navigator and King John II, with such notable voyages as Bartolomeu Dias' sailing beyond the Cape of Good Hope (1488), Vasco da Gama's discovery of the sea route to India (1497–98) and the European discovery of Brazil (1500).

Portugal monopolized the spice trade during this time, and the empire expanded with military campaigns in Asia. However, events such as the destruction of Lisbon in a 1755 earthquake, the country's occupation during the Napoleonic Wars, and the independence of Brazil (1822), left Portugal crippled from war and diminished in its world power.

After the 1910 revolution deposed the monarchy, the democratic but unstable Portuguese First Republic was established before later being superseded by the Estado Novo right-wing authoritarian regime. Democracy was restored after the Carnation Revolution in 1974, ending the Portuguese Colonial War.

Shortly after, independence was granted to almost all its overseas territories. The handover of Macau to China in 1999 marked the end of the longest-lived colonial empire. Portugal has left a profound cultural and architectural influence across the globe, a legacy of over 250 million Portuguese speakers, and many Portuguese-based creoles. A member of the United Nations and the European Union, Portugal was also one of the founding members of NATO, the eurozone, the OECD, and the Community of Portuguese Language Countries.

Portugal is a developed country with a high-income advanced economy, a developed market, and high living standards. It is ranked highly in terms of LGBTI rights (6th in Europe), press freedom (18th), social progress (20th) and prosperity (25th), and has one of the best road networks in the world.

With its political stability and low crime rates, it is ranked as the most peaceful country in the EU and the 3rd in the world. Additionally, it is recognized as one of the fifteen sustainable states, maintaining a unitary semi-presidential republic. Portugal ranks above the OECD average in mathematics, science, and reading, having been the country with the most expressive positive evolution throughout PISA's studies.

Although historically a Catholic-majority country, in the last decades Portugal has transformed itself into a secular state with one of the world's highest rates of moral freedom. It was the first country to abolish life imprisonment and one of the earliest to abolish capital punishment. Practices such as abortion, same-sex marriage and adoption, medically assisted insemination for single women and lesbian couples, and altruistic surrogacy have been legalized. In 2001, Portugal became the first country in the world to decriminalize the possession and consumption of all illicit drugs, focusing on treatment and harm reduction, with significant public health gainsⁱ.

1.2. Portuguese Political System

Portugal is a semi-presidential republic with a head of government - the prime minister - and a head of state - the president - who has power to appoint the prime minister and other government members. The country is administratively divided into 308 municipalities, subdivided into 3,092 civil parishes. Operationally, the only legally identifiable local administrative units are the municipality and civil parish, and the national government.

1.3. Statistic Profile of Portugal



«Relative to other OECD countries, Portugal has a mixed performance across the different well-being dimensions. For example, it is in the bottom third of the OECD in terms of household net adjusted disposable income, average earnings and long-term unemployment, social support and life satisfaction. On the other hand, while both housing affordability and the average number of rooms per person are below the OECD average, only 1% of Portuguese people still live in housing without basic sanitation, compared to an OECD average of 2.2%. Life expectancy at birth is one year higher than the OECD average, and Portugal fares reasonably well in terms of environmental quality and personal security, where it stands above the OECD average across all the available indicators. In terms of education and skills, the country's performance is mixed: while only 47% of working-age adults have attained at least an upper secondary education, among the lowest in the OECD, students' cognitive skills at age 15 are above the OECD average level»ii.

According to the Portuguese Governmentiii and the EUROSTAT statisticsiv, the last economic indicators about the Portuguese economy vare the following:

Table 1: Portugal in numbers

EU Indicators	2012	2013	2014	2015	2016
GDP per capita (base=2011)	16 015, 0	16 282,0	16 640,0	17 330,0	17 905,0
Deficit (% GDP)	-5,7	-4,8	-7,2	-4,4	-2,0
Public Debt (% GDP)	126,2	129	130,6	129	130,3
Balance of Trade (% GDP)	0,1	1,9	1,1	1,8	2,2

Data Sources: Country Profile EUROSTAT

Source: EUROSTAT

Table 2: Portugal in comparison with the EU 28

EU Indicators	Portugal	EU 28
Real GDP - change compared to previous quarter (%)	0,5	0,6
Real GDP - change compared to same quarter of previous year (%)	2,5	2,6
Inflation rate (HICP all items) - change compared to previous month (%)	-1,2	0,3
Inflation rate (HICP all items) - change compared to same month of previous year (%)	1,1	1,7
Unemployment rate - Total (%)	7,8	7,3
Employment - change compared to same quarter of previous year (%)	3,1	1,8
Labour Cost Index - change compared to previous quarter (%)	-0,9	0,4
Labour Cost Index - change compared to same quarter of previous year (%)	-1,1	2,1
Job vacancy rate (%)	0,9	2,0
International trade in goods - balance (Million EUR)	-1164.1	6431.4
Volume of retail trade - change compared to same month of previous year (%)	5,0	2,4
Current account balance (million EUR)	2068.0	75848.4
Business investment rate (%)	21,85	22,11

Data Sources: Country Profile EUROSTAT

Source: EUROSTAT

According to PORDATA, the Resident Populations of Portugal in 2016 were 10.325,5 citizens: 4.892,0 males and 5.433,5 females.

Table 3: Resident population: total and by sex

Years	Sex				
rears	Total	Males	Females		
2012	10.514,8	5.013,1	5.501,8		
2013	10.457,3	4.976,9	5.480,4		
2014	10.401,1	4.940,8	5.460,2		
2015	10.358,1	4.912,6	5.445,5		
2016	10.325,5	4.892,0	5.433,5		

Data Sources: INE – Annual Estimates of Resident Population

Source: PORDATA, Last updated: 2017-11-10

Also according to PORDATA, the Resident Populations: total and by major age groups in 2016 had the flowing composition: 14,1 are citizens from 0–14 years old, 65% are citizens from 15–64 years old and 20,9% had more than 65 years old.

Table 4: Resident population: total and by major age groups

Years		Major	age groups	
rears	Total	0-14	15-64	65+
2008	100,0	15,5	66,6	17,8
2009	100,0	15,4	66,5	18,1
2010	100,0	15,2	66,3	18,5
2015	100,0	14,2	65,3	20,5
2016	100,0	14,1	65,0	20,9

Data Sources: INE - Annual Estimates of Resident Population

Source: PORDATA, Last updated: 2017-11-10 Portuguese Illiteracy rate still exists according to the last Census: total and by sex. It is measure by the percentage of resident population aged 10 and over who does not know to read or write. The next table presents the results from the last two Census: in 2001, there was a total of 9,0 of Portuguese population without education (6,3 males and 11,5 females) and 10 years after we still have 5,2% of the Portuguese in that circumstances (3,5 males and 6,8 females).

Table 5: Illiteracy rate, according to the Census: total and by sex

Wasse	Sex				
Years	Total	Males	Females		
2001	9,0	6,3	11,5		
2011	5,2	3,5	6,8		

Data Sources: INE - X, XI, XII, XIII, XIV and XV General Population

Census

Source: PORDATA Last updated: 2015-06-26 According to the same sources, the **Aging Indicators** are define as «How old are there for every 100 young people? How old and/or young are there for every 100 people of working age? How many people aged 75 and over exist for every 100 elderly?». The following table show us that the demographic disadvantage of the Portuguese population to face the next economic and social challenges.

Table 6: Resident population: total and by sex

Years	Ageing index	Total dependency rate	Young-age dependency ratio	Old-age dependency ratio	Longevity index	Potential sustainability index
2012	129,4	51,7	22,5	29,1	48,7	3,4
2013	133,5	52,2	22,4	29,9	48,9	3,3
2014	138,6	52,8	22,1	30,7	49,0	3,3
2015	143,9	53,2	21,8	31,4	49,0	3,2
2016	148,7	53,8	21,6	32,1	48,8	3,1

Data Sources: INE - Annual Estimates of Resident Population

Source: PORDATA Last updated: 2018-01-29

The table 6 shows that in 2016 there has an ageing index of 148,7 a total dependency rate of 53,8 and particular relevant the young-age dependency ration of 21,6. Our potential of sustainability index is 3,1.

The Portuguese resident population aged 15 and over by the level of highest educational qualification since 2012 and until 2017 is presented below (table 7). According to the National Statistics Institute, INE - Labour Force Survey, in 2017: 7,3% of the Portuguese population who lived in national territory had no education qualification; 22,4% had the 1st cycle; 10,7 had the 2nd cycle and 20,4% had the 3rd cycle; 21,1% had upper-secondary education and only 18,1 had higher education.

The Erasmus + Coalition for the EU Programmes in Education, Training, Youth and Sports highlights: «Education is a Key driver to socio-economic progress, to the fulfillment of EU2020 and the United Nations Sustainable Developments Goals». The empowerment of citizens through education is one of the 10 most important reasons do to better at the lifelong learning environments and to support the economic growth, employability and talents retention providing better opportunities to acquire and recognize basic and transversal skills, competence and knowledge.

Table 7: Resident population aged 15 and over by level of highest educational qualifications obtained (%)

	Educational qualifications							
Years	With no educational qualification	Compulsory education			Upper-secondary education	Higher education		
		1st cycle	2 nd cycle	3 rd cycle				
2013	9,5	24,6	11,9	20,5	18,5	15,0		
2014	8,9	23,8	11,2	20,5	19,2	16,5		
2015	8,3	23,5	10,9	20,3	19,9	17,1		
2016	7,9	22,8	10,7	20,4	20,4	17,8		
2017	7,3	22,4	10,7	20,4	21,1	18,1		

Data Sources: INE - Annual Estimates of Resident Population

INE- Labour Force Survey

Source: PORDATA Last updated: 2018-02-12

2. Labour market description

In Portugal, according to the Country Report Portugal 2017: Including an in-depth review on the prevention and correction of macroeconomic imbalances: the «Unemployment continues to decline and rising unemployment, even though unemployment long-term unemployment and youth unemployment remain high. Half of the unemployed are smart for a year or more, and a quarter of young people do not have job. Long-term unemployment may make return to work even more difficult and compromises the growth potential of Portugal».

According to CEDEFOP report, the unemployment rate in 2016 was 11.1%, rising from 8.1% to 16.2% between 2007 and 2013 and then declining. These figures confirm a slow recovery from the financial and sovereign debt crisis which lasted several years. Long-term unemployment accounts for over half of the total unemployment and tends to be stabilized at a high level. In the mainland, 51.4% of the unemployed held primary level education, 29% held secondary level education and 19.6% held higher education. The rate of youth unemployment still remained high in 2016.To face these challenges, the government reinforced the measures to promote youth employment (53.5% of employers under 30 years work on temporary contracts affecting new entrants; EU average 33.3%) and negotiated a mid-term agreement with social partners to improve the labour market conditions regarding topics of market segmentation and collective bargaining.

The Portuguese labour market showed strong recovery over 2014-2016. The fall in unemployment between 2014 and 2016 was about 4.5 pps. faster than was to be expected on the basis of the past relationship between GDP growth and unemployment. This overshooting was the largest in the EU (European Commission, 2016a). The relatively job-rich recovery is probably linked to factors including strong wage adjustment in the previous years and with recent labour market reforms. Strong growth in tourism, particularly in 2016, is also estimated to have had a substantial positive impact on employment growth, as the sector itself and many related services are labour intensive. Overall, labour market conditions are expected to continue to improve over the medium term. Employment growth is however set to slow down over the forecast horizon. Along with a moderate decrease in the labour force, it is expected to bring the unemployment rate from around 11 % in 2016 to 9.4 % in 2018^{vi}.

According to the INE (National Statistics Institute) Employment Survey, Portugal had a total population of 10 281 600 in the third quarter of 2017, comprising 47.3 % men and 52.7 % womenvii as already mentioned.

In that same quarter, the active population was 5 247 000 and the employed population was around 4 803 000. The rate of unemployment was 8.5 % (9.2 % for women), representing a fall of 2.2 % on the previous year and continuing the downward trend observed since February 2016. Unemployment among young people under 25 years of age stood at 24.2 %. Youth unemployment is a particularly sensitive issue, although there has been an improvement in recent months (down 1.9 % from last year). Long-term unemployment has also fallen, but still accounts for 51.6 % of total unemployment (the EU-28 average stands at 45.6 %)^{viii}.

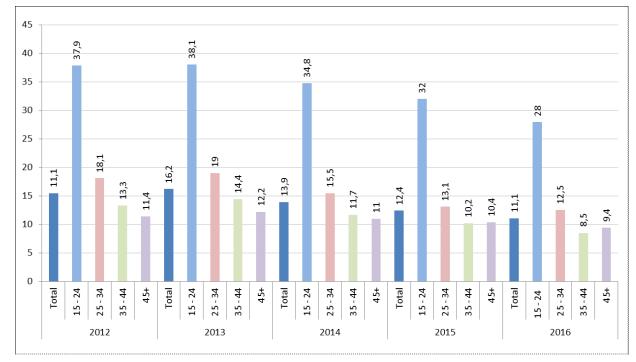


Figure 1: Percentage of unemployment people by age groups, 2012 to 2016

Source: Statistics of Portugal - INE

According to the European Labour Force Survey (data for the third quarter of 2017), Portugal's activity rate (75.1%) is still higher than the EU-28 average (of 73.3%). The participation of Portuguese women in the labour market (72.1%) is also higher than the EU28 average (of 67.8%).

As far as new forms of work organisation are concerned, part-time work in the country is still limited (only 8 % of total employment compared to 19.5 % for the EU-28), particularly among women (10.6 %), when compared to the average of 31.9 % female employment at EU-28 level.

At the end of October 2017, there were 404 564 persons registered as unemployed in the employment services (almost 105 039 less than the year before), with 45.1 % men and 54.9 % women. Of these, 49.4 % had been registered for more than a year. In September 2017, around 3.8 % of people registered as unemployed were foreign nationals. According to the figures available for mainland Portugal, there was a notable fall in their number from 21 804 in February 2017 to 15 574 in September 2017. 3 111 were EU citizens (particularly from Romania, Bulgaria and Spain), while 2 097 were from Eastern European countries (particularly Ukraine). There were also nearly 9 500 registered unemployed from Portuguese-speaking countries, especially Brazil (4 420) and Cape Verde (1 813).

Active labour market measures continue to foster transitions into employment, although the share of participants among jobseekers is falling. The percentage of registered unemployed people following active labour market measures fell from an average of 26 % in 2015 to 18.2 % in 2016. The Government published a preliminary assessment study on active labour market policies in June 2016 (Portuguese Ministry of Labour 2016). This relevant highlights the need to slow down the overall supply of active labour market measures, in line with the resources available from the European Social Fund (ESF) until 2020 (active labour market policies are largely co-financed by the ESF), while focusing these policies on schemes that foster job creation on permanent contracts. The study also

shows that 38 % of trainees were integrated in the labour market after having completed a traineeship and 27 % were offered an open-ended contract. Additionally, 65 % of those who were initially hired through hiring incentives are employed one year after the financial support has ended, but less than 30 % have an open-ended contract.

Portugal is developing one-stop shops for employment, with a particular focus on addressing the problem of long-term unemployment. Although still in a definition phase, once implemented, these would improve coordination between employment and social services and increase the 'activation' of unemployed people, in particular the long-term unemployed. The obligation for people registered as unemployed to turn up twice a month at the Public Employment Services (PES) has been revoked and replaced by personalised schemes, including towards long-term unemployed.

3. Economic sectors and enterprise description

A sectoral analysis of the employed workforce in the third quarter of 2017 gives an idea of the country's employment profile: agriculture, animal production, hunting and forestry represent 6.3 % of the employed population; industry, construction, energy and water 24.6 %; and services 69.1 %. The country's tertiary sector continues to gain in importance, particularly vehicle trade and repair, transport and storage, hotels and restaurants (26.3 % of total employment), and public administration and defence, social security, education, health and social support services (23.6 %)^{ix}.

The hotels and restaurants sector and human health and social care activities created the most jobs, with an increase of 70 500, particularly in the large metropolitan areas, followed by wholesale and retail sales, repair of motor vehicles and motorcycles and administrative and support services activities, with 27 400 additional jobs compared to the previous year.

Industry, construction, energy and water, which have been recovering since the beginning of 2014, recorded a year-on-year increase of 48 800 jobs, and the construction industry, which has been recovering since last year, accounted for 10 600 more jobs than in the same quarter of the previous year.

The manufacturing industries (representing 17 % of all jobs), not one of the most dynamic sectors of the Portuguese economy, have been modernizing, with an increase of 40 000 jobs in the quarter under analysis. Some sectors are significant, not only in terms of employment (as regards quantity and skills required), but also in terms of their contribution to wealth creation in the country, in particular because they contribute to exports:

- information and communication technologies, with a large number of small and mediumsized enterprises developing software, for example, or working on innovative cutting-edge technologies;
- the moulds sector in the Centre region;
- life sciences, the pharmaceuticals industry and the emerging biotechnology sector;
- the automotive 'cluster' (with the presence of brands such as Volkswagen, but also some component production plants);
- electrical and electronic equipment industries.
- Traditional sectors, such as footwear and clothing are also committed to modernisation and internationalisation, resulting in new jobs being created.

In synthesis, the most important sectors of Portugal's economy in 2016 were wholesale and retail trade, transport, accommodation and food services (24.9 %) and public administration, defense, education, human health and social work activities (19.7 %) and industry (18.5 %).

Intra-EU trade accounts for 75% of Portugal's exports (Spain 26%, France 13% and Germany 12%), while outside the 5% go to the United States and 3% to Angola.

In terms of imports, 78% come from EU Member States (Spain 33%, Germany 14% and France 7%), while outside the EU 3% come from China and 2% from Russia.

4. VET in Portugal

4.1. Historical context

The establishment of 'technical education' took place in the mid-1940s. This type of education matured in the 1960-70s but was discontinued in the post-1974 revolutionary period because of the social stigmatisation it became associated with over time. Nevertheless, in the late 1970s, the Institute for Employment and Vocational Training (IEFP) was created in order to put in practice the employment and training policies with increased attention to the local needs. It was not until the end of the 1980s that governmental authorities began to repave the way to incorporate the practical component of professional training into the mainstream education system by setting up professional schools (escolas profissionais), based on public-private partnerships and co-financed by the ESF.

A decade later, these schools would legally become state dependent private schools; however, the state remained entitled to create public professional schools to address specific local needs. The turning point would come about in the 21st century, when 'professional programmes' (cursos profissionals) begun to be provided by secondary schools, offering a choice between a general/formal path (leading to higher education) and a professional training/vocational education path (leading to the labour market, further or higher education).

In 2000, a set of policies were framed to tackle the traditional underperformance of learners and the low level of educational attainment by:

- (a) Creating a system of recognition of prior learning (RVCC);
- (b) Developing measures to combat the high dropout rates at lower secondary level;
- (c) Elaborating adult education policies.

The process for bridging the traditional gap between education and professional training then begun. In 2007, the National System of Qualifications (Sistema Nacional de Qualificações - SNQ) launched the current qualifications system in an attempt to get aligned with the EU policies. Its objectives are listed below. The SNQ framework is based on a balanced relationship between VET within the educational system and VET in the labour market. It establishes common objectives and instruments, developed over the years and complementary tools to sustain the implementation of the policies, including the National Qualifications Framework (QNQ).

Under the SNQ, successful completion of VET programmes grants a double certification, i.e., an education diploma and a vocational qualification level within the QNQ. The QNQ is in line with the European Qualifications Framework (EQF). Double certification allows:

- (a) Promotion of the parity of esteem between general education and VET;
- (b) Open educational and training pathways, thus;
- (c) Increased VET attractiveness.

4.2. Types of Vocational Education Programmes

4.2.1. Compulsory education: basic and secondary levels

In 2009, compulsory education was extended to 12 years of schooling, between the age of six and 18. In line with these policy changes and as of 2012, compulsory education comprises two stages: basic education (1st - 9th year) and secondary education (10th - 12th year). Compulsory education is provided in state schools which are publicly-funded but also in private schools (with or without state funding).

Basic education is organised into three subsequent cycles (see Table 8) allowing school children to move through a predictable sequence of developmental stages. The 1st cycle corresponds to the so-called primary education; the 2nd cycle and the 3rd correspond to lower-secondary education. As a result, secondary education in the national context corresponds to what may be understood as upper-secondary education.

Table 8: Organisation of basic education including VET Cycles

Cycles	Years of schooling	Age level	ISCED 2011-P level	QNQ levels
1st cycle	1st - 4th	6 - 10	100	ı
2nd cycle	5th - 6th	10 - 12	100	1
3rd cycle	7th- 9 th	12 - 15	244, 254	2

Source: Information collected from DGE, ANQEP, IEFP and INE (2016).

4.1.1.1. VET at basic level

Traditionally VET programmes are a major option after the age of 15 at secondary education. However, education and training programmes for young people (cursos de educação e formação de jovens - CEF), targeting those who were under 15 years old at risk of early leaving were launched in 2004 at the 2nd and 3rd cycle of basic education. So far, there is lack of political determination for the implementation of these programmes and their funding has been steadily decreasing.

In 2012/13, the government launched the vocational programmes in basic education (cursos vocacionais no ensino básico) for young learners aged 13+ who had two retentions/failures in the same cycle of study or three (or more) in different cycles throughout their educational path. The programmes aimed at raising the quality in education and improving educational success; and allowing a first contact of learners with vocational activities. After a pilot period the programmes were gradually extended to schools that gathered technical and pedagogical conditions recognised by the Ministry of Education. However, they do not have national coverage. They are organised into modules and based on the involvement of enterprises and partner institutions set in the geographical area of the school. The involvement of enterprises ranges from the contribution to the modular subjects of the vocational component to the simulated practice suitable to the age of learners. There is a diagnostic evaluation that includes vocational guidance at the beginning of each programme to assess the prior knowledge of the learners, their needs and interests.

4.1.1.2. VET at secondary level

Secondary education is characterised by subject specialisation and is organised in different paths, leading to either further studies and/or vocational qualifications (see Table 9). Permeability has been ensured between general/academic paths (leading to further studies) and VET paths (leading to the labour market). Qualifications are provided within the QNQ.

Table 9: Organisation of secondary education including VET Type of path

Cycles	Years of schooling	Age	ISCED level	QNQ levels
Science and humanities programmes (cursos científico-humanísticos) * - General programmes	10th-12th	16- 18	344	3
'Professional programmes' (cursos profissionais)	10th-12th	15- 18	354	4
Education and training programmes for young people (cursos de educação e formação de jovens - CEF)	10th-12th	15- 18	351 354	4
Apprenticeship programmes - (cursos de aprendizagem)	10th-12th	15- 24	354	4
Specialised art programmes (cursos artísticos especializados)	10th-12th	16- 18	344 345	4
'Vocational programmes' in secondary education (cursos vocacionais no ensino secundário)	10th-12th	16- 18	N.A.	N.A.

Source: Information collected from DGE, ANQEP, IEFP and INE (2016).

(a) Professional programmes

They aim at providing learners with the required vocational education and training to develop personal and professional skills to perform a job and to pursue further studies and/or training (at post-secondary or higher education). They also aim at adjusting training offer to local and regional working needs. The 'professional programmes' include three training components: sociocultural; scientific; and technical. Training fields include applied arts, business administration, computer sciences, electronics, engineering, energy, construction and architecture, food industries, health services, tourism and hospitality etc. The programmes last for three years (10th-12th, approximately 3 200 hours). Work-based learning is mandatory and lasts 600-840 hours corresponding to 19-24% of the overall programme. These programmes are offered by public (secondary) or private schools. Upon successful completion, they allow a double certification - diploma of 12th year of schooling and QNQ level 4 and they lead either to the labour market or further VET, including higher education.

(b) Apprenticeship programmes

They aim at providing learners with the adequate knowledge and competences to enter the labour market by providing them a combination of work experience and studies/training. They address young learners between 15 and 24 years of age who have reached at least the 9th year of schooling but have not completed secondary education. Curricula are organised in training components: sociocultural, scientific, technological, and practice in the workplace. Priority areas of training include audio-visual and media production, computer sciences, trade, construction and repair of motor vehicles, electricity and energy, electronics and automation, hospitality and catering, manufacture of textiles, clothing, footwear and leather, metallurgy and technologies of chemical processing. The programmes last about 2.5 year (from 2 800 to 3 700 hours), including mandatory workplace training

(40% of the programme duration) and are provided by IEFP training centres or private providers (e.g. employers' associations, companies, trade unions) under protocols with IEFP. The evaluation is formative and summative. The final evaluation test (PAF) constitutes an integrated set of practical activities at the end of the training programme that help a jury to assess the competences acquired during the training. A double certificate - diploma of 12th year of schooling and QNQ level 4 is granted upon successful completion. Apprentices wishing to pursue their studies are subject to the regulations and requirements established to access the different higher level programmes.

(c) Education and training programmes for young people

Their objectives are to tackle the high numbers of young people leaving the school early. They are meant to enhance their integration into the labour market through double certification and to motivate them to continue further their studies/training by providing flexible learning solutions in line with their expectations and local labour market needs. CEF programmes are organised sequentially from type 4 to 7 according to learners levels of educational attainment and the duration of the training (duration varies from 1 125 to 2 276 hours per type spanning one or two years). Regardless of types, all CEF programmes comprise four training components: sociocultural; scientific; technological; and practical. Training is offered in various fields, such as crafts, computer sciences, environment protection, accountancy, management, beauty care, domestic services, therapy and rehabilitation, electronics, food industry, metallurgy etc. CEF can be offered by state schools, private or cooperative schools, IEFP training centres or certified training providers. Learners' assessment is carried out per subject/ area and per training component. The final assessment test (prova de avaliação final - PAF) is a presentation of a professional performance, comprising one or more practical works related with the most relevant knowledge and skills included in the programme profile. Successful completion of a CEF leads to a double certification - diploma of 2nd or 3rd cycle or secondary education and of QNQ levels 1, 2, 4 or 5. Progression is allowed to secondary or tertiary education, including higher education after certain conditions are met depending on the type and level of programme.

(d) Specialised art programmes

They aim at providing learners with the specific vocational education and training they need to enter a career in the artistic field of their choice by developing their capacities and talent or to take further studies/training in one of the fields. They are organised in three learning areas (general, scientific and technical/artistic). Workplace learning is mandatory in the 3rd year of the programme (12th year of schooling). Programmes are offered by public, private or cooperative schools in the fields of communication design, product design and artistic production. Learners' assessment is formative and summative. Successful conclusion of a specialised artistic programme leads to a double certification - diploma of 12th year of schooling and QNQ level 4. Progression is possible to technological specialisation programmes (QNQ level 5), or higher education (university or polytechnic).

(e) Vocational programmes in secondary education

These programmes were launched in 2013 and extended in 2014 but are not as relevant as similar programmes at basic education. They have a modular structure and are organised in three training components: general; complementary; vocational and simulated practice. They have been implemented in clusters of public schools or individual schools, private general or vocational schools or in cooperative education, based on projects developed with enterprises.

Following the same approach as the programmes at basic education, a diagnostic evaluation is done at the beginning of each programme. Upon successful completion, the programmes grant a double

certificate - diploma of 12th year of schooling and QNQ level 4 upon successful completion. Learners wishing to pursue studies also have access to other VET paths or they may enter the labour market. The completion of any programme at secondary education requires learners to be assessed at school level (internal summative assessment). Additionally, VET programmes may require a project or a practical test to assess vocational skills. Successful learners are entitled to a secondary education diploma and to hold a vocational certificate at QNQ level 4. Those who intend to access post-secondary non-tertiary education are required to present administrative evidences/certificates. To enrol in higher education learners must take national exams in specific disciplines (external summative evaluation).

4.2.2. Pos-secondary non tertiary education

(a) Technological specialisation programmes

These programmes are characterised by a combination of general, scientific and technological components in school with work-based learning and are composed by 60 ECTS. Usually they last approximately one year (1 200 to 1 560 hours) and award a QNQ level 5 and a technological specialisation diploma (DET). These programmes are developed in collaboration with the training institution and the enterprise, other employment organisations, associations of enterprises or socio-professional associations, amongst others, and can adopt different types/methodologies of training, including traineeships. The CET diploma allows learners to apply to higher education through a separate entrance/admission procedure determined by a broader regulatory framework, and following the requirements for entry set by each academic institution. Training held at the CET will be credited in the higher education programme.

(b) Higher professional technical programmes

Launched in 2014, these programmes comprise the following components: general and scientific, technical, and on-the-job training, which takes place through an internship (lasting at least one semester and granting 30 ECTS). They run for four academic semesters, with 120 ECTS and award a diploma of higher professional technicians. These programmes are provided only by polytechnic institutions. Each institution provides programmes in the areas that should meet the region's needs. Holders of these diplomas can access the 1st cycle of higher education programmes or integrated master programmes through specific application procedures, leading to a high education degree. In 2016, these programmes integrated the higher education legislation.

4.2.3. Higher education: universities and polytechnics

Higher education is structured according to the Bologna principles and is divided into university and polytechnic education. Pre-conditions to enter higher education include successful completion of a secondary level programme or a similar qualification level, admission exams and specific requirements concerning the area of study. Candidates over 23 years of age who do not comply with the above conditions may be submitted to specific entrance exams to show evidence they have the competences to enrol in the selected field of study.

Universities and polytechnic institutions grant 1st cycle degree (licenciatura, QNQ level 6) and 2nd cycle degree (mestrado, QNQ level 7), and integrated master programmes which comprehend the 1st and 2nd cycles (mestrado, QNQ level 7), whereas PhD degrees (doutoramento, QNQ level 8) are

granted by universities alone. This level of education is both funded by the state and by the payment of tuition fees.

4.2.4. VET for adults

(a) Education and training programmes/courses for adults

Launched in 2000, these courses/programmes (either of certain modules or for a full qualification, according to need) are available for people over 18 who wish to complete the 3rd cycle of basic education or secondary education and/or obtain a professional qualification (QNQ levels 2-4).

EFA are organised in a lifelong learning perspective; in training paths, defined through an initial diagnostic assessment, carried out by the training provider or through a process of recognition and validation of the competences acquired throughout life. Training programmes are developed in an integrated way, comprising basic training and technological training or only one of these; and are offered in the form of modular training, based on a training standard/referential under the CNQ. Training is centred on reflective processes and on skills acquisition through a module entitled 'learning with autonomy' (aprender com autonomia leading to a basic level of education diploma and/or professional qualification) or a reflective learning portfolio (portfólio reflexivo de aprendizagens, leading to a secondary diploma and/or professional qualification).

Adults who hold the 3rd cycle of basic education diploma of an EFA programme and who want to pursue their studies can attend an EFA programme at secondary level or enter into a process of recognition, validation and certification of competences to obtain the secondary education diploma. Adults who hold a secondary diploma of an EFA programme can continue their studies in a technological specialisation programme (CET) or in a higher level programme, under the conditions defined by the higher education legislation.

(b) Certified modular training

Certified modular training is included in the CNQ and is available since 2008 for people older than 18, who do not have the adequate qualification to access or progress in the labour market or have not completed basic or secondary education.

The modular training enables learners to create or to follow flexible learning paths with variable length, according to their own needs. The curricula organisation of modular training is based on training units of short duration (unidades de formação de curta duração - UFCD) available in the CNQ.

Modular training composed of UFCDs integrated in training standard/referential associated with QNQ level 2 is intended primarily for adults who have not completed 3rd cycle of basic education. Similarly, UFCDs associated with QNQ level 4 are intended only for adults with equal or higher than the 3rd cycle of basic education.

The duration of a modular training course may range from 25 to 600 hours. Whenever a course exceeds the duration of 300 hours, one third the UFCDs are required to include the basic training component.

(c) Prior learning process

The RVCC process comprises the identification of formal, non-formal and informal competences developed throughout life; through the development of specific activities and the application of a set of appropriate evaluation tools. There are two different paths (educational and professional) to recognise competences acquired by adults through lifelong learning.

One of the tools used in the RVCC process to evaluate the candidates is the reflective learning portfolio (portefólio reflexivo). It is a written record of the candidate's competences acquired throughout life presenting a critical appraisal of his/her knowledge and competence development, as well as explaining and organising prior experience and education. It includes relevant supporting documentation in relation to the different areas of the portfolio. Validation of these competences is done under the referential framework of key competences elaborated by ANEQP. The certification of educational competences is awarded after a jury decides that the candidate has demonstrated a self-directed review of their knowledge, skills, and competences in the different areas of key competences of the related referential. The educational RVCC process aims at obtaining a QNQ level 1, 2 and 3.

This reflective record also includes supporting documents and other supporting evidence that demonstrate the competences and the professional achievements of the candidate. Implying a self-evaluative and critical view, this tool greatly depends on the profile of the candidate. The certification consists in a practical demonstration before a jury that allows for the assessment of proficiency held within the framework of professional competencies. The professional RVCC process aims at obtaining a professional qualification at QNQ level 2 and 4.

These processes are under the responsibility the Qualifica Centres, managed by ANQEP. Currently there are around 260 centres spread all over the country that provide adults this service

4.2.5. VET for vulnerable groups

All the above mentioned VET provision is available for vulnerable groups. Additionally, there is a limited number of courses for immigrants and adults with low level qualifications:

(a) Portuguese for all

These courses target immigrant citizens, aged 18+, employed or unemployed, with regular residency status in Portugal. They aim at allowing them to increase their communication skills, to understand the Portuguese language, and to know the basic rights of citizenship necessary for their integration into the Portuguese society.

There is no limitation in accessing these programmes and a certification according the European language levels can be obtained:

- 1. Elementary user A it has a length of 150 hours and confers a certification of proficiency level A2.
- 2. Independent user B it has a length of 150 hours and confers a certification of proficiency level B2.

Technical Portuguese - it has a length of 25 hours and confers a certification of training for specific purposes. Portuguese technical manuals for the fields of construction, hotel and catering, trade and beauty care are available.

(b) Basic competences

These courses target adults with low level qualifications and provide them with basic reading, writing, arithmetic and ICT competences required to access education and training courses (EFA) or a RVCC process.

These courses may last between 150 and 300 hours and by legislation (26) a minimum of 26 to 30 candidates is required to proceed with the course.

Special measures are taken for people with disabilities, mainly related with employment policy initiatives, which include support for qualification through initial and continuing VET courses. They aim at providing people with disabilities the knowledge and competences necessary to obtain a qualification that will allow them to carry out an activity in the labour market, to keep their employment and to progress professionally.

The courses follow the CNQ referential/standards, the specialised advice from the IEFP, and are organised and developed with careful attention to the labour market and to the specific needs of these people.

5. Practical training at the workplace (PTW): current arrangements

In the reporting period, the National Agency for Qualification and Vocational Education (Agência Nacional para a Qualificação e o Ensino Profissional, ANQEP) organised regional debates and reflection groups involving employers, schools and vocational training centres, to promote workplace learning. Topics discussed involved evaluation of practical training in the workplace (based on real situations) and final exams assessment.

In 2016-2017, under the #somosensinoprofissional, the Forum estudante and ANQEP launched several actions, disseminated appealing publications with interesting testimonials of young people on their professional experiences, among other events. "Work-based Learning is considered by schools that promote vocational education as a gateway to the employability of their students and a way to strengthen the relationship between schools and companies." (1)

IEFP is responsible for promoting and funding traineeships (estágios and emprego jovem ativo). These initiatives are two-fold; they aim at developing practical experiences in the workplace and at improving employability.

5.1. The Law on Apprenticeship

In 2015, the Ordinance no. 181-A, of June 19 and Ordinance no. 190-A / 2015, of June 26, which Administrative Rule no. 60-C / 2015, of March 2, which publishes the specific regulation of the Human Capital, which applies to the type of operation learning".

 Administrative Rule no. 60-C / 2015, of March 2, which publishes the specific regulation of the Human Capital, which applies to the typology of operation "Apprenticeship Courses".

⁽¹) Forthcoming study: "O ensino profissional, a formação em contexto de trabalho e a empregabilidade", November 2017.

- Ordinance no. 289/2009, of March 20 Alters Ordinace nº 1497/2008, of December 19, which regulates the conditions of access, organization, management and operation of the Courses the evaluation and certification of learning.
- Ordinance nº 1497/2008, of December 19 Regulates the conditions of access, organization, management and operation of the Learning Courses, as well as the assessment and certification of learning.
- Order No. 18225/2008, of 8 July Approval of the specific regulation that defines the arrangements for access to support granted under the type of intervention.

The **Apprenticeship Courses** are developed, in the context of initial vocational training, in alternation between the Training Entity (for the components of socio-cultural, scientific and technological training) and the Alternance Supporting Body (for the practical training component in the work context). The alternation while succession of training contexts, articulated among them, makes it possible to necessary to acquire the competences that output. The training offer integrates a set of curricular plans, which allow the achievement of different professional backgrounds. These plans, which are based on the National Qualifications Catalog, are organized into training, integrating UFCD - short-term training units of 25 or 50 hours. With double certification, these facilitate courses of professional qualification and integration of young people in the labor market, enhancing their employability and also allowing them to continue their studies.

Objectives

To intervene with young people in transition to active life, or those who are already part of the market and have not completed secondary education, with a view to levels of employability and social and professional inclusion. To maximize the training potential of companies, allowing the acquisition of skills in real working conditions, which are fundamental to economic growth.

Target group: Young people under the age of 25, with the 9th year of schooling or higher, without the conclusion the secondary education.

Promotional Entities:

- IEFP, I.P.
- Training Entities
- Employment and vocational training centers
- Associated professional training centers
- Certified training entities, public or private, with the exception of basic, secondary and professional schools
- Public or private companies or other employers (for the development of the practical training component in the work context)

According to IEFP activity report of 2016, initial training remains a priority of the activity to be developed, namely through double certification, provided by Apprenticeship Learning. Learning has an important translation into goals, with about 31 thousand young people to be covered and almost 57 million euros in endowment. This measure is considered by IEFP as a strategic bet in the initial qualification of young people due to the opportunities it brings in the conciliation of double certification, school and professional, with a close connection with the companies, a favorable condition for the acquisition and consolidation of competences and the increase of employability conditions.

Table 10: Information sheet - Apprenticeship programmes

	Information sheet - Apprenticeship p					
Objectives	To provide learners with the adequate knowledge and competences to:					
	a) enter the labour market by providing them work experience;					
	b) continue their studies/ training by upgrading their educational					
	attainment.					
Admission requirements	- 15 to 24 years of age.					
	- At the level of 3rd cycle of basic education (9th year of schooling) or					
	higher but who have not completed secondary education.					
Organisation of provision	The curricula are organised in training components: socio-cultural,					
organication or production	scientific, technological, practice in a work context.					
Training fields	Priority areas: Other areas (cont.):					
Training ficials	- Audio-visual and media	- Finance, banking and insurance				
	production	- Floriculture and gardening				
	1 .					
	- Computer Sciences	- Management and				
	- Trade	administration				
	- Construction and repair of motor	- History and archaeology				
	vehicles	- Food Industries				
	- Electricity and energy	- Marketing and Advertising				
	- Electronics and automation - Fisheries					
	- Hospitality and catering - Farming of animals					
	- Manufacture of textiles, clothing, - Protection of persons a					
	footwear and leather property					
	- Material (cork industry, plastics - Environmental Protection					
	and other) - Health					
	- Metallurgical and metalwork - Secretarial and office					
	- Technology of chemical - Safety and hygiene at wo processes - Support services for child					
	0.1	and young people				
	Other areas:	- Domestic services				
	- Craft	- Transportation Services				
	- Library, archive and	- Forestry and hunting				
	documentation	- Diagnostic and therapeutic				
	- Building and civil engineering	technologies				
	- Accounting and taxation	- Social work and guidance				
	- Beauty treatments	- Tourism and leisure				
	- Sports					
	- Framing the					
	organization/company					
Duration	About 2.5 year courses (2 800 – 3 70	I 10 hours) including mandatory				
Daration		, ,				
Academie ve muestical tusticis -	work placement (40% of course duration). Mandatory work placement comprises around 40% of course duration					
Academic vs practical training						
Providers	IEFP training centres and private pro	· • · ·				
	associations, companies, trade unio	ns) under protocols with IEFP.				
Allowances	Expenses related to training:					
	- Professionalization allowance					
	- Meal allowance					
	- Transportation allowance In specific situations:					
	- Training material allowance - Accommodating allowance (for those with children or relatives)					
	dependents)					
Sources of funding		of January 24, 2009				
	- Legislative Decree No. 4-A / 2008, of January 24, 2008					
(only available in Portuguese)	It lays down the nature and the ceilings of costs considered eligible for					
	co-financing by the European Social Fund.					

5.2. Financing

Almost ten years after the establishment of the National Qualifications System (SNQ - Sistema Nacional de Qualificações), and despite slight improvements, the level of training (and qualifications) of the Portuguese population remain low. The end of the financial assistance and the economic adjustment programme (2011-14) released the country from restrictions that left behind far-reaching effects which have been subject of analysis and revision. This critical time lead to a significant drop of investments in adult training / qualification, with significant reductions in training activities and the process for recognition, validation and certification of competences (RVCC). Recent developments aim towards national policy priorities that will reinvigorate and strengthen adult education and training, both keystones of the national qualifications system.

The costs of education and VET are covered almost entirely by public funding through contributions from the State budget (Orçamento de Estado – OE), the Social Security Budget (Orçamento da Segurança Social – OSS) and the European Social Fund (ESF). However other ministries, the Autonomous Regions of Madeira and Azores, and the municipalities also contribute with funds.

Portugal receives substantial support from the EU to help fund VET programmes, courses and policies in the form of ESF resources. These funds are allocated under specific measures especially the Human Capital Operational Programme approved by the European Commission's decision on December 2014 and under the financial framework 'Portugal 2020'. Its thematic priorities most relevant for VET are:

- 1. Promoting educational success, reducing early school-leaving and increasing youth qualifications it addresses 'vocational programmes' and CEF at basic level; and specialised art programmes, 'professional programmes', CEF at secondary level.
- 2. Increasing Higher Education and Advanced Training especially in what concerns the professional higher technical programmes (CTSP).
- 3. Learning, lifelong learning qualifications and increased employability funding the Qualifica initiative, RVCC and EFA programmes/courses for adults.

In 2016, at national level, the thematic priority 1 had 1 232 approved applications from which the 'professional programmes' received the major funding (953 applications and approximately € 1.3 million of total investment, i.e. 81% of available funding was allocated). Receiving lower financial support, 107 'vocational programmes', 93 CEFs and 79 specialised art programmes were approved.

Funding for VET for adults fell abruptly during the period of the crisis. The launch of the Qualifica Programme in August 2016 aimed at reversing this trend in 2018.

5,0 4,8 4,8 4,8 4,6 4,5 4,4 4,2 4,2 4,0 4,0 3,9 3,9 3,8 3,7 3,8 3,6 3,4 3,2 3,1 3,0 1980 1990 2000 2010 2011 2012 2013 2014 2015 2016

Figure 2: Government expenditure on education: budget execution as a % of GDP

Source: Pordata, available at:

https://www.pordata.pt/en/Portugal/Government+expenditure+on+education+budget+execution+as+a+percentage+of+GDP-867 Note: data from 2015 and 2016 represent projections

5.3. Place of the PTW in the ET system

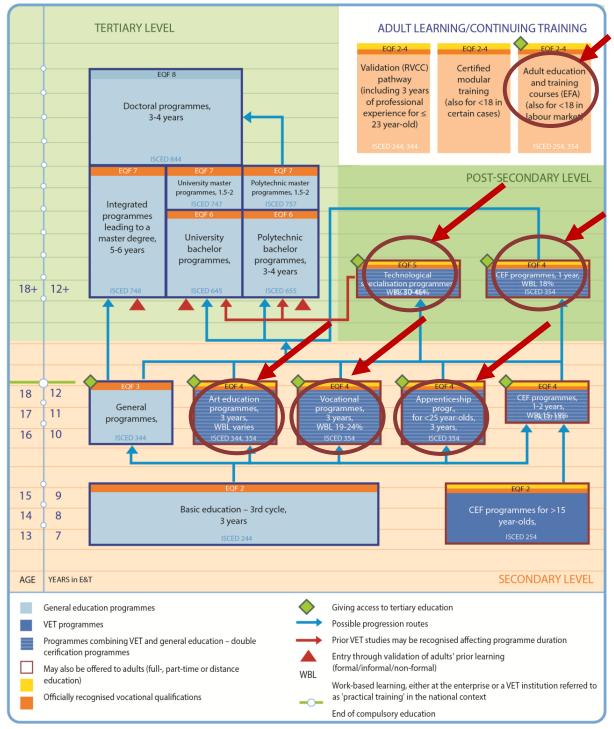


Figure 3: Diagramme of the Portuguese education and training system in 2016

NB: ISCED-P 2011.

Source: Cedefop and ReferNet Portugal.

Table 11: Young people and adults enrolled in general education and VET programmes (2015-16)

Young people enrolled in E&T (percentage of distribution) by level and modality of E&T 2015/16			Adults enrolled in E&T (percentage of distribution) by level and modality of E&T 2015/16			
Level and modality	No.	%	Level and modality	No.	%	
Total	1 602 740	100	Total	62 045	100	
Pre-school education	259 850	16,2	_			
Basic education	986 022	61,5	Basic education	27 375	44,1	
1 st cycle	405 201	25,3	1 st cycle	2 840	4,6	
General	404 124	25,2	EFA programmes	2 004	3,2	
Specialized arts programmes	303	0	Recurrent education 565		0,9	
Alternative schooling paths	774	0	RVCC	260	0,4	
			FM	11	0,0	
2 nd cycle	224 147	14,0	2 nd cycle	6 695	10,8	
General	219 349	13,7	EFA programmes	5 276	8,5	
Specialized arts programmes	1 029	0,1	Recurrent education	16	0,0	
Vocational programmes	1 539	0,1	RVCC	1 330	2,1	
CEF programmes	66	0,0	FMC	73	0,1	
Alternative schooling paths	2 164	0,1	3 rd cycle	17 840	28,8	
3 rd cycle	356 674	22,3	EFA programmes	13 105	21,1	
General	324 300	20,2	Recurrent education	250	0,4	
Specialized arts programmes	1 181	0,1	RVCC	4 418	7,1	
Professional programmes	230	0,0	FMC	67	0,1	
Vocational programmes	25 035	1,6	Secondary Education	34 670	55,9	
CEF programmes	2 433	0,2	EFA programmes	19 612	31,6	
Alternative schooling paths	3 495	0,2	Recurrent education	8 530	13,7	
Secondary Education	356 868	22,3	RVCC	6 280	10,1	
General	210 259	13,1	FMC	248	0,4	
Science and humanities programmes	206 346	12,9	Source: Estatisticas da Educação 2015-2	016 – Adultos. D	ireção-Geral	
Technological programmes	3 913	0,2	de Estatisticas da Educação e Ciência			
Specialized art programmes	2 454	0,2				
Arts and audiovisual	2 137	0,1				
Dance	54	0,0				
Music	263	0,0				
Professional programmes	112 395	7,0				
Apreenticeship	26 010	1,6				
Vocational programmes	5 244	0,3				
CEF programmes	506	0,0				

5.4. Governance structures

The central government has overall responsibility for vocational education and training. The Ministry of Education is traditionally responsible for the educational sector (pre-primary education, basic education, secondary education, school-based training). The Ministry for higher education and science is responsible for tertiary education. 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). ANQEP and IEFP have the overall responsibility for implementing VET policies. Regional authorities for non-higher education and VET are responsible for the implementation of policies at local level.

In accordance with specific legislation, the SNQ comprises the following institutions: ANQEP (coordination), Directorate-General for Education (DGE); DGERT; IEFP; bodies and structures with competence to fund VET policies; sector councils for qualification; centres specialised in adult qualifications; primary and secondary education establishments; training centres and professional rehabilitation of direct and protocol management with IEFP; centres of excellence created for training providers distinguished by the quality of their interventions, namely the protocol centres of IEFP; accredited VET providers. The SNQ also includes enterprises that promote the training of their employees, and other entities that contribute to the same purpose. Higher education institutions are also part of the SNQ, in accordance with the specific and applicable legislation.

The social partners intervene in the coordination of the SNQ through their participation in the general council of ANQEP, in the management board of IEFP; and in the monitoring board of DGERT body representative for the certification of VET providers. Higher education (universities and polytechnic institutes) are autonomous institutions.

VET provision applies the following key principles:

- 1. Competitive diversity of VET;
- 2. Flexibility in type and duration of courses;
- 3. Compatibility between EQF and QNQ, between education attainment and training qualification;
- 4. Permeability;
- 5. Transparency of the recognition of qualifications to learners and employers.

For the 2016-2020 period the country's priorities in this area, as set by the Education and Labour Ministries, are to:

- (a) promote the entrepreneurial culture in young people; and
- (b) promote learning experiences and recognition of skills in the workplace and businesses.

5.4.1. Promoting workplace learning

In the reporting period, the National Agency for Qualification and Vocational Education (Agência Nacional para a Qualificação e o Ensino Profissional, ANQEP) organised regional debates and reflection groups involving employers, schools and vocational training centres, to promote workplace learning. Topics discussed involved evaluation of practical training in the workplace (based on real situations) and final exams assessment.

In 2016-2017, under the #somosensinoprofissional, the Forum estudante and ANQEP launched several actions, disseminated appealing publications with interesting testimonials of young people on their professional experiences, among other events. "Work-based Learning is considered by schools that promote vocational education as a gateway to the employability of their students and a way to strengthen the relationship between schools and companies." (2)

IEFP is responsible for promoting and funding traineeships (estágios and emprego jovem ativo). These initiatives are two-fold; they aim at developing practical experiences in the workplace and improving employability.

5.5. Training content and learning outcomes

Between 1997 and 2006, the Ministry of Labour was responsible for designing the instruments needed to research competences, training needs and trends in the evolution of qualifications. During this period, prospective studies and professional profiles were elaborated for 29 economic sectors. They aimed at enabling the main VET stakeholders to anticipate competences needs and to define the corresponding training content, along with the development of occupations and their specified qualifications.

In 2007, the reform of vocational training lead to a shift in VET policies and the National System of Qualifications (Sistema Nacional de Qualificações - SNQ) was launched. The latter was revised in January 2017, and it constitutes a milestone in the development of the system of qualifications in Portugal and its alignment with the EU policies. The set of policy objectives to be adopted was chosen on the basis of assessing the significant challenges the country should tackle.

Above all, attention was given to the level of education and VET attainment. The National Qualifications Framework (Quadro Nacional de Qualificações - QNQ): designed in line with EQF – European Qualification Framework, it is organised in eight levels of qualification and a set of descriptors specifying the learning outcomes of the different qualification levels.

In 2015, ANQEP introduced a new methodology for designing qualifications based on learning outcomes. Since 2016, ANQEP has been organising and monitoring several training actions targeting course coordinators and trainers of the technological training component of professional schools that will develop qualifications according to this new methodology.

Some of the EQAVET indicators were selected to monitor the quality of the National Qualifications Framework (Quadro Nacional de Qualificações – QNQ) level 4 qualifications. More specifically,

^{(&}lt;sup>2</sup>) Forthcoming study: "O ensino profissional, a formação em contexto de trabalho e a empregabilidade", November 2017.

Portugal reported to be using systematically – so far – only three indicators (those related to completion rates, destination of learners upon completion of their training and on the utilisation of acquired skills at the workplace, that involves the percentage of students that complete a programme and are working in the area and the percentage of employers who are satisfied with the trainees), which is below the EU average. No information was provided for CVET indicators in 2016.

In 2014 and 2015, stakeholders had analysed tourism and commerce sectors' qualifications. This led to changes in 2016 with new qualifications emphasising digital and foreign language competences among other competences (social and transversal) designed in terms of learning outcomes.

5.6. Cooperation among learning venues

The Government is implementing a plan to promote school success. Approved in March 2016 it is designed to address education inequalities and preventing school failure. The plan is based on a closer cooperation between schools and municipal authorities so as to develop specific strategic plans adapted to their local needs. It provides schools with additional teaching hours to implement pedagogical projects and improve students' basic skills.

In June 2016, 663 education centres had joined this Plan most of which will benefit from 100 additional teaching hours over the 2016-2017 school year. Each school will also benefit from 10 specific training actions provided by 91 training centres. This Plan, although it does not preclude the implementation of the Autonomy Contracts signed over the past three years with more than 200 schools nonetheless puts their renewal and continuation on hold.

The higher education offer is quite heterogeneous and does not necessarily match actual demand. Decree Law No 63/2016 upgrades the higher education technical vocational courses (CTeSP) by integrating them into the Legal Regime of degrees and higher education diplomas. This increase further an already dispersed scope of higher education programmes. Yet, it is expected to consolidate the new upward trend in enrolment on such courses and encourage cooperation with business.

The Portuguese Government has requested a higher education review to explore avenues for reforms in the higher education system. Few universities have engaged in specific cooperation projects with companies at regional level. However, the Government has made some efforts in encouraging the interaction between universities and the business sector, but a comprehensive and integrated strategy is missing. The upcoming second phase of the National Skills Strategy project could open up new opportunities to make progress on this issue.

5.7. Participation and support to companies

5.7.1. SMEs basic-figures

SMEs play a particularly important role in the non-financial business economy in Portugal, accounting for 68.5 % of value added and 78.1 % of employment. These estimates are more than 10 percentage points higher than the respective EU averages. By contrast, Portuguese SMEs employ an average of about 3 people, which is approximately one person fewer than the EU average. The two largest SME sectors, manufacturing and wholesale and retail trade, together generate roughly half of SME employment and value added. Annual productivity of Portuguese SMEs, calculated as value added per person employed, is approximately EUR 21 500, half of the EU average.

Portuguese SMEs are still recovering from the economic crisis. SME value added hit a low point in 2012 but has subsequently risen consistently to a total of 16.7 % overall by the end of the period 2012-2016. Nevertheless, in 2016, SME value added still remained 8.3 % below its 2008 level. Employment recovery has been even slower for SMEs, with the first signs of growth recorded only since 2013, leading to an overall increase of 6.6 % in 2013-2016. Although employment was still 14.8 % lower in 2016 than its pre-crisis level, the most recent figures for 2015-2016 are positive, with growth in SME value added and employment of 3.8 % and 3.5 % respectively.

The recent performance of SMEs in manufacturing, one of the largest Portuguese SME sectors, was consistent with SME performance in the overall non-financial business economy. Value added increased strongly, whereas job growth lagged behind. There was strong growth in SME value added in almost all subsectors, resulting in an overall sector increase of 22.5 % in 2012-2016. Textiles, wearing apparel, and leather products generated above-average growth in the same period, with a combined value-added increase of 27 %. This exceeded pre-crisis levels by 12.9 %. These subsectors benefited from a renewed industry focus on high quality and design3,4, and international promotion5, which successfully revived demand, especially from abroad6.

At the same time, improvements in technology and increased automation of production led to a rise in productivity 7,8 and therefore lessened the demand for workers. As a result, job growth in these three subsectors was weaker than value-added growth, totalling only 10.1 % in 2012-2016. SME employment has also increased recently in the sector as a whole, rising by 6.7 % in 2013-2016 and therefore slowly recovering from the crisis. In 2016, however, employment was still 14.7 % lower than in 2008.

5.7.2. Skills and innovation

Portugal performs in line with the EU average in this area. Compared to last year's edition of the SBA fact sheet, the country's performance has deteriorated in some areas. The percentage of turnover from sales of new-to-new market and new-to-firm innovations halved in 2014 compared to 2012. On a positive note, Portugal scores high on SMEs introducing innovative products or processes and SMEs innovating in-house.

Since 2008, Portugal has implemented several measures to help SMEs to upgrade their skills, including the use of innovation and training vouchers. The operational competitiveness and internationalisation programme (Programa Operacional Competitividade e Internacionalização) and the national strategic reference framework (QREN — Quadro de Referência Estratégica Nacional)

have provided essential public support to SMEs for R&D and innovation activities. However, support for closer cooperation between universities and businesses and mechanisms to support SMEs to exploit R&D results are lacking, although Portugal is making efforts to provide this link.

Until recently, Portugal has favoured general education over vocational training. Perform a thorough evaluation of all vocational training programs as to unify the different systems of vocational education by establishing a single dual VET system, including work-based learning in companies in one of the most fundamental recommendations.

5.7.3. Raising skills

In comparison to other European countries, the average skills of Portuguese citizens are low, reflecting decades of poor education performance (OECD, 2006; Guichard and Larre, 2006). Only around 43% of the working age population and 67% of young adults have attained upper secondary education, the fourth lowest rate in the OECD. 33% of young adults in Portugal have a tertiary qualification, compared to an OECD average of 42%. Improving these comparatively low education attainments will be critical to improving well-being and incomes. Better skills will also reduce widening income inequality by providing better earnings opportunities to the low-skilled, which often also have low incomes.

Improving skills will also lead to stronger economic growth, by alleviating the skill shortages faced by Portuguese companies. More than two thirds of them consider finding employees with appropriate skills an obstacle to their operations (INE, 2015). At the same time, incentives for investing in skills are weak due to high unemployment and poor job quality. A solution to this vicious circle requires simultaneous action with respect to both education opportunities and labour market performance. While it takes time to address this legacy, Portugal should build on its continuous policy efforts, which have resulted in rapid improvements.

More adult education for the employed and for the unemployed is one way to address the low qualifications and skills of those who have already left the education system. However, experience shows that it is difficult to reach those who would need it most, as lifelong learning activities have low take-up rates among older and low-skilled workers (OECD, 2015; EWCS, 2015). Still, Portuguese workers receive less on-the-job training than in other countries. One recent government initiative (Cheque Formação) is providing financial support to workers, job seekers and firms for adult training. This scheme seams useful in addressing firms' immediate training.

For youths, further improvements in the education system are the crucial factor for raising skills, which could improve the future for many young people with low skills and better integrate them into society. Student performance at age 15 has improved and is now above OECD average (OECD, 2016b). Beyond average performance, learning outcomes are heterogeneous and related to the socio-economic status of students. This link is higher than the OECD average and has become more pronounced over the last decade. Moreover, disadvantaged students are also more likely to repeat a grade and less likely to obtain tertiary education than in the average OECD country, suggesting challenges with respect to equity.

5.7.4. Developing vocational education and training (VET)

Vocationally-oriented upper secondary training often leads to better employment prospects than academically-oriented training, for students who do not pursue further studies (CEDEFOP, 2013). Portugal has traditionally had a bias towards general programmes aimed at preparing for tertiary education, but the on-going development of VET has changed this. 46% of students in upper-secondary education were enrolled in VET courses in 2014, which is close to the OECD average.

The offer of VET courses has been expanded and now encompasses a wide range of higher skilled occupations such as electronics and automation, information and communication technologies or renewable energies (OECD, 2015). Further policy efforts to raise the attractiveness of the VET system and strengthen its links to labour market needs are ongoing. Two-year technical courses in post-secondary education (TeSP) have recently been established, and both enrolment and private sector participation in these courses have been strong.

The administration of Portugal's VET system is still fragmented, despite recent policy efforts to put it under a single legal framework. The system could be streamlined, which would probably also result in a reduction of the large number of VET courses on offer. The current situation is conducive to overlaps, inefficiencies and the supply of training options that do not reflect labour market needs (Pedroso, 2011). Two almost parallel public systems are run by IEFP (the Institute for Employment and Vocational Training) and the Ministry of Education. IEFP courses have a stronger element of dual training, combining class room teaching with practical experience in companies.

As a result, these courses have a stronger link to the business sector than the VET courses run by the Ministry of Education, for which no systematic evaluation of participants' labour market performance is undertaken. The Ministry of Education has recently established Vocational Schools of Business Reference to focus on priority sectors, with a strong technical component. In addition, VET courses may also be provided by private training providers, including employers and trade unions, partly with public funding. Although a certification process exists, concerns about effective quality control for these courses have been raised (OECD, 2015).

Table 12: Evolution of key indicators for FPC (CVET) 2005 - 20106)

	2005
64,6	44,1
41,1	22,3
29,5	24
5,6	4
11	4,5
9	3,4
11,9	5,1
44,5	32,3
37,9	26,5
20,9	16,3
	,

Table 13: Typology of training provided in enterprises by economic activity (% of the total of the n. of enterprises)

Activity	Typology of training provided						
	Enterprises with CVET	Internal and/or external courses	On the job training	Rotation of place of work	Learning cycles	Self- learning	Conferences and workshops
Total	64,6	44,5	41,1	5,6	11	9	29,5
B Extractive industries	71,6	48,1	51,4	7,5	8,6	6,2	30,2
C Manufacturing industries	59,3	40,6	40,3	6,3	10,5	6,4	26,7
D-E Electricity gas, and water supply, sewage and waste management	79,4	60,4	50,3	5,3	7,8	8,3	54,7
F Construction	63,9	40,8	37,5	2,6	6,9	8,7	31
G Wholesale and retail trade, repair of the motor vehicles	70,7	48,2	41,9	5,6	12,2	10,7	27,4
H Transportation and storage	67,7	48	47,4	1,6	7,7	5,3	29,4
I Accommodation and food services	49,5	33,8	36,8	9,8	10,3	4,5	17,6
J Information and communication	78,4	59,2	49,6	10,8	14,7	28,4	48,9
K Financial and insurance activities	92,1	89,1	36,1	5,5	18	49,9	49,1
L, M, R, S Real estate, consultancy, administration, arts, other	70,7	50,5	45,6	6	17,1	10,6	40,9

Source: Ministry of Employment (2012)

Table 14: Average number of hours per participant and average costs of training course by economic activity

Activity	Hours by participant	Costs per participants (E)
Total	42,5	391,4
B Extractive industries	35,2	248,2
C Manufacturing industries	42,7	274,4
D-E Electricity gas, and water supply, sewage and waste management	30,6	868,7
F Construction	35,6	583,4
G Wholesale and retail trade, repair of the motor vehicles	44,1	254,2
H Transportation and storage	33,9	491,7
I Accommodation and food services	42,1	198,1
J Information and communication	39,9	1668,7
K Financial and insurance activities	38,9	678,2
L, M, R, S Real estate, consultancy, administration, arts, other	53,5	187,6

Source: Ministry of Employment (2012)

5.8. Requirements and support to teachers and mentors

As already mentioned, the SNQ framework is based on the articulation between VET within the educational system and VET with the labour market. The framework establishes common instruments and complementary tools to support the implementation of VET policies. These are reference frameworks used to help policy developers, learners, teachers/trainers, employers and society at large in understanding how the system functions and what are its benefits.

For the 2016-2020 period, the country's priority in this area, as set by the Education and Labour Ministries, is to review the initial training of trainers and tutors.

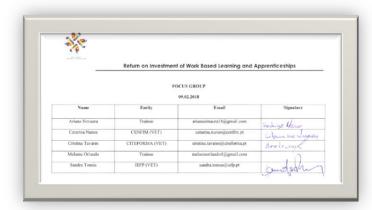
In-company tutors and mentors are not required to undergo any specific training. In 2012, the Ministry of Education had concluded a cooperation agreement with the German Federal Ministry of Education and Research (BMBF) for a project targeted at devising a training plan for company tutors in various work-based learning settings. Within this framework, ANQEP and IEFP developed a referential for tutor training. Based on this referential, three pilot training actions have been organised in 2015 and 2016 in partnership with IEFP, ANQEP and the German Chamber of Commerce in Lisbon and Porto. Initial and continuing training referential/standards (40 hours each) for the qualifications of tutors, were set in 2017.

The ANQEP study to support the development of a framework of skills and training also covered trainers.

In 2016, IEFP developed a new set of training referential/standards of expertise (consultant trainer, trainer of trainers, and manager / coordinator trainer) suited to different trainer intervention contexts, which will give the possibility of access to a Specialisation pedagogical competences certificate (Certificado de competências pedagógicas de especialização - CCPE).

6. The main results from focus group

6.1. Description of Focus Group (e.g. date and location, participants)



During February 2018, CECOA organised a focus-group with representatives of the following ROI project's target groups:

- 1. One trainee who has experienced WBL
- 2. Two managers of VET centres that provide WBL courses
 - 3. One technician of IEFP, IP

The results of the focus groups are summarized below. In the tables you can find the different answers of each question.

6.2. Country/System level

- 1. How do you define WBL and apprenticeship in the country?
- 2. What is your opinion about WBL and apprenticeship in the country? Synthesis opinion on WBL in country:

There was a very positive opinion about WBL and the apprenticeship system, nevertheless, participants pointed out the difficulties in support students when they are in companies, in internships.

VET representative 1: «There are still little learning opportunities for learners to learn at the workplace. This is the view of someone who follows the VET courses for 20 years, with a component of practical workplace training. The tutor "war" on learning is a long "war". A company has a learner/learner vision as a fundamental element to solve problems in the company, not as much as someone who goes there to learn.

Student confirms this view: «Students have to be able to work their own way. In my case, the theoretical training was given after the internship. And after this learning experience/ internship these components make more sense».

VET representative 2: «It is a learning of learning, it is learning in the workplace. Those who host (in the company) should make a briefing, to understand how to receive the students/trainees».

VET representative 1: «This "confrontation" is also an option to see the students' reaction. It's also good for them to figure out how to react in another context. It's difficult for some trainees

and a way of enriching skills for others»

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

Companies are not properly informed about the WBL and the apprenticeships system, as an advantage to integrate new human capital.

Some support measures were mentioned as:

- Business support and support to trainees during the internship
- Financing support to tutors during the internship

VET representative 2: «Business support works as long as the supports work. In 20 trainees, 2 are employed. This is the issue of the return of these programs»

VET representative 1: «There is no support for trainees. The companies work as long as the supports work in the post-training, that is, in the hiring of the students. The investment for the company should be while receiving the trainee, during the internship. Because the company has to make available resources to welcome trainees, to have this function of tutoring. After graduating the young student, you should receive a return on investment. It would be easier from the standpoint of legitimacy to select companies to welcome trainees. There are things that do not work, for example, the trainees perform tasks that do not correspond to the training area. If the training entity was paying to the companies, it could require the trainee to perform tasks liked to the training programme.

VET representative 2: «Support can be given to the tutors who receive the students».

Student: «I have colleagues who said they were doing tasks that have nothing to do with their training. Colleagues who 'cleaned up the dust'. Those are examples of companies which received students by necessity...».

4. In your opinion, which are the main benefits for an effective work-based learning in your country?

Some of the main benefits mentioned:

- Learning is faster by the students (when they are in the company)
- Students should have an active role when preparing their internship
- The richness of the formative process is when the students go to the company
- To reflect on the divergences, or apparent divergences, between what they learn in the training and what they apply in the company

VET representative 2: «Learning is faster on the part of the students, the "know-how", and the transfer of learning. It should be possible for students to take internships in various learning spaces. Different realities. With results that are obtained from one side and the other».

Student: «What you learn in training is not always put into practice in the company. For example, in training we learned that we should not put pressure on the customer. And in some companies the culture is different. There is specific expertise for companies that should be 'passed on' to students».

VET representative 1: «What is missing is a system that helps trainees to reflect on these divergences, or apparent divergences. Often the trainees question about the learning and in the

confrontation with the company the incoherence makes more sense. Maybe in the training entity, maybe in the company. There is a potential for learning that is lost because of the profitability of know-how, but there are other skills that are lost, for example, understanding different cultures. If this happens, the trainees would be better prepared for professional mobility. The trainees may question the company about different practices, different examples of what they have learned».

VET representative 3: «The question of the pre-training of the trainees, even in relation to specific questions of the company. Encourage trainees to prepare their internship, to take an active role. People should be prepared for autonomy, for their choices, to give the tools to the students and prepared the tutors for the pedagogical component of the trainees».

VET representative 1: «There should be a formal space/moment for not realizing (losing) this information. The richness of the formative process is when the students go to the company. How the student will manage this insecurity. The training coordinator cannot do this job».

5. In your opinion, which are the main obstacles for an effective work-based learning in your country?

- Companies are not aware of the "social value" that the trainees can bring in terms of innovation, new knowledge
- In some cases, companies don't have the same machines/software/equipment (this can be problematic)
- The contact with tutors (non-existent or weak)
- The parents' involvement is not always positive

VET representative 1: «The social value that the company recognizes to the trainees. In general, the trainee is more updated than the reality in the company. Being both an obstacle and a disadvantage. It depends on the company culture. There are also trainees very difficult to integrate in their learning period, the trainee is not always receptive (and prepared) to be trained in companies».

VET representative 3: «In our case, that we have very specific training areas, companies do not always have the machines/equipment that exists in the training. The conditions in the company are not always the same as those in the training».

Student: «In my internship, I have never had contact with the tutor, but with the manager assistant»

VET representative 1: «The parents' involvement is not always positive; it can be an obstacle in the case of younger students. I have the case of a father who decided that his daughter was not going to do that internship in that company»

6. Could you mention measures or approaches implemented in your country to improve the work-based learning?

- Social support for some trainees with disadvantage conditions
- Parents involvement and the commitment of SMEs
- Having some pedagogic support to tutors
- Communication strategies

VET representative 1: «Social support for trainees is a good measure that already exists. A different view of the role of trainees is critical to the success of that measure. The students/trainees are not workers».

VET representative 2 and 3: «Involvement of parents, as mentioned in the example, should be worked to become an advantage. And the involvement and commitment of companies».

VET representative 3: «Having some pedagogic support for the trainees and even for the young adults. It's important to show the company the advantages of accepting trainees».

VET representative 2: «Communication strategies»

- 7. In your opinion, what are the main costs associated with WBL in the companies (wages, material, recruitment, supervision, infrastructure, quality, etc.) and which of them are/should be covered by the government?
 - Financial support to tutors
 - Incentive for recruitment

VET representative 1: «The tutors should receive a financial compensation, even while the trainees meet in an internship context».

VET representative 3: «It should exists some incentives for companies that decide to integrate the trainees, so that there is no "cycle" of receiving trainee after trainee, and continuously receive new trainees».

6.3. Cooperation between VET and Companies' level

- 8. Do you consider the national system has established a structured, continuous dialogue between all apprenticeship partners including a transparent method of coordination and decision-making?
 - The framework of the system is well assembled but in reality entrepreneurs are concerned mostly about the day-to-day situation of their companies and not about contributing to the training of young people
 - There is no company "logbook" which is considered important
 - The exchange of knowledge, the communication is the most relevant aspects for all the stakeholders

VET representative 2: «There is no company "logbook" which is considered important and good practice to train new trainees, such as a company file, that can be used as an example for the training of new employees in the future».

VET representative 3: «For the added value: companies have to realize the added value of collaborating with the apprenticeship system; and companies should realize that they can have a return with that. Training centers must also know how to reach to companies».

VET representative 1: «The frame is well assembled. ANQEP is well represented. The National

Qualification Catalog integrates 270 qualifications that cover the most sectors of activity. However, this is a dynamic instrument, designed to answer to the qualification needs of the business, being constantly updated by the Sectorial Councils for Qualification (CSQ) and the Open Consultation Model. But in practice, entrepreneurs are concerned mostly about the day-to-day situation of their companies and not about contributing to the training of young people. Some companies do not get involved, there is no articulation. We do not work as a team. In our culture is very rooted the idea that "the secret is the soul of the business"».

VET representative 2: «What we do best is shared knowledge. Communication and sharing is the most interesting part for all stakeholders».

9. Do you consider companies that provide apprenticeships for disadvantaged learners are sufficiently supported?

Unfortunately there is no support for students during the courses, during the internship period.

VET representative 1: «There is no support for students during the courses, only after the training period».

- 10. Do you consider there is a systematic cooperation between VET schools or training centres and companies that ensure sufficient support to SMEs through business-education partnerships at the local level?
 - The framework of the system is well assembled but in reality entrepreneurs are concerned mostly about the "day-to-day" situation of their companies and less about contributing to the training of young people
 - There is no company "logbook" which is considered important
 - The exchange of knowledge, the communication is the most relevant for all the stakeholders

VET representative 3: «There is no such collaboration between companies and the training centers. Companies do not like to give this information. Now what we do is always a business-oriented awareness. Here we should also learn from the Nordic countries».

VET representative 1: «Most companies do not get involved with the system, although there are good "schools" companies, but for the most part there is no such link. Assembled systems have to be improved, sharing attitude is not rooted».

6.4. Companies' level

- 11. In your opinion, companies are sufficiently motivated and supported to assign qualified trainers and tutors to their apprentices?
 - Training is considered as a cost not an investment
 - No, there are not pedagogic training support to trainees during the internship period

VET representative 3: «They do not have the pedagogical training to support the trainees. There was a phase where it was envisaged that companies would be required to provide incompany training, 25 hours of training or more. There were no conditions to implement this system. In our case it was adopted the responsibility of the companies, but still, the training is provided by us».

VET representative 1: «In accounting training is seen as a cost and not an investment. There may be a company that can do it but not all of them would be in a position to guarantee it».

VET representative 2: «When there are budget cuts, first cut is in training».

12. Do you consider the content and provision of apprenticeships is correctly updated to labour market needs?

There are challenges still in the system as for examples the ones mentioned by the VET representatives, below:

VET representative 1 and 3: «The training standards are not updated, according to ANQEP. It is necessary to design new competency standards».

VET representative 3: «Change happens and it is the adaptability that promotes success. People need to be developed for greater flexibility and adaptability».

VET representative 1: «What can organizations give us in 5 or 10 years? How to do this work to anticipate business needs. Sometimes companies cannot do it even».

- 13. Do you consider the current content of work-based learning programmes takes into account the changing skill needs in your company?
- 14. In your opinion, which are the main success factors that contribute to an effective work-based learning in your company?
- 15. In your opinion, which are the main benefits that contribute to an effective work-based learning in your company?
- 16. In your opinion, which are the main obstacles that contribute to an effective work-based learning in your company?

6.5. Students' level

- 17. To which extent students improve changing skills needs in company?
- 18. To which extent students increase their working experiences in company?
- 19. To which extent students improve practical skills?
- 20. To which extent students improve social skills?
- 21. To which extent students are better prepared for a job/position?

The questions from 17 until 21 are answers below by the focus groups participants:

Student: «It is different; we are not only in the classroom to learn, since we are in the work context. We do not sometimes have the help we need. In my case there was recognition, they gave me a good final rate and asked me to stay there (to work). Anyway, there was not much

room for suggestions. There has been an improvement in social skills and practices for me. I was better prepared for a future job; I realized the difficulties of the job, the difficulties of the employees, etc».

VET representative 3: «Sonae developed an "internal school program" where the company evaluated the image of the oldest employees "in the house". With the aim of undoing preconceived ideas, the study analysed the productivity of younger and older workers. And the results were quite promising. We have to work with new and old employees. The communication is essential and the intergenerational work, associated with the social responsibility in sharing knowledge between old and younger colleagues».

VET representative 2: «I just want new people to work," says one entrepreneur, because it increases the dynamics of the organization. Young people bring dynamics, have less experience but have more initiative and claws, want to seize the world».

22. In your opinion, which are the main success factors that contribute to an effective work-based learning from students' perspective in company?

There are some success factors indicated by some elements of the focus group. They are listed below:

VET representative 1: «New energy and blood, more dedication».

VET representative 3: «Look for different experiences, to look for what makes sense to young people».

23. In your opinion, which are the main benefits that contribute to an effective work-based learning from students' perspective in company?

There are main benefits that contribute also and some are listed below:

VET representative 1: «Cheap labor. Intergeneration approaches. What is new is that the young students also selects the company. This is a challenge for the company, to retain new talent, it's a reality».

Student: «The students have noticed if they like the internships, and are able to do that work in the near future. One must realize whether or not it is worth it. But it is important to have other perspectives, other realities, and other experiences».

24. In your opinion, which are the main obstacles that contribute to an effective work-based learning from students' perspective in company?

There are also some obstacles as the ones presented below:

VET representative 3: «Companies must learn to live with these new ways of being, greater demands of the employees themselves. Companies must be available for young people's ability to demand, reflect, and think and to make question».

VET representative 2: «Large turnover costs by companies. Not all young people have the capacity to question themselves. There are other young people who feel uncomfortable to disagree, questioning is not the engine of learning in all cases».

VET representative 1: «The schools still do not help students to reflect, despite having all the tools and new technologies. There are still passive young people answers and they continue to take place in the educational system, because the school continues to not question, the school by the discovery is another strategy ...»

VET representative 2: «The young person who ask questions are the most absorbed by the market».

25. In your opinion, what are the eventual advantages/disadvantages if WBL is not applied?

VET representatives considered there are mainly advantages. Learning in work context allows students to learn faster and to make mistakes. Nevertheless, there are some disadvantages since the companies consider students as workers, and not as learners.

VET representative 2: «There is no transfer, or learning is more time consuming. The return on investment is lower».

VET representative 3: «Learning allows you to correct mistakes. It is a more controlled experience. There is room for error in work placement. To have theoretical training followed by a complete period of practice in companies depends on the VET provider. For some courses there is a final project, and it can be complex for the company to dispense the trainees for doing that. There is not always openness on the part of the companies to dispense the trainees for the final project. There is a lot of resistance».

VET representative 1: «In our VET centre much of the training in classroom and young people only go to the company when they have the knowledge acquired. 4 days in the company and 1 day in the center. The graduates are not lacking in the companies, but sometimes they miss some lessons, because they are asked by companies to work on that day of training. The relationship between the company and the trainee must be differentiated by the modality. In CETs and EFAS it is necessary to give more autonomy to the trainees. When less interference occurs its better, but the trainees also play a more active role».

6.6. Social value/impacts and outcomes of apprentices and WBL

What do you understand by social value/social impacts/SROI of that item?

VET representatives and the student summarized the most representative social values or social impact associated with the apprentices system and the WBL as:

- 1. Impact on the company, more flexible processes, the entrance of new contacts/persons and new technologies as well (students bring some innovation in this respect).
- 2. New skills and best practices can be consolidated. The training is an organizational "input" of development.

- 3. It is an opportunity to meet people (workers) in a learning context, to select the most appropriate and risk-free students, is a faster process. Students are a good contact with the outside/inside of companies.
- 4. The adhesion of companies is a way for companies to update and also to survive, in almost all areas of activity.
- 5. The fact that it is effective waste of time and turns organizations into true "learning" organizations.
- 6. The organizational culture also changes inside and changes other companies/suppliers and clients, there is a cycle of innovation. Companies also share positions, when they do benchmarking among themselves.

Who changes as a result of an apprenticeship/WBL?

VET representatives and the student's summarized the most important results of the apprenticeships and the WBL as:

- 1. Young people are by far better prepared.
- 2. The training entities are most closely linked to the business and able to close new partnerships for cooperation.
- 3. There is a greater adaptability with what is being taught on the ground.
- 4. If it turns out, organizational culture also changes, by sharing practices, by the comparison with other companies of the same sector, sometimes, competitors, and in the limit this facts contribute to build a more receptive national culture.
- How do they change as a result of an apprenticeship/WBL? Or; what are the changes you have (or would likely) experience as a result of an apprenticeship/WBL? This question can of course be phrased differently – options such as 'how are you different now', 'what do you do differently now', what is different now' etc.
- Are there any negative changes that have (or would likely) be experienced as a result of an apprenticeship/WBL?

In the processes there may be certain less good areas.

How long will the changes last?

VET representatives and the student's summarized the changes with greater durability as:

Student: «It will depend on the self-motivation and the personal characteristics of the trainees; each case is a case».

VET representative 2: «Durability has to do with impact, but also with processes. That is, the processes will have to be "renewed". The relationship of the person to the task, to other peers, and to the organization as a whole. The communication with companies is materializing».

VET representative 1: «Each professional profile should have outputs translated into numbers. The adherence of companies to the ALT is a way to modernize, to ensure updating, to bring

competition and innovation. But, how this can be measured?».

VET representative 3: «There should exist a learner's contract. How long will the person's be satisfied in the workplace? It also depends on each case».

- How much of the changes is a result of an apprenticeship/WBL? (to be consider counterfactual
 and the contribution of others) so specifically
 - What is the chance that these changes could be experienced without an apprenticeship/WBL?

VET representatives and the student's summarized the answer as the follows:

- 1. The real agents of change are the trainees.
- 2. The public policies should be embodied in economic incentives.
- 3. The training centers should communicate better and more often with companies, showing evidences of what companies understand and perceive as an add-value. It is essential to demonstrate through numbers such as increases in sales and productivity. Measuring the direct costs of training is easy, but the indirect ones are far more difficult.
- 4. The company needs to have a "paper" (in the sense of a written document) in which it is realized that by investing 50 hours receiving a trainee, this will cost about X but at the end this young person will bring a return of Z; there is a positive effect due to the internship because I will have more clients, more satisfied clients, less waste, etc, etc ... we must know how to do this analysis in terms of each training profile. The transformation of the proper skills from each profile into young people's experiences translated into money, as, «I will go with this training I will save Y In each professional profile, the outputs are translated into "cash".
 - Who else contributed to creating the changes (or will likely contribute to them)? AND,
 what is the contribution that is down to others?
- How important are the different changes?
- Is anyone else affected? (individuals or organisations)
- If so, how?

7. The recommendations for further research – questionnaires survey for SMEs

The suggestions are mainly related to the clarification of the concepts of internships, work based learning, apprenticeship programs, etc.

Another specification is to deliver a survey which can be answered by the business representatives. Sometimes, as we are familiar with this terminology and involved with the project design and implementation, we believe that the others have also the same understanding.

In our case, we did not manager to involve representatives from SMEs in the focus group, but the VET providers invited have a strong connection with their sector and know very well how the apprenticeship system works.

8. The main results from SMEs survey

Until the 20 of March 2018, CECOA received 11 questionnaires. The survey was distributed in Portuguese and it was fulfilled online by the respondents.

From the total of companies contacted, around 200, in the table below there is an overview of the companies' profile that participated in this study:

Table 15: Distribution of the respondents by the companies' number of employees

Number of employees	Number of respondents	%
0-10	2	18%
11-50	7	64%
51-100	0	0%
101-250	0	0%
>250	2	18%
Total	11	100%

64% of the respondents are from SMEs; 18% came from micro-sized enterprises (<10 employees) and also 18% do not belong to the target group of SMEs. Nevertheless, that last category of companies also has suppliers who are SMEs, and for this reason we will include them in this report, and also their comments, suggestions and recommendations.

The sectors of activity do not vary much as expect, respondents are mostly coming from the commerce and services sector. And this result is due to the fact that CECOA database is sectoral VET Provider, so, and mostly with contacts of companies of these two sectors of activity. There are respondents from consultancies, accounting services, transports services, decoration services and cultural area. One person comes from one Navigation Agency; another person is a member of a higher education entity and finally another respondent comes from an Association.

Table 16: Distribution of the participants by their function in the companies

	Number of	%
Role in the company	respondents	
CEO	1	9%
Decorator	1	9%
Director	3	28%
Human resources manager	1	9%
President	1	9%
Ships agency manager	1	9%
Social educator	1	9%
Training program manager, coordinator of the communication, human resource,	2	18%
internships		
Total	11	100%

According to their function, the participants have a variety of roles, but all are "business tutors" and have experience in accompanying young VET students in work based learning activities. 28% of the respondents are "Directors" and 18% are the "Training program manager, coordinator of the communication, hr, internships". All the other respondents have different roles in their organisations.

Table 17: Distribution of the respondents by their location

City	Number of respondents	%
Coimbra	3	28%
Leiria	1	9%
Lisbon	6	54%
Porto	1	9%
Total	11	100%

In terms of location, 54% of the participants are from Lisbon area, followed by 28% who are from Coimbra area (the third larger city of Portugal). Only 9% are from Oporto (the second larger city of Portugal).

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

Table 18: Distribution of the respondents by the companies' involvement

Yes	10	91%
No, but we are considering it	1	9%
Total	11	100%

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

Table 19: Distribution of the respondents by the companies' policy

Yes	7	64%
No, but we are considering it	3	27%
I do not know	1	9%
Total	11	100%

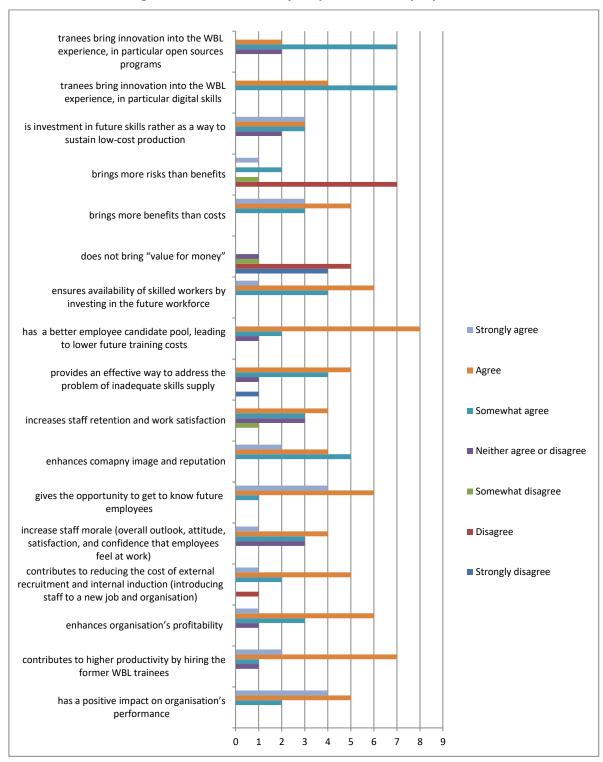
3. In your opinion, WBL and apprenticeship in a companies

Table 20: Perception about company effects

COMPANY EFFECTS	Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree
has a positive impact on organisation's performance					2	5	4
contributes to higher productivity by hiring the former WBL trainees				1	1	7	2
enhances organisation's profitability				1	3	6	1
contributes to reducing the cost of external recruitment and internal induction (introducing staff to a new job and organisation)		1			2	5	1
increase staff morale (overall outlook, attitude, satisfaction, and confidence that employees feel at work)				3	3	4	1
gives the opportunity to get to know future employees					1	6	4
enhances comapny image and reputation					5	4	2
increases staff retention and work satisfaction			1	3	3	4	
provides an effective way to address the problem of inadequate skills supply	1			1	4	5	
has a better employee candidate pool, leading to lower future training costs				1	2	8	
ensures availability of skilled workers by investing in the future workforce					4	6	1
does not bring "value for money"	4	5	1	1			
brings more benefits than costs					3	5	3
brings more risks than benefits	·	7	1		2		1
is investment in future skills rather as a way to sustain low-cost production				2	3	3	3
tranees bring innovation into the WBL experience, in particular digital skills					7	4	

tranees bring innovation into the WBL experience, in particular open sources programs				2	7	2	
Other, please specify:	too (SV • «G	o fixed and acq VOT analysis)»	uired. Minimum avai	es is not what you ne lability to assess the e specific functions.»	institution's strengt		•

Figure 4: Distribution of the perception about company effects



In terms of perception about the company effect of the WBL and apprenticeship, 72% of the respondents agreed it «has a better employee candidate pool, leading to lower future training costs» and 64% agreed it «contributes to higher productivity by hiring the former WBL trainees».

Regarding the respondents who disagreed with some effects: 64% disagreed with the item «brings more risks than benefits» and 45% disagreed with the item « does not bring "value for money" ».

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

Table 21: Perception about the society effects

SOCIETY EFFECTS	Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree	
increases employability through more effective preparation of learners for the labour market and fostering the acquisition of soft and employability skills			5		1	9	1	
contributs to developing more relevant and integrated curricula at schools					5	6		
reduced youth employment	1			2	2	6		
higher inclusion in society, helps social integration and participation, particularly for vulnerable groups				2	3	6		
higher inclusion in society, helps to keep dropout rates low				2	3	6		
higher economic return through reducing public expenditure and freeing up funds for other priorities		2	1	2	4	2		
a better social cohesion and cooperation in the region			1	1	4	5		
higher societal trust since governments, companies and citizens contribute to improving the provision of opportunities and results				3	5	3		
improves intergenerational exchange				1	5	3		
improves active citizenship					6	5		
Other, please specify:	«Greater interaction between the labor market and the education system, where contributions may be made for an assertive adaptation of curricula of some of the courses offered».							

According to the results about the society effects, 82% of the respondents agreed with the item «increases employability through more effective preparation of learners for the labour market and fostering the acquisition of soft and employability skills».

The results of the society effects also shows us that 55% of the respondents agreed with the following items: «contributs to developing more relevant and integrated curricula at schools»; «reduced youth employment»; «higher inclusion in society, helps social integration and participation, particularly for vulnerable groups» and «higher inclusion in society, helps to keep dropout rates low».

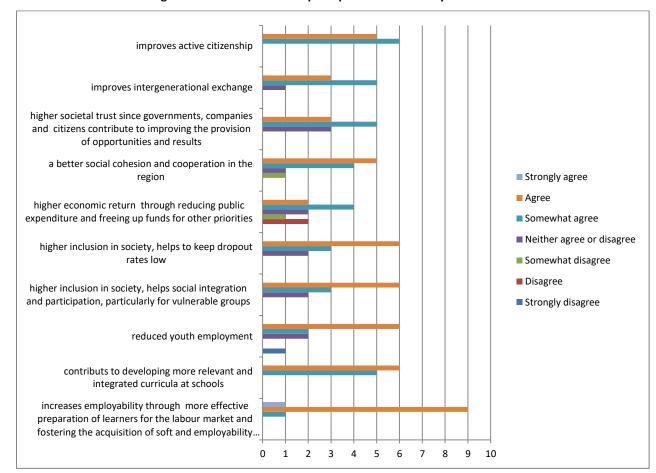


Figure 5: Distribution of the perception about society effects

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

Table 22: Perception about the support and environment measures

SUPPORT, ENVIRONMENT	Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree	
has established a structured, continuous dialogue and cooperation between all apprenticeship partners including a transparent method of coordination and decision-making				3	5	3		
safeguards the rights and responsibilities of the main partners (vocational education and training providers, employers, apprentices and social partners)				3	3	5		
duly involves employer and employee representatives in questions of apprenticeship content, assessment and certification				5	4	2		
has appropriately set the WBL financial framework				8	2	1		
is motivating to engage both companies and vocational education and training providers				4	4	3		
is more suited to larger companies than SMEs		3	1	5	1	1		
Other, please specify:	 «I think it is necessary to request more clearly the participation of all those involved in the search for improvement of existing laws». 							

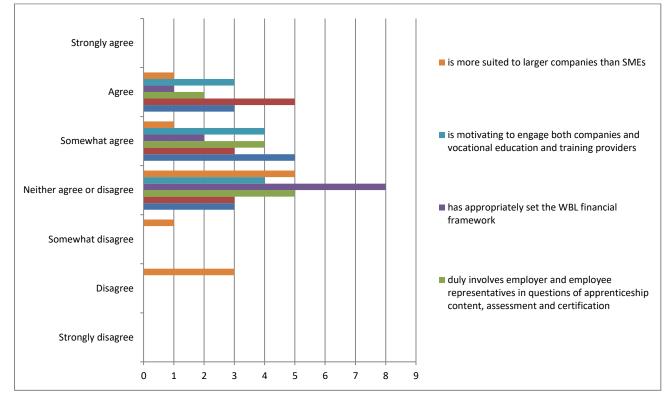


Figure 6: Distribution of the perception the support and environment measures

According to the results about the perception of support and environment, 46% of the respondents agreed with the item « safeguards the rights and responsibilities of the main partners (vocational education and training providers, employers, apprentices and social partners)»; 27% disagreed with the item «is more suited to larger companies than SMEs».

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

Financial support measures

- That Employments Center establish a monetary amount for supporting companies promoting internships
- Financial incentives to the receiving entities, incentives at the tutor's level
- Liability insurance for trainees during the internship
- Support for temporary geographical mobility, financial support for students such as the costs of transports

Legal framework measures

- Longer duration of internship and apprenticeship
- Duration of the internship of 3 months, at least
- Less bureaucracy

Preparation support measures

 A closer job analysis of the jobs available on the host company responsible to receive the students

Implementation support measures

- Formal recognition of the receiving entities and recognition at the tutor's level such as a formal certification
- Better support provided to the trainees; initial coaching
- More internship hours; selection of persons to the enterprises to received trainees
- More guidance for tutors and simplification of the process

Other measures

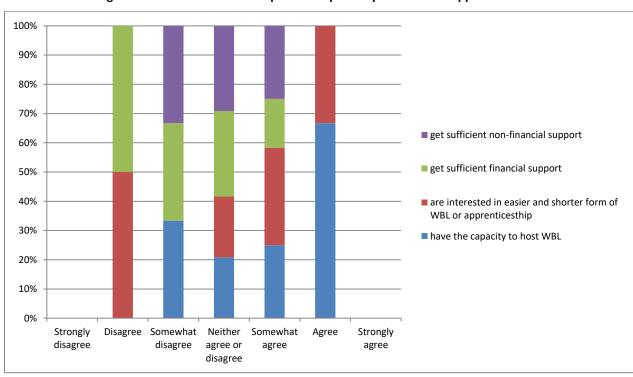
- More dissemination, more training relevant to the trainees and companies needs
- Diversity, referral and management

7. In your opinion, SMEs with no prior experience with apprentices

Table 23: Perception about respondent's prior experience with apprentices

	Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree
have the capacity to host WBL			1	5	3	2	
are interested in easier and shorter form of WBL or apprenticesthip		1		5	4	1	
get sufficient financial support		1	1	7	2		
get sufficient non-financial support			1	7	3		

Figure 7: Distribution of the respondent's prior experience with apprentices



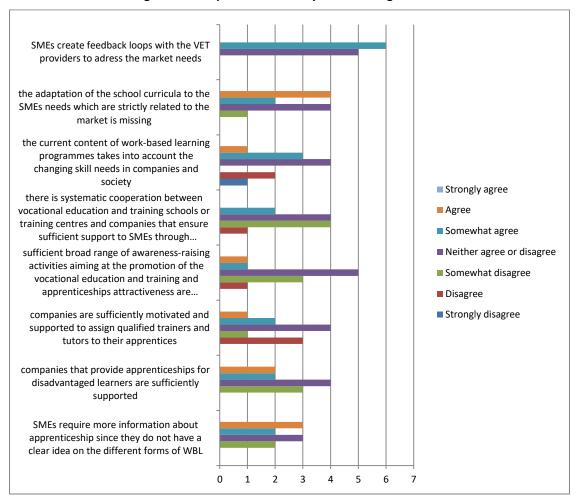
Only 18% of the respondents agreed that SMEs «have the capacity to host WBL» and 36% somewhat agreed that SME «are interested in easier and shorter form of WBL or apprenticesthip».

8. In your opinion

Table 24: Perception about the system working

PERCEPTION OF THE SYSTEM WORKING	Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree
SMEs require more information about apprenticeship since							
they do not have a clear idea on the different forms of WBL			2	3	2	3	
companies that provide apprenticeships for disadvantaged learners are sufficiently supported			3	4	2	2	
companies are sufficiently motivated and supported to assign qualified trainers and tutors to their apprentices		3	1	4	2	1	
sufficient broad range of awareness-raising activities aiming at the promotion of the vocational education and training and apprenticeships attractiveness are implemented		1	3	5	1	1	
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		1	4	4	2		
the current content of work-based learning programmes takes into account the changing skill needs in companies and society	1	2		4	3	1	
the adaptation of the school curricula to the SMEs needs which are strictly related to the market is missing			1	4	2	4	
SMEs create feedback loops with the VET providers to adress the market needs				5	6		

Figure 8: Perception about the system working



Regarding the perception about how the system works, the distribution of results is very wide as presented above: 36% of the respondent agreed about «the adaptation of the school curricula to the SMEs needs which are strictly related to the market is missing» and 27% also agreed about «SMEs require more information about apprenticeship since they do not have a clear idea on the different forms of WBI.»

27% also disagreed about «companies are sufficiently motivated and supported to assign qualified trainers and tutors to their apprentices».

9. In your opinion, which are the 3 main success factors that contribute to effective work-based learning?

Business related factors

- Close relation with the business
- Mapping of relevant enterprises and needs analysis
- Employability; acquisition of practical knowledge; personal achievement

Apprentice related factors

- Involvement and commitment of SME, close monitoring by the entity that places the trainees and motivation of the trainees
- A dialogue between all parts would be essential
- Trainee interest / commitment; support provided by the tutor/staff for integration in the workplace, i.e. attendance of the trainee in person; good bilateral tutor/trainee communication (activities to be performed, difficulties to overcome, ...)
- Provide proper training

Procedure related factors

• Support, follow up and commitment

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

Table 25: Distribution of the respondents by their perception about company obstacles

Table 23. Di	stribution of	the respon	dents by then	perception	about compan	iy obstaci	C3
COMPANY OBSTACLES	Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree
optimal public policy support does not exist	1	3		3	3		1
formal recognition of WBL	1	2		3	1	1	3
informal recognition of WBL	2	3		4	1	2	
low interest of vocational and							
education training schools in WBL	1	2		4	2	2	
degradation of apprenticeship and vocational and education training school in public eyes	1	4		2	4		
poaching of WBL learners - some firms will invest in training whilst others recruit the trained workers				5	6		
lack of a legal structure and data (i.e. legislation determining the status or insurance of trainees, challenge of measuring learning outcomes)		2		2	5	2	
ensuring the quality of WBL; use of appropriate quality control mechanisms		1		2	6	2	
lack of support and commitment for WBL from companies and vocational and education training schools				1	6	4	
workplace supervision and training, availability of good trainers and mentors	1	4		1	2	2	1
low involvement and capacity of chambers of commerce and other proffesional associations	1	3		2	2	3	
negative perceptions of WBL (e.g. as a second-best educational alternative)	1	4		3	3		
high financial costs having impact on profits	1	7		3			
high time cost having an impact on profits		3		3	4		
too much bureaucracy and documentation to provide in order to start the WBL experience	1	4			6		
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		4			3	4	
Other, please specify:	kn • «A	owledge of the e	ntity where they will of the entity to the v	be carrying out th	•	art of the train	nees the lack of

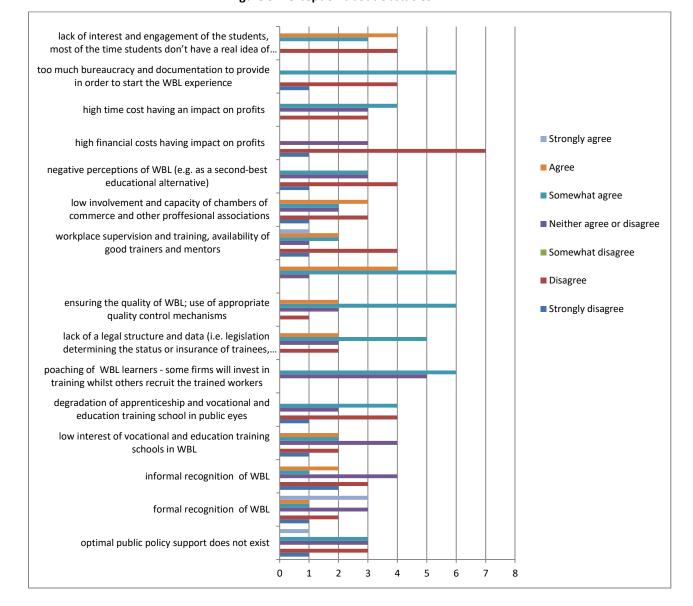


Figure 9: Perception about obstacles

Regarding the perception about the obstacles from companies to WBL and apprenticeship, 66% disagreed with the item «high financial costs have impact on profits».

55% of the respondents somewhat agreed with the following items:

- «poaching of WBL learners some firms will invest in training whilst others recruit the trained workers»,
- «ensuring the quality of WBL; use of appropriate quality control mechanisms»,
- «lack of support and commitment for WBL from companies and vocational and education training schools» and
- «too much bureaucracy and documentation to provide in order to start the WBL experience».

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

Table 26: Distribution of the respondents by their perception about support needed for companies

			· · · · · ·	•		1	
SUPPORT NEEDED FOR COMPANIES	Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree
staff development				2	6	2	1
development of ICT platform/ guide/website				1	7	2	1
development of mentor guidance		1		1	7	1	1
support network and tutorial groups		2		2	5	1	1
creation of teaching and learning resources				4	5	1	1
employer training offered by the higher education/training institutions				6	2	1	2
reduction in the direct cost of programmes to employers		1		3	6	1	
development of WBL partnerships and effective communication with the professional and the apprentices			1	2	4	4	
flexible educational framework for development of WBL projects designed to address the company needs				2	3	4	1
research undertaken by relevant Sector Skills Councils, and support for the internal validation process		1		3	4	2	1
higher public investment into the system to cover design and delivery of WBL projects and individual students		1		4	2	3	1
Possibility to cooperate between VET schools and SMEs abroad				2	5	4	
Other, please specify:			nancial area should b nould have supportir				companies »

36% of the respondents agreed on the kind of support do companies need for WBL as the «possibility to cooperate between VET schools and SMEs abroad»; the «development of WBL partnerships and effective communication with the professional and the apprentices» and the «flexible educational framework for development of WBL projects designed to address the company needs».

On the other hand, 64% of the respondents somewhat agreed on the kind of support do companies need for WBL as the «development of ICT platform/ guide/website» and the «development of mentor guidance».

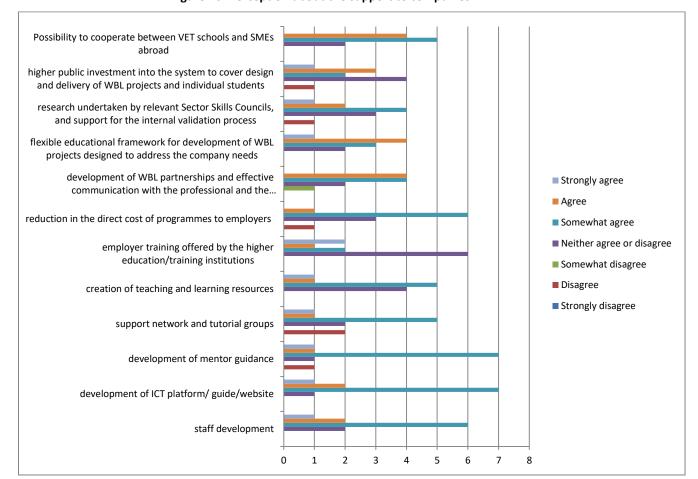


Figure 10: Perception about the support to companies

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 Work-based Learning Partnership or The Employer Engagement Unit)

Table 26: Distribution of the respondents by their perception about institutions supporting companies

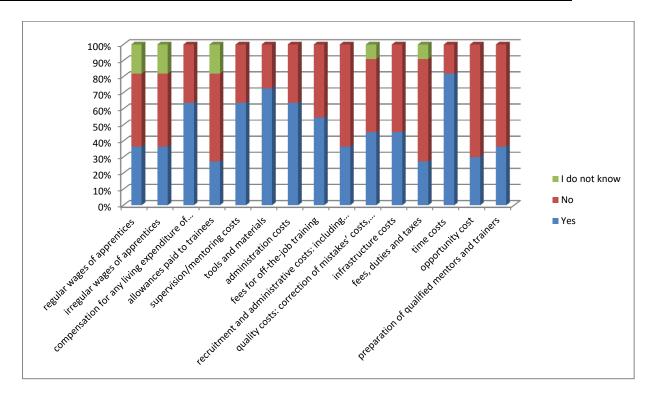
Yes	4	36%
No	7	64%
If you answered Yes, Which:	Cecoa IEFP, Escola João de Barros, Grupo Escola D.Pedro V Associação Empresarial de Ansião; Centro de Negócios de Ansião; Instituto Pedro Nunes; Centro Qualifica da Escola Tecnológica e Profissional de Sicó (Avelar)	

64% of the respondents do not know any institution in Portugal which provides support for WBL and employers engagement activities and 36% of the respondents are aware of this type of organization mission and support.

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

Table 27: Distribution of the respondents by their perception about costs

COSTS	Yes	No	I do not know
regular wages of apprentices	4	5	2
irregular wages of apprentices	4	5	2
compensation for any living expenditure of apprentices	7	4	
allowances paid to trainees	3	6	2
supervision/mentoring costs	7	4	
tools and materials	8	3	
administration costs	7	4	
fees for off-the-job training	6	5	
recruitment and administrative costs: including financial and capital costs	4	7	
quality costs: correction of mistakes' costs, quality assurance costs	5	5	1
infrastructure costs	5	6	
fees, duties and taxes	3	7	1
time costs	9	2	
opportunity cost	3	7	
preparation of qualified mentors and trainers	4	7	
Other, please specify	«I think that, yes, it should be assumed by an external entity, both the School and the institution, the costs related to the assignment of monetary values to the trainee» «Expenses associated with any training».		



81% of the respondents considered the «time costs» as the most relevant; 72% of the respondents considered the costs with «tools and materials», followed by 64% for the costs associated with «compensation for any living expenditure of apprentices», «supervision/mentoring costs» and «administration costs».

At the end, just 27% of the respondents considered the costs with «fees, duties and taxes» and «opportunity cost».

9. The main recommendations for O1. Model for Return on Investment of WBL and Apprenticeships preparation

The study "Skills Development and Employment: Apprenticeships, Internships and Volunteering"^x, points out to some important conclusions. This study discusses participation, outcomes, quality and challenges of apprenticeships, internships/traineeships and volunteering schemes. Though important, all three forms face challenges that need attention in the related existing and planned EU-level initiatives (such as the planned Quality Framework for Apprenticeships).

Some conclusions of the study:

- «At European level work-based learning including apprenticeships, internships/traineeships and volunteering are positioned as important responses to combat youth unemployment and future skills mismatches».
- «In order to arrive at quality apprenticeships, internships and volunteering schemes, challenges need to be overcome by policy responses, being accepted by all stakeholders (including employers' organisations and trade unions».
- «Apprenticeship systems, compared with internships, tend to be well governed, ensure fair learning and working conditions for apprentices and lead to formal qualifications and entry into the labour market. They do face difficulties in engaging employers and there can be issues related to low pay».
- «Internships and volunteering are less regulated and offer less secure working and learning conditions for participants. The outcomes are less pronounced compared to apprenticeships. They are however an attractive opportunity both for employers and young people».
- «Introducing, establishing, and developing apprenticeships, internships/traineeships and volunteering include a re-thinking of the sharing of responsibilities, costs and benefits between government, education providers, employers and individuals».
- «There are societal risks associated with internships and volunteering. The concern is that they are not equally accessible to all, and that there are indications that they can lead to replacing regular (paid) employment and the misuse of qualified young people. Finally, it hints at a re-thinking of who(m) bears the costs for skills development: the State, the employer, or increasingly the individual».

Some reflections to our project:

Based on these conclusions, the following recommendations can be provided as a input for the project development:

Suggestion 1: In relation to apprenticeships, as apprenticeships lead to good employment outcomes, it is suggested to stimulate the further development of apprenticeships as a benefit to employers, students and VET providers.

This would require the following actions:

- 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^{xi};
- stimulate further the 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.

Suggestion 2: In relation to internships, it is suggested to stimulate a more structured approach towards internships, especially to the open-market internships and establish better governance arrangements by spelling out the contractual status, remuneration (openmarket interns should be paid); guidance; and the envisaged learning outcomes. Unpaid internships can lead – but not necessarily so – to unequal access and the replacement of existing employees in an organisation. In addition, more can be done to guarantee the quality of mentors guiding the interns. It would be beneficial to start initiatives at European level to come to an agreement on principles of remuneration involving Social Partners (i.e. find agreement in the Councils Recommendation on a Quality Framework for Traineeships when it comes to remuneration of interns/trainees).

The Working Group on Vocational Education and Training also points out the following arguments:

The Working Group on Vocational Education and Training has developed 20 guiding principles on how to create and support high-performance apprenticeships and work-based learning. These guiding principles address **four key challenges** in offering apprenticeships, namely national governance and social partners' involvement, support for companies, in particular SMEs, offering apprenticeships, attractiveness of apprenticeships and improved career guidance, as well as quality assurance in work-based learning. The principles are illustrated with real-life examples from the countries which participated, which show how certain elements of apprenticeships and work-based learning can be put in place.

Representatives of EU Member States, EFTA countries, Candidate Countries as well as EU Social Partner and VET Provider organisations, Cedefop and European Training Foundation (ETF) participated in the Working Group, which was chaired by the Commission.

High-performance apprenticeships & work-based learning: 20 guiding principles

National governance and social	Principle 1: A clear and consistent legal framework enabling
partners' involvement	apprenticeship partners to act effectively and guaranteeing
	mutual rights and responsibilities
	Principle 2: A structured, continuous dialogue between all
	apprenticeship partners including a transparent way of
	coordination and decision-making
	Principle 3: Strengthening the role of social partners by capacity
	building, assuming ownership and taking on responsibility for
	implementation
	Principle 4: Systematic cooperation between VET school or
	training centres and companies
	Principle 5: Sharing costs and benefits to the mutual advantage
	of companies, VET providers and learners
Support for companies, in	Principle 6: Supporting measures that make apprenticeships
particular SMEs, offering	more attractive and accessible to SMEs
apprenticeships	
apprenticeships	 Principle 7: Finding the right balance between the specific skill need of training companies and the general need to improve the
	employability of apprentices
	Principle 8: Focusing on companies having no experience with
	apprentices
	 Principle 9: Supporting companies providing apprenticeships for disadvantaged learners
	Principle 10: Motivating and supporting companies to assign
	qualified trainers and tutors
Attractiveness of apprenticeships	Principle 11: Promoting the permeability between VET and other
and improved career guidance	educational and career pathways
and improved career gardance	Principle 12: Improving the image of vet and apprenticeships by
	promoting excellence
	Principle 13: Career guidance to empower young people to make
	well-founded choices
	Principle 14: Enhancing the attractiveness of apprenticeships by
	raising the quality of VET teachers
	Principle 15: Promoting the attractiveness of vet and
	apprenticeships through a broad range of awareness-raising
	activities
Quality assurance in work-based	Principle 16: Providing a clear framework for quality assurance
learning	of apprenticeship at system, provider and company level
	ensuring systematic feedback
	Principle 17: Ensuring the content of VET programmes is
	responsive to changing skill needs in companies and the society
	Principle 18: Fostering mutual trust and respect through regular
	cooperation between the apprenticeship partners
	Principle 19: Ensuring fair, valid, and authentic assessment of
	learning outcomes
	Principle 20: Supporting the continuous professional
	development of in-company trainers and improving their
	working conditions
L	

5 References

i https://en.wikipedia.org/wiki/Portugal

ii http://www.oecd.org/portugal/Better-Life-Initiative-country-note-Portugal.pdf

iii https://www.portugal.gov.pt/pt/gc21/portugal/portugal-em-numeros

ivhttp://ec.europa.eu/eurostat/guip/mapAction.do;jsessionid=lg-42IIkZ_uZZffV9CVfZyL4oVsHapTEtERih2Tof-U1iO8eiB!1467842197?indicator=teina011*1&mapMode=static&mapTab=2&country=pt

v https://europa.eu/european-union/about-eu/countries/member-countries/portugal_en

νi

Country Report Portugal 2017 Including an In-Depth Review on the prevention and correction of macroeconomic imbalances

vii

https://ec.europa.eu/eures/main.jsp?catId=2645&countryId=PT&acro=lmi&lang=en®ionId=PT0&nuts2Code=%20&nuts3Code=®ionName=National%20Level

viii

https://ec.europa.eu/eures/main.jsp?catId=2645&countryId=PT&acro=lmi&lang=en®ionId=PT0&nuts2Code=%20&nuts3Code=®ionName=National%20Level

ix

https://ec.europa.eu/eures/main.jsp?catId=2645&countryId=PT&acro=lmi&lang=en®ionId=PT0&nuts2Code=%20&nuts3Code=®ionName=National%20Level

^x This document was requested by the European Parliament's Committee on Employment and Social Affairs.

https://ec.europa.eu/education/policy/strategic-framework_en