

# **WBL Pro**

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QUALIFICATION, OPEN RESOURCES & TOOLKIT  
FOR THE WORK-BASED LEARNING PROFESSIONAL

**WBL-PRO Project**  
**Qualification, Open Resources & Toolkit**  
**for the Work-Based Learning Professional**  
**2016-1-DE02-KA202-003339**

## **IO1: WBL Pathways Research and Analysis Report**

### **Summary of National Reports**

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## 1. INTRODUCTION

The following report shows an overview of the state of the art in the involved partner countries (Germany, Italy, Portugal, Bulgaria, Spain and Latvia) in relation to work-based learning (hereafter WBL). For that purpose, it has been carried out:

- **A desktop research:** The aim of the desktop research is to get a general picture about the relevant information extracted from different reliable sources (companies participating in WBL procedures, public administrations in charge of designing learning/education policies, good practices on WBL, etc.).
- **A field research:** At least 20 organisations per country dealing with WBL were involved in the definition of the main challenges that the professionals involved (from education and companies sides) encounter, the main educational needs and support and/or supervision needed. The partners conducted interviews and focus groups to get information about the current situation of WBL in the country, paying special attention to the topics dealt with in the prior stage of desk research.

The following topics are specifically addressed:

### Desktop Research:

- National legal frameworks and theoretical perspectives supporting WBL.
- WBL in the education systems.
- Knowledge, skills and competencies of the WBL professionals involved.
- WBL forms/types. Their advantages and disadvantages.
- References to main observatories dealing with WBL quality.

### Field Research:

Interviews and/ or focus groups were carried out in all project countries. The Competencies, skills and knowledge owned by WBL Professionals and requirements for future guidance, promotion, support, facilitation and assessment of effective WBL experiences.

- Main advantages for SMEs and VET organisations deriving from managing effective WBL pathways.

- Main barriers/incentives met by companies and VET institutions in introducing WBL pathways.
- To what extent WBL supports efficient learning and employability.
- Educational needs, support and supervision.

In order to provide first-hand sources, relevant links to original documents are implemented in the report.

## 2. DESKTOP RESEARCH

### 2.1. NATIONAL LEGAL FRAMEWORKS AND THEORETICAL PERSPECTIVES SUPPORTING WBL

In **Germany**, “educational and cultural legislation and administration is primarily the responsibility of the Länder [federal states]. In the field of VET the Federal Government is responsible for in-company vocational training, while the Länder are responsible for vocational training in schools, and hence also vocational schools.” (Hensen-Reifgens & Hippach-Schneider, 2014)

The German education system offers various possibilities: After completing primary school education at the age of about 10 years, young students have three main options to continue: Mittelschule (or formerly Hauptschule) [secondary general school], Realschule [intermediate school] or Gymnasium [grammar school] (Federal Ministry of Education and Research, 2016). Vocational Education, e.g. in the dual system, can be started after having completed Secondary general school (9 years of school) or Intermediate school (10 years of school). Grammar school with the exam after 12 or 13 years would usually lead to higher education. There is a variety of vocation-oriented schools, such as Vocational grammar schools (Berufliches Gymnasium) that are more directed to vocational education and the labour market with a focus on certain fields like social, technical, etc.

In **Spain**, the vocational education system aims to train students to work contributing to the economic development of the country. Other secondary but important objectives are civic education to integrate these people into society, promotion of social inclusion, and learning throughout life. In order to achieve these objectives, the curricula of every VET diploma programme provide professional, personal and social skills, as well as the theoretical and practical knowledge. There are two VET options:

- VET diploma developed and implemented by the MECD (Ministry of Education, Culture and Sport).
- Professional certificates (RNCP) provided by the MEYSS (Ministry of Employment and Social Security), as part of the National Employment System and continuous vocational education and training (CVET).

According to the LOMCE (Spanish acronym for Organic Law on Education Quality Improvement) approved in December 2013, a new Basic VET programme replaces the Initial Vocational Training Programmes (PCPIs). Basic VET includes 21 different diplomas (official qualifications) at the moment this report is being prepared. The target group for this training level is that of students aged among 15 and 17 years, having completed their third year of Compulsory Secondary Education (exceptionally the second one) and without option to complete secondary compulsory education. Basic VET is an alternative to continue studying since it gives access to VET intermediate level. For adults who lack the basic secondary education qualification, there are specifically designed 'Adult Education' programmes that lead to lower and upper secondary education certification.

In **Latvia**, the procedure states that educational institution organizes and implements WBL for a student who is carrying out an individual WBL study plan, according to a licensed VET programme, whose learning outcomes result in obtained professional qualification, except professional qualification level four and five, with a business, institution, association, foundation, with an individual, including a farm, fishery farm, or another economic operator (Cabinet of Ministers, 2016).

In recent years, Latvia has developed cooperation with Germany, Austria and Switzerland in order to exchange information and experience on how to develop WBL. A memorandum for cooperation in VET was signed in 2012 with Germany. In 2013/2014., WBL pilot projects were started in six VET institutions in order to test WBL learning approach in Latvian context. In 2014/ 2015 academic year there were 23 pilot projects. (Anita Līce & LDDK, 2016) From September 1<sup>st</sup>, 2015 to September 1<sup>st</sup>, 2017 a project "WBL development: WBL supervisor training and WBL promotion (WBL supervisor training)" is taking place. The project intends to increase the availability of employees to those fields where a lack of employees has been observed. It will help to coordinate the skills that are necessary with the requirements of the labour market and avoid the lack of these skills. And it will raise the qualification of employees with the help of WBL development. (LDDK, 2015)

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In **Portugal**, WBL is an integrant part of the Curriculum Plan of any Professional Course and is indispensable for obtaining a Level 4 Professional Qualification Diploma. WBL is defined by a set of professional activities developed under the coordination and follow-up of the VET School, aiming at the acquisition and/or development of technical, relational and organizational skills relevant to the performance profile at the end of the course attended by the student.

In order to strengthen vocational education in the country, promote competitiveness and increase employment, it was decided to adjust vocational training provision to the needs and priorities of the different socio-economic sectors, paying particular attention to the interaction between schools and enterprises. Thus, in 2013 the Portuguese Government created Portaria nº74-A/2013, de 15 de Fevereiro (February 15th), a law which establishes the rules for the organization, operation and evaluation of professional courses and which defines the conditions for the realization, organization and development of training in a work context (or work-based learning). According to this law, guidance and orientation of the trainee throughout WBL is a responsibility of the VET School (which assigns a guidance teacher), and of the company (which assigns a tutor).

In **Italy**, school-work alternating was introduced in the Italian legal framework with the Law 8/3/2003 n. 53 and it is defined in the Legislative Decree n. 77/2005 in the following way: "students over fifteen [...] can choose and apply for completing their [...] educational period from 15 to 18 or part of it, by alternating periods of study and work, under the school or Vet provider's responsibility"

WBL itself appeared for the first time within the 2010 School Reform. An Apprenticeship is regulated by "*Testo Unico per l'Apprendistato*", Leg. 167/2011 and it is defined as "a type of job contract for an unlimited period of time aiming at the training and employment of young people". The norm defines the powers assigned to the State and to the regions.

Educational and training standards for apprenticeship pathways contained in the State-Region Conference Agreement of 2012 set standards for certification of competencies within apprenticeship schemes, internships and traineeships. The same issue was covered also in the Legislative Decree n. 13 of 16 January 2013. The meaning of an apprenticeship was modified again in 2015 "Jobs Act", being defined as "a permanent employment contract for youth training and employment". Finally, with Law 107/2015, known as La Buona Scuola, school-work alternating became a structural element of the Italian school system.

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In **Bulgaria**, amendments to the Vocational Education and Training Act, adopted in July 2014, increased the functions of the branch and sectorial employers' organizations with regard to VET. Article 56 stipulates that they participate in the development and updating of the syllabi and curricula for VET; participate in ensuring school and production practice of students and propose improvements of their organization; ensure conditions for establishing partnerships between employers and the institutions providing work based training (dual training); participated in the elaboration of the regulations for quality assurance in VET; participate in the development of the national examination programmes; ensure conditions for provision of training in enterprises; participate in teachers' training; and finally, participate in the evaluation of the quality of VET programmes."

A number of initiatives have been developed, such as The Student Placement Project, which makes it possible for the business sector to be more actively involved in the development of curricula concerning vocational training in profession, improving the links between the results from the vocational education and the needs of the constantly changing labour market. Project activities also contribute to the qualification enhancement of trainers in the VET system by helping them acquire certain competencies related to the organization of placements in real work environment based on effective partnership with employers-partners. In May 2014 a new scheme "Youth employment" was approved under Operational Programme Human Resources Development (OP HRD), funded by ESF. The scheme enables young people up to 29 years of age with secondary or higher education to participate in 6-months internships and young people up to 29 years of age with secondary education to receive work based training in an enterprise for a period of up to 6 months

## 2.2. WORK-BASED LEARNING IN THE EDUCATION SYSTEMS

In **Germany**, in many federal states there are so-called vocational secondary schools, vocational grammar schools or similar schools that have a strong vocational orientation and lead to a secondary level II exam (Fachhochschulreife, Abitur) that will give access to higher education.

In Germany, the dual system is firmly established. The main characteristic of the dual system is "cooperation between for the most part small and medium sized companies, on the one hand, and public vocational schools, on the other. This cooperation is regulated by law. The Vocational Training Act of 1969, which was amended in 2005, introduced this

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tight-knit alliance between the Federal Government, the federal states (Länder) and companies with a view to providing young people with training in occupations that are recognized nation-wide and documented accordingly through certificates issued by a competent body, i.e. chamber of industry and commerce or chamber of crafts and trades respectively.” (Federal Ministry of Education and Research, 2017)

The 2005 Vocational Training Act (Berufsbildungsgesetz 2005) published in English by the Federal Ministry of Education and Research in August 2015, includes among others: Vocational Training (Initial Training, Further Training, Retraining, Vocational Training for Special Groups of Persons), Organisation of Vocational Training (Competent Bodies/Competent Authorities, Land Committees for Vocational Training).

The apprenticeship duration in the dual system usually in most cases is foreseen for three full years. During this time the trainees will spend 3-4 days/week in the company (work-based learning) and 1-2 days at vocational school. The companies have to follow the training regulations for the specific occupation which are issued by the state (Federal Ministry for Economic Affairs and Energy, 2017). The accompanying Vocational School Education is regulated by the curricula for overarching subjects (e.g. German, English, Sports, etc.) as well as curricula for the specific occupations (Staatsinstitut für Schulqualität und Bildungsforschung München, 2017). This means that the vocational education does not only include theoretical parts but also hand-on training in workshops etc. Vocational Schools are organised on Länder (Federal States) level and follow e.g. the curricula published by the Bavarian State Ministry for Education, Science and the Arts.

Moreover, in Germany there are other so-called Vocational Schools that provide IVET apart from the dual system. The status of these trainees is students at vocational schools. According to Freytag in 2016, these schools are mainly directed to educational (e.g. pre-school) and health professions (e.g. physiotherapy, geriatric care, ergotherapy, speech therapy). However, this vocational education includes several internships in different companies or organisations.

In Germany, the setting-up of the enterprise is often related to possessing the master craftsman diploma for the specific occupation, at present these are 41 occupations (e.g. baker, butcher, painter, plumber, electrician, hairdresser...) published on a list by the Federal Ministry for Economic Affairs and Energy (2017). For these, but also for other occupations, there is the possibility of continuing vocational education in order to prepare for the master diploma.

In **Spain**, the categories of dual vocational training are the following:

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- Exclusive training at the school, by which school training must be made compatible with and alternate with the work carried out at the company.
- Training with participation from the company, where the business must provide schools with the spaces, installations or experts necessary to teach totally or partially some professional or modules.
- Training at an authorised or certified company and the school, by which certain professional or training modules are taught at the company, in combination with those taught at the school.
- Shared training between the school and the company, which consists of different proportions of participation in teaching and learning processes from the company and the school. The company needs be specifically authorised by the corresponding work administration to provide this type of teaching, and it will be attached to the school where the training takes place.
- Exclusive training by the company, which it is totally taught by the company.

In **Latvia**, during a research made by Employers Confederation of Latvia in Cooperation with the Ministry of Science and Education a suggestion was made to define the WBL accordingly – “WBL studies is a Vocational Education form where at least 50% of the respective vocational education programme is being acquired in a real working environment an institution, an enterprise or an association.” (LDDK Research, 2015)

There are two types of WBL forms mentioned in the Vocational Education Law:

1. Qualification training – final part of respective professional education programme for the acquiring the practical part (professional skills), before the State examination for acquiring professional qualification;
2. Teaching practice – acquisition of practical skills in the respective professional education programme in an educational institution or outside it. (Saeima & President of the State, 1999)
3. Experts point out to common trends for WBL development, by pointing out that WBL is a way how to prepare employees according to the requirements of employers and a way how to increase the productivity of a company. The good practise of WBL pilot projects contributes to the appeal of WBL. (Imanta, 2015)

In **Portugal**, the work-based learning (WBL) component integrates all the training modalities of the National Qualifications System (homologous to the European Qualifications System) and aims to develop new skills and consolidate the acquired ones

in a training context, by performing activities essential to the professional exercise, as well as facilitating the future (re)insertion of learners. Professional Courses have a curricular structure organized by modules, which allows greater flexibility and respect for your learning rhythms.

Table 1: Structure of Professional Courses in Portugal.

Training Components	School subjects	Hours/Training Cycle
<b>Sociocultural</b>	Portuguese and foreign language	540 hours (divided between Portuguese Language and Foreign Language)
	Integration Area	210 hours
	ICT	220 hours
	School physical education	100 hours
<b>Scientific</b>	2 or 3 school disciplines	140 hours
<b>Technical training</b>	3 or 4 school disciplines	1180 hours (divided amongst all school disciplines)
	Work-based learning	420 hours

Adapted from ANQEP. (n.d.).

In **Italy**, WBL could be implemented in several ways as follows:

- Apprenticeship:
  - a) Apprenticeship for 3 / 4 years vocational qualifications (15 - 25 y. o. – regional VET);
  - b) Apprenticeship for higher qualifications and research (18 - 29 y. o.);
  - c) Apprenticeship for job qualifications (18 - 29 y. o. – contractual qualifications only).

In this connection, 'they integrate, in a dual system, training and work' (Article 41, paragraph 3, legislative Decree No 81/2015).

- Internships/ traineeship both included and not included in an educational path.

Within VET programmes, WBL can take different forms according to the field of study (e.g. alternation schemes, on the job training periods, on-site labs). School work alternation can be defined as School- driven work-based learning integrating classroom

acquisitions with workplace experience.

In the last years, a new form of WBL has emerged: simulated enterprise projects. Among the most famous ones there are the ones designed and organised by JA Italia.

In **Bulgaria**, according to the Vocational Education and Training Act (VETA, 1999) places where practical training can take place can be of the following types - training facilities, training and workshop facilities of schools and enterprises of legal and physical entities. Training practice takes place in school environment (training rooms in vocational schools, workshops, laboratories, etc.), as well as in real work environment, provided by companies on the basis of a contract signed between the vocational school and the respective employer. Production practice is in fact placement in a real work environment. In order to provide such placements the vocational school signs a contract with one or a number of employer organizations, according to which the employer should secure the necessary conditions for the production practice of the students. Neither trainees, nor mentors, who are provided by the employers, receive remuneration for their work.

Production practice is carried out according to a curricula and time schedule, approved by the school director and corresponds to the particular conditions for its organization. The curricula and the time schedule are agreed with the enterprise where the production training will be carried out. The certificate for vocational qualification issued by vocational schools gives access to regulated professions included in the List of Regulated Professions of the Republic of Bulgaria.

### 2.3. WBL FORMS/TYPES. ADVANTAGES AND DISADVANTAGES

In **Germany**, the Federal Institute for Vocational Education and Training (BIBB, 2017) states that the main focus of work-based learning is to be seen in vocational education.

It highlights three specific areas for work-based learning. This is the reason why this report will now mainly focus on these three work-based learning concepts:

- **“Work-based learning at school:** In this form of WBL, practical on-site experiences are acquired in the educational institution, e.g. in the laboratory, in workshops, training restaurants, through projects in which "real life" is simulated or where real projects from the working world are carried out. The aim is to create a work environment as authentic as possible, to cooperate with companies and customers and to develop entrepreneurial skills.
- **Dual system:** It is a formal educational pathway in which training content between school and enterprise is combined and it leads to a nationally recognized

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educational qualification.

- **Vocational schools** with learning phases at the workplace: This type of training involves compulsory or voluntary internships of varying duration in enterprises and also leads to a formal qualification.”

The main intention of including work-based learning at schools is to support students on supporting a smooth transition from school to labour market. Several detailed aims were identified (Becker, 2014):

- General understanding of business life
- Orientation on the labour market
- Getting to know a specific occupation
- Choice of occupation
- Relation between theory and practice
- Knowledge transfer
- Perception and enhancement of own competencies
- Application Training
- Self-reflection and sensitization
- Encourage personal responsibility

With regards to the different school types in Germany the general situation different. In general, there is a strong trend over the past years that the number of students in secondary general school is decreasing while the number of students at grammar schools is steadily increasing. This is important for the work-based learning since the secondary general school graduation would lead to the dual system whereas the grammar school graduates will usually proceed with higher education. However, the trend to include in-company internships and other labour market-oriented activities is expanding from secondary general school to other school types.

As mentioned above an in-company training of two weeks is compulsory part of the 8th class of secondary general school in Bavaria regulated by the Bavarian State Ministry for Education, Science and the Arts.

The absolute number of students at secondary general school is decreasing in favour of the number of students attending grammar school (Federal Ministry of Education and Research, 2016). The career pathway of grammar school students would usually lead to university, although a minority of students would continue in vocational education. However, for secondary general school graduates the most common way would be to find an apprenticeship in the dual system.

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Although the job orientation phase in Intermediate school or Grammar school may start one year later than in Secondary general school and the aims of the work-based learning and the internship are very similar to the above mentioned for Secondary general school.

With their strong focus on vocational education, these schools foresee longer periods of internships. So there is a strong interlinking between theoretical and practical parts as well as between school and enterprise. These vocational schools also offer special facilities (e.g. workshop for metal work) in their premises in order to teach both, theoretical and occupation-oriented contents.

### Advantages and Disadvantages in Germany

Cooperation between secondary general school and the industry has become quite common for many years. It is a relatively newer development that other types of general schools (e.g. Grammar school) include internships in their curricula. However, this means that the students take advantage from the experiences gained in real work experience. Moreover, in some cases it is the first time they face a labour day in reality (e.g. working 8 hours with only few breaks, having responsibility for something, etc.). WBL can give them some concrete ideas about their future occupation as well as knowledge of the work place. Usually the students are motivated to take part in this form of learning because the internship and the practical work is something completely different from the normal school day. For the teachers, it can be interesting to see how the students manage with these tasks – it may happen that there is a difference between the individual performance of a student in school and in the workplace.

Apart from the extra work for teachers and the time missing for other theoretical contents, no disadvantages could be identified for work-based learning in cooperation between schools and enterprises. In contrary, there are many good reasons for strengthening these activities, in particular for those students who intend to start in apprenticeship in the dual system after having completed their school exams. Having spent some time in an enterprise could mean that the students have already a good network and this fact could make it easier to confirm the apprenticeship work contract for both parties (employer and trainee).

In **Spain**, dual vocational training follows open experimental regulation (Homs, 2016); i.e., it has been regulated as any other VT pathway, at the same level of those already in place. Each autonomous region has, however, some freedom in its implementation. This has led each region to choose a different implementation model, the two extremes of which are represented by the Basque Country and Andalusia.

In the Basque Country, the first year is done at school and after that, students have to alternate between it and the company. The system basically aims to extend the period students were already spending in companies in the so-called “Workplace Training Module” — which already represented between 20% and 30% of the syllabus —, but without further implications; for instance, assessment is still the responsibility of the school.

In the case of Andalusia, the student accesses the company after the first term of the first year. They may perform their activity in several companies, either by dividing their weekly time between the school and the company, or in consecutive continuous periods at school and the company.

The rest of the Spanish autonomous regions present elements of both models with a wide dispersion of procedures and methodologies. This allows experimentation since the very early stages, as well as flexibility in implementation in order to adapt to the business fabric and conditions of each region.

As for the characteristics of this model, the ratio is two days per week at the company, and the rest, at school. The methodology is based on coordination between school teachers and company tutors through a Teaching Committee where one of the school teachers is the coordinator acting as the Committee’s secretary. Teachers explain theoretical contents, as well as the procedural contents which could not be practised in the company. Those which *are* taught at the company consist of a classroom presentation followed by the necessary practice at the facilities. Assessment is continuous, with teachers collaborating with tutors, although the final responsibility of grading the students falls upon the school teacher.

#### Advantages and disadvantages in Spain

However, a number of outstanding issues need to be mentioned regarding the development and implementation of Dual VET programmes in Spain. As mentioned above, the dual system of VET in Spain is quite new, and while some good news has been reported, there is currently a lack of experience within the regulating bodies, the educational centres, and the participating companies in developing these programmes, and also insufficient collaboration between these different partners (Bassol & Salvans, 2016).

The Ministry of Education, Culture and Sport (MECD) is responsible for developing and implementing government policy in VET programmes in the education system (IVET),

while the Ministry of Employment and Social Security (MEYSS) is mainly concerned with VET programmes in the National Employment System and continuous vocational education and training (CVET). Developing and applying basic regulations and in regulating non-essential aspects of the VET system lie with the autonomous regional authorities, who also have executive and administrative powers on the regional management of the education system. Bassol & Salvans (2016) highlight the problems that this hybrid management structure, such as differences in how often programmes are launched (in some regions ongoing, in others there is an annual inscription period) and number of centres. For example, while Andalucía has double the number of VET centres as Madrid (888 to 396), the former has no centres dedicated solely to dual VET programmes, whereas Madrid has 49 (Gobierno de España, 2017). This results in variations in the actual training received by two students taking the same course in different autonomous regions.

The role of companies in the dual VET programmes has also faced some criticism. The law 1529/2012 outlines the roles and responsibilities of a company participating in a dual VET program. The owner of the company must supervise the development of the training activity, either personally or by designating someone amongst the staff as a tutor. This person must possess the adequate professional qualifications and/or experience. However, there is also no regulated training for those carrying out this role, and it appears companies struggle to adequately identify, support and motivate these company tutors and provide them with the necessary tools they need to perform their role well (Bassol & Salvans, 2016).

In **Latvia**, “WBL studies are a Vocational Education form where at least 50% of the respective vocational education programme is being acquired in a real working environment – an institution, an enterprise or in an association.” (LDDK Research, 2015)

Two types of WBL forms mentioned in the Vocational Education Law:

4. Qualification training – final part of respective professional education programme for the acquiring the practical part (professional skills), before the State examination for acquiring professional qualification;
5. Teaching practice – acquisition of practical skills in the respective professional education programme in an educational institution or outside it. (Saeima & President of the State, 1999)

#### Advantages and disadvantages in Latvia

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In Latvia, WBL is seen as a way to prepare employees according to the requirements of employers and a way how to increase the productivity of a company.

WBL is becoming more and more popular and prestigious, interest is growing each year. Cooperation between educational institutions and social partners, especially from sectors of different levels continues improving. (Imanta, 2015) WBL main disadvantages are the uncertainties in the legislation, lack of motivation for students, and lack of professional WBL trainers in companies. (LDDK Research, 2015)

In **Portugal**, work-based learning (in Portuguese *Formação em Contexto de Trabalho*) integrates a set of professional activities under the coordination and monitoring of VET Schools, aiming the acquisition or development of technical, relational and organizational skills important for the professional profile of the learners and their career opportunities.

WBL develops in companies or in other organizations under the form of working experiences during periods of variable duration throughout the training course, under the form of internship in intermediate steps, or in the final phase of the course (3<sup>rd</sup> year).

In order to carry out the WBL, it is necessary for VET schools and welcoming entities (companies or organizations) to establish a protocol, sharing the formative responsibility between them, providing learners with professional experiences and practical learning conditions in a real context, which schools could never provide alone.

Organization and development of WBL obey to an individual working plan developed by both entities involved (VET school and companies) and signed by all the parties – VET school, company and learner (or legal tutor if the learner is under age). This agreement is not a working contract; it ends with the end of the training it was signed for.

The individual working plan works as an agreement between VET school and learner, identifying:

- Aims and objectives of WBL;
- Contents;
- Syllabus;
- Period of duration;
- Time and place;
- Ways of monitoring and following;
- People responsible;
- Rights and duties of all parties.

WBL must adjust to the operating hours of the company where it will be developed, and

the weekly duration must not exceed 35 hours nor the daily duration of seven hours. VET Schools designate a guidance teacher (among teachers who are connected to Technical training courses) and the companies have to designate a Tutor to guide and monitor the trainee.

Trainees have an insurance that covers all risks regarding displacement and development of activities and the targeting of WBL includes, in all modalities, the acquisition of knowledge and the development of capacities in the field of health and safety at work.

These courses culminate with the presentation of a project called the Professional Aptitude Test (PAP), in which learners have to demonstrate the skills and knowledge developed throughout the training. Many learners use their PAP to develop products to be used in companies where they have WBL and often when it happens, companies hire those learners to be its employers given the quality of the PAP. After successful completion of a Professional Course learners obtain the secondary education and professional certification, conferring the level 4 of qualification of the National Qualifications Framework (and also EQF).

#### Advantages and disadvantages in Portugal

Being able to learn in a real working context that provides the development of social and professional skills, autonomy and sense of responsibility and the technical support given to trainees preparing them to the labour market are some of the advantages pointed out by participants in what regards to advantages for trainees.

Having trainees in WBL means that companies can share knowledge and resources as well as the possibility to select future employees with new dynamics and ideas that answers to real needs of the companies. Their employees are involved and responsible for the integration of new elements (trainees) and presented to new processes and methodologies that appeal to their creativity and adaptability to new approaches.

Regarding the challenges, VET Schools and trainees always have expectations regarding WBL and its programmes and sometimes companies have difficulties to answer them because its planning has to respond to the company's business context at the time of WBL. Motivating the trainee is, thus, sometimes difficult for some companies.

Not all trainees have the right posture and attitude towards the company where they are developing WBL. Some trainees are considered disturbing and destabilizing and their skills are considered by tutors as "very low" for the tasks they have to develop. Endowing trainees with practical skills is therefore a challenge for some companies.

The systematic welcoming of new elements supposes a constant effort for teams to integrate and train trainees, which is regarded as a challenge because not all institutions are focused on the training; some of them are focused on the execution of products, which requires deeper knowledges.

One of the participants stated that the number of hours of WBL is not sufficient for trainees to develop their skills, even in cases of observation.

In **Italy**, WBL can take different forms according to the field of study (e.g. alternation schemes, on the job training periods, on-site labs). School work alternation can be defined as School- driven work-based learning integrating classroom acquisitions with workplace experience. In the last years, a new form of WBL has emerged: simulated enterprise projects. Among the most famous ones there are the ones designed and organised by JA Italia. The common elements within VET programmes are:

- The experienced are formalised and regulated;
- Rights and obligations of the involved actors are regulated
- WBL types always involve three parts
- Objectives and learning outcomes are clearly stated
- Tutorship and accompanying measures are provided
- Actors are involved as well with monitoring and evaluation tasks
- Assurance schemes are foreseen
- Reimbursement or a small salary is often given to learners.

IUR- Ministry of Education, University and Research and MLPS – Ministry of Labour and Social Policies are the national authorities governing apprenticeship and also the VET system. Regional authorities (and autonomous provinces) have specific powers related to recognition of competencies and certification of VET paths as well as in regulating other forms of WBL. Moreover, it is important to underline the role of INAPP- National Institute for the Analysis of Public Policies (ex ISFOL) in implementing research about WBL. School-work alternation is implemented with the collaboration of territorial associations and social partners.

#### Advantages and disadvantages in Italy

On the positive side, the following can be said:

- It combines study and work, allowing individuals to acquire work experience while

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improving their skills in line with employers' requirements.

- It helps to reduce skills mismatch by being responsive to labour market change.
- It offers a stepping stone into the labour market; apprentices receive a recognised qualification for an occupation, valid across workplaces, and certifying possession of a full set of knowledge, skills and competencies to perform that occupation.
- It may result in a job offer from the company where the training was completed.

On the negative side, one cannot really speak about disadvantages. It is better to define them "open issues" or challenges. The most important are:

- The figure of the company-based supervisor. He should be both adequately trained and supported in the task of overseeing and guiding the practical training and the acquisition of work experience of apprentices/trainees at the workplace.
- Lack of connection between the different typologies of WBL.
- Lack of companies interested in hosting learners: companies should offer more apprenticeship places, student placement.
- Better collaboration among companies and educational institutions in the definition and adaptation over time of work-based learning.
- The bad perception of WBL: it is seen as a "second choice" for those who did not manage to complete the traditional education path.
- WBL and apprenticeship is not yet offered for innovative professions.

There are several ways in which WBL improve learning, fight youth unemployment and foster learners employability.

First of all, WBL helps to reduce skills mismatch by being responsive to labour market. In fact, as we have previously underlined when talking about benefits, learners' competencies and education can be shaped according to companies' needs; therefore WBL is able to tackle skills' gaps and shortage.

Secondly, work-based learning facilitates the transition from learning to work in the following way: It helps learners to develop skills and competencies, which are relevant for the job role and to understand the differences between the educational context and the working one.

WBL helps youth to get prepared for the job market. A real work experience help the

students to acquire professional skills and understand the working environment, employment and training possibilities. WBL represents an efficient method to develop skills and competencies; moreover, employers are now looking for candidates with working experience.

In **Bulgaria**, the elaboration of the Concept for the Development of VET includes the provision of conditions for dual training or vocational education and training through work in the form of partnership between the vocational school and the employer as one of the ways for providing quality and effectiveness of vocational preparation. This type of vocational education and training will combine training in real work environment under the supervision of a mentor after hiring the student to work in the enterprise and following completion of the education in the vocational schools.

Responsibility regarding the training should be shared between the state and the business sector on the basis of a consensus distribution of tasks and financial commitments in the process.

#### Advantages and disadvantages in Bulgaria

Training through work (dual training) will support the application of flexible approaches for the organization and implementation that take into consideration the specific features of the enterprise and the abilities of the trainees.

Years of experience show that the existing legislative framework does not encourage the participation of employers in the process of organizing practical training. However, the dialogue between the two parties has become more active in recent years, the vocational schools being the more active part. In order to provide production placements for students in the 11th and 12th grades, school managements are actively seeking partnerships with companies.

On the other hand the opinion of the business sector is that students acquire a very good theoretical practice in vocational schools, whereas their practical skills are inadequate. This requires additional training at the workplace in order the employees to perform the activities they have been hired for. This fact hinders the quick entrance and full participation of the young people in the labour market and makes it difficult for employers to find opportunely suitable workforce. In current conditions vocational schools find it impossible to provide modern equipment, machinery, raw materials and supplies, which companies use. The position of the business is that the number of the training hours for practical training should be greater.

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Bulgarian business is still not convinced that it should participate actively in the process of education and is critical in most cases with respect to the quality of vocational training in the system of vocational education. This situation was the reason for initiation of Student Placement Project, which implementation shows increase in the activity of employers in ensuring placements for students' practical training.

## 2.4. KNOWLEDGE, SKILLS AND COMPETENCIES OF WBL PROFESSIONALS

In **Germany**, these WBL learning activities are included in regular or compulsory school activities and therefore will mainly be conducted by the school teachers (preparation, feedback, etc.). Other experts from the labour office, other authorities, companies, etc. might support them.

The school teachers in secondary general schools in Bavaria have to require a special academic degree (diploma, bachelor/master's) with one main subject and including didactics and pedagogy. After this exam they have to follow the two-year in-service training and exam. The intermediate school teachers require a special academic degree (diploma, bachelor/master) with two main subjects and including pedagogy. After this exam they have to follow the two-year in-service training and exam. The teachers at grammar schools require a special academic degree (diploma, bachelor/master) with two main subjects (in-depth studies) and including pedagogy. After this exam they have to follow the two-year in-service training and exam. (Bavarian State Ministry for Education, 2017)

WBL professionals involved in the dual system are:

- Planners/evaluators of curricula at ministries, chambers
- Teachers at vocational schools
- In-house trainers for the dual system in enterprises

They have might have different educational backgrounds: the people responsible for planning and evaluating the curricula and working at the ministries will in most cases have an academic background, e.g. pedagogy, law or economy, whereas the WBL professionals from the chambers also could also have a background from the specific industry.

Regular teachers at vocational schools (Bavaria: Lehramt Berufliche Schulen) require a special academic degree (diploma, bachelor/master) including pedagogy, main subject with a special occupational focus and minor subject. For solely teaching specific

occupation-oriented subjects there is a second (lower) qualification (Bavaria: *Fachlehrer an beruflichen Schulen*) which requests e.g. a Master Craftsman Diploma and 3 years of practical experience in the field. These two pre-conditions have to be completed by a one-year training in pedagogy.

There are specific requirements that have to be met by in-house WBL professionals in the dual system. The Vocational Training Act in Section 29 states that WBL professional have to be allowed to employ children and young persons and that they are not in conflict with the Vocational Act or any regulations related to it. Section 30 in combination with a special regulation list the technical qualifications:

- Holding the specific vocational qualification
- Having completed a specific certificate for WBL professionals (*Ausbildung der Ausbilder – Ausbildereignungsverordnung AEVO*). This is a special exam which has to be passed, usually subsequently to a training course. It includes a theoretical (3 hours) and practical exam (30 minutes).

In **Spain**, the training of VET teachers is integrated within national structures. However, owing to the incipient state of implementation of WBL in Spain, our curricula do not contemplate training in the competencies necessary for dual VT teachers. Nevertheless, it is already being considered within teachers' continuous training.

For example, the 2015-2020 Strategic Plan of the Region of Murcia (Instituto de Cualificaciones de la Región de Murcia, 2015), provides for both the update of work and educative profiles and the design of personalised plans for each profile, as well as the improvement of the tools necessary for the development of the advisor's function. In other words, the competencies, skills and knowledge necessary have not been defined yet, but are bound to over the next 3 years. Likewise, due to the early state of implementation of dual VT in Spain, the requirements are yet to be defined on future counselling, promotion, support, facilitation and assessment of effective WBL experiences.

The Spanish law 276/2007, of 23 of February, regulates the necessary requirements for secondary level teachers. They are as follows:

1. Have a bachelor's, engineering or architecture undergraduate degree, or an official undergraduate degree in Higher Education. The law specifies the type of academic background required for each branch of learning. It also differentiates between general secondary school teachers and those involved in the fields of arts and music, art and design, and languages.

2. Be in possession of the pedagogical and didactic training referred to in article 100.2 of Organic Law 2/2006, of May 3, Education, which consists of a Master's Degree in Teacher Training in Compulsory Secondary Education and Baccalaureate, Vocational Training and Language Teaching. This title is essential to be able to practice as a teacher and replaces the previous Certificate of Pedagogical Aptitude, known as CAP.
3. In the case of a teaching position in a public secondary school, it is also necessary to pass a series of public exams known as an *oposición*, which consists of two separate tests:
  - Test 1: Examination to assess the candidate's specific expert knowledge. This test contains a practical exercise to evaluate the candidate's scientific training and mastery of the technical aspects of the specialty chosen; and a written essay on a topic related to the specialty.
  - Test 2: An exercise to verify the pedagogical aptitude of the candidate and their mastery of the necessary teaching techniques. The test consists of the presentation of a didactic programme and the oral presentation of a didactic unit.

The same law (276/2007) regulates the requirements of those teaching in VET programmes. They are as follows:

- Be in possession of a university diploma, or equivalent. The law specifies which academic qualifications are required for each branch of learning.
- Be in possession of the pedagogical and didactic training referred to in article 100.2 of Organic Law 2/2006, of May 3, Education, which consists of a Master's Degree in Teacher Training in Compulsory Secondary Education and Baccalaureate, Vocational Training and Language Teaching.
- In the case of a teaching position in a public VET centre, it is also necessary to pass a series of exams known as an *oposición*.

In **Latvia**, the procedure for organizing and implementing WBL has been determined by Cabinet of Ministers Regulations No. 484. Point 10 States:

10. WBL training manager in a company meets the following requirements:

10.1. Person holds a craftsman qualification given out by the Latvian Chamber of Crafts and they have according craftsman traineeship certificate or they have professional education in their respective field, personal pedagogical competency and their experience

meets the following requirements:

10.1.1. Personal pedagogical competency meets at least one of these requirements:

10.1.1.1. Person holds professional pedagogical qualification;

10.1.1.2. Person has pedagogical knowledge which they have obtained according to the rules of the Cabinet of Ministers regarding the necessary education and professional qualification and educator professional competency development procedure in the above mentioned pedagogical professional competency development programme B in the extent of at least 72 hours;

10.1.2. Person's professional education in their respective field or experience corresponds with, at least, one of these requirements:

10.1.2.1. Person holds professional education in their respective field;

10.1.2.2. Person has, at least, three-year long experience in their respective field. (Cabinet of Ministers, 2016)

Mentors in companies are not mentioned as "vocational education teachers" in regulations so these qualification requirements do not automatically apply to them. However, as according to the new WBL regulation mentors in companies are supposed to teach also theory of VET programme and their workload most probably will exceed 240 teaching hours, it can raise a discussion whether the same qualification requirements should not be applicable to them as are to VET teachers. (Anita Līce, 2016)

In **Bulgaria**, the main target users include VET teachers and trainers, career practitioners, human resources professionals, mentors, etc. The main skill gaps include: WBL design, management and implementation: knowledge, skills and competency for organizing WBL, preliminary work on design of the respective programmes, learning objectives and outcomes, preliminary and going evaluation and monitoring and follow-up, mentoring competencies, collaboration with other man actors engaged in WBL, time management, etc.

There are available online resources, blogs or training programmes offered, usually developed as part of European projects, which are related to the topic or address theoretically the multiculturalism and intercultural competencies as a whole. However, there is no evidence for such resources which address specifically the practical intercultural skills, required in the labour market.

In **Italy**, the growth of WBL has led to the necessity to train WBL professionals both

within VET organisations and companies and in collaboration with third parties. This has the aim of transferring to WBL professionals skills and tools to develop alternation projects and promote among schools the cultural, educational and functional role of WBL.

Among the most important competencies and skills owned or that must be owned by the WBL professionals there are:

- Knowledge of the job market;
- Understanding of emerging sectors and skills;
- Personal and professional ability to train apprentices
- Ability to create network with companies and social partners
- Ability to involve employees in shaping WBL paths
- Ability to support the apprentice in performing his/her tasks
- Ability to assess competencies and knowledge acquired
- Transversal skills
- Mentoring and orienting ability
- Knowledge of norms regulating WBL
- Knowledge of learning by doing
- Knowledge of the methodology of enterprise simulation
- Health and safety norms.

In **Portugal**, WBL Guidance Teachers are responsible for elaborating the trainees' individual working plan, together with the course director and other teachers, as well as with the companies' tutors. He/she has to follow the execution of the individual working plan with visits to the companies where the WBL is being developed. Guidance Teachers assess together with Tutors, the trainees performance, helps trainees with their WBL report and proposes to the class board of evaluation a classification for the trainee, after listening to the tutor.

## 2.5. REFERENCES TO MAIN OBSERVATORIES/ASSOCIATIONS DEALING WITH WBL QUALITY

### European Level:

- EQAVET – European Quality Assurance in Vocational Education and Training: Quality assuring work-based learning

Identification of a series of common themes, called building blocks:

01 Design work-based learning

02 Improve the quality

03 Respond to learners' needs

04 Communicate

05 Train the staff

06 Assess the learners

With key questions, key issues and main messages

<http://eqavet.eu/Libraries/Symposium/EQAVET - Quality assuring work-based learning.sflb.ashx>

- European Commission, Education and Training, Publication: Work-Based Learning in Europe:

[http://ec.europa.eu/dgs/education\\_culture/repository/education/policy/vocational-policy/doc/alliance/work-based-learning-in-europe\\_en.pdf](http://ec.europa.eu/dgs/education_culture/repository/education/policy/vocational-policy/doc/alliance/work-based-learning-in-europe_en.pdf)

- NetWBL: NetWBL is a network of 29 European national agencies, coordinated by the German National Agency at BIBB. It is funded by the European Commission, Directorate General Education and Culture (DG EAC). NetWBL aims to strengthen work-based learning (WBL) elements in existing Vocational Education and Training (VET) systems and Higher Education (HE) and to support apprenticeship in particular. The network addresses the key actors involved in WBL in each European country taking into account the different VET and Higher Education systems and legislative regulations. Furthermore, the network supports the European Alliance for Apprenticeships (EAfA): <http://www.net-wbl.eu/>

- Work-Based Learning Toolkit: <http://www.wbl-toolkit.eu/site/home>

The Work-Based Learning Toolkit provides a single platform for the promotion of identified products, approaches and tools in addition to confirming the reach, users, benefits and state-of-play of work-based learning in Europe. The Toolkit is one of the core outputs of the Work-based learning and Apprenticeships network

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known as NetWBL.

- European Centre for the Development of Vocational Training (CEDEFOP):  
<http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/apprenticeships-in-wbl>

#### Germany:

- The Federal Ministry of Education (BMBF) is responsible for general policy issues of VET and coordinates and steers VET policy for all training occupations in cooperation with the respective ministries. <https://www.bmbf.de/en/index.html>
- The Ministry also works closely together with the Federal Institute for Vocational Education and Training (BIBB) who conducts research, advises the Federal Government and vocational training providers. <https://www.bibb.de/en/index.php>
- The Länder (federal states) have committees for vocational training with employer and employee representatives and are responsible for school education. The Länder Ministries of Education cooperate in a Standing Conference (KMK) to ensure a certain degree of uniformity and comparability. KMK recommendations only become legally binding when passed by individual Länder parliaments. <https://www.kmk.org/kmk/information-in-english.html>
- As self-governing bodies of industry, the chambers have been assigned public tasks in dual training (competent bodies). These include counselling and monitoring functions with regard to the individual training contracts. Training advisers of the chambers verify the aptitude of companies and instructors for providing training and advise both companies and trainees. (Hensen/Hippach-Schneider 2013, p. 13 ff) <http://www.ihk.de/ausbildungsberatung>, <http://www.handwerkskammer.de>
- Bavarian State Ministry for Education, Science and the Arts <https://www.km.bayern.de/englisch.html>
- State Institute for School Quality and Education Research in Bavaria <https://www.isb.bayern.de/berufsschule/lehrplan/berufsschule/>

#### Spain:

- The **Observatory of the State Public Employment Service (Observatorio del Servicio Público de Empleo Estatal)**, part of the Ministry of Employment

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and Social Security is responsible for the coordination and cooperation with the autonomous communities in the exercise of their powers, through the Sectoral Conference on Employment and Labour Affairs. They are also responsible for detecting needs in the productive system and providing effective responses to the training needs and requalification of the labour market.

- **Each of the autonomous regions** also maintains their own website on VET. Access to all these sites may be found at:  
<http://www.todofp.es/sobre-fp/webs-de-fp-de-ccaa.html>
- The **General Council of Vocational Training (Consejo General de la Formación Profesional, CGFP)** is the advisory board on VET policies. It consists of education and labour administrations responsible for VET, at national and regional level, social partners from companies and unions as well as VET provider associations.
- The **Alliance for Dual Vocational Training (Alianza para la FP Dual)**- a state-wide network of companies, educational centres and institutions committed to the development of a high-quality Dual VET system in Spain. To date 61 companies have joined the Alliance and around 40 more are in the process of joining. Participants include the Bertelsmann Foundation, the Princess of Girona Foundation, the CEOE-CEPYME (Spanish Confederation of Employers' Organisations- Spanish Confederation of Small and Medium-Sized Enterprises) and the Spanish Chamber of Commerce.
- **Fundación Bertelsmann**- a Spanish foundation linked to the German Bertelsmann Stiftung which, under the slogan 'For youth employment', develops initiatives to provide youth access to the labour market. The first project is related to promoting a better career guidance to teenagers during school and includes a series of activities focused on schools, parents and families, teenager and companies. The other project aims to promote and develop a high-quality dual VET in Spain through a partnership between different stakeholders.

## 2. FIELD RESEARCH

The partners of the project have carried out very varied field research on the field of work-based learning. It ranged from one-to-one interviews and questionnaires to focus groups, whose aim was to provide as much relevant information as could possibly be gathered. The reason for doing so was that, even though some general arguments had

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been predicted beforehand — e.g. the advantages WBL provided with respect to traditional VET —, the wider the range of the sample, the more unforeseen situations could come up.

Therefore, at least 20 organisations per country dealing with WBL were involved in the definition of the main challenges that the professionals involved (from education and companies sides) encounter, the main educational needs and support and/or supervision needed. The partners conducted the research paying special attention to the topics dealt with at the prior stage of desk research. The main results are summarised in sections 2.1 (focus groups) and 2.2 (general interviews).

In order to make the information as accessible as possible, the answers have been filtered according to two main criteria: whether they were often repeated, or not, by at least three partners (“general answers”), or if they only appeared in one specific report (in which case, they are shown under the country’s name).

That allows for the most common traits to be clearly displayed whilst, at the same time, specifying features which are particular to each country. The latter should indeed be taken into consideration, but as specificities of the different education systems which cannot always be portrayed as general.

## 2.1. FOCUS GROUPS

Most (but not all) partners carried out focus groups, which allowed deeper discussion on the topics laid out. Moreover, the information provided by the respondents in this format could be better synthesised than in one-to-one interviews. On the other hand, the answers are divided into two main categories, whether they were provided by students or by WBL professionals.

### 2.1.1. Focus groups carried out with VET students

#### a) WBL methods: advantages

- Students experience and taste real work life and teamwork, gaining professional experience at the same time as theoretical training.
- They gain personal growth and responsibility.
- They also learn a lot about the specificities of certain professions and entities.

#### Bulgaria:

- Learning how to follow personal performance.

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Latvia:

- Students have a chance to assess very quickly if they like the profession they have chosen or not.
- WBL is a way to change career/ profession quickly, without any additional costs and without spending an excessive amount of time for that (as for example, applying and studying in a University would require).

Spain:

- It is not the same to teach your colleagues than other people/clients. The latter case is much more connected to professional reality.

**b) WBL methods: weaknesses**

GENERAL COMMENTS:

- The dual VT model is considered as complex by some students. Some students did not like the system of concentrating training hours in two days a week, leaving the last three days only for the placement: they preferred full theoretical or practical weeks.
- The students do not generate confidence at the company owing to their young age or are assigned non-stimulating tasks, such as making photocopies.

Latvia:

- Sometimes mentors in the company do not have enough time for students as they have other obligations, even though students would like to ask more questions and understand something more deeply.

Spain:

- Students deem their level of knowledge when they join the company insufficient – with only 3 months of class.
- The training received at the company is adapted to specific aspects, and not so much to the profession.
- Students consider it is best to have a single company tutor as a reference for their whole in-company training period.

**c) Educational needs, support and supervision needed**

General comments<sup>1</sup>:

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<sup>1</sup> This part was specifically focused on by Spain and Latvia. General comments are those made by students in both countries.

- Students think that it would be necessary to implement very strong rules regarding the communication between the organizations that are participating in WBL, VET's and students. More synergies are needed between school and company tutors to adapt as much as possible learning to students' needs. The syllabus needs to be well planned and coordinated.

Spain:

- A key aspect of the model is that the student must have as much information as possible on the development of dual training and how their relationship with the company will unfold.
- Students receive training by the company, yet it is very focused on work methods specific to that organisation. It would be necessary to receive more general training which goes beyond the needs of the company.

**d) Competencies, skills and knowledge owned by WBL professionals:**

GENERAL COMMENTS:

All WBL professionals should:

- Have communicative skills.
- Be able to set objectives and elaborate plans for period for the joint work.
- Have teamwork and coordination skills: it is fundamental to coordinate efforts and to improve processes.
- Provide students with role models and make them aware of their learning process.

Company tutors (especially, but not only) should:

- Have experience in their field of work.
- Have specific training providing with flexible and engaging teaching methods.
- Be accessible for students and supportive.
- Provide with appropriate feedback and follow-up/evaluation.

School mentors (especially, but not only) should:

Italy:

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- Diversity management skills.
- Provide opportunities for participants to plan next steps as their WBL activities and projects unfold over time
- Encourage the use of role playing, role reversal conversation, and other coaching techniques designed to enhance or integrate new learning into established patterns of behaviour.

Latvia:

- Mentors should have motivation and time to correctly teach students.

Spain:

- It is important for teachers to be able to link as much as possible subject content to the activity students will carry out at the company.
- It is important for the company tutor to grant students enough freedom for further learning to take place.

### 2.1.2. Focus groups carried out with VET professionals

#### a) WBL methods: advantages

General comments<sup>2</sup>:

- Link between theoretical knowledge and practical competency implementation.
- Increase in employability.
- Students get to experience what happens in a specific company and profession.
- To be able to assess one's own knowledge and skills in a real working environment
- To structure and direct one's efforts
- To improve vocational education and training quality
- To work in team and learn how to practically solve problems and negotiate.

#### b) WBL methods: weaknesses

GENERAL COMMENTS:

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<sup>2</sup> Bulgaria, Latvia and Spain specifically answered this part. These "General Comments" are those where at least two out of those three partners gave the same answer.

- WBL issues are very specific to each country. Here are the most general problems detected (in, at least, two countries), whereas the rest are listed under the country's name:
- Insufficient theoretical classes.
- Students only perform repetitive tasks or observation.

#### Bulgaria:

- Non-compliance of the school curricula with real work/production processes
- Lack of skills for implementing already acquired knowledge
- Ignorance about machines, technologies, processes due to out-of-date equipment at schools.
- Lack of teamwork skills and taking responsibility for own results.
- Lack of skills to learn through work, etc.

#### Italy:

- Often schools are not aware of the benefits of work-based learning. In Italy alternation schemes are compulsory, but most of the schools do not recognise the learning outcomes of work-based experiences. They give much more value to theoretical activities and the related exams.
- Networks among schools and companies are lacking in Italy. This means that for schools it might be very difficult, or even impossible, to find companies which are willing and prepared to host students.

#### Latvia:

- Some of the companies were unable to provide WBL five days a week, so they adapted the 3 days at school, 2 days in a company principle.
- Communication with bigger companies is an issue.

#### Spain:

- Low adaptation of dual model to Spanish business culture:
  - The company does not detect and select the best profiles to be tutors, so any of them may be in charge of students' training.

- Companies find it hard to assume the training of future professionals. It is necessary to improve companies' implication in our students' training process.
- Students' low personal maturity, with low personal self-management.

### **c) Competencies, skills and knowledge owned by WBL professionals**

#### GENERAL COMMENTS:

##### 1. In the planning of WBL programmes:

- Communication Skills.
- Teamwork and social competencies.
- Expert knowledge.
- Being familiar with the labour market (trends, training, future...).
- Level of WBL activity – Financial attractiveness.
- Reflection on aims (for development of curricula).
- Planning and analytical.

##### 2. In the implementation of WBL programmes:

- Communication Skills.
- Teamwork and social competencies.
- Expert knowledge.
- Knowledge about methodologies.
- Mediation / Conflict Management.
- Motivational, supportive.
- Ability to provide useful feedback to students.

##### 3. In the evaluation of WBL programmes:

- Communication Skills.
- Expert knowledge.
- Assessment on project performance.

#### Bulgaria:

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- Intercultural skills.

#### Italy:

- Monitoring the extent to which participants are learning as well as achieving task outcomes, as they progress with their work-based activities.

#### Germany:

1. In the planning of WBL programmes:
  - Digital Skills.
  - Being familiar with the labour market (trends, training, future...)
  - Level of WBL activity – Financial attractiveness.
2. In the implementation of WBL programmes
  - Digital Skills
  - See formal competencies required in Germany (Federal Institute for Vocational Education and Training BIBB , 2009)
  - Supervision of relationship between employer and staff or among colleagues.
  - Knowledge about possible sanctions/legislation.

#### Spain:

- The figure of the coordinator who carries out fortnightly follow-up is very useful. Aside from this, teachers contact professionals to perform objective assessment of the student's level of learning and development.
- Vocation and implication.

### **d) Educational needs, support and supervision needed**

#### General comments<sup>3</sup>:

Good communication with the company is essential.

#### Bulgaria:

- Motivation of all participants in the process should be ensured.

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<sup>3</sup> Bulgaria, Latvia and Spain gave specific information on this topic. There is just one "General comment" shared by at least two of the partners. The rest are very specific to each country.

- Appropriate organisation of the learning, incl. duration, planning of the aims and results to be achieved, documentation of learners' achievements and division of tasks are essential.
- Ensuring that the design of work-based learning schemes balances the interests of both employer and trainee is key to successful implementation.
- Providing well-qualified professionals both in their profession and in Adult Training trainers/mentors/instructors.

#### Latvia:

- It is more difficult to communicate with bigger companies as they have a lot of people there who work with just one student.
- It is easier to communicate with smaller companies as they only have one person who is responsible for students' education in the company.

#### Spain:

- Supervision and functioning of the programme:
  - It should be considered whether to carry out selection tests prior to the students' enrolment in dual VT programmes in order to assess the adjustment of the model to their profile.
  - Further teamwork is needed, as well as coordination amongst school teachers.
- Needs of both company trainers and school teachers:
  - The ideal would be for the company tutor to have a mixed profile: company professional and teacher.
  - Another way to obtain good results would be through the school teacher's permanence at the company to perform training observation, collaborate on joint projects, assess students' work, etc.
  - It would also be interesting for company tutors to transfer specific company knowledge to school teachers themselves.
- Students' training needs:
  - The development of students' competencies is observed to be somewhat low owing to lack of time. Paradoxically, the company preferably seeks competencies instead of theoretical and technical training in the different disciplines.

## 2.2. INTERVIEWS

All members of the project interviewed a wide variety of people related to the field of work-based learning were interviewed. The profile of the respondents corresponded to training experts, members from company associations, HR managers, WBL professionals, mentors, workers' representatives, counsellors, and all those actors and stakeholders that may provide first-hand relevant information. This provided with information on their professional experience and views of WBL: advantages, weaknesses/ challenges, solutions for challenges; and, finally, WBL professionals' knowledge, skills, competencies, and training.

As with focus groups, in order to make the information as accessible as possible, the answers have been filtered according to two main criteria: whether they were often repeated or not, and in at least three countries ("general answers"), or if they only appeared in one specific country, in which case, they are shown under the country's name. A summary of their opinions is shown below.

### 2.2.1. Advantages of WBL

**Advantages** in relation to WBL:

#### GENERAL COMMENTS:

- Transfer between theory and practice.
- The possibility to learn a new profession close to the real work environment.
- Personal contact of apprentice/trainee with colleagues and clients.
- Job security for the individual, but with updated knowledge/offer to the market also for the company/other staff.

#### Bulgaria:

- Work-based Learning has enormous effects for vulnerable people.

#### Italy:

- It offers a stepping stone into the labour market: apprentices receive a recognized qualification.

#### Germany:

- The dual system avoids disadvantages of a purely VET school system (e.g. France, with a major part of theory) or a purely VET training in companies (showing, imitating without background knowledge).

- The learning sequences of work assignments, work process and reflection in theory, at school workshops and in companies.
- Soft skills are to be evaluated by the enterprises, "Family-Idea", Education in company, process knowledge, capability for innovation, Sense of work, Handling of stress at work, no extra training necessary when exam completed and contract as a regular worker in the same company, flexible applicability of the young worker.
- Exchange programmes with Erasmus+ to explore VET in other countries.

Latvia:

Increased employability after graduation.

Portugal:

Development of social and professional skills, autonomy and sense of responsibility.

Spain:

- Interns transmit illusion and become very productive after the training.

### **2.2.2. Weaknesses/ challenges in relation to WBL**

GENERAL COMMENTS:

- Coordination of theoretical and practical parts for learning situations (possible lack of theoretical knowledge).
- Non-compliance of the school curricula with the real work/production processes.
- Out-of-date equipment and school instructors' knowledge.
- Teamwork challenges.
- On-the-job trainers/mentors/instructors should be both adequately trained and supported.
- Influence of many external factors not directly related to WBL (company policies, motivation of learners and mentors...).
- Coordination of VET school and enterprise in training and assessment.
- Students sometimes lack motivation and the right attitude.
- Financing of the program: added costs.

Italy:

- Lack of connection between the different typologies of WBL.
- Lack of companies interested in hosting learners: companies should offer more apprenticeship places, student placement.

- The bad perception of WBL: it is seen as a “second choice” for those who did not manage to complete the traditional education path.
- WBL and apprenticeship is not yet offered for innovative professions.

#### Germany:

- Rapid changes on the labour market.
- Industry 4.0 / automatization.
- Equipment for workshops is very expensive.
- Realisation and evaluation of competencies achieved.
- External conditions affect WBL, e.g. some kindergartens in rural areas are just open for 3 hours, however, WBL requires 6 hours per day (legislation).
- Sometimes it is not possible to implement theoretical knowledge in WBL situations. There might be a gap between VET school and enterprise which is difficult to overcome.
- Due to trainees’ youth and lack of experience, it is time-consuming.

#### Latvia:

- Narrow specialization of students.

#### Portugal:

- Not all trainees have the right posture and attitude towards the company where they are developing WBL.

#### Spain:

- Sometimes the company limits the students’ knowledge since it considers them as cheap labour.
- Companies’ size. Sometimes they are too small.
- It involves more trainers’ dedication (traditional training time plus the direct/inverse shadowing phase).
- The trainer’s figure must be recognized (through higher salaries or other conditions).

### **2.2.3. Solutions for challenges and weaknesses**

#### GENERAL COMMENTS:

- More financial, human and material resources invested in the different programmes.
- Coordination of content: process analysis, process optimization, moderation of team meetings, quality circles, analysis of tasks and competencies, coaching concepts, organisation concepts for the dual system, assessment for WBL.

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- Planning of theoretical contents in relation to practical parts of the VET training that go in line (timeline!).
- Better frame conditions and minimum standards.
- The ratio between trainees and trained staff should be appropriate; this has to be strictly supervised since some companies try to employ apprentices as “cheap workers”.
- The mentor should be invited to the school to participate in lessons, so they could get to know today’s teenagers.
- Convincing companies that time investment in training is part of the solution.

#### Germany:

- Internal practical workshops in companies.
- WBL training has to be implemented for WBL professionals in the companies not as “extra work task” but as part of the regular job and work time.

#### Portugal:

- Individualized monitoring of learners.

#### Spain:

- It is necessary to increase individual reflection on the working context in order to effectively internalise learning.
- Exchange must be fostered among workers of different areas.
- Standardising processes facilitating implementation.
- Increasing students’ school training to one year, so they gain maturity and acquire more knowledge.

### **2.2.4. Knowledge, skills and competencies of the WBL professional**

#### **a) In planning WBL programmes:**

##### GENERAL COMMENTS:

- Professional knowhow in theory and practice.
- Management and coordination.
- Flexibility.
- Planning competencies.
- Social competencies.
- Leadership.
- Knowledge of the types of WBL programmes and their strengths and weaknesses.

#### Italy:

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- Understanding of emerging sectors and skills.
- Ability to create network with companies and social partners.

Germany:

- Quality management.
- Process management, project management.
- Media literacy, in particular digital media.

Latvia:

- Knowledge of the specific circumstances of each student, company and sector.

Portugal:

- Team-working and coordination with the other training professionals.

Spain:

- Observation, analysis, organization, oratory, group needs and knowing the syllabus to be taught.

**B) In the implementation of WBL programmes:**

GENERAL COMMENTS:

- Professional competencies.
- Empathy, problem-solving, observation and monitoring (social skills).
- Didactical skills.
- Provide feedback.

Bulgaria:

- Teaching competencies.
- Conflict solving and intercultural skills.
- Motivation skills.
- Specialised knowledge.

Italy:

- Ability to manage companies' expectations.
- Ability to compare different editions of the WBL programme.

Germany:

- To explain complicated matters in simple words.
- Authenticity.
- Charism.
- Capability to motivate others.
- Humour.

Latvia:

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- Tripartite - student-teacher- business.
- Pedagogical skills for the Mentor in the enterprise.

Portugal:

- Open to accepting new ideas.
- Technological skills.

Spain:

- Feedback, critical analysis of students and mistakes, and active listening.
- Planning, organisation and attention to detail.
- Autonomy, growth mentality and sense of citizenship.

**c) In the assessment of WBL programmes:**

GENERAL COMMENTS:

- Quality and project management.
- Structured teamwork.
- Evaluation methods and skills.

Italy:

- Macro- and micro-evaluation.
- Ability to draft a SROI report.
- Pre and post assessment of skills.

Germany:

- Critical ability (towards oneself and toward others).
- Communication skills in order to talk about the results with colleagues, WBL professionals and trainees, and to discuss possible changes.

Latvia:

- Trilaterally understood and decided before the WBL evaluation procedure — who will be evaluated, who will evaluate, how they will be evaluated, as well as the recognition procedure of the evaluation.

Portugal:

- Evaluation as continuous “quality control” of the WBL process.
- Critical spirit and objectivity in the valuation of one’s own capacities.

**2.2.5. Training for WBL professionals**

Type of training needs in relation to WBL:

GENERAL COMMENTS:

- Quality management in education.

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- Update knowledge in the field.
- Pedagogical competency.
- Digital skills.

#### Spain:

- More training both for regular VT school teachers and for employment trainers.
- Active participative methodologies and staff management.
- Communication and feedback with school teachers.

#### Italy:

- Learn from EU best practices.
- Knowledge of economic sectors and the job market.
- Soft skills needed for each economic sector.

#### Germany:

- According to the certification of the VET school, per year each trainer has to attend 1 training in pedagogy and 1 training in the professional field.
- Administration at VET schools.
- Administration of documents.
- Modern structures in administration.

#### Latvia:

- Ability to adapt.
- Entrepreneurial skills.

### **3. CONCLUSIONS**

WBL systems in Europe present the widest variety. As the running of the education system depends upon either national or regional governments, everything, from the laws regulating it to the types of WBL learning, differs from one country (or even region) to another. Therefore, the actual competencies acquired by VET students can also be greatly enhanced (or hindered) depending on the theoretical framework of the law and its practical implementation.

This is reflected in the different types of work-based learning, which can also range from practical classes at school to *dual* vocational training. The former imply much less involvement of the students, whereas in the latter they acquire a great amount of their competencies while working at a company. In between, there exists the *hybrid* possibility of placements during a classic vocational training programme. All possibilities offer

advantages and disadvantages, with a mix of theoretical and practical competencies acquired during the teaching system.

As for dual WBL, it involves a great deal of planning in order to integrate practical and theoretical skills. This fact impacts upon the qualifications demanded from WBL professionals, which must combine theoretical knowledge, pedagogical skills, and the adaptability necessary to participate in a WBL programme.

The field research carried elaborates on all these points, as the interviewees are well aware of the special characteristics of WBL. For instance, with respect to the advantages of work-based learning, a recurrent idea was that it is unequalled by traditional vocational education and training in some respects. Practical training has much more weight than in traditional VET, even when the programmes of the latter have long placement periods.

This fact equips students with fundamental competencies for their future job, which is consistent with the competency-based learning most countries aim at nowadays. Moreover, most students end up joining the company where their placement takes place, and even if they do not, this kind of learning is considered as equivalent to work experience by most employers. Therefore, the advantage of a student having taken a WBL programme over a traditional VET student is obvious when applying for a job.

Students themselves are well aware of this situation, and they value the employability the WBL system grants them. It is worth highlighting the case of Germany, whose dual VET system has a longstanding tradition: the good mix of professional competencies and work stability it offers is greatly appreciated by its respondents.

As for possible challenges of the system, coordination stands out as one of the key concerns of respondents. Those countries whose system is better established — notably Germany — greatly stress that aspect, whilst those with a shorter history of WBL note that it is one the main issues in implementing the system. A lack of coordination in planning syllabi, during the WBL programme or in the final assessment can hinder the correct functioning of the mix of theory and practice.

This fact shows in other problems pointed out by respondents. For instance, some trainers cite a deficient combination of theory and practice, either due to a lack of planning or to failure to stop problems as soon as they come up. They would rather include more theory, especially since — as some students also note — the practical

process sometimes involves very repetitive tasks which do not really help the students. The trainees also point out that they sometimes feel lost, especially at the beginning of the programme, when they may not be correctly informed of the steps of the process. Once again, coordination is the key to most of these issues.

The knowledge, skills and competencies that a WBL professional must have also relate to this topic. They are asked to be proactive, empathic and to have communication, managerial and social skills. In other words, to be a *comprehensive* professional, one who can manage a team, communicate with others (i.e. the company), deal with the student in an understanding way, and anticipate and solve any problems in the meantime. Pedagogical skills and a deep knowledge of their sector and WBL are also required.

The process a WBL-pro must follow is divided into three main steps: planning, implementing and assessing the WBL programme. Some of the professional's skills remain the same in all three parts (social and communication skills, teamwork, etc.), whereas others specially focus on one of them. For example, planning involves more reflective knowledge and competencies (knowing WBL and the sector, management competencies); implementation, proactive skills (team management, problem solving and active communication with the company); and assessment, much quality management (quality control and technical skills, standardised questionnaires and protocols...).

This reflects on the training needs quoted by respondents. Technical skills related to project management are greatly valued, notably, team management and ICT's in relation to WBL. Besides, more theoretical skills need to be taken into account: knowledge on the subject and the WBL system, while soft competencies need to be enhanced, too.

In conclusion, both the general functioning of WBL and each country's situation are depicted in depth in the field work: it has great potential, but the details of its implementation must be handled with care. Indeed, this report provides a great amount of information which, when analysed, can provide with useful solutions for the improvement of WBL programmes.

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