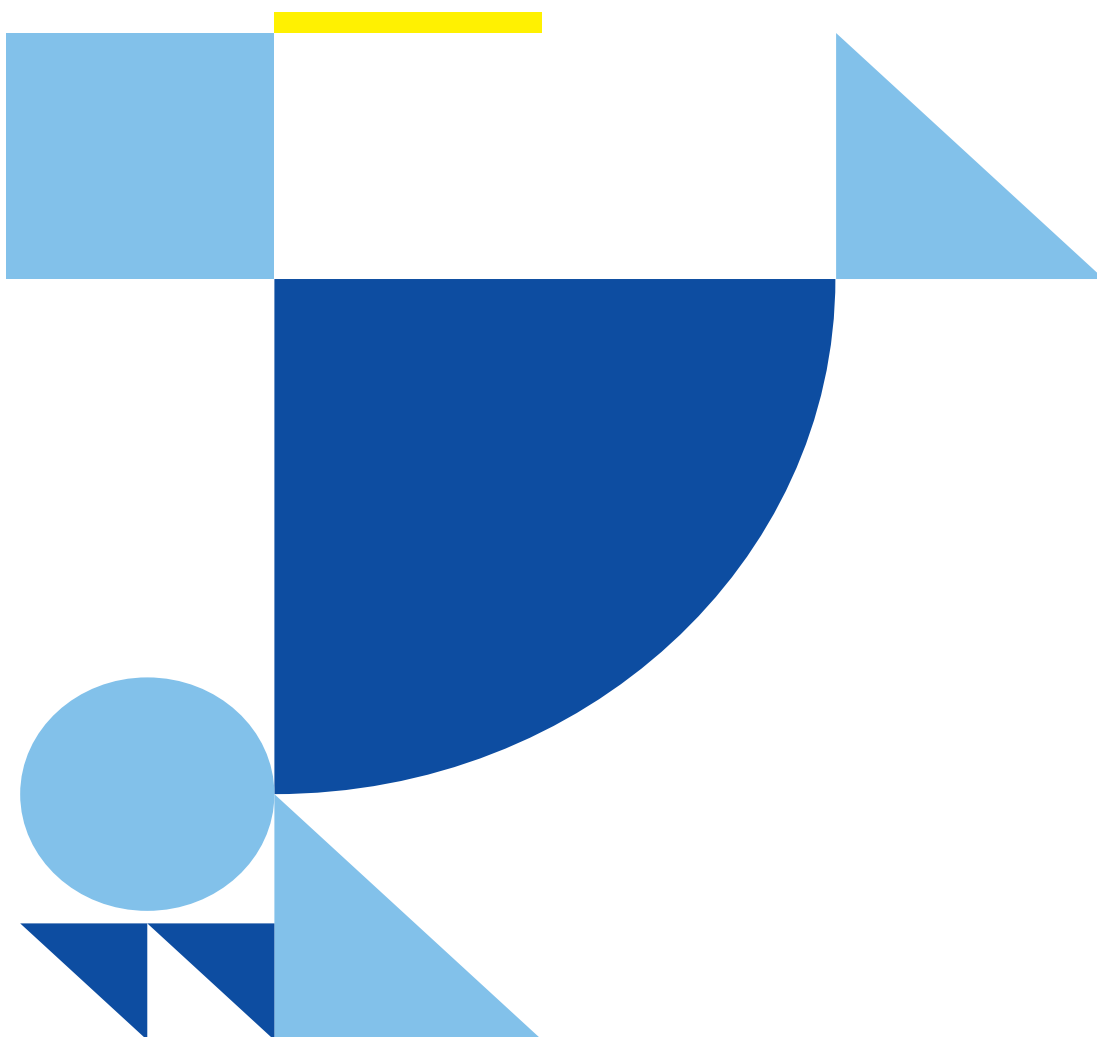




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No 49

Work-based learning in continuing vocational education and training: policies and practices in Europe





Work-based learning in continuing vocational education and training: policies and practices in Europe

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Foreword

Continuing vocational education and training (CVET), particularly its work-based forms, are important in the current European economic and social context. Trends towards an ageing society, longer working lives and increasing globalised competition make it necessary for adults to update and broaden their skills regularly through CVET, and work-based learning (WBL) is a powerful way to support adult learning. Work-based CVET has the potential to promote inclusion and social cohesion, to tackle adult unemployment and underemployment, and to support company and country policies and strategies for innovation, competitiveness and growth.

A range of major European Union policy statutes – among them the 2010 Bruges communiqué, the 2011 renewed European agenda for adult learning and the recently adopted 2015 Riga conclusions – have acknowledged the potentials of WBL for adults and have therefore called for promoting and using it. Work-based CVET has also been assigned a key role in contributing to reaching the Education and training 2020 (ET 2020) target of a 15% average rate of adult participation in lifelong learning by 2020.

Despite this increasing attention and importance, the potentials of WBL in CVET do not seem to be fully utilised yet. While substantial progress has been made in understanding the role of WBL in initial vocational education and training (IVET), the reality and potential of WBL in CVET is less well-known. In addition, Europe's CVET landscape is very heterogeneous and diverse. CVET is delivered by a wide range of stakeholders and institutions and is intrinsically linked to the labour market and the way it is structured. It operates in specific national, regional, sectoral and local contexts, and relies heavily on the country context, including economic structure in terms of sectors and size of enterprises and the overall lifelong learning culture. Numerous examples of practices as well as several specific studies on WBL in CVET may be found, but systematic and comprehensive knowledge of the field is still lacking. This is problematic because a consistent and complete overview is necessary for well-founded decisions and policy-making in this field, at both practical and policy levels.

To contribute to filling the knowledge gaps and to provide a more solid basis for designing and implementing efficient and effective WBL in CVET, Cedefop has conducted several projects and activities in the field of CVET (Cedefop, 2011; 2012; 2013; 2014; 2015).

The present study complements the existing work aiming at improving the understanding of policies and practices of WBL in CVET in Europe. I trust that this publication fruitfully contributes to a better knowledge base on work-based CVET and stimulates further developments that will allow exploiting the full potential that WBL has to offer.

Joachim James Calleja
Director

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⁽¹⁾ Cedefop service contract 2013-0066/AO/EC/ADEHM-GUTCH/Work-based learning in CVET/002/13; team leader Dr Dietmar Frommberger, Otto-von-Guericke-Universität Magdeburg.

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Executive summary

Aims and content of the study

The objective of this study is to improve the understanding of policies and practices of work-based learning (WBL) in continuing vocational education and training (CVET) in Europe.

The report provides information on what WBL in CVET is (Chapter 1) and gives insights into the statistical landscape of WBL in CVET in Europe (Chapter 2). It analyses European and national policies on WBL in CVET, proposes a typology of national policies and illustrates how they shape practices (Chapter 3). What is more, it reveals which forms and patterns of WBL are used for CVET (Chapter 4), shows what different stakeholders perceive as main advantages, needs and challenges (Chapter 5), and ends with conclusions and key messages (Chapter 6).

The study was carried out in six European countries (Bulgaria, Germany, France, Italy, Sweden and UK-England), with a focus on medium-sized enterprises (50 to 249 employees) in selected sectors. Research methods included (a) desk research; (b) interviews with national stakeholders (social partner representatives, policy-makers and academic experts), training providers and enterprises (c) a Delphi survey with experts.

What is WBL in CVET?

A universally accepted definition or a common understanding of WBL in CVET does not exist. Notions of work-based CVET vary between and within countries, and there are overlaps with other concepts such as on-the-job training, workplace learning or work-relevant training. In addition, WBL is often associated with initial vocational education and training (IVET), not with CVET. For the purpose of this study, WBL is defined as:

- (a) intended and structured non-formal learning;
- (b) being of direct relevance to the current or future tasks of the learner;
- (c) taking place in a work-based context, that means either in the workplace, in settings simulating the workplace or outside the workplace, but with specific learning tasks that must be directly applied in the workplace and reflected upon afterwards (train, apply, reflect).

The available knowledge on WBL in CVET to date is still rather fragmented, while a consistent and complete set of information is necessary to improve

practice and policy-making. In addition, there is a lack of comprehensive, comparable and reliable statistical data at European and national levels that specifically cover WBL in CVET. However, on the basis of existing data from the continuing vocational training survey (CVTS), the European working conditions survey (EWCS) and the adult education survey (AES), it is possible to estimate that the EU average participation rate of employed adults in formal and non-formal WBL in CVET is above 20%.

Supply and demand of work-based CVET: main determinants

While there are some variations between countries, employers seem to be the main providers of work-based CVET. More than half of the training investigated in the study was delivered by in-house staff (such as senior employees, human resource staff, specialists), followed by commercial institutions where education and training is not the main activity (mostly providers of equipment that give training on the use of their equipment). Formal education and training institutions are far from being the main providers.

Regarding demand for work-based CVET, it seems that although enterprises do not specifically ask for work-based training, they actually demand WBL or WBL elements, sometimes without even being aware that this is what they do. This might be due to a lack of awareness and understanding of WBL in CVET. Evidence from this study shows that lacking supply of work-based CVET options is rarely the reason why employers opt for other forms of training. Some major drivers for the demand of WBL in CVET could be identified, namely the type of sector, legal requirements and customers' requests with respect to competences and training; the availability of public funding directed to WBL; and the general attitude towards work-based forms of learning in the specific country.

Policies on work-based CVET: conducive, just-allowing and unconcerned

Policies for WBL in CVET are influenced by various actors at different levels. European Union (EU) policy gives orientation and inspiration for national policies; it fosters cooperation and can have an impact through the provision of specifically targeted funding, for example through the European Social Fund. Social partners and other stakeholders, such as professional bodies or sector organisations, can also influence policies for WBL in CVET and foster this form of learning, for

example through promotional activities. Regulated professions might require CVET on a regular basis to maintain a licence to practise, though training forms are normally not specified and left to the discretion of providers. National and/or regional authorities usually do not directly regulate WBL for CVET for employed people as CVET is mainly left to the discretion of the employers and employees. While general rights to CVET and access to financial resources are often ensured by public authorities, the forms of training are normally not specified. However, a framework that facilitates the use of work-based CVET and includes various activities, for example specifically dedicated programmes, may be provided.

All these influences shape national policies and result in a diversity of practices in Europe. Five operational criteria to categorise countries' policies on work-based CVET can be identified, namely:

- (a) WBL is acknowledged as a regular, common and accepted CVET method;
- (b) specifically WBL-oriented programmes exist at national, regional or sectoral level;
- (c) financing training and learning that contains work-based elements is possible;
- (d) learning outcomes acquired non-formally and informally through work are recognised;
- (e) stakeholders (such as social partners) have interest in and focus on WBL in CVET; they actively promote and encourage it.

Depending on their degree of openness to WBL, CVET policies can be defined as 'conducive', 'just-allowing' or 'unconcerned'.

Conducive policies meet all the five criteria. In this study, UK-England has been identified as an example of a country with conducive policies for WBL in CVET. Just-allowing policies meet only some of the five criteria. France falls into this category, as the first two criteria are not sufficiently met. Unconcerned policies only verify one or none of the criteria. Bulgaria was found to belong to this type; work-based CVET programmes can be financed through public/European funds, but it seems that the other four criteria are not met.

Work-based learning in CVET: a kaleidoscope of practices

Evidence from this study confirms that forms, patterns and practices of WBL in CVET are very diverse. They vary in terms of duration (from a few hours to several months), timing (during or outside work hours; full- or part-time), number

of participants per training, origin of trainers (internal employees or external staff from training providers) and training location (in or outside the workplace, or a combination of both). Most of the specific examples given by the respondents of the study were a combination of on- and off-the-job practices, sometimes also with e-learning elements. The approaches also vary with respect to how the learning process is led (mainly self-regulated learning, mainly trainer-regulated learning or a combination of both) and the degree of collaboration with others in the learning process.

Based on the analysis of practice examples, WBL in CVET is often part of a broader training package, involving different forms of training with varying degrees of trainer and learner regulation and with cooperative as well as individual learning sequences. It might, for example, start with a rather trainer-led, off-the-job part aiming at providing information, supplemented by flexible e-learning elements, and can then turn into self-regulated and collaborative parts with practical exercises in work simulations and later learning at the workplace itself, supported by a mentor.

The study shows that forms, patterns and practices of WBL used in CVET are, to a certain extent, also determined by the type of sector and its particular characteristics. In the shipping sector for example, e-learning seems to be a useful option due to its flexibility, as it can be used virtually anytime and anywhere in the world for on-board employees. In sectors where training on technical systems is needed, learning with simulated work places is perceived as particularly beneficial. Findings from the study confirm that employers consider simulated work environments as a good method to provide training on many different technical systems, because the time needed for learning certain skills is reduced, as the trainees can be systematically trained on several relevant technical systems simultaneously. As the costs of WBL in simulated work environments might be high due to the need for relevant technical systems and the most up-to-date equipment, it is beneficial to provide it through collective arrangements or investments, for example in training institutes of chambers of crafts. Depending on the sector and the particular work, training on a regular basis can be mandatory, as shown for example in the Swedish shipping sector or in the Italian agri-food sector. Such legal requirements might influence forms, patterns and practices of CVET by setting standards and content for training.

Most employers interviewed in this study reported that training was provided by in-house trainers. Employers and training providers state that practical experience with the field in which they will train is an important selection criterion for WBL trainers. Specialisation in the provision of WBL is mainly seen as specialisation in specific work-tasks that need to be taught and not specialisation

in training people using WBL as a method. There seems to be a lack of trainers who have been properly trained to implement WBL. Most training providers presume that standard training and selection procedures for trainers ensure that they also have the relevant competences for WBL.

The stakeholders' views: advantages, needs and challenges

Interviewees identified various advantages, needs and challenges regarding WBL in CVET. Work-based CVET is perceived as an efficient and effective way of training, and of combining an individual's skills development with the work in the enterprise. It is seen as a means to increase the relevance and flexibility of training. Interviewees highlighted in particular the benefits of linking learning directly to the work context, the relevance of skills that can be fostered through WBL, and the comparatively easy application of newly acquired skills into daily work practices. Work-based CVET is considered useful both for the induction of newly hired staff as well as for further development of existing personnel.

However, the respondents in the study see lacking awareness and understanding of WBL in CVET and its potentials as a major obstacle for an increased and better use of WBL. According to them, WBL is often still perceived as a rather vague form of learning with unclear outcomes. Thus, materials and guidelines on WBL for CVET and good practice examples that serve as a source of inspiration could be beneficial, together with awareness-raising campaigns. Further challenges mentioned include adequate training and professional development of CVET trainers in the specifics of WBL and the validation of learning outcomes attained through WBL.

Conclusions and key messages

The potential of WBL in CVET to support adult learning and human resource development in enterprises has not yet been fully exploited. Key actions that should be considered from policy-makers, social partners and other relevant stakeholders are:

- (a) improving the information base and statistical data on WBL in CVET. Comprehensive, reliable and comparable data which describe adult participation in the various forms of formal, non-formal and informal work-based CVET in the different EU Member States is a prerequisite for sound analysis that can support evidence-based policy and decision-making;

- (b) implementing work-based CVET conducive policy environments/frameworks. WBL should be established as an integral part of the policies, laws and financial instruments targeted at CVET, and it should be critically checked whether existing structures actually hinder or foster work-based CVET. Room for WBL in CVET should be created, even without directly requiring its use – there are many ways of doing so. It should be considered and assessed whether WBL should be integrated more firmly into the countries' formal CVET provision;
- (c) promoting collaboration, active commitment and the idea of shared responsibilities. CVET is delivered by a wide range of institutions, and is intrinsically linked to the labour market as well as sector characteristics. Responsibilities for setting policy and for overseeing provision lies with multiple stakeholders. When it comes to fostering WBL in CVET, active commitment and collaboration of all stakeholders is therefore crucial; it is a shared responsibility;
- (d) raising awareness and improving knowledge on WBL CVET benefits and methods. Methodological guidelines, toolboxes and other material, as well as good practice examples that serve as a source of inspiration could increase the quantity and quality of work-based CVET. Adequate training and professional development of trainers on the specifics of WBL is also important. Further, better understanding and use of informal in-house WBL activities should be promoted.

CHAPTER 1.

Introduction

A common understanding of work-based learning (WBL) in continuing vocational education and training (CVET) and systematic knowledge on its use seems to be lacking in Europe. Clearly defining what WBL is, for example distinguishing it from similar concepts such as work-place learning or experiential learning, is sometimes difficult. Describing WBL is also challenging, because it may take various forms, such as apprenticeships, traineeships or internships at initial vocational education and training (IVET) level, or guided on-the job training, job rotation, job shadowing or mentorship at CVET level. In CVET in particular, the disparity of types of WBL is significant because CVET contexts are strongly shaped by professional, sectoral and institutional frameworks which in turn influence the way WBL can be implemented on the ground. Further, CVET is usually less regulated than IVET, and is often part of companies' internal human resource development strategies, based on the particular needs and interests of the individual company.

Nonetheless, in the context of VET policy and, more generally, in the context of lifelong learning policy, the development of work-based forms of learning and in-company training (apprenticeship, WBL) plays a key role (Evans and Rainbird, 2002; Hodkinson and Bloomer, 2002). WBL has recently also gained increased importance at political level in the European Union (EU). In IVET, the 2013 European Alliance for apprenticeships initiative has recently crystallised the policy interest of EU Member States in WBL for young people. In CVET, developing WBL for adults has been pointed out as a major objective both in the 2010 Bruges communiqué (Council of the EU and European Commission, 2010) and the 2011 renewed European agenda for adult learning (Council of the European Union, 2011). The Bruges communiqué highlights WBL as a source of professional and personal development and social cohesion, and identifies WBL as one of the areas that require more attention and strategic action (Council of the EU and European Commission, 2010). The renewed European agenda for adult learning calls for promoting WBL and for using different forms of WBL, also in combination with other learning modes, to support flexible provision and inclusion (Council of the EU, 2011). Work-based CVET has also been assigned a key role in contributing to reaching the Education and training 2020 (ET 2020) target of a 15% average rate of adult participation in lifelong learning by 2020. Recently, the importance of WBL has been reaffirmed in the 2015 Riga

conclusions of the Latvian Presidency of the Council of the EU (Latvian Presidency of the Council of the EU and European Commission, 2015).

Several factors explain the increasing policy attention and expectations. Trends towards an ageing society and longer working lives make it necessary that adults regularly update and broaden their skills through CVET, and WBL appears as a powerful way to support adult learning (Cedefop, 2014; Dehmelt, forthcoming). Through addressing low-skills traps and inequality in skills distribution, work-based CVET also has the potential to promote inclusion, tackle adult unemployment and underemployment (Cedefop, 2013), and support innovation, competitiveness and growth (Cedefop, 2012).

This publication contributes to a better knowledge and understanding of WBL in CVET. It provides information on what WBL in CVET is, its spread in European countries, how it is practised on the ground, and how practice is framed by European and national policies. It also shows the views of stakeholders on advantages as well as concerns and challenges regarding WBL in CVET.

Better knowledge on work-based CVET can contribute to an improved understanding of this form of learning and encourage stakeholders to use it in the most appropriate ways, and to anchor it into their practices. With more knowledge about work-based CVET, policy-makers would also be more able to spot existing issues and weaknesses that could be addressed in future developments of VET policies.

1.1. Definitions

A universally accepted definition of work-based CVET does not exist. Across countries, the components of work-based CVET considered the most important may vary, as illustrated by Table 1. However, even within countries, there seems to be no universally agreed definition or common understanding of work-based CVET. Further, WBL often appears to be associated with IVET, and not so much with CVET. Research on WBL and initiatives that foster the development of WBL in VET also tend to refer predominantly to IVET.

In this study, CVET is defined as ‘education or training after initial education or entry into working life, aimed at helping individuals to improve or update their knowledge and/or skills; acquire new skills for a career move or retraining; continue their personal or professional development’ (Cedefop and Tissot, 2004, p. 50). CVET is essentially the part of adult learning oriented towards professional development.

Table 1. **Major defining elements of work-based CVET according to observation of country practices**

Countries	Major defining elements of work-based CVET
BG, FR, DE, IT, SE, UK-England	The training is integrated in the work processes/takes place at the workplace
DE, FR, IT, SE, UK-England	The training conducted is based on the needs and interests of the employer/relevant for the work of the participants
BG, DE, SE	The training is financed by the employer
DE	The training takes place during working hours
IT	• The employer and the provider coordinate to develop learning plans • The training uses 'unconventional' learning modes

Source: Cedefop.

Next, WBL in CVET (or work-based CVET) is defined as intended and structured learning of direct relevance to a worker's current or future tasks and taking place in simulated or real work conditions, or outside of the workplace but with specific learning tasks that must be applied in the workplace and afterwards reflected upon (train-apply-reflect method). In broad lines, it is 'CVET in work conditions and targeted at work tasks. Work-based CVET aims to improve workers' mastery of work tasks through providing them with the necessary skills whatever these may be, for example basic, soft or transversal' (Cedefop, forthcoming a). At least three concepts have to be distinguished from that of work-based CVET:

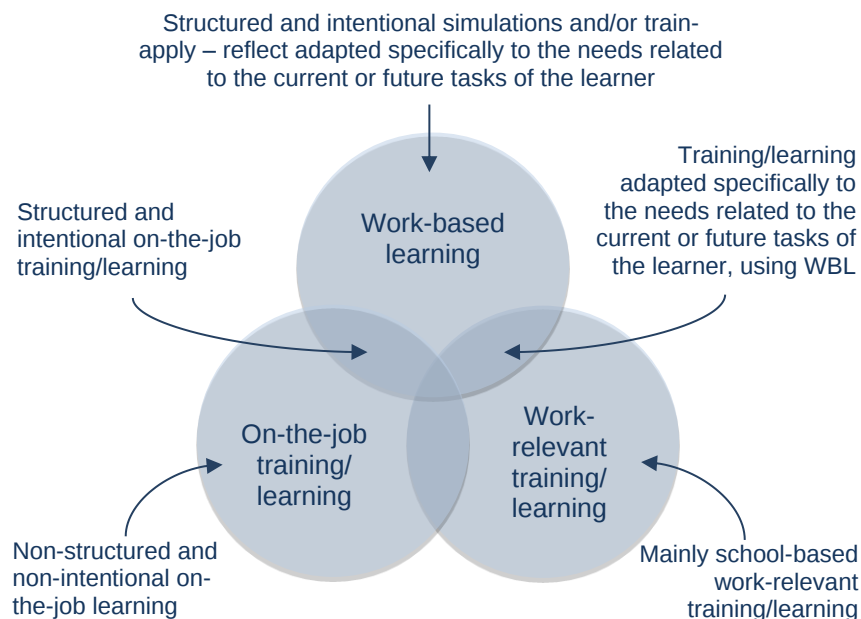
- (a) learning by doing (or experiential learning) is the general process in which individuals construct their knowledge, skills and competences through experimenting, reflecting, drawing conclusions, applying and adjusting these in light of reality. The concept of learning by doing is broader than that of work-based CVET as learning by doing can be applied outside of CVET, in general and technical education as well as in IVET. Work-based CVET can be represented as the CVET form of experiential learning;
- (b) on-the-job training/learning (or workplace learning or learning while working) is a commonly known and often used term that to some extent overlaps with work-based CVET as defined in this study. On-the-job training can be defined as training 'given in the normal work situation' ⁽²⁾ and hence, in principle, cannot take place outside the premises of the enterprise. In contrast, work-based CVET can take place outside of the work-place/work-

⁽²⁾ Eurostat, for example, defines on-the-job training as training carried out 'in the work place using the normal tools of work, either at the immediate place of work or in the work situation' (Eurostat, 2012, p. 26).

- station, for example in simulated environments or through the train-apply-reflect method. As such, the two are distinct concepts;
- (c) the concept of work-relevant training/learning is used in training policies and activities to emphasise the need for the skills taught to be as relevant as possible to the labour market. The concept calls for involving stakeholders in defining the competences developed through CVET, helping companies to identify training needs, and ensuring a flexibility of the learning setting for it to be adaptable to company needs. There is however no guarantee that the training will be work-based, and so relevant for the current and/or future tasks of the employee; and taking place at the work-station, or in simulated work environment or through the method of train-apply-reflect.

Figure 1 presents the overlaps and differences between the concepts of work-based CVET, on-the-job training/learning, and work-relevant training/learning.

Figure 1. **Illustration of differences and overlaps between the concepts of WBL, on-the-job training/learning and work-relevant training/learning**



Source: Cedefop.

A further noteworthy definition of WBL is the one proposed by Raelin (2008) according to which critical elements in the WBL process are that:

- (a) learning is acquired in the midst of action and dedicated to the task at hand;

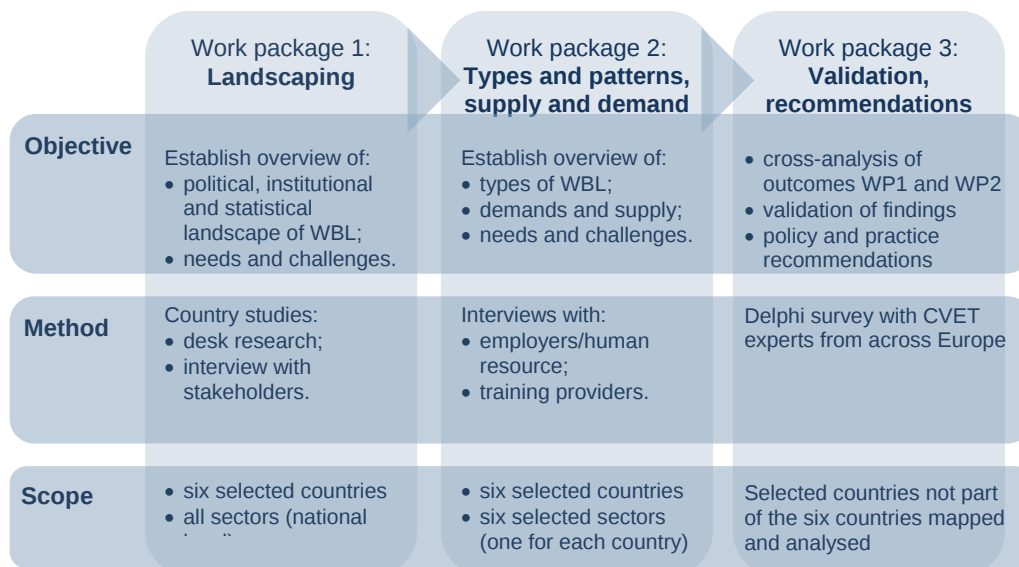
- (b) knowledge creation and utilisation are collective activities wherein learning becomes everyone's job;
- (c) learners demonstrate a learning-to-learn aptitude, which frees them to question underlying assumptions of practice.

In this definition, self-responsibility is stressed while the work context is referred to as a source of (tacit) knowledge and possibilities to get feedback (community of practice). This definition is broader than the one adopted in this study.

1.2. Research design

The objective of the study was not to yield a representative picture of work-based CVET in Member States, but more modestly, to qualitatively explore some aspects of work-based CVET policies and practices in a limited set of enterprises, sectors and countries in the EU. The study focused on work-based CVET for employees in medium-sized enterprises (50 to 249 employees). It was developed through three main work packages with different objectives, scopes and data collection tools, as outlined in Figure 2.

Figure 2. Overview of research approach



Source: Cedefop.

The study was carried out in six countries: Bulgaria, Germany, France, Italy, Sweden and UK-England. Countries were selected so as to have in the panel:

- (a) large and small countries;
- (b) northern, central and southern Europe countries;
- (c) countries with different levels of CVET provision and types of CVET (Cedefop, 2010):
 - (i) two high performers in providing CVET (France and Sweden), one with a high degree and one with a low degree of on-the-job training, one using courses more than other types of training and one using both to the same extent;
 - (ii) one average performer in providing CVET (Germany), with a high degree of on-the-job training and using courses and other types of training equally;
 - (iii) two low performers in providing CVET (Bulgaria and Italy), both of them having a low degree of on-the-job training;
 - (iv) one country with a high degree of CVET in the work situation and using other types of training more than courses (UK-England).

In each country, one economic sector was specifically targeted. Sectors were chosen so that the panel includes primary, secondary and tertiary sectors, as well as different situations in terms of use of formalised forms of CVET (Table 2).

Table 2. **Selection of sectors**

	Sector with high share of formalised CVET	Sector with low share of formalised CVET
High performers in providing CVET (FR, SE)	Human health and social work activities in France	Maritime economy in Sweden
Medium performers in providing CVET (DE, UK-England)	Metalworking and electrical industry in Germany	Information and communication in UK-England
Low performers in providing CVET (BG, IT)	Agriculture in Italy	Administration and other services in Bulgaria

NB: The information on CVET in the different sectors was very limited and the selection therefore is based on the best possible assessment with the information available. Only when the national studies started and the team had a chance to go in depth with the sectors was it possible to assess the characteristics of the specific sector with respect to CVET.

Source: Cedefop, based on Cedefop, 2010; Eurostat, CVTS3; and BIBB.

Data for the study were collected through desk research, interviews and a Delphi survey. The research team also included national experts for each country, who conducted country-specific desk research and the field work.

The desk research was mainly based on the review and analysis of documents about the national WBL CVET policy framework and context

(analytical descriptions of main features, national characteristics, history, etc.); national and regional level policy documents relating to work-based CVET; documents mapping the demand for and supply of work-based CVET; information from European wide and national surveys on training; documents presenting institutional forms/types/patterns/settings of work-based CVET and their main features and functioning; documents, overviews, stakeholder statements, articles, evaluations, studies, etc. that provide information about needs and challenges in relation to WBL CVET implementation at company level; opportunities and conditions for effective WBL CVET; wishes and requirements of suppliers and employers towards future development of policies and systems. Documents were identified using the following search strategies: analysis of national journals on (C)VET, WBL, lifelong learning; national educational law; references from interviewees; references from identified documents to find additional relevant documents/authors/intuitions; websites of relevant organisations/institutions; Google scholar search for other articles and for policies, strategies, programmes, etc.

Interviews were carried out with national level stakeholders, including representatives of social partners (trade unions and industry organisations), training providers (and/or their industry organisations), policy-makers and academic experts. The stakeholders were selected partly based on the document review – persons or organisations behind reports, programmes, and policies relevant for the study were contacted – and partly based on a snowballing approach in which respondents were asked to help identify other relevant stakeholders. A total of 56 national level stakeholders were interviewed. Enterprises providing or demanding work-based CVET within the sectors chosen were also interviewed. Respondents were identified mainly in three ways: union representatives or other stakeholders; online databases of enterprises within the sectors; national lists of providers of training. In total, 39 providers and 53 demanders were interviewed.

Finally, the results from the analysis were validated using a Delphi survey method. The study findings were translated into questionnaires with open and closed questions which were submitted through three successive rounds to an expert panel so as to combine experts' opinions into group consensus. Five experts participated in the Delphi survey. They were from Denmark, Croatia, Cyprus, Hungary and the Netherlands, and were requested to consider the study findings also from the standpoint/through the lens of their respective countries.

1.3. Structure of the publication

The publication is divided into six chapters. After the introduction (Chapter 1), the statistical landscape of work-based CVET is presented in Chapter 2. Chapter 3 analyses the policy framework of work-based CVET in the EU and Member States, and proposes a typology of national policies. Chapter 4 investigates practices of work-based CVET and characterises emerging forms and patterns. In Chapter 5, the benefits of WBL in CVET are outlined, along with the needs of stakeholders and challenges to be addressed. Conclusions and key messages for policy and practice are highlighted in Chapter 6.

CHAPTER 2.

Insights on the statistical landscape of work-based learning in continuing vocational education and training

This chapter presents an overview of employee's participation in work-based continuing vocational education and training across Europe, along with some illustrative data and examples of the supply and demand of work-based learning for employees.

2.1. Employees' participation in work-based CVET across Europe

Reliable statistical data which specifically cover WBL in CVET for people in employment in Europe do not exist. However, proxy data can be found from three major sources: the continuing vocational training survey (CVTS), the European working conditions survey (EWCS), and the adult education survey (AES). Cedefop provides a detailed comparative analysis of the CVTS4 together with the AES2 (Cedefop, forthcoming b).

2.1.1. Continuing vocational training survey (CVTS)

The CVTS is the most frequently used source for approaching CVET and in particular work-based CVET. The CVTS has been carried out by Eurostat since 1993 ⁽³⁾. It is a survey of employer-sponsored training (only enterprises respond). It contains data on continuing vocational training in work situations (formerly 'guided on-the-job training').

This indicator accounts for the employees who have participated in employer-sponsored on-the-job training. On-the-job training here refers to learning activities carried out in the workplace using the normal tools of work in the normal work conditions: 'guided on-the-job training is characterised by

⁽³⁾ Four rounds of the CVTS have taken place so far, relating to years 1993 (CVTS1), 1999 (CVTS2), 2005 (CVTS3) and 2010 (CVTS4). CVTS5 is planned to take place in 2015. Eurostat: *Continuing vocational training survey*. <http://ec.europa.eu/eurostat/web/microdata/continuing-vocational-training-survey> [accessed 31.8.2015]. Cedefop provides a detailed comparative analysis of the CVTS3 (Cedefop, 2010).

planned periods of training, instruction or practical experience in the work place using the normal tools of work, either at the immediate place of work or in the work situation' (Eurostat, 2012a, p. 26).

This definition captures the essential elements of WBL, as defined in the present study, (learning in work conditions and targeted at work tasks) well. However the measure of work-based CVET provided by the CVTS indicator 'continuing vocational training in work situation' is limited in scope: the survey covers employees only (neither the inactive and the unemployed nor the self-employed). It does not consider enterprises that have fewer than 10 employees, and it also does not cover such economic sectors as agriculture, public administration, defence, compulsory social security, education, human health and social work activities. Hence the information that it provides on the extent of work-based CVET only covers employees in enterprises of certain sizes and sectors.

In addition, CVTS data are somewhat uncertain due to the fact that the survey does not only collect data on 'continuing vocational training in work situation', but also on other forms of learning provision that might include WBL. Since this is not specified in the survey, the data cannot be used as a source on WBL in enterprises. For example, the CVTS collects information on the 'share of employees participating in CVT courses' (internal and external courses). These courses may very well include WBL, but it is not specified whether and to what extent this is the case. The same applies to the CVTS indicator 'planned training by self-directed learning'. Thus, these indicators cannot be properly used for our purpose. As a consequence, while the CVTS indicator 'continuing vocational training in work situation' allows for some light to be shed on WBL in CVET in Europe, it does not cover all the WBL that might be provided to employees. It only shows part of the picture.

2.1.2. European working conditions survey (EWCS)

The EWCS is an alternative source for measuring the extent of work-based CVET. The EWCS has been carried out by The European Foundation for the Improvement of Living and Working Conditions (Eurofound) since 1990 ⁽⁴⁾. The survey addresses people in employment, whether employees or self-employed, with no age limitation. It contains data on on-the-job training.

⁽⁴⁾ Five rounds have taken place to date: 1990/91 (EWCS1), 1995/96 (EWCS2), 2000 (EWCS3), 2005 (EWCS4) and 2010 (EWCS5). Eurofound: *European working conditions surveys*. <http://www.eurofound.europa.eu/surveys/ewcs> [accessed 31.8.2015].

The question asked to respondents is: ‘over the past 12 months, have you undergone on-the-job training?’ (Eurofound, 2010, p. 22, Q61C). In that survey, on-the-job training is defined as ‘training given by other colleagues of the company where the respondent works’ (fifth EWCS glossary).

This indicator provides a good reflection of the focus of WBL (learning in work conditions and targeted at work tasks) as it is very likely that training provided by co-workers and supervisors is focused on work tasks, and provided in work conditions. However this definition leaves aside the part of WBL that stems from provision by an external party (trainers who are not colleagues, such as an external provider). The ‘having undergone on-the-job training over the past 12 months’ indicator is, in that sense, too restrictive and likely to capture only part of the real magnitude of work-based CVET among the people in employment. What is more, the EWCS also does not cover the part of work-based CVET among the unemployed and the inactive.

2.1.3. Adult education service (AES)

A third survey that could also be considered for measuring the extent of participation in work-based CVET is the AES ⁽⁵⁾. It has been carried out by Eurostat since 2005. Two rounds have taken place so far, relating to reference years 2007 and 2011. Regarding WBL, the AES contains data on employer-sponsored job-related non-formal education and training.

In the AES, formal education is defined (based on the ISCED 1997) as ‘Education provided in the system of schools, colleges, universities and other formal educational institutions that normally constitutes a continuous ‘ladder’ of full-time education for children and young people...’ (Unesco, 2006, p. 47), and non-formal education refers to organised and sustained educational activities that do not correspond to formal education. Education or training is job-related (professional) if ‘the respondent takes part in this activity in order to obtain knowledge and/or learn new skills for a current or future job, increase earnings, improve job- and/or career opportunities in a current or another field and generally improve his/her opportunities for advancement and promotion’ (Eurostat, 2012b). It is employer-sponsored if partially or fully paid by the employer.

⁽⁵⁾ Eurostat: access to microdata: *adult education survey*.
http://ec.europa.eu/eurostat/c/portal/layout?p_l_id=203684&p_v_l_s_g_id=0
 [accessed 31.8.2015].

However, the link of this ‘employer-sponsored job-related non-formal education and training’ indicator with WBL is questionable. It cannot be assumed that only WBL activities are included in employer-sponsored learning. Therefore, using this indicator most probably leads to an overestimation of the real extent of WBL in non-formal CVET. Also, an additional limitation of this indicator is that it only covers non-formal learning, and hence does not provide any information on WBL in formal and informal CVET.

Table 3 presents estimates of participation in work-based CVET among people in employment according to selected indicators of these three surveys.

The comparability of these data from the three different surveys is very limited. CVTS covers only employer-provided training to employees in part of enterprises in some sectors. The EWCS is a survey of individuals, including both employees and self-employed individuals, with no size or sectoral exclusion. None of these surveys have age limitations (respondents are aged 15+), contrary to the AES where the indicator is restricted to those aged 25 to 64, and limited to the non-formal segment of CVET.

Based on these surveys, it can only be estimated that the percentage of employed persons who participated in WBL in CVET (both formal and non-formal) in the EU was above 20% in 2010.

In conclusion, a comprehensive indicator that would describe the participation of all adults (whether inactive, unemployed or in employment) in formal, non-formal and informal work-based forms of CVET in European Member States is still lacking to date.

2.2. Some illustrative data on the supply and demand of work-based CVET for employees

Data from European surveys and the data collected through this study shed some light on practices in the field of work-based CVET regarding supply, demand, costs and prices.

2.2.1. Supply

WBL in CVET is provided by various types of providers: formal education institutions; non-formal training institutions; commercial institutions (where training is not the main activity and is focused on the use of equipment or service provided); employers (in-house trainers); employer organisations or chambers of trade/commerce; trade unions; non-profit associations (cultural society, political party, etc.); or individuals (such as freelancers or persons giving private lessons). Table 4 illustrates the relative shares held by these categories in the six study

countries and the EU average, as measured by the AES for the provision of non-formal education and training activities.

Table 3. **Percentage of persons in employment who have participated in WBL in CVET according to indicators from the AES, CVTS and EWCS**

	CVTS		EWCS	AES	
	CVT in work situation		Having undergone on-the-job training	Employer-sponsored job-related, non-formal education and training	
	Employees (%) No age limitations		Employed persons (%) No age limitations	Employed persons (%) aged 25-64	
	(trng_cvts50)		(Question 61c)	(trng_aes_123)	
	1 2005	2 2010	3 2010	4 2007	5 2011
EU	16	20	32.2	30.6(e)	37.7(e)
Belgium	21	21	36.3	35.8	37.3
Bulgaria	12	20	21.7	47.1	34.7
Czech Republic	32	31	32.1	42.6	36.1
Denmark	25	16	47.0	39.7	53.7
Germany	26	28	39.7	43.6	47.7
Estonia	16	14	33.2	42.3	48.2
Ireland	:	:	37.8	:	9.5
Greece	4	6	16.0	10.9	7.7
Spain	19	20	24.2	20.6	32.6
France	7	14	25.3	:	46.7
Croatia	:	15	20.5	22.6	:
Italy	7	11	17.3	14.6	32.6
Cyprus	6	18	27.1	36.5	38.2
Latvia	7	21	29.3	31.4	28.3
Lithuania	11	25	27.5	33.4	28.9
Luxembourg	23	20	31.1	:	60.4
Hungary	13	12	28.3	6.3	44.4(b)
Malta	17	15	28.4	32.4	37.8
Netherlands	11	14	40.8	43.4	59.8
Austria	9	12	43.5	36.8	39.6
Poland	15	11	29.6	24.2	23.4
Portugal	9	20	24.3	23.8	41.4
Romania	14	10	17.6	4.8	6.7
Slovenia	20	25	45.3	32.5	33.4
Slovakia	20	21	50.2	47.3	42.8
Finland	16	12	57.8	50.9	53.2
Sweden	21	24	46.8	71.4	67.0
United Kingdom	:	30	44.7	35.2	25.5

NB: (e) estimated; (b) break in time series; : not available.

Sources: Eurostat database (indicators trng_cvts50 and trng_aes_123);

Eurofound EWCS 2010 data tables,

<http://www.eurofound.europa.eu/surveys/ewcs/2010/datatables.htm> – Table 1 (retrieved August 2014).

Table 4. **Distribution of non-formal education and training activities by provider (2011)**

	Formal education institutions	Non-formal education and training institutions	Commercial institutions where education and training is not the main activity	Employers	Employers' organisations, chambers of commerce	Trade unions	Non-profit associations (e.g. cultural society, political party)	Individuals (e.g. persons giving private lessons)	Non-commercial institutions where education and training is not the main activity	Other	No response
EU	9.8	17.7	10.9	32.0	3.2	1.0	5.9	5.1	5.7	4.9	3.6
BG	2.5	11.3	3.9	71.8	2.3	:	:	1.3	5.3	:	:
DE	16.8	14.3	17.0	28.2	:	0.9	3.0	7.7	5.2	4.2	2.3
FR	2.7	23.4	6.8	33.4	1.6	0.8	14.3	7.5	3.7	4.1	1.7
IT	11.0	11.1	8.0	31.7	8.0	:	4.9	3.6	7.7	13.3	:
SE	7.5	10.5	25.1	30.1	3.9	1.3	3.9	3.1	9.0	4.8	1.0
UK	:	10.7	:	44.3	7.3	:	2.1	3.4	1.6	:	29.0

NB: The percentages might not always aggregate to 100% due to rounding effects.

Source: Eurostat database, AES survey [trng_aes_170]; : means data not available.

As shown in Table 4, on average in the EU employers clearly appear as the major providers of non-formal education and training activities. While this is also the case for all six countries analysed in this study, there are considerable variations. In Bulgaria, 71.8% of non-formal education and training is provided by employers, whereas in Germany it is, for example, only 28.2%. Germany on the other hand has a fairly high share of non-formal education and training being provided by formal education institutions (16.8%). France is characterised by a fairly high share of the non-formal education and training being provided by non-formal training and education institutions (23.4%) and non-profit associations (14.3%) and in Sweden it is commercial institutions where education and training is not the main activity (25.1%).

The small sample of 36 examples of WBL training collected among employers in the present study confirms that employers are the main providers. More than half of the training providers were in-house trainers (senior employees, specialists, human resource department staff etc.) and almost 25% were commercial institutions where education and training is not the main activity (mainly providers of equipment that give training in the use of their equipment). Less than 15% of the providers were formal education institutions. The remaining providers were non-formal training institutions or individuals (3% each) and 'other types of providers' (10%).

A general observation is that formal education and training institutions are far from being the main providers. An explanation could be that formal educational institutions seem to offer mostly training that leads to State-recognised qualifications. Yet, at least in some countries, a large part of the WBL training falls outside this category. This might explain why WBL is usually provided outside formal educational institutions, by in-house trainers, commercial institutions, etc.

Are the providers of WBL in CVET specialised on WBL, or do they also provide other forms of CVET? When looking at the providers interviewed in the study we can see that this varies. The share of WBL training differs quite substantially between the 18 providers that gave this information. In six cases, all the training provided in the last 12 months before the interview was 100% WBL-based. Another four providers had some elements of WBL in all their training, while eight providers also gave training completely without WBL elements. This indicates that WBL is delivered by providers specialised in WBL (often mainly providers of equipment that give training on the use of their equipment or in-house trainers) as well as by training institutions that provide several different types of training. The number of WBL training instances provided in the 12 months before the interview ranged from one to 150 in the same period.

According to the research conducted in this study, lack of supply is very rarely the reason why employers do not choose WBL, but opt for other forms of training. One might however question the quality of the WBL provided: providers generally state that they do not offer trainers any specific training; they presume that the standard training and selection procedures ensure that trainers have the competences required for WBL as well. An important selection criterion for WBL trainers seems to be practical experience with, and knowledge on the field in which training will be provided. A reason for this might be that as WBL is (still) not seen as a method for training, specialisation in the provision of WBL is mainly seen as specialisation in specific work-tasks that needs to be taught and not specialisation in training people using WBL as a method. Some interviewees highlight that it is difficult for the providers to ensure that their trainers are specialised in all the very specific processes and/or machinery used by the different enterprises in a sector and profession.

2.2.2. Demand of the medium-sized companies in the specific sector selected in each country

Evidence from our study sample shows that enterprises do not always specifically demand WBL training. Enterprises demand training that will improve the performance of their employees. As WBL is not a commonly known and used

concept, enterprises do not explicitly ask for it. Yet, enterprises demand WBL or WBL elements, but sometimes without even being aware that this is what they do.

Although statistical data on the size of the demand for WBL are lacking, some major drivers for the demand for WBL could be identified through the study:

- (a) type of sector. A good example of this is given by the electrical industry sector in Germany. According to the interviewees, demand for WBL in CVET is strongest in areas with high rates of technological progress. Because work safety plays an important role in this sector, there is also a considerable demand for training which simulates the work place as at the work place itself it is often not possible to simulate all the possible distortions of the everyday working routines. Depending on the type of sector and the particular work, there might also be legal requirements for training;
- (b) legal requirements and customers' requests with respect to competences and training. Large parts of the budgets for training are used on training required by law, collective agreements, sectoral requirements etc. (such as training relating to safety at the work-place). If this training – which has often been developed by providers based on the legal requirements – does not include WBL (because the legal requirements, for example, do not include WBL), then demand for WBL will be limited. With limited budgets for training, the agri-food sector in Italy illustrates this situation (Box 1). Legal requirements also play an important role in the Swedish shipping sector. There is a wide range of eligibility requirements for on-board personnel; if workers do not fulfil them, they are not allowed to operate at sea. In addition, shipping companies receive specific requests from customers (such as oil companies) that might lead to training demand;
- (c) types of competences needed: WBL is most often demanded when it comes to:
 - (i) training newly hired employees in the specific procedures, equipment and processes of the company;
 - (ii) training employees in how to use new equipment/new methods, this is often a very company-specific need;
 - (iii) training employees in soft skills relevant for specific job situations, for example how to deal with a potential security situation in a given company, or improvement of sales and customer-facing skills, or managerial roles, etc.

WBL might be less demanded if the purpose is to keep valued employees or if the employee has a high influence in the decision process. The reason is that in those cases, the employee might prefer training that lead to a

- recognised diploma, which is often not the case for WBL. However, with access to skill recognition obtained through WBL, this could become less important (Box 2);
- (d) EU and national funds directed to WBL in CVET, and overall financial situation. In some of the six countries studied, especially in Italy and Bulgaria, the demand for training seems to be greatly influenced by the European funds available. Thus, it can be assumed that an increase in the share of EU funds directed at WBL types of CVET is likely to boost demand for WBL in these countries. For other countries, for example Germany, the same point was mentioned with a focus on national funds rather than on European ones. Generally, the financial situation of the enterprises has an impact on their training provision. Several companies from Bulgaria and England reported that they had to considerably limit their training programmes due to budgetary cuts;
 - (e) other factors. The WBL demand of enterprises might be positively correlated with the general demand for CVET for employed persons within the specific country, and also with the general attitude towards forms of learning. For example, the UK seems to generally have a rather high demand for training for employees, and evidence suggests that, on the whole, companies tend to prefer on-the-job training more than off-the-job training. For this reason, demand for WBL is expected to be high, although no exact evidence exists. In Bulgaria, a general low demand for CVET of employed personnel was reported for medium-sized companies, leading to an expected low demand for WBL even if a large share of the CVET demanded was WBL.

Box 1. Influence of legal requirements on the demand for WBL

In the agri-food sector in Italy, a bias towards activities that do not include WBL was observed and could be explained by the legal requirement to provide training and periodical updates to all employees of enterprises dealing with either dangerous activities or foodstuffs destined for human consumption (e.g. HACCP)^(a). Compliance with even the minimum legal provisions is likely to absorb most (or all) of the resources set aside for the training thus leaving little room for experimenting with WBL. An increased provision of training on security in the workplace, environmental protection and safety of foodstuffs, as mandated by the law, which often does not include any practical activity, seems unfavourable to WBL. Classroom-based activities therefore remain the preferred option.

According to a study on CVET in Italy conducted by ISFOL (2012), 59.1% of enterprises are opting for this more 'traditional' learning mode. This represents an increase by over 27% with respect to 2005. Only 23.9% of the enterprises used on-the-job training (*formazione in situazione di lavoro*).

^(a) Hazard analysis and critical control points. Legislative Decree 155/97, Council Regulation 852/2004 and other regional laws set out the requirements in terms of hygienic standards for foodstuffs.

Box 2. Influence of competences needed on the demand for WBL

In France, interviewees pointed out that certain sectors will usually be more prone to WBL due to the nature of their work or previous experience with WBL. Frequently mentioned examples are production businesses as well as the service sector. Also, areas within the human health sector are expected to be more prone to WBL, for example caretakers and home help (nurses or social assistants). Among the companies which agreed to be interviewed, most provided both medical and social care for the elderly, frail, handicapped and ill (in particular people suffering from Alzheimer's). They emphasised that they generate demand for WBL because they use it to train their employees due to several factors shown in the figure below.

Reasons behind demand of WBL

Frequently mentioned	Occasionally mentioned	Rarely mentioned
The type of tasks performed by employees are of a practical nature and cannot be taught in a classroom or away from the work post The employees prefer WBL to other more theoretical types of CVET due to the hands-on approach of WBL The cost of conducting WBL is lower	WBL courses have a shorter duration WBL effectively trains employees in new tasks	WBL can be conducted as tandem learning between a more experienced and less experienced colleague

According to the interviewees – both from companies and providers – demand for WBL training in the human health and social work sector in France will increase in the coming years. The two primary factors causing this are an ageing population, which increases demand for health care services and a simultaneously ageing workforce which reduces the capacity to provide care. The latter is aggravated by the fact that the sector is finding it increasingly difficult to hire young people, and that employers are therefore looking to hire workers from a wider variety of backgrounds. As these employees may not have a relevant educational background or work experience, WBL is one of the main methods used to equip them adequately to adapt to their new professional capacity.

2.2.3. Prices and costs of work-based learning

Looking at training provided by external providers ⁽⁶⁾, the prices for a training activity per employee observed in this study ranged from EUR 10 to EUR 7 000 per employee trained, with an average around EUR 1 900. The most expensive training took place in England with a trainee receiving more than 300 hours of training and a certificate. The cheapest was also from England with an external provider providing around 16 hours of training to 60 employees.

⁽⁶⁾ Information from nine employers and 15 providers.

For the internal training (organised by the employer), the prices (for supplies and hourly remuneration of trainers) ranged from around EUR 220 to EUR 3 290 per employee with an average of EUR 1 150. The most expensive training observed (functioning of a new production line) was of around 140 hours per employee. The cheapest training was a 16-hour collaborative and individual learning activity (teaching employees about the company as well as about safety and security risks). Both examples are from Italy.

Where internal and external training was combined, the joint costs ranged between EUR 210 and EUR 740 per employee, with an average of EUR 440.

CHAPTER 3.

Policies for work-based CVET

Policies for work-based continuing vocational education and training (CVET) can be shaped by actors at different levels. Member States policies are influenced by the orientations and inspiration provided by European policy and voluntary cooperation in that field. However, the EU orientations are only one part of the influences that shape Member States policies of work-based CVET. Other important determinants of these policies are national/regional regulations, for example country legislations for CVET and the recognition of non-formal and informal learning.

3.1. Policy levels

3.1.1. European level

The Bruges communiqué, the renewed European agenda for adult learning and the recently adopted Riga conclusions, which set medium-term objectives for the VET field in the period 2015-20⁽⁷⁾, are the major references on work-based learning (WBL) for CVET when it comes to European policy. These major EU statutes recommend that (Figure 3):

- (a) WBL for adults, should be promoted in all its forms⁽⁸⁾;
- (b) operation and implementation of WBL in CVET should be carried out in combination with other forms of adult training⁽⁹⁾;
- (c) the combination should be targeted at reaching two objectives:
 - (i) developing ‘both job-specific skills and broader skills’ (Council of the EU, 2011, p. 5), covering the full range of skills;
 - (ii) enhancing the flexibility of learning provision so as to meet the diversity of needs and situations of learners⁽¹⁰⁾. The flexibility of learning

⁽⁷⁾ Council of the EU and European Commission, 2010; Council of the EU, 2011; Latvian Presidency of the Council of the EU and European Commission, 2015.

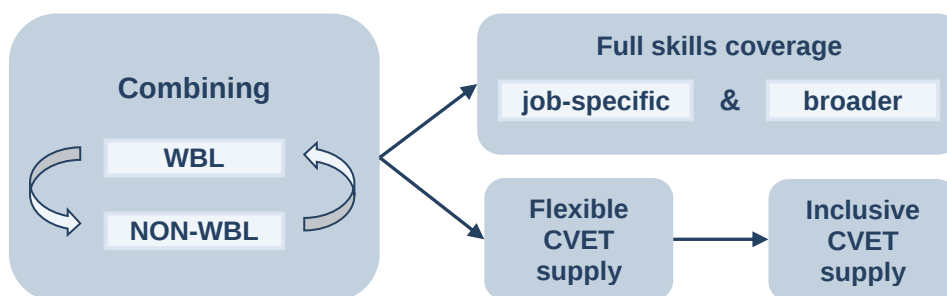
⁽⁸⁾ Council of the EU and European Commission, 2010, p. 10; Latvian Presidency of the Council of the EU and European Commission, 2015, p. 8.

⁽⁹⁾ Council of the EU and European Commission, 2010, p. 10.

⁽¹⁰⁾ Council of the EU and European Commission, 2010, p. 10; Council of the EU, 2011, p. 3; Latvian Presidency of the Council of the EU and European Commission, 2015, p. 8.

provision itself should be aimed at supporting the inclusion of the low-skilled and the at-risk groups ⁽¹¹⁾.

Figure 3. **EU policy directions for WBL in CVET**



Source: Cedefop.

Major ways of conveying these messages to national policies and actors are the provision of funding, inspiration on how effective training can be conducted, and the promotion of voluntary cooperation among Member States and other stakeholders such as the European social partners.

The EU can influence the quantity of WBL being demanded/supplied through ensuring that its financial mechanisms support the use of WBL as a method. The European Social Fund is a main funding tool: requiring WBL elements as a condition for accessing EU funds has proved to be a powerful way to promote this form of learning (as highlighted for example in this study for Bulgaria and Italy).

Further, the EU conducts research on relevant issues, fosters exchange and provides inspiration by providing information on the advantages and methods of WBL, sharing good practices, etc. ⁽¹²⁾.

Last but not least, it fosters voluntary cooperation in the framework of the Copenhagen process for European cooperation in VET. The above-mentioned Bruges communiqué and the Riga conclusions set the agenda for VET in Europe, and include recommendations on WBL ⁽¹³⁾. In the context of the ET 2020

⁽¹¹⁾ Council of the EU and European Commission, 2010, p. 16.

⁽¹²⁾ See for example Cedefop, 2014; 2013; 2011; European Commission, 2013 and the *New Cedefop database on financing adult learning*.
<http://www.cedefop.europa.eu/en/news-and-press/news/new-cedefop-database-financing-adult-learning> [accessed 31.8.2015].

⁽¹³⁾ See Cedefop (2015) for progress towards the objectives agreed in the Bruges communiqué.

strategic framework for European cooperation on education and training, the European Commission has also set up two expert groups which deal among others with issues relevant to WBL ⁽¹⁴⁾.

3.1.2. National/regional level authorities

National/regional authorities do not usually regulate WBL for CVET as such, but they can ensure a right to training and/or funding of training (WBL or not), or promote WBL through awareness-raising campaigns (such as information leaflets, voluntary training on WBL methods for trainers). They can also regulate the providers and/or some general aspects of the training provided. Through this, they are able to influence the share of WBL in CVET, for example by explicitly demanding WBL, but also – more indirectly – by requesting practical aspects with respect to the training, ensuring that training can take place at the premises of the enterprises through certifying in-house training institutions. Generally, training of employed persons seems to be mainly left to the discretion of the employers and employees or is only regulated by safeguarding employers' and employees' rights and maybe by securing financial resources for the training, but usually without further specification of subjects and methods. This is different when it comes to national/regional policies and programmes for the unemployed (Cedefop, 2013).

3.1.3. Social partners and other stakeholders

Professional regulations issued by professional bodies and the pressure exerted by sector organisations, social partners and other major stakeholders can also influence WBL policies. Depending on the sector, specific requirements for competences that must be ensured among employed persons are in place (such as safety regulations), and regulated professions may require CVET on a regular basis to maintain a licence to practise. However, it is often not specified how those competences must be obtained (WBL or otherwise). Where there are specifications, they are usually in the form of requirements for a certificate that can only be obtained through training by recognised providers. The choice of method for the training is often left to the discretion of the providers, who may, nevertheless, have to comply with certain regulations to be recognised, and who usually adapt the training to the need of the employers especially in situations of competitive markets for the training.

⁽¹⁴⁾ ET 2020 working group on adult learning and ET 2020 working group on vocational education and training (mandate 2013-15).

Moreover, stakeholders (such as unions and employers' organisations) can foster WBL through other initiatives, for example promotional activities. They may also influence national policies, as shown by the legal provision for union learning representatives in the UK (Section 3.2). Based on efforts from the unions during the 1990s to make training and development of employees more into a social partnership, the UK Employment Act 2002 ⁽¹⁵⁾ provides a statutory right to paid time off work for appropriately trained union learning representatives to carry out a range of duties, including promoting learning and supporting workplace learning centres to embed learning in the workplace.

All these influences result in a diversity of policies that can be categorised. Section 3.1 proposes criteria for this categorisation, and Section 3.2 applies these criteria to categorise the countries in this study, and provides examples.

3.2. Classification of national policies for work-based CVET

Three types of policies for work-based CVET can be distinguished, depending on the fact that the policies are 'conductive', 'just-allowing' or 'unconcerned'. Five criteria were used in this study to classify policies (Table 5).

Table 5. **Classification of WBL policies in CVET**

Criteria	Types of policies		
	Conductive	Just-allowing	Unconcerned
WBL acknowledged as a regular, common and accepted CVET method Specifically WBL-oriented programmes exist at national/regional/sectoral levels			
Financing learning with WBL elements is possible	[4-5 criteria met]	[2-3 criteria met]	[0-1 criterion met]
Informal learning outcomes are recognised			
Stakeholders have an interest in and focus on WBL			

Source: Cedefop.

Conductive policies acknowledge WBL as a regular, common and accepted method for CVET and give room to specifically WBL-oriented programmes. They

⁽¹⁵⁾ Legislation.gov.uk: *Employment Act 2002*.
<http://www.legislation.gov.uk/ukpga/2002/22/contents>

finance training and learning that contains work-based elements. They recognise learning and knowledge, skills and competences acquired non-formally and informally through work. Such policies are also characterised by a context where stakeholders (such as unions and employers' organisations) have an interest in and focus on WBL, and promote, facilitate and support it.

Just-allowing policies only verify some of the five criteria, while unconcerned policies only verify one or none of them.

3.2.1. Criterion 1: WBL acknowledged as a regular, common and accepted CVET method

The national policies or laws on CVET explicitly mention WBL as a method for delivery of CVET in the formal CVET system. This can be, for example, if it is specifically mentioned that the training takes place (at least partly) at the enterprises' premises or in simulated work environments, through WBL. It could also be mentioned that the training and learning activities should be (partly) conducted through the processing of real work-tasks. More generally, it is a question of the extent to which the national policies and laws specifically give room for WBL elements as part of the CVET provided, and attempt to make CVET as work-relevant as possible.

3.2.2. Criterion 2: specifically WBL-oriented programmes exist at national/regional/sectoral levels

Criterion 2 accounts for the availability of national, regional or sectoral programmes that specifically require the use of WBL elements as part of the training methods. Such programmes increase the use, knowledge and awareness of WBL, and through that lead to increased demand for and supply of WBL.

3.2.3. Criterion 3: financing training with WBL elements is possible

Criterion 3 indicates that the main financial instruments for CVET (State funds, collective agreements, etc.) clearly give a good frame for WBL as a method used in CVET. Such is the case when it is, for example, specifically mentioned that (part of) the financed training must be practical with direct relevance to the employees' current work situation. The opposite situation is when financing instruments only finance school-based, off-the-shelf training that is difficult to adapt to the specific needs of specific companies or employees and does not include WBL.

3.2.4. Criterion 4: informal learning outcomes are recognised

Criterion 4 refers to cases where knowledge, skills and competences obtained through informal learning and through non-formal WBL can be tested and recognised, and as such form a basis for further education, upskilling, promotion and career moves. A national, regional or sectoral system that provides mechanisms for recognition of knowledge, skills and competences obtained through WBL might increase the employees' incentives to participate in this form of learning.

3.2.5. Criterion 5: stakeholders have interest in and focus on WBL

Criterion 5 covers examples of stakeholder initiatives (such as unions and employers' organisations) which promote, facilitate and support WBL in CVET. Stakeholders' initiatives may not only directly promote WBL but may motivate policies that give a good frame for WBL.

3.3. Application to countries and examples

Criteria 1 to 5 were applied to the study countries, which resulted in the following distribution of these countries as an illustration of the classification. UK-England and Italy were found to be examples of 'conductive' policies because all five criteria were met. France was found to belong to the 'just-allowing' category because two criteria were not sufficiently met, as described in Section 3.3.2. Bulgaria was categorised 'unconcerned' as, although work-based CVET programmes can be financed through public/European funds, the other four criteria were not met.

3.3.1. Two examples of conducive policies for work-based CVET: UK-England and Italy

England has apprenticeships for employed adults as a central part of its formal CVET system; they are clearly based on WBL (Box 3). Financing schemes for these apprenticeships exist. Generally, recognition of learning outcomes in England is ensured through the qualification and credit framework (QCF; formerly national vocational qualifications, NVQ) system⁽¹⁶⁾. There is long-standing stakeholder support for work-based CVET, as illustrated by the unions' push for

⁽¹⁶⁾ The NVQ/QCF system is built on the assessment of competences acquired in the workplace. The novelty of QCF is that it brings together achievements from different places, so qualifications can be made up of units from training at work and units completed in college.

the Employment Act 2002 to provide union learning representatives with a statutory right to paid time off work to promote, support and arrange learning in the workplace (Box 4).

Box 3. Adult apprenticeships in UK-England

Who introduced it?

Apprenticeship types of learning have a long history. In 1994 the so-called modern apprenticeship was introduced by the government and since then apprenticeship has developed as an important instrument for WBL.

Why was it introduced?

The objective was to overcome skills shortages, especially on the intermediate level. Originally, the programme was focused almost entirely on occupational competence and based on the older apprenticeships in England which had been in rapid decline during the 1980s. Since then there have been important revisions, like the introduction of a theoretical part, providing underpinning knowledge, the technical certificate (2001), the rebranding of modern apprenticeships as 'apprenticeships' and the creation of higher apprenticeships at level 4 (2004). Recently, after the Richard review of apprenticeships (Richard, 2012), new standards have been developed in the so-called specification of apprenticeship standards for England (SASE). Since 2003, apprenticeship has also deliberately been developed as a way of reskilling and upskilling employees who have already worked for some time (CVET) by removing restrictions in funding.

What are the main elements?

The principle is to alternate on-the-job and off-the-job learning. Every apprenticeship is based on a framework devised by a sector skills council, encompassing four elements: a knowledge-based element, a competence-based element, key skills and employment rights and responsibilities. The application of this is checked by official training providers and tested through the use of personal portfolios and other means. Over the years there have been many changes to the original system, including apprenticeships for different levels (higher, advanced and intermediate), changes in the minimum time spent and changes in the funding system.

Currently the apprenticeship needs to last at least a full year, including a minimum of 100 off-the-job learning hours (which constitute at least 30% of the total amount of guided learning). The other part of the so-called guided learning hours is on the job. The competence-based element should lead to a competence-based qualification. In most cases this is filled by using the qualifications from the NVQ system which are now integrated in the QCF system. The learning outcomes are what matters and are tested by assessments.

Apprenticeship can be delivered in several ways: various forms of partnership with a training provider (including mentoring by the training provider) or delivery by the company itself.

The apprenticeships system is currently being revised and reviewed.

How does it influence WBL in CVET?

Although apprenticeships are not purely CVET, the proportion of employees who have already been working for some time is very high (age-based estimate: more than 40% in 2011/12 are over 25). Apprenticeships are seen as the golden standard

in terms of WBL in England and both highly supported by the government and widely used by companies. As all apprenticeships work through the use of competence-based qualifications like the NQV (which are WBL with work-based assessments like portfolio building on the job, workplace projects and direct observations) and have a very large on-the-job component, they are the major WBL-CVET influence in England.

References/links

- Brockmann et al., 2010; Gambin, 2013.
- Several relevant government reports, including the Richard review (Richard, 2012) can be found at: <https://www.gov.uk/government/collections/apprenticeship-changes> [accessed 7.9.2015].
- Information about the recent (2013) standards formulated in the Specification of apprenticeship standards for England (SASE). <http://www.apprenticeships.org.uk/partners/frameworks/sase.aspx> [accessed 7.9.2015].

Box 4. Union representatives in the Employment Act in UK-England

Who introduced it?

Introduced by the UK Government in 2002

Why was it introduced?

The act was introduced to make it easier for union members to become learning representatives as well as to make learning more of a workplace priority, after a call from unions during the 1990s to make training and development of employees more into a social partnership.

What are the main elements?

The Employment Act provides a statutory right to paid time off work for appropriately trained union representatives to carry out a range of duties including:

- promoting the value of learning;
- supporting learners;
- arranging learning/training;
- supporting workplace learning centres to embed learning in the workplace.

How does it influence WBL in CVET?

The Employment Act of 2002 influences WBL in CVET by improving the provision of training by Unions, which includes (among others) work-based training.

References/links

- Eurofound (2003). *European observatory of working life: new statutory right for union learning representatives*, 22 May 2003. <http://www.eurofound.europa.eu/eiro/2003/05/feature/uk0305102f.htm> [accessed 4.9.2015].
- Legislation.gov.uk: *Employment Act 2002*. <http://www.legislation.gov.uk/ukpga/2002/22/contents> [accessed 4.9.2015].

In the Italian VET system, one type of apprenticeship – the *apprendistato professionalizzante*, a work-based learning scheme – is also open to young adults (aged 18 to 29), at least under certain conditions (such as in the framework of collective dismissal processes) ⁽¹⁷⁾. Further, the 2012 law on territorial networks has defined a new strategic approach to CVET (Box 5). It acknowledges that learning can be formal, non-formal and informal and recognises the workplace as a learning place thus reinforcing the basis for the development of WBL in CVET. Financing WBL activities is ensured through joint inter-professional funds (JIPFs) which are bilateral bodies jointly managed by trade unions and employers. JIPFs are dedicated to financing training activities for their members. A system of recognition exists in some regions and is in the process of extension. An example of stakeholders' support was the 2008 initiative of Fondimpresa, the biggest JIPF, to give priority to on-the-job training and other alternative training modes (such as action learning, coaching, mentoring) (Box 6). In 2010, government, regions, provinces and social partners agreed on guidelines for training (*Linee guida per la formazione*) and committed themselves to promoting WBL for adults.

Box 5. Territorial networks in Italy (Law 92/2012)

Who introduced it?

Government

Why was it introduced?

The reform is part of an effort undertaken by the government to promote economic growth and the simplification of labour market provisions. The setting up of the territorial networks is an attempt to foster links between the different actors participating in CVET and to promote economic growth, labour market access, active citizenship and ageing, and reform of the welfare system.

⁽¹⁷⁾ Legislative Decree No 81/2015 <http://www.normattiva.it/uri-res/N2Ls?urn:nir:stato:decreto.legislativo:2015-06-15;81> [accessed 22.7.2015]. The 'apprendistato professionalizzante' is a work-based scheme, with a marginal component of formal training (maximum 120 hours in three years) which can be carried out inside or outside the company. It does not lead to an educational qualification, but upon completion the apprentices can acquire contractual qualifications as defined and recognised by collective labour agreements.

What are the main elements?

The measure is aimed at:

- supporting the creation of customised learning paths by integrating formal, non-formal and informal modalities. Particular attention shall be paid to the identification of learning needs, especially language and IT skills;
- recognition of learning and certification of competences;
- use of orientation services throughout the whole life.

The law promotes the creation of integrated territorial networks which bring together various actors (higher education institutions, training providers, beneficiaries and public bodies) to develop integrated and consistent paths of formal, non-formal and informal learning, the identification of skill shortages, the validation of the competences acquired. Universities are expected to play a primary role and to rethink their approach with the aim of reaching out to a wider population of potential students, including workers. This requires them to explicitly endorse CVET in their strategic plans and devise more flexible learning packages.

The government commits itself to designing an appropriate framework for the certification of the competences (however attained) by defining homogenous minimum service standards. The validation is to be completed by means of a certificate/diploma or other official document issued by a public institution and/or an accredited subject. Qualification and competences standards shall be listed in a national/regional inventory.

How does it influence WBL in CVET?

This legal provision defines a new strategic approach to CVET and acknowledges that learning can be formal, non-formal and informal. By bringing together various actors ranging from universities to enterprises it stimulates the development of more innovative approaches to learning. Furthermore, it recognises the workplace as a learning place thus creating the basis for the development of WBL-relevant activities. Finally, it sets out a plan for the development of a national inventory of qualification and competences to be used as the reference point for the (yet to be adopted) validation and certification procedure.

References/links

Disposizioni in materia di riforma del mercato del lavoro in una prospettiva di crescita [Law on provisions on the reforms of the labour market policy in the perspective of growth] (Law 92/2012, 28 June 2012).

http://www.lavoro.gov.it/Strumenti/normativa/Documents/2012/20120628_L_92.pdf [accessed 22.7.2015].

3.3.2. Example of a ‘just-allowing’ policy for WBL in CVET: France

France does not have a specific, explicit and identifiable approach to WBL in its CVET system. It lacks an explicit recognition of WBL as a regular, common and accepted delivery method in its formal CVET system, and also lacks prominent CVET programmes specifically requiring the use of WBL. Criteria 1 and 2 are therefore not sufficiently met. Work-based CVET can nevertheless be financed through training funds, the *organismes paritaires collecteurs agréés* (OPCAs).

For a training to be eligible to OPCAs funds, parts of it must contain practical elements, which include WBL. Regarding recognition, France has a system called validation of acquired experience (*validation des acquis de l'expérience*, or VAE). VAE means that an applicant can be granted a university degree, a diploma or a professional certificate, which is in part, or fully, based on his/her prior work experience and learning. Participation of stakeholders in that recognition system suggests that they support the concept of work-based CVET.

Box 6. Fondimpresa's strategy to promote unconventional training activities in Italy

Who introduced it?

Fondimpresa, the biggest joint inter-professional training fund in Italy. It is open to businesses of every size and industry. According to Italian law on continuing training, 0.30% is withheld from the pay check of every worker whether in the private or public sector to finance CVET. These contributions are managed by the training funds. If an organisation does not adhere to a training fund, its contribution is managed by the public system.

Why was it introduced?

To create incentives for the use of unconventional training methodologies that guarantee flexibility and customisation that better respond to the specific needs of the small and medium-sized enterprises.

What are the main elements?

The award of the funds for the training activities in the periodical calls for tenders issued by Fondimpresa is the responsibility of a committee of experts that assesses the tenders on the basis of their quality and against the strategic objective of the fund. Since 2008, Fondimpresa decided to include the experimentation of unconventional training modes (such as action learning, coaching, mentoring, on-the-job training and distance learning) among their priorities. Financial incentives have also been provided.

How does it influence WBL in CVET?

This creates a more WBL-friendly framework in the general CVET. According to the statistics, this kind of activities was carried out in 15% of the training hours.

References/links

- Fondimpresa, 2012.
- Fondimpresa Congress, Rome, April 2012: *Il future del lavoro si chiama formazione [the future of work is training]*.
http://www.fondimpresa.it/index.php?option=com_content&view=article&id=65&Itemid=175 [accessed 31.8.2015].

Box 7. Validation of acquired experience (VAE) in France

Who introduced it?

Introduced by the French Government in 2002.

Why was it introduced?

The VAE was introduced to recognise all forms of learning, to reduce educational inequality and to increase permeability in the education and training system.

What are the main elements?

Partly or fully based on the applicants prior work experience (a minimum of three years) and learning, an individual can be granted university degrees, a diploma or a professional certificate. The applicant must write an application which may be rejected, accepted or partially accepted. In the latter case, the board will suggest actions which the applicant can take to have the application accepted. Subject to some minimum requirements, everybody can apply for a validation of their prior work experience and learning.

How does it influence WBL in CVET?

The VAE allows practical work experience and competences obtained through WBL to be translated into higher education and as such can form a path between work-based CVET and higher education. It increases permeability in the education and training system, makes work-based CVET more attractive and gives it more potential.

References/links

Cholvy, 2011; Ministère de l'éducation nationale, de l'enseignement supérieur et de la recherche. *La validation des acquis de l'expérience*.
<http://www.education.gouv.fr/cid1106/la-validation-des-acquis-de-l-experience-vae.htm> [accessed 31.8.2015].

CHAPTER 4.

Forms and patterns of work-based learning in CVET

The forms and patterns of work-based learning used in continuing vocational training in Europe are very diverse. This chapter first provides a theoretical perspective and then presents forms and patterns as well as illustrating examples of WBL in CVET as identified in the six countries of the study.

4.1. A theoretical perspective on forms and patterns of WBL

Learning takes place predominantly in direct contact with the living world. We are constantly learning in interaction with other people and by dealing with daily personal and professional requirements. Besides these informal learning processes, learning is organised and formalised in institutions, for example in schools, in universities or in vocational education and training (VET) institutions.

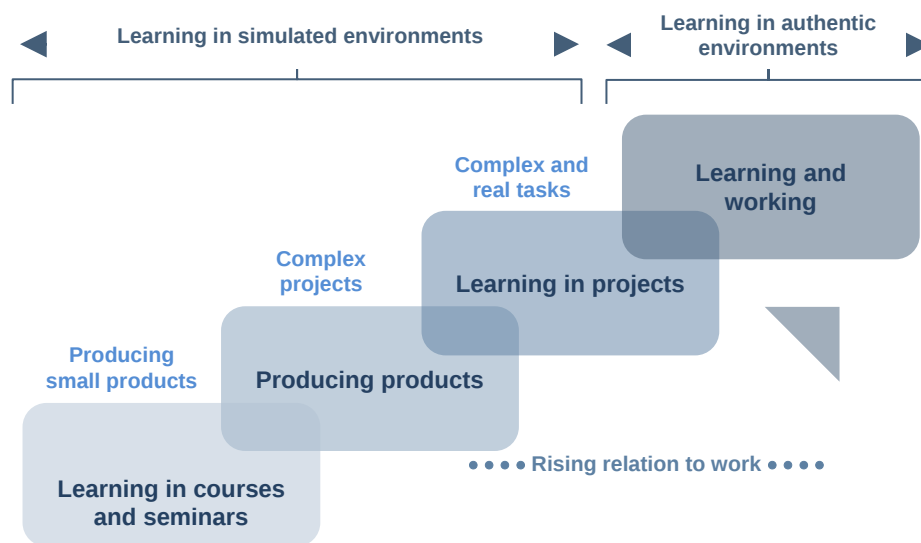
But this separation between knowledge and action, respectively knowledge transfer and use of the acquired knowledge in everyday life and profession, is also connected with transfer problems. Often, the acquired knowledge cannot be easily applied in a given context or for a specific purpose: a phenomenon that is called 'inert knowledge' (see originally Whitehead, 1929; for VET see for example Stark et al., 1998). This transfer problem arises particularly in the context of conventional school learning environments. On the one hand, learning and transmission difficulties occur when the obtained knowledge is too abstract and not understood. On the other hand, the abstract knowledge that is taught in the classroom often cannot be used by learners to address concrete action situations.

In pedagogy and didactics, approaches and considerations about how to bridge the gap between the acquisition and use of knowledge have existed for a long time. Major contributions trace back to progressive education, especially to John Dewey and his approaches to experiential learning and problem-based learning (Dewey, 1938). Kolb (1984) has extended this approach and developed a learning model, the four-stage experiential learning cycle: concrete experience, reflective observation, abstract conceptualisation, active experimentation. In terms of learning theory, these approaches are based on the constructivist

perspective which states that knowledge is self-directed and experiential-based and learners should be treated as active and self-reflexive subjects in teaching and learning processes (Hart-Landesberg et al., 1992; Kintsch, 2009).

Figure 4 illustrates different learning arrangements and their relation to work processes. Traditionally, systematic and formal learning was often organised in courses disconnected from work practice, where skills would be developed through exercises such as producing small objects. In the next phase, the focus was set on the production of more complex objects in a simulated learning context. The third phase saw the emergence of project-based learning, while the last phase has been emphasising integrated learning across the whole work process in an authentic context. While the early forms were based only on a few learning and teaching methods, strongly oriented towards the transmission of predefined skills and knowledge, the later forms include more diverse learning and teaching methods, allowing a stronger differentiation depending on the learner's experience and needs.

Figure 4. **Change and tendency of work-related learning**

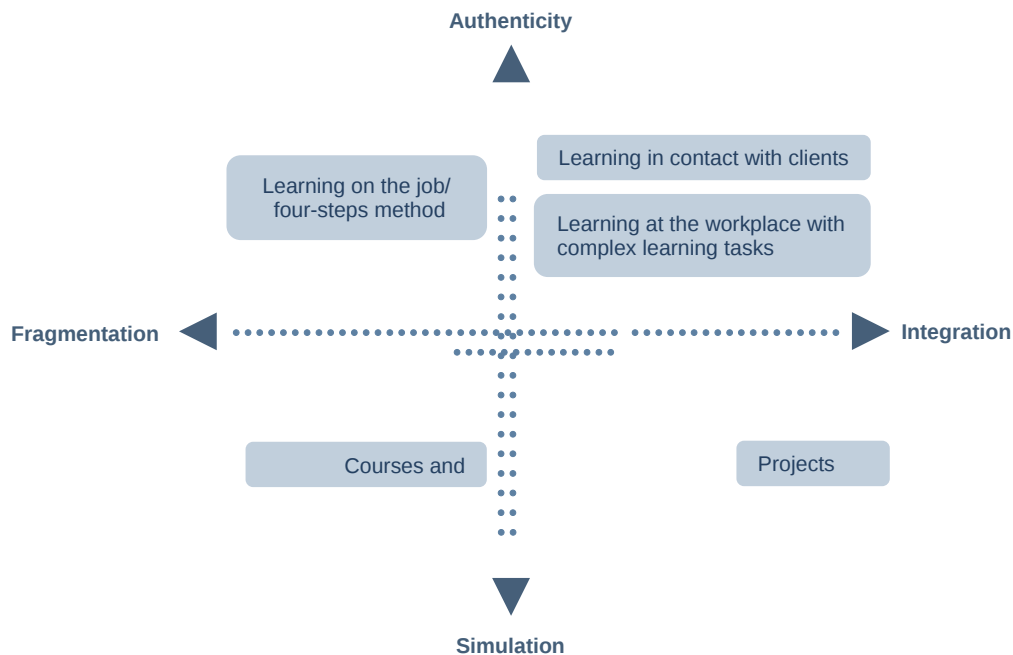


Source: Hahne, 2003.

The different phases correspond to different learning and teaching methods. These methods can also be presented according to their degree of integration versus fragmentation and their authentic versus simulated character, as shown in Figure 5. Methods in the upper right corner of the graph tend to integrate, within

one learning arrangement, both theory and practice on the one hand, and working and learning on the other hand.

Figure 5. **Work-related learning processes towards integration and authenticity**



NB: The 'four-steps-method' is a way of learning at the workplace. Traditionally it is the process of training and learning taking place with a master craftsman (trainer) and a trainee within an apprenticeship. First, the workplace has to be prepared; second, the trainer is demonstrating; third, the trainee is imitating; and fourth, the trainee is exercising.

Source: Hahne, 2003.

For vocational training that takes place in the company and in a work context, for example in the context of an apprenticeship, the application and action orientation is usually given immediately and does not need to be constructed or simulated. The learning situation is thus quite different. WBL in vocational training in the workplace offers the advantage that the transfer problem outlined above does not exist because learning takes place directly in the work context. However, in this case, it is necessary to decontextualise the immediate practical knowledge to further develop it and bring it into the context of theoretical knowledge. Organised teaching and learning processes in the workplace are thus also faced with a transfer problem, but in the reverse direction. The practical knowledge and work experience are to be brought in connection with systematic knowledge. In this context, a conceptual distinction based on Polany (1966; see especially Neuweg, 1999) is also made between 'explicit knowledge' and 'tacit knowledge': 'explicit knowledge is the familiar

codified form that is transmittable in formal, systematic language. Tacit knowledge is the component of knowledge that is normally not reportable since it is deeply rooted in action and involvement in a specific context.' (Polany, 1966 cited in Raelin, 1997).

For vocational training, the extent to which competence development processes take place and can be didactically supported in the context of work is important (Fischer, 2000; Dehnbostel, 2007).

In connection with the didactical support of learning processes in work environments (WBL) the methodological approaches of corporate teaching and learning become important. How can WBL be supported? There are many different approaches to support individual learning processes and to promote the transfer of knowledge and expertise. Cunningham et al. (2004) distinguish, for example, between 'strategies', 'tactics' and 'methods' for WBL and development: 'we take a learning strategy to be about the big picture and about planning for learning over the longest time horizon across which you can think [...]. Having gained a clear strategy you may need to use particular tactics to meet your needs. We take tactics to be the short-term implementation of strategy' (Cunningham et al., 2004, p. XII). Examples of 'strategies' are internships, action learning, apprenticeship, continuing professional development, etc. Examples of 'tactics' are coaching, e-learning, job rotation, on-the-job-learning, etc. Examples of 'methods' are reading, video conference, peer review, learning logs, etc.

Over the last decades, new learning arrangements have emerged, with a tendency to gradually organise and formalise learning processes (Büchter, 2002). The strategies of human resource development in companies have changed, although this may not be the case in all countries. Besides a growing interest of single companies in training their employees, employer and employee organisations have been aiming for an increased level of standardisation. This has led for instance to the development of qualification standards for CVET qualifications in countries where qualifications had originally been primarily granted through IVET, such as France. At the same time, training and learning processes are changing as well, providers seeking to develop more effective and more attractive approaches. Contents and aims are changing according to new demands at the workplace (Schlaffke and Weiß, 1990; Docherty and Nyhan, 1997).

In the present study, data and information on forms and patterns of WBL in CVET were collected to get an overview of the different approaches used in selected European countries.

4.2. Forms, patterns and practices of work-based CVET

Evidence from this study clearly confirms that the practice of work-based CVET is diverse. Mechanisms vary in terms of location (in or outside the workplace); duration of a training (from a few hours to several months); timing (during work hours, whether full-time or part-time; or after work hours); origin of trainers (internal employees or external providers' staff); and number of participants per training (from a few people to several hundred). Data from the study give a few examples of that diversity (Table 6).

Table 6. **Examples of work-based CVET practices: number of cases observed per practice in a small sample of 63 European enterprises**

	Bulgaria	UK-England	France	Germany	Italy	Sweden
Location						
On-the-job	6	3	3	–	4	2
Off-the-job	1	1	–	1	–	1
Combination of on-the-job and off-the job locations	3	12	2	8	1	6
Timing						
Work-hours, full-time	–	3	2	2	5	1
Work-hours, part-time	7	13	3	1	3	–
After work-hours	2	–	–	2	–	–
Origin of trainers						
In-house trainers	2	8	2	4	3	2
Formal education and training institutions	–	–	1	2	1	1
Non-formal education and training institutions	–	–	1	–	–	–
Commercial institutions (*)	3	1	1	–	1	2
External individual freelance trainers	–	1	–	–	–	–
	All 63 enterprises					
Duration of a training (number of hours)						
Up to 10	4					
11 to 25	10					
26 to 50	5					
51 to 100	6					
More than 100	12					
Number of participants per training						
Up to 10	13					
11 to 20	13					
21 to 50	6					
More than 50	7					

(*) Commercial institutions do not have education and training as their main activity. The most frequent case in this category is that of providers of equipment that give training in the use of their equipment.

NB: These data cover 63 enterprises that were surveyed in 2013 in Bulgaria, Germany, France, Italy, Sweden and UK-England. The sample was not representative and the results are not intended to inform on any general trend across EU enterprises. The figures given here are just to illustrate the practices that could be observed.

Source: Cedefop.

These figures support the idea that there is much diversity in work-based CVET practices in European enterprises. Yet, different patterns can be identified.

4.3. Patterns in terms of training location

Training can be located on- or off-the-job, or can be a combination of both. Looking at the specific examples described by the respondents of this study, most of the training was organised as a combination (Table 6). Cross analysis with data on providers indicates that employers who organise training internally are more likely to do so at the workplace rather than outside, or use a combination of different locations.

While the decision on the location may be arbitrary or pragmatic, it may also result from choices in terms of pedagogy and instructional strategy. Combining on- and off-the-job locations for work-based CVET can be a way to make the off-the-job sequence prepare the on-the-job one: learners first receive basic theoretical and practical training on the off-the-job site and then, when ready, are placed in on-the-job positions where they will use what they have learnt, realise its value and consolidate it. Work-based CVET programmes for the reintegration of low-qualified unemployed adults into the labour market illustrate these patterns (Box 8).

In the present study, different examples for on-the-job training, off-the-job-training and a combination of both were found.

4.3.1. On-the-job training in the actual workplace

An example of on-the-job work-based CVET is the systematic use of mentoring for training purposes. This approach is for instance used in a training provided by a social health care institution in France, as described in more detail in Box 12.

4.3.2. Off-the-job training

Off-the-job work-based CVET sometimes uses simulated work-environments. An example is training provided by a chamber of crafts training centre in Germany.

Particularly in some sectors, for instance the shipping sector, where on-board employees can be physically placed anywhere in the world at any given point in time, e-learning seems to be a useful option due to its flexibility. This is demonstrated by examples from Sweden.

Box 8. Pedagogy-based approach to the location of work-based CVET

Work-based CVET programmes for the reintegration of low-qualified unemployed adults into the labour market have been developed in several European countries over the past decade. The learning activities can be located:

- only or mainly off-the-job (such as the Danish vocational basic education for adults programme – *Grunduddannelse for voksne*), sometimes with simulated work environments;
- only or mainly in the workplace (such as the French integration workshops and worksites programme – *Ateliers et chantiers d'insertion*);
- or they can also be performed in alternance in both types of locations (such as the Estonian labour market training programme).

In the learning centre – off-the-job programmes – emphasis is placed on role playing, group working, observation, study trips (to firms) and individual project work. Role play is used, for example, to improve job interview skills or teamwork behaviour. Group work helps develop competence in handling teamwork situations. Both methods help learners share ideas and experiences, and realise that others may share their problems, which can help deal with a lack of self-esteem and confidence. Attempts to make classroom teaching more attractive and suited to the target group are made through the use of small-sized groups (maximum of five participants), discussion groups, one-to-one supported training, giving and receiving feedback. In the work placement segment, focus is usually placed on developing job-specific skills, acquiring work experience, learning appropriate attitudes and behaviour, developing social competences, and networking with employers.

When the programme is a combination of both types of segments, the centre-based phase often serves to prepare the participants for the work placement, where they will use what they have learnt, realise its value and consolidate it. In some programmes, beneficiaries also receive individual coaching or support from a mentor. Such support provides 'a security net to keep the participant on the course'.

Source: Cedefop, 2013.

Box 9. Example: off-the-job training in simulated work environments

A chamber of crafts training centre in Germany provides courses that use simulated work-environments. The aim of the course is to prepare the trainee to be able to find and abolish errors within heating installations. The training contains the basics of relevant installation and systems engineering, calculations, maintenance, error analysis, electronic basics, and control engineering at the different technical equipment. It is conducted in specially designed rooms of the provider. These rooms are very similar to the rooms the trainee may find when coming to the clients; technical installation and equipment which might be relevant for the job is installed. The practical training is complemented with theoretical training on the technical principles of the technical equipment.

Box 10. Example: off-the-job training in e-learning environments

A private training provider in Sweden offers e-learning-based CVET for the shipping sector. Since learning is computer based, it can take place wherever the trainee has access to a computer. According to the provider, around 30% of their courses are completed on board, and the rest are done at home or at other locations such as internet cafés. The training is not dependent on the setting of the workplace, but the elements of the training are directly connected to the work tasks of the participants. Case studies and short videos are used to relate the theory to the specific work tasks. The courses are tailored to companies' needs and formal requirements, and the curricula are based on analyses of companies' specific requirements for training and education, ensuring that there is a straightforward connection between the learning material and the work tasks.

4.3.3. Combination of on- and off-the-job training

An example of a combination of on- and off-the-job work-based CVET is the training used by an Italian enterprise as described in Box 13, which combines practical activities at the workplace with theoretical classes. Another example is a CVET programme offered by an Institute for environmental protection in Germany.

Box 11. Example: combination of on- and off-the-job training

An Institute for environmental protection of a German chamber of crafts offers CVET programmes aimed at developing practical skills such as installation techniques, but also communication skills. The training takes place in simulated-work environments at the premises of the Institute, and is complemented by group work at the trainees' actual work-places. In between the training at the Institute, the participants have to engage in project work at their own workplace, usually working in groups. At the workplace they have to solve actual problems/challenges and conduct projects using the knowledge obtained in the training. They have to compose final reports on these real projects. The training is usually conducted part-time in the evening, twice a week, and lasts six months. This example shows how on- and off-the-job sessions can be combined in a way that enhances the process of transferring the knowledge from the training to the daily work routines, and ensures sustainable learning with a tight nexus to the everyday work.

4.4. Patterns in terms of the nature of the learning process

The key issues here are: who is leading the learning process (self-regulation by the learner versus regulation by a trainer) ⁽¹⁸⁾; and is the learning process organised as individual or collaborative learning? In practice, both modalities of a criterion can be combined, for example a WBL approach might combine a learner-regulated sequence with a trainer-regulated one. In theory, this yields nine different possible patterns (Table 7).

Table 7. **Patterns in terms of nature of the learning process**

		Who leads the learning process		
		Mainly learner	Mainly trainer	Combination
Degree of collaboration in learning process	Individual	Pattern 1	Pattern 4	Pattern 7
	Collaborative	Pattern 2	Pattern 5	Pattern 8
	Combination	Pattern 3	Pattern 6	Pattern 9

Source: Cedefop.

Examples from the study illustrate different patterns: individual and learner-regulated learning process (Box 12); collaborative and trainer-regulated learning process (Box 13); and learning process combining learner and trainer regulation with individual and collaborative sequences (Box 14).

Box 12. **Example: individual and learner-regulated learning process (pattern 1)**

This example refers to a training provided by a social health care institution in France. The organisation provides care to people with multiple disabilities as well as to people who are severely mentally disabled. WBL is used to train employees in new methods by pairing them up with a mentor. The mentor trains the other employee and transfers knowledge on how to perform work tasks, in particular conducting workshops for people suffering from disabilities. These workshops consist of activities designed to improve the wellbeing of the clients.

This CVET approach uses mentoring and is based on individual learning rather than collaborative learning. The learning process is mainly self-regulated by the learner in the sense that the learner performs work tasks, and then receives suggestions from the mentor, who then may also demonstrate certain techniques. It takes place in the workplace.

⁽¹⁸⁾ Self-regulated learning refers to the metacognitive, motivational, and behavioural processes individuals use to direct and control their learning (Zimmerman, 1990; Jossberger et al., 2010).

Box 13. Example: collaborative and trainer-regulated learning process (pattern 5)

This example describes a training package delivered in Italy by a training provider to a medium-sized enterprise operating in the field of distribution and processing of fresh vegetables. The objectives of the training were to improve the quality and efficiency of the production process, and to develop the employees' problem-solving capacities. Activities were related to three broad business areas: production and processing of organic products; use of newly purchased machinery; and safety and security in the workplace for newly hired workers.

In close cooperation with the management of the company, the provider conducted a preliminary analysis of the situation in the company to identify the skills gaps, and designed the format, i.e. the types of activities. The learning activities were carried out in small groups of five people so as to allow a more systematic interaction between the learners and the trainers. Practical activities at the workplace were combined with theoretical classes. The trainers were steering the activities with the support of tutors, while learners were expected to proactively find the relevant information/solutions.

Box 14. Example: learning process combining learner and trainer regulation with individual and collaborative sequences (pattern 9)

This training was provided at an English company that delivers audio, web and video conferencing and integrated communications solutions to enterprises of all sizes. The company has a broad learning management system, including virtual classrooms, workshops, e-learning, and webinars. The objective is to train employees in the use of new products which they will have to work with and sell to clients.

The training system is based on a structure of green, red and black belts that indicates different types of completed training. The green belt is the formal part of the training and consists of classroom meetings and e-learning. The red belt part of the training consists of participation in webinars, reading various documents, and completion of a multiple-choice quiz. A crucial element of the red belt training is a so-called sales pitch. This is a simulated scenario where the trainee has to sell the product to a client (played by an experienced sales manager). When the pitch is delivered successfully, the trainee receives the red belt. The black belt (or the practice part) of this learning system is based on performance and revenue. A trainee has to pass certain threshold values to attain the black belt. This is seen as a good way of actually ensuring that the employee uses what he has learnt for his everyday tasks. The training system used in this enterprise serves as an example of combining different approaches. The green belt element of the training is mostly trainer-regulated; the black belt attainment process is self-regulated by the learner, while the red belt training is a mixture of the two approaches.

The analysis of practical examples shows that WBL in CVET is frequently part of a broader training package, involving different forms of training with varying degrees of learner and trainer regulation and individual as well as cooperative learning. The training packages might include a highly structured,

rather trainer-led part in the beginning, more targeted towards giving information and with less of a WBL character (for example, classroom sessions where information is given). At a later stage the training can turn into practical exercises at the workplace, mainly led by the learner and supported by a mentor. In such training packages, WBL can be a good way to tailor the training to particular needs.

4.5. Patterns in terms of training providers and content setting

CVET in Europe is delivered by a wide range of stakeholders and institutions, in formal education and training as well as outside (Cedefop, 2014). In the present study, employers were asked about the type of training provider used for their WBL training. In most cases they reported that the training was provided by themselves, by in-house trainers. In fewer instances commercial institutions or formal education institutions were used (Table 6).

Especially when using such other providers, assuring that the training is relevant and connected to the actual work of the employees seems crucial. Providers highlighted that close coordination with the employer is important in this context and gave examples of several measures:

- (a) discussion between the provider and the employer on how to carry out the training so that it builds upon identified needs and existing competences;
- (b) development of training approaches specific to the learner's workstation, based on the trainers' professional assessment of situations which could potentially occur at work, as well as based on previous occurrences at the work place;
- (c) co-designing activities and skills assessment with the enterprises.

The example of the Italian enterprise in Box 13 shows how training can be developed in close cooperation between training provider and enterprise. Parts of the resources for the training were specifically directed at developing the training in close cooperation between provider and employer, based on a preliminary assessment of needs and followed by the respective design of the training.

In some sectors, employees' participation in CVET on a regular basis is officially required due to the nature of the profession, and content as well as standards for this mandatory training are set. An example is the Swedish shipping sector.

Box 15. Example: CVET based on formal requirements

In the Swedish shipping sector, there is a wide range of eligibility requirements for on-board crew members without which they are not allowed to operate at sea. The governing body regulating required training for on-board personnel is the Swedish Transport Agency. It adopts standards provided by the International Maritime Organisation UN agency into national legislation. Required training for the sector mainly concerns various certificates that normally need to be renewed every five years. Public and private training providers offer courses that comply with the official requirements and lead to certification. While most CVET provision in the Swedish shipping sector seems to be mandatory, enterprises also offer CVET that is not legally required, but fits the very particular needs of the enterprise or the employees, and serves as a supplement to the mandatory training.

CHAPTER 5.

Benefits, needs and challenges in work-based learning in CVET: views of stakeholders

According to the interviews and the Delphi survey carried out in this study, several benefits, needs and challenges are associated with WBL in CVET.

5.1. Work-based learning in CVET: why it is worth it

Work-based learning, particularly in the area of continuing vocational education and training, is seen as a rather flexible, efficient and effective way of combining employees' skills development with the work in the enterprise. Often, the learning processes are directly linked to the working tasks and times. The data indicate that WBL is seen as useful for three purposes:

- (a) induction of new staff;
- (b) response to changing skill requirements for existing employees;
- (c) career development.

WBL seems especially useful for the induction of newly hired personnel, ensuring that they get up to speed with the processes, procedures and machinery at the specific workplace as quickly as possible. WBL is seen as beneficial not only for newcomers, but also for existing employees. It is highly relevant in ensuring adaptability to change and is used to prepare employees for new requirements, for example when new processes, procedures or machinery are introduced. Finally there have been some examples of WBL as relevant for career development, in two ways: by taking on the role as trainer and hence being recognised as a responsible and experienced employee and through using WBL methods to train management competences at the workplace.

Research shows that CVET generally provides many benefits for individuals, enterprises and the economy and society as a whole (Cedefop, 2014). The present study shows the particular benefits associated with WBL in CVET.

One of them concerns the relevance of the competences trained in WBL. Most information collected in the study indicates that WBL has proven to be effective in the training in competences that are directly related to the performance of the tasks at the specific work place. Employers consider especially the simulated work place as a good method of providing training on

many different technical systems, the reason being that the time needed for acquiring certain skills is reduced, as the trainees can be systematically trained on several relevant technical systems simultaneously.

From a didactical point of view, WBL can address the gap between the skills acquired in the formal VET system and the needs of the employers. Moreover, considering that learning does not take place in a vacuum but, on the contrary, depends on the interaction between subjects and the surrounding environment, the context is of high relevance. Thus the very fact that the worker is not completely alienated from a work-context makes the cognitive process of linking each concept to its practical application easier. For instance, as explained by one of the respondents, if a training activity is meant to teach workers a new pruning technique, in addition to providing some theoretical background, it is unavoidable to 'bring workers in the field and show them how to perform the task'. Other forms of training such as classroom-based activities make it more difficult to establish links with the work context. A possible consequence is that even though the course content may be relevant and stimulating the worker's interest, this content may not be immediately translatable into daily procedures.

For most employers interviewed in the study, it was obvious that to the extent that they organised and funded CVET for their employees, it would be work-related at the least. Without it being work-related, there would be no direct gain for the company, and therefore the company would have no motivation to invest in such initiatives. Respondents were unanimous in pointing to WBL as a training form which allows for a more direct assessment of the impact of training on the functioning of the enterprise, compared to other forms of training. As WBL is aimed at developing work-relevant skills, learners find it easier to bring the newly acquired concepts into the workplace and apply them into their daily work.

Another benefit that was mentioned by some interviewees had to do with costs. The release of employees from their working tasks is not necessary which means lower costs for the employers. A similar advantage reported by one respondent was the savings generated by the possibility of carrying on the production while training and using their own staff. Employers may face difficulties in organising training as they cannot replace the employees during training, but in some cases WBL in itself can be a solution – if conducted while working. However, the views on costs seem to be mixed. While some interviewees associate WBL in CVET with low costs and consider it an advantage, others point to the high costs of WBL in CVET – especially in simulation environments – and perceive this as a barrier.

Other research shows that WBL also plays a role in improving the attractiveness of working in a chosen company. For example, Ellstrom (2011)

points to the specific advantages and values of work-place learning, a term which lies very close to this study's definition of WBL in CVET. He argues that an important challenge in today's labour market is to meet the rising demand for competence and for companies to remain competitive. Work-place learning plays a key role in facing this challenge, not only because it leads to improved skills and knowledge among the employees, but also because it makes the company a more attractive workplace which facilitates new recruitment. This point is often referred to in literature, but was not mentioned by the respondents interviewed during the study.

5.2. Challenges and needs

The interviewees in this study associated WBL in CVET with various needs and challenges. Knowing and addressing them is important to improve the situation and to make the most of the benefits that WBL in CVET has to offer.

5.2.1. Awareness and understanding of WBL in CVET and its benefits

There is, both among employers and among employees interviewed, a lack of awareness and understanding of WBL in CVET and of the benefits that it has to offer. According to the respondents, this is one of the main challenges. WBL often still appears to be perceived as a rather vague form of learning, with unclear outcomes. Several interviewees stated that employers and employees are not familiar with the concept of WBL or that they sometimes even have a negative perception of it.

Several interviewees went further and judged that lifelong learning is not yet an established trend in companies, and that increasing the knowledge of WBL as well as CVET in general could help boost CVET provision and participation. As a remedy, many interviewees suggested encompassing awareness-raising and information campaigns.

Furthermore, while there are several policies aimed at promoting CVET for employees, awareness among employers of these possibilities and of funding opportunities appears to be rare.

5.2.2. Needs analysis and knowledge on organising work-based CVET

CVET should reflect the requirements of enterprises and employees. Relevance of CVET, both in terms of forms of learning used as well as in terms of content, is crucial (Cedefop, 2014). According to the respondents of the present study, an important challenge for employers is the lack of knowledge on the areas in which they should invest with respect to their personnel and a lack of strategies for

investing in WBL in CVET in general. Another challenge that was mentioned several times is the lack of understanding of the motivation and specific needs of the employees.

Enterprises seem to struggle not only with identifying needs and relevant training to meet those needs. Interviewees stated that there is also a lack of knowledge about methods for integrating WBL into the organisation. Further, materials for the preparation of training schemes and how WBL can be conducted seem to be missing. The development of methodological guidelines for WBL and good practices that could be used as references would be appreciated. Almost all interviewees pointed out the need for further in-depth research on work-based CVET.

In the view of some respondents, the lack of an evaluation culture is making it difficult for work-based CVET to emerge as a valid alternative to other forms of learning. A more systematic approach to evaluation (especially ex-post) would help identify good practices, would stimulate the scaling up of successful experiences and would feed a more evidence-based policymaking. Further, it was put forward that evaluation and rating of providers and their programmes should be established at some point.

5.2.3. Professional development and qualifications for trainers

There seems to be lack of trainers who have been properly trained to implement WBL in CVET. The need to introduce some minimum requirements, for example, with respect to the qualification and professional development of trainers in the specifics of WBL in CVET to ensure high-quality training and learning in companies, was stressed by the interviewees quite often. A focus on WBL should be integrated in the general training of CVET trainers, as it poses particular challenges. To promote WBL in CVET, a trainer needs to be trained for example to (see also Cedefop, 2014; 2015):

- (a) analyse work tasks and enroot learning activities in the daily work of the learner;
- (b) create learning-conducive work environments;
- (c) foster the employees' ability to observe and analyse work tasks with the purpose of identifying learning points, and to reflect critically on their own action and professional development needs;
- (d) promote learners' abilities to reconstruct concepts and knowledge from practice;
- (e) encourage employees to continue experimenting and learning through work over time.

In the Riga conclusions, the need for systematic approaches to initial and continuous professional development of VET teachers, trainers and mentors, also in work-based settings, is highlighted as one of the five medium-term deliverables for the field of VET for the period 2015-20⁽¹⁹⁾, and confirms the importance of well-trained trainers.

5.2.4. Validation of learning outcomes from WBL

To a large extent, WBL in CVET is happening outside the formal education and training system, through non-formal or informal learning, taking place in the workplace or elsewhere. Non-formal work-based CVET usually does not systematically lead to a recognised qualification; most often, participants merely get a certificate of completion. This may curb the interest in improving and promoting non-formal and informal WBL in CVET, and might have a negative impact on learners' willingness to participate. Almost all respondents pointed out the lack of an institutionalised system for the validation of knowledge, skills and competences attained through work-based CVET. Several of the respondents stated that the lack of such a system is an obstacle for the support to WBL which can be provided by the State, as there is no mechanism to control the outcome of the financed training.

Generally, research shows that validation – identifying, assessing and recognising knowledge, skills and competences, no matter how, when and where these have been acquired – has the potential to open education and training pathways, to allow flexible entries and to encourage further learning.

5.2.5. Specific constraints of medium-sized enterprises (MSEs)

Regarding the challenges of using WBL in MSEs, respondents pointed out that time and organisational factors are major obstacles. Employees usually have high workloads and limited time available, and due to the small amount of staff in MSEs, employees who are absent for training cannot easily be substituted by colleagues. However, some respondents highlight that WBL offers the advantage that it can take place at the workplace, and that a release of employees from their working tasks might then not be needed.

There are also other constraints related to the size of the enterprise. Many respondents pointed out that even if public funds and similar forms of financial support for CVET are available, the procedures to access them are often lengthy, time-consuming and extremely rigid; thus they are not well-suited to respond to the needs of an MSE. It appears that due to the administrative burden of the

⁽¹⁹⁾ Latvian Presidency of the Council of the EU and European Commission, 2015.

application process, it is too costly for small and medium-sized companies to apply for funding. Large companies can afford to hire consultants, who prepare the application for them.

5.2.6. Costs

A few respondents also pointed to the high costs of some WBL training schemes, especially those using simulation environments. The costs are related to the need for relevant technical systems and the most up-to-date technical equipment.

CHAPTER 6.

Conclusions and key messages

The findings of this study confirm that the knowledge on use, methods and potentials of work-based learning in continuing vocational education and training is still rather fragmented, while stakeholders at different levels would appreciate a more consistent and complete set of information for improved decisions and policy-making. This publication contributes to closing some knowledge gaps and identifies several challenges that should be addressed. They serve as a basis for key messages to various stakeholders, among them policy-makers and decision-makers at all levels (European, national, regional, sectoral), social partners, employers and training providers.

6.1. Produce comprehensive and comparable statistical data on work-based CVET

Existing statistical data on work-based CVET need to be improved to enable better analysis of the field and informed, evidence-based policy- and decision-making. Comprehensive, comparable and reliable data that describe adults' participation in formal, non-formal and informal forms of work-based CVET in the different EU Member States are still lacking. The existing European surveys (CVTS, AES and EWCS) allow for some estimates, but the precision and comparability of their data is limited as each survey measures things differently (Cedefop, forthcoming b). Further, their indicators in some cases seem too restrictive to cover the real magnitude and variety of WBL in CVET (they only show part of the picture), and in some cases too broad (they could lead to overestimations).

6.2. Implement a policy environment/framework conducive to work-based CVET

Policy-makers should try to establish an environment that facilitates and encourages the use of WBL in CVET. The study shows that there are different ways in which policy-makers can create room for the use of WBL, even without directly requiring its use, leaving it to the providers, employers, employees and other stakeholders to assess when WBL is most appropriate. WBL should be an

explicit and integrated part of the policies, laws and financial instruments targeted at CVET. Research in this study revealed that in some cases, national legislation, regulations and financial mechanisms give priority to other forms of learning, and actually hinder the use of work-based CVET. There could be reasons for such choice, but it is recommended to assess whether such priorities are indeed intended, or whether adaptations should be made. In other cases, several policies, including funding opportunities, are in place, but awareness about their existence seems to be lacking, which calls for increasing information campaigns.

A work-based CVET friendly environment also includes opportunities for the validation of knowledge, skills and competences acquired through non-formal and informal WBL. This is of paramount importance because WBL to a large extent takes place outside the formal VET system and does not lead to a full qualification, but only – if at all – to a certificate of completion. Opportunities to validate WBL outcomes so that they can count towards a recognised qualification could open learning pathways and encourage further learning.

National policy-makers also need to consider if they want to integrate WBL more firmly in formal CVET provision. Only a small percentage of the WBL training identified in the study was formal training provided by VET institutions. Further research on how WBL can be integrated effectively and efficiently in formal CVET seems beneficial. One option that might be assessed is the use of apprenticeships-type schemes in CVET for employed people. In some countries (such as UK-England), apprenticeship and thus WBL are systematically extended, opened up and promoted for employed adults.

6.3. Promote collaboration, active commitment and the idea of shared responsibilities

Due to the characteristics of CVET, responsibilities for setting policy and for overseeing provision lie not only with national authorities, but with various stakeholders. CVET – including its work-based forms – is delivered by a wide range of institutions, in formal as well as non-formal education and training settings, and is intrinsically linked to the labour market. This fragmentation and diversity of CVET poses challenges in coordination, quality and transparency, and could have a negative impact at different levels. For example, it could impede participation in work-based CVET, since employers and employees might lack information on suitable learning opportunities, access and pathways. Thus, communication, collaboration, coordination and more coherence at and across national, regional, local and sectoral levels, should be fostered.

Active commitment of all relevant stakeholders, including the adult learner himself/herself, is essential. The idea of work-based CVET as a shared responsibility therefore needs to be promoted and implemented with the involvement of all relevant stakeholders. The social partners in particular have a key role to play when it comes to WBL. They are best placed to develop workplaces that encourage learning and to negotiate appropriate arrangements in terms of working time and work organisation that make participation in WBL easier. They can also act as providers for work-based CVET, through measures such as union learning programmes or sectoral initiatives (Cedefop, 2014).

Collaboration between the various stakeholders has to happen at different levels, both horizontally and vertically. Enterprises benefit from joining forces and collaborating horizontally with one another, for example when it comes to needs analysis and training provision, as they can profit from economies of scale. This is particularly important for small and medium-sized enterprises, which often face certain constraints due to their size. Different stakeholders, including enterprises, social partners, regional governments and VET providers, also need to collaborate vertically. As not all knowledge, skills and competences can be taught adequately in the companies and at the workplace, local and regional cooperation between companies and various private and public VET providers should be developed and increased. For example, simulated work environments could be provided by collective arrangements or investments, because costs for simulations are often high due to the need for relevant technical systems and the most up-to-date equipment. The study showed that employers consider the use of simulated work environments as a good method of providing training on many different technical systems, because the time needed for learning certain skills is reduced, as the trainees can be systematically trained on several relevant technical systems simultaneously.

6.4. **Raise awareness and improve knowledge about benefits and methods of work-based CVET**

While many acknowledge work-based CVET as a flexible, efficient and effective form of learning, others might still perceive it as a rather vague approach with unclear outcomes. Work-based CVET still suffers from a lack of visibility, awareness and understanding, and seems not to be used to its full potential yet. This is due to several factors. A universally accepted definition or a common understanding of WBL in CVET is missing. Principles, functioning, costs and benefits of work-based CVET are often not known or not well understood. WBL in VET tends to be associated mainly with IVET, in particular with apprenticeship for

young people, rather than with CVET and adult learning. Various actions could be taken to raise awareness and improve knowledge. These include the development and provision of materials and guidelines on work-based CVET, and good practice examples that serve as a source of inspiration. Different stakeholders, in particular social partners, could play an active role in raising awareness about WBL in CVET and in promoting its implementation.

To increase the quantity and quality of work-based CVET, adequate training and professional development of trainers on work-based CVET methods is also important. There is a lack of trainers who have been specifically trained for WBL in CVET, though its implementation requires particular abilities, for example: analysing work tasks and enrooting learning in the performance of daily work; guiding the learners in critically reflecting on their own action, and promoting their abilities in reconstructing knowledge from practice and in applying learning outcomes to work processes; supporting them to continue experimenting and learning through work over time; creating learning-conducive work environments. The need to introduce systematic approaches and opportunities for initial and continuous professional development of VET teachers, trainers and mentors, also in work-based settings, is also one of the five medium-term deliverables for 2015-20 as set out in the Riga conclusions (Latvian Presidency of the Council of the EU and European Commission 2015).

More in-depth and high-quality research is needed to improve knowledge on work-based CVET; the topic should be firmly established in VET research. In addition to immediate research, programmes designed to promote WBL in CVET should be systematically monitored and evaluated.

Further, better understanding and use of informal in-house learning should be promoted. By definition, informal WBL is unstructured and sometimes unintentional. Yet, it is an important part of what people learn in the workplace. Therefore, informal learning as such has a meaningful and legitimate place among the different forms of learning. However, its lack of formality is a barrier to transferability. It is recommended that policy- and decision-makers encourage initiatives targeted at knowing more about practices of informal WBL. What do they consist in? How are they concretely functioning? What are their major features? To what extent are they effective, and what exactly are the factors of their effectiveness? It is not necessary to transform informal learning into non-formal or formal learning; what is more helpful is to know what works in informal learning, and what are important features to take into account when it comes to promoting informal WBL and transferring good practices from one workplace to another. This is particularly important as far as small and medium-sized enterprises are concerned. They often seem less likely to offer structured and

intentional WBL to their employees, but what they typically provide is more informal, unstructured and unintentional WBL forms and opportunities. Support could be offered to those enterprises wishing to change some of their informal WBL activities to non-formal WBL.

List of abbreviations

CVET	continuing vocational education and training
EU	European Union
ICT	information and communication technology
IVET	initial vocational education and training
MSE	medium-sized enterprise
NVQ	national vocational qualifications
VAE	validation of acquired experience
VET	vocational education and training
WBL	work-based learning

Country codes

BG	Bulgaria
DE	Germany
EU	European Union
FR	France
IT	Italy
SE	Sweden
UK	United Kingdom

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Work-based learning in continuing vocational education and training: policies and practices in Europe

Work-based continuing vocational education and training (CVET) requires more attention and strategic action. Work-based learning (WBL) is a powerful way to support adult learning and human resource development in enterprises, but the potential it has to offer has not yet been fully exploited in Europe. Systematic and comprehensive knowledge of WBL in CVET is still lacking. What exactly is WBL in CVET? How is it practised on the ground, and which forms and patterns of WBL are used in CVET? Do European and national policies on WBL in CVET exist, and in how far do they shape practices? What do different stakeholders perceive as main advantages, needs and challenges? This publication addresses these issues and contributes to better understanding of policies and practices of WBL in CVET in Europe.

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