



Typology of Apprenticeships in Higher Vocational Education

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

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Co-funded by the
Erasmus+ Programme
of the European Union



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Background

In Europe, many young people are affected by unemployment and face challenges in finding quality, stable employment with an adequate income. Internships, apprenticeships and other forms of work-based learning (WBL) are seen as useful devices for young people to access the labour market and thereby ease the transition between education and employment. However, at present there is no clear EU-wide reference framework or guidance in place for assuring the quality of different types of WBL. It will be ApprenticeshipQ key task to strengthen the cooperation and networking between HVET/PHE institutions and the training site (employers), providing them with innovative practices to establish and enhance quality management procedures that will be developed and tested during the project.

Evidence suggests that WBL can be a promising pathway towards better employment outcomes for young people. And vocational, technical and professional training combined with work placement can improve employment, earnings and career outcomes for young people. If there is high quality learning in the workplace, young people can be put in situations that help them develop problem-solving competencies and the capacity to adapt to change as they encounter new and different workplace practices, technologies and environments. However, some work experience programs fail to improve young people's prospects; for example, when they are unplanned and unstructured, and in consequence, nominal real learning or skills development takes place. According to OECD, the quality of local implementation is an important factor that can "make or break" program success (OECD, 2016).

HVET/PHE provision is usually locally and regionally focussed and can therefore help meet regional priorities as well as skills needs at a national level. Moreover, HVET is a significant priority issue for the Union. CEDEFOP's RP 38 (2013) and WP 23 (2014) summarises HVET's importance for improving access to employment, career advancement and progression to HE. The European Parliament resolution of 8 June 2011 on European cooperation in VET to support the Europe 2020 strategy (2010/2234(INI)) calls: "for all stakeholders, especially educational institutions, employers, employees and unions to ensure high quality VET".

Assuring quality is key to securing positive outcomes for all stakeholders; and ApprenticeshipQ will therefore focus on approaches to securing and developing high quality apprenticeships/WBL¹ by developing measures that will strengthen collaborations¹ between employers, providers and students. Low quality apprenticeships can lead to poor outcomes for the learners as well as for employers. Furthermore, low quality apprenticeships/WBL can negatively influence the take-up of

¹ There are no agreed definitions for apprenticeships and WBL across Europe. In some countries college-based apprenticeships and internships would be considered an apprenticeship, whilst in others these types of provision are seen as types of WBL and not an apprenticeship. In this report we use the terms apprenticeship and WBL interchangeably unless they refer to a specific country type.

apprenticeships/WBL and affect the acceptance and credibility of such forms of learning in many countries.

It is also important that the HVET/PHE sectors, with their strong links to employers, are viewed as key drivers in helping to improve social inclusion by organising learning programmes that maximise positive employment and labour market outcomes, and develop a more diverse and innovative tertiary education system.

There are national agencies, standards (EQAVET; EQF) and procedures in place to externally assure quality in the classroom and the workplace. In line with the Leuven Communiqué 2009 and the Jerewan Conference 2015, ApprenticeshipQ aims to improve the internal quality assurance of apprenticeships and thereby enhance employability. Project outputs will complement the quality standards already available and demonstrate how to operationalize them most efficiently into practice. This is already done very effectively by partnerships between employers and educational institutions in countries such as Germany, Austria, Netherlands and Denmark. In other European countries, apprenticeships have rarely received the appropriate and desired attention from policy makers. To address this, the European Commission (2015) has published a document on "High performance apprenticeships & work-based learning: 20 guiding principles". It focuses on four main themes: involving national governance and social partners; supporting companies, in particular, SMEs; making apprenticeships attractive and improving career guidance; and quality assurance. The principles relating to external quality assurance, the primary topic for this report, include:

- Providing a clear framework for quality assurance of apprenticeships at the system, provider, and company levels, ensuring systematic feedback;
- Ensuring the content of VET programs is responsive to changing skill needs in companies and society;
- Fostering mutual trust and respect through regular cooperation between apprenticeship partners;
- Ensuring a fair, valid, and authentic assessment of learning outcomes and
- Supporting the continuous professional development of in-company trainers and improving their working conditions

The European Commission (ETU & Union Learn, 2014) announced in 2014 that it started a European Alliance for Apprenticeships 'to help improve the quality and supply of apprenticeships and to change mind-sets towards work-based learning'. The Alliance committed themselves to:

- consider our common commitment and mutual trust as a precondition for the launch of the European Alliance for Apprenticeships and
- Contribute to the access to, supply, quality and attractiveness of apprenticeships across the EU by encouraging the setting up, reviving or modernizing of apprenticeship schemes.

There are several EC initiatives that support the need for this type of quality assurance development. One is the EC work program "Education and Training 2020": the second of its four strategic objectives aims at "improving the quality and efficiency of education and training" (ET 2020). Other initiatives such

as Bruges 2010 and Riga 2015, whose aim is to ensure high quality WBL (European Parliament, 2015) through shared responsibility, involvement of employers as well as SMEs and alignment to the labour market needs.

The EC (2015) published 20 guiding principles developed by the ET 2020 Working Group on Vocational Education and Training (WG on VET). The most important task of the WG on VET is, to respond to the objectives of ET 2020. This means to reconsider education, and the Bruges Communiqué as well as the Riga conclusions of June 2015. The principles target governments, social partners and VET providers to promote WBL in all its forms and to make related policies more effective and more targeted to labour market needs.

The 20 guiding principles respond to the four important policy challenges of WBL:

- national governance and social partners' involvement;
- support for companies, in particular, SMEs, offering apprenticeships;
- the attractiveness of apprenticeships and improved career guidance and
- Quality assurance in WBL.

Several factors need to be in place to foster success: mutual trust and respect through regular partner contact; fair, valid and authentic assessment of learning outcomes. And in order to ensure the quality of in-company training, the continuous professional development of in-company trainers.

The European Trade Union Confederation (ETUC, 2016) proposed 20 quality standards for apprenticeships. The standards include measures relating to external review, such as giving social partners the responsibility for monitoring the suitability of workplaces and for accrediting interested companies and employing robust quality assurance procedures on apprenticeship schemes.

The Advisory Committee on Vocational Training (ACVT, 2016) shared its ideas for WBL to the EC in December 2016. They bewail the present supply of quality and effective WBL programmes. In order to improve WBL they provide suggestions on partnerships and support to the Commission, member states, and social partners.

An important instrument, developed by EU member states in cooperation with the EC is the European Quality Assurance Reference Framework for VET20. It comprises a quality assurance and improvement cycle of planning, implementing, evaluating/assessing, and reviewing/revising VET, supported by common quality criteria, descriptors, and indicators designed to increase transparency and mobility, valorise permeability in a lifelong learning perspective, and make VET more attractive (EP, 2009).

These reports, guidance notes and principles indicate that a significant practical knowledge base exists for policy makers, education providers, employers and practitioners to utilise and improve the quality of VET WBL/apprenticeships.

However, at the European level, there is far less information and knowledge about WBL quality assurance processes that occur within Higher Education Institutions (HEIs), where both HVET and PHE

can be delivered. HEIs are subject to the standards and guidelines for quality assurance in the European Higher Education Area - EHEA (ESG, 2015). ESG were adopted by the Ministers responsible for HE in 2005. Before this, a proposal was prepared by the European Association for Quality Assurance in Higher Education (ENQA) in co-operation with the European Students' Union (ESU), the European Association of Institutions in Higher Education (EURASHE, who are also a partner in the AppQ project) and the European University Association (EUA). In 2012, the Ministerial Communiqué invited the E4 Group (ENQA, ESU, EUA, EURASHE) in cooperation with Education International (EI), BUSINESSEUROPE and the European Quality Assurance Register for Higher Education (EQAR) to prepare an initial proposal for a revised ESG "to improve their clarity, applicability and usefulness, including their scope". The ESG provides guidance for successful quality provision and learning environments and applies to all higher education offered in the EHEA.

In the European Higher Education Area (EHEA), it is understood that HEIs have the primary responsibility for the quality of their provision and its assurance. This means that in those cases in which WBL forms an integrated part of the curriculum it is awarded credit, and WBL is covered by the HEIs' internal quality assurance (IQA) processes such as:

- Description, including formulation of learning outcomes in the curriculum
- Protocol for assigning internships/apprenticeships and tutors
- Student support during the work placement
- Qualification of personnel supporting students in the company (instructors)
- Rules/regulations regarding the assessment of placements (part of examination rules)
- Cooperation agreements with companies on the offering of work placements
- Integration of work placements into the IQA procedures, which may include evaluations of the students' performance as well as evaluations of the placements and support structures
- Results of practical work (such as projects and research results) (Kerber & Gourdin, 2018, p. 9)

However, depending on how a national qualification framework (NQF) has been constructed, not all forms of WBL/apprenticeships are recognised in HE.

Introduction

The focus of the project "Mainstreaming Procedures for Quality Apprenticeships in Educational Organizations and Enterprises – ApprenticeshipQ" - will be on apprenticeships provided in the higher vocational education and training (HVET) and professional higher education (PHE) sectors.

As there is no single agreed definition for an apprenticeship amongst credible agencies working in this field the project developed its own draft working definition – see later - informed by partners practice and the following expert agencies perspectives:

For OECD: »Apprenticeships typically involve a structured mix of: 1) work placements during which apprentices develop new skills and perform productive work; and 2) off-the-job education and training involving no or limited productive work and typically funded and managed primarily by public authorities

(e.g. education and training provided in vocational schools, colleges, recognised educational and training providers). Apprenticeships lead to a formal qualification«².

For the ILO and UNESCO: »Formal apprenticeship refers to a system by which a learner (the apprentice) acquires the skills for a trade or craft in an enterprise learning and working side by side with an experienced craftsperson, usually complemented by classroom-based instruction. Apprentice, master craftsperson/employer and the training provider conclude a training agreement that is regulated by formal laws and acts. Costs of training are shared between apprentice, master craftsperson/employer and the government«.³

And for CEDEFOP: »Systematic, long-term training alternating periods at the workplace and in an educational institution or training centre. The apprentice is contractually linked to the employer and receives remuneration (wage or allowance). The employer assumes responsibility for providing the trainee with training leading to a specific occupation. In addition, an apprenticeship also has the following characteristics: following successful completion, learners acquire a qualification and receive an officially recognised certificate; apprentices usually have the status of employees«⁴

[Moreover, according to a forthcoming Cedefop study two fundamentally different functional groups of apprenticeships (have) emerged in the EU28 plus Norway and Iceland

- Apprenticeship as an education and training system is aimed at providing people with full competency and capability in an apprentice occupation or trade (education and training function);
- Apprenticeship as a type of VET delivery is aimed at providing a diverse way to achieving formal VET qualifications by bringing people into the labour market (mixed education and training and employment functions).]

More recently, the European Training Foundation (2018) classifies WBL into four main types (ETF, 2018):

1. arrangements in which the learner is legally an employee, such as formal apprenticeships, and in some cases alternate; in some cases, informal apprenticeships may come under this heading;
2. arrangements in which the learner is legally a student; these can be called by a number of names, including traineeships, internships, work placements, and cooperative education;

² Kuczera, M. (2017), "Striking the right balance: Costs and benefits of apprenticeship", OECD Education Working Papers, No. 153, OECD Publishing, Paris.

³ Upgrading informal apprenticeship: a resource guide for Africa; International Labour Office, Skills and Employability Department. Geneva: ILO, 2012

⁴ Cedefop (2010) Terminology of European education and training policy: A selection of 100 Key Terms + Cedefop, 2014, Developing apprenticeships – Briefing Note. Luxembourg: Commission of the European Communities,

3. borderline cases such as virtual firms, training firms, or 'real' firms that are attached to and part of educational institutions;
4. Programs such as work shadowing and work experience, the main aim of which is to teach the learner about work rather than to teach them to do work.

In essence, owing to the unique cultures, histories and politics of countries internationally and within Europe it is almost impossible to develop a consensual definition of an apprenticeship or indeed apprenticeship system. The fact that the project is working in the field of HVET and PHE and the practices and regulations associated with HE further complicates definitional discussions. It is also the case that the main focus of the project is not to develop a definition for 'higher or degree apprenticeships'.

After extensive internal project discussions it was agreed to use the following working definition that would be refined during and at the end of the project.

The process of education which takes place in shared responsibility between actors from the world of work and education institutions in a learning/education partnership.

While apprenticeships occur in different forms, types and locations, this project focuses specifically on higher, and possibly Bachelors/degree level apprenticeships/WBL, or apprenticeships based in HVET/PHE.

HVET has a mixed character between vocational/technical/professional and higher education, and often tools that were designed for PHE and academic HE are used for quality assurance (QA) - meaning that either apprenticeships fall out of the purview of the QA system or they are ill adapted for use within it.

In fact, no proposal currently exists on how European HVET institutions may adapt their internal quality systems to ensure proper supervision and control of apprenticeships, or even what a minimum threshold of quality for an apprenticeship in HVET should entail. Thus, the project is designed to complement existing tools for coordinating quality in educational institutions, in particular work by EQAVET; in certain cases the European Standards and Guidelines (ESG) for Quality Assurance in the European Higher Education Area (EHEA), EQAR, and international standards such as ISO 21001, by proposing cross-based methods for assuring quality assurance in apprenticeships.

Quality assurance is a fundamental key in assuring positive outcomes for all stakeholders involved, and this project therefore focuses on approaches to securing and developing high quality assurance guidelines that will in turn help foster stronger collaborations between employers, providers and students. Smaller companies and employers with less experience of apprenticeships/WBL, and in need of external assistance, are likely to be the major beneficiaries of the project's outputs.

The ApprenticeshipQ project also builds upon other ERASMUS+ project outputs already published, such as the Apprenticeship Quality Toolkit from SAPS (Footnote) and toolkit developed by the Beehives Project (Footnote).

A major goal of the project is to provide a clear framework for the quality management of apprenticeships at the system, provider and company levels ensuring systematic feedback and plans for improvement. This will be supported by identifying and analysing different types of apprenticeships or work based learning across the partner countries to design and test a new typology of apprenticeships, and inform the future work of the project.

Typology of Apprenticeships in HVET/PHE

The most recent comprehensive report on apprenticeships in Europe (Apprenticeship supply in the Member States of the European Union – 2012)⁵, only distinguishes between school-based and enterprise led apprenticeships. However, within these two categorisations a multitude of forms of work based learning (WBL) exist, including, Business/Industry Field Trips, Cooperative Education, Entrepreneurial Experiences, Internship, Job Shadowing, Mentorship, School-Based Enterprise and Service Learning to mention a few. And in many cases these forms of WBL are described in different countries as constituent parts in apprenticeships. Moreover, national descriptions and/or definitions of apprenticeships can be in conflict. For example: in some countries an apprentice is classified as an employee for legal purposes, in other countries they are students; terms such as internship or traineeship can be used in some countries to describe an apprenticeship; and in some countries apprentices are either a student or an employee.

This created problems for the project as it was difficult for the partners to identify an agreed and concordant terminology or lexicon. (One outcome of this problem was for the project to generate explanatory advice notes explaining key concepts – see Section: development of a descriptive framework) This of course mirrors the definitional difficulties discussed above.

Design Framework

In many EU countries, the traditional apprenticeship framework purpose is to provide a supply of young people seeking to enter work-based learning via apprenticeships by offering structured high-value learning and transferable skills and knowledge. Apprenticeship training is enabled by linking industry with local technical colleges /VET/ HVET schools and professional higher education institutions. The

⁵ Directorate-General for Employment, Social Affairs and Inclusion (European Commission) (2012) Apprenticeship supply in the Member States of the European Union
Final Report Luxembourg: Publications Office of the European Union

apprenticeship framework offers a clear pathway and competence outcomes that addresses the issues facing the industry sector and specific companies.

This variety and the changing policy landscape (e.g. emergence of dual traineeship programmes in HVET and PHE, reform of school-based VET systems, and revisions to work-based learning that is part of a school-based programme) makes it difficult to apply a clear and precise definition of apprenticeship from these perspectives and others, as previously indicated.

Achieving a better understanding of what is understood to be an apprenticeship, within a given national context, can help to strengthen employer engagement in apprenticeship schemes, enhance the quality in terms of learning outcomes, and increase their attractiveness for young people.

To achieve this 'better understanding' the project decided to use a practice-influenced 'characteristics approach' to try and unravel and partially address some of the definitional and terminological issues discussed previously.

Developing a descriptive framework

To address the definitional and terminological issues the project identified a set of agreed characteristics based on advanced practice that could be used to describe the different forms of WBL in HVET/PHE that existed in the partner countries; thereby capturing national forms that might be excluded if agency and commissioned report definitions of apprenticeship were applied. These characteristics – a classificatory framework - could also act as a starting point for identifying which 'measures' may need quality assurance procedures. The following project classification was identified:

- Education programmes EQF 5-6
- Type of programme (HVET, PHE, HE)
- Time (Length/duration)
- Balance between education in institution & company
- Curriculum-integrated, work-related, work-based, work-integrated
- Formal contract

See Annex 1 for an out-take from a country example.

Identification and analysis of different forms of Apprenticeship

This framework was then further refined by engagement with the relevant educational literature - including fifty papers around work-based learning across the six partner countries - and any EU and national policy-reports dealing with apprenticeships. This led to the development of a 'conceptual tool' that could be used to survey and scrutinise the various forms of apprenticeship/WBL that existed across the six partner countries. The following characteristics were identified to be included in the framework, with added explanatory notes and examples. The consequent survey can be viewed at annex 3

1.1.1. Agreement

When two parties agree to something, or have the same opinion, they have an agreement. It is a decision about future action, which is made by two or more people, groups or organisations. An agreement on something is a joint decision that a course of action should be taken. An agreement can be verbal or written.

Explanation: In your answer, indicate what sort of agreement exists for each apprenticeship type. This could include informal and formal agreements; legally binding agreements; verbal and written; signatory agreements – student and/or employer and/or provider; unsigned statements indicating responsibilities and obligations.

Examples: (1) An intern signs an agreement to work on a work related project with company XY. (2) A three-way agreement between a student, an employer and an education provider detailing roles and responsibilities for a work placement.

2.1.1. Funding / Incentives

Money given by a government or organization for an event or activity. An Incentive is something that encourages someone to do something.

Examples: (1) The basic lack of government funding is at the core of the problem. (2) The education director is persevering in his attempt to obtain additional funding for the school. (3) Tax incentives have been offered to attract industry to the region.

3.1.1. Payment/Credits

Something that is given to someone in exchange for something else. Something given as a reward or in recompense for something done. Agreed medium of exchanges - currencies – have been developed to avoid complexity and continual bartering. However, a currency does not have to refer solely to money. Currencies exist for learning - learning credits – and for attendance, completion, and of course monetary payment – loan, grant, bursary, wage/salary, and apprenticeship wage

Explanation: In your answer, indicate if this apprenticeship type includes some form of payment – monetary, learning credit, attendance and completion. The answer will also need to include reference to European-wide learning credit systems – ECTS and ECVETS – and nationwide or occupational learning credit systems.

Example: The full one-year HVET programme, if completed satisfactorily, attracts XX ECTS

4.1.1. Learning Workload

The amount (quantity) and complexity of learning to be carried out by someone to achieve learning credit and/or certification such as a named qualification. Learning is the activity or process of gaining knowledge, behaviours and skills. Workload is what you need to do to achieve this learning. Learning outcomes, curriculum content and assessments convey quantity and complexity.

Explanation: In your answer, include designated learning methods contained in the apprenticeship type validation or accreditation documentation. This could include independent study, practicing with a variety of materials, formal tuition led by a teacher, demonstration and experiencing new processes. In addition, indicate any underpinning learning models as described below. Workload could include regulations related to quantity and duration – learning/working week, overall duration of programme and time to be devoted to on-the-job and provider based education and training. In addition, how is quantity and complexity determined, such as the use of learning outcomes, curriculum content and assessment?

Example: The duration for the motor vehicle technician apprenticeship framework is a minimum of two working years; and is underpinned by work-integrated learning, on, and off the job training and education. It utilises a range of learning methods such as work-based instruction and demonstration and the learning outcomes of the framework document indicate quantity and complexity.

Types of learning concepts or models often used in vocational/technical education related to work based learning.

- Curriculum-integrated learning: Is a model of learning that describes the development of integrated lessons helping students make connections across subjects and disciplines.
- Work-related learning: Planned activity that uses the context of work to develop knowledge, skills and behaviours useful in the workplace, including learning through the experience of work, learning about work and working practices, and learning the skills for work.
- Work-based learning: Is an educational strategy that provides students with real-life work experiences where they can apply academic and technical skills and develop their employability skills?
- Work-integrated learning: Are forms of experiential learning where the site of learning either occurs in the workplace or where the learning is strongly associated with a workplace.
- Cooperative education: A term that is commonly used in North America to refer to programmes in which learners spend time in workplaces and receive academic credit for the work experience, but in which there may be little connection between what the student does in the workplace and the curriculum of the school or college.

5.1.1. Learning Supervision⁶

Various roles exist to support apprenticeships and work based learning apart from provider teachers, and these roles have different titles in different countries. These can include learning supervisors, workplace assessors, provider or workplace mentors, expert technical education teachers, work based instructors etc.

Explanation: In your answer identify the titles and describe the roles of staff involved in each apprenticeship type's learning processes.

Example: If the student has a problem in the workplace, s/he can go to her/his learning supervisor for support.

6.1.1. Learning Location

Learning Location/environment is the diverse physical locations, contexts, and cultures in which students learn. This can include physical locations such as provider and employer premises and the development of communities of practice or learning groups, increasingly online and virtual, organised by one group - students, employers or providers - or jointly.

Explanation: In your answer, describe where learning takes place for each apprenticeship type.

Example: Learning occurs on provider and employer premises and student organise their own online communities of practice.

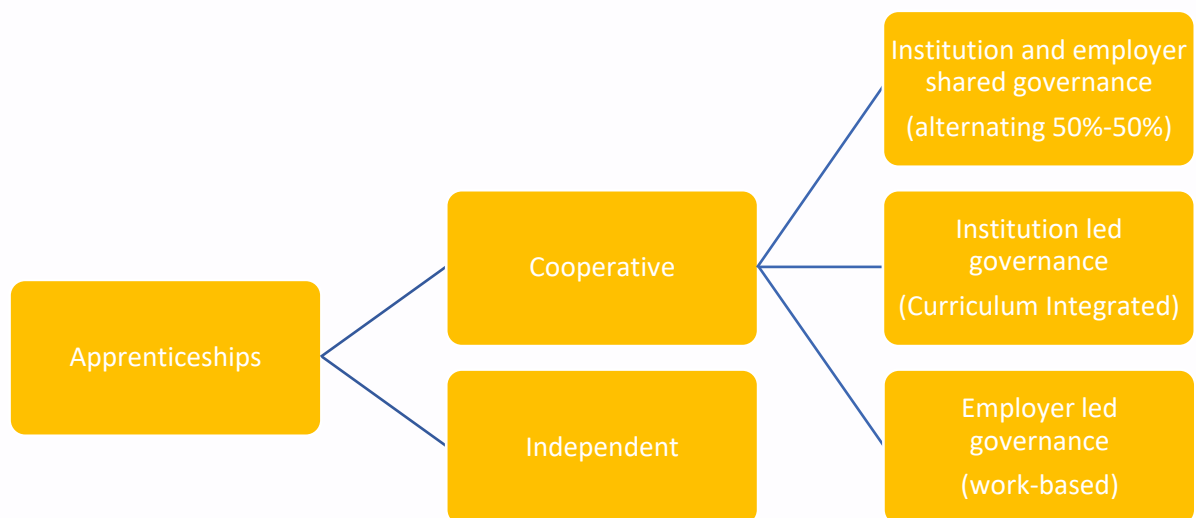
7.1.1. Quality

A quality education is supported by three key pillars: ensuring access to quality teachers; providing use of quality learning tools and professional development; and the establishment of safe and supportive quality learning environments. Quality depends upon characteristics: learners (motivated, healthy students), processes (competent teachers using active methodologies), content (relevant curricula) and systems (good governance and educationist).

The results of applying this framework can be found in Annex 2.

Further, through mapping these types of apprenticeships the following typology of apprenticeships for the project ApprenticeshipQ was developed:

-
- ⁶ **Useful Report: Teachers and trainers in work-based learning/apprenticeships**
<https://publications.europa.eu/en/publication-detail/-/publication/88780c83-6b64-11e7-b2f2-01aa75ed71a1/language-en>



The characteristics of the cooperative type of apprenticeships could be summarized into the following:

Cooperative Type / Characteristics	Institution and employer shared governance	Institution led governance (short-cycle)	Institution led governance (long-cycle)	Employer led governance
Education Programme	EQF 6	EQF 6	EQF 6	EQF 5-6
Type of Programme	PHE, HE	HVET, PHE, HE	HVET, PHE, HE	HVET, PHE
Average Length	3-4 years	2-3 years	2-3 years	1 year
Balance b/w Theory & Practice	alternating theory & practice (50%-50%)	Short placements from few weeks to 6 months	placements from 30- 40% of the curriculum	employed for a minimum of 30 hours per week, 20% of learning hours must be off-the-job
Location of Learning	Institution -& work-integrated	Institution -& work-integrated	Institution -& work-integrated	work-based
Contract	yes	yes	yes	yes

Annex 1 – Out-take from a Country Example

Country	England		
Type of Apprenticeship/ Characteristics	All apprenticeships in England are based on an 'employment contract' between apprentice and employer. There are no school or college based apprenticeships.	Apprenticeships are paid jobs which incorporate on and off-the-job training. There must be an apprenticeship agreement between apprentice/employer stipulating apprenticeship standard – trade, skill, occupation - to be used.	These rules are the same for any trade/occupation/profession. The statutory basis for these reforms are the <ul style="list-style-type: none"> • Welfare and Reform Act 2016 – meeting 3 million target • Enterprise Act 2016 – protection of Apprenticeship title • Finance Act 2016 – introducing the training levy • Technical and Further Education Act 2017 – establishing the Institute for Apprenticeships
Funding	From 2017 apprenticeships will be mainly paid for by an apprenticeship or training levy on medium and large organisations. (see table 2 for details)		
Education programme (EQF-Level)	Apprenticeship Standards are set at English Qualification levels: 2 - 7	At levels 4 and above they are called higher apprenticeships (4/5) and at level 6+ degree apprenticeships	
Type of programme (HVET,PHE, HE)	<ul style="list-style-type: none"> • Levels 2-3 are apprenticeships - VET • 4-5 higher apprenticeships – PHE or HVET • 6+ degree apprenticeships – PHE or HVET 	The term HVET is not recognised in government policy documents. The boundaries between HVET and PHE are fluid in the English context.	

Time Average Length of programme	<ul style="list-style-type: none"> Any apprenticeship must take a minimum of 12 months to complete. 		
Balance between education in institution & company (e.g. 6 months in company, or 1 day at VET Center & 4 Days a week in company, ...)	<ul style="list-style-type: none"> Apprentices must be employed for a minimum of 30 hours per week 20% of learning hours must be off-the-job 		
curriculum-integrated, work-related, work-based, work-integrated	All on and off-the-job training should be related to the outcomes – skills, knowledge, behaviours - specified in the relevant apprenticeship standards document.		
Formal contract	Yes		
References:	<p>There is a limited academic literature on the new apprenticeship system emerging in England as it is presently being implemented. In consequence several of the literature informing these tables and commentary are from official documents and reports</p> <ul style="list-style-type: none"> Saraswat A (2016), Higher Apprenticeships: perceived potential and challenges. MEG. Durham HoC Library (2017) Apprenticeship Policy in England HMSO London IPPR (2016) England's Apprenticeships Assessing the New System IPPR. London HoC Select Committee Joint Report (2017) Apprenticeships HMSO London Sutton Trust Fuller/Unwin (2017) Better Apprenticeships Sutton Trust, London Policy Exchange (2016) The skills we need and why we don't have them. Policy Exchange. London AoC (2016) Apprenticeship Reform and the implications for colleges. AoC. London Keep E (2014), What does skills policy look like now the money has run out UoOxford/AoC. London 		

Annex 2 Design of Conceptual Framework & Identification of Types of Apprenticeships

Austria.

Type of Apprenticeship Dual study bachelor program		Yes or No	Austria
National language Dualer Studiengang Produktionstechnik und Organisation			
Core Dimensions	Agreement	yes	It is a form of contract between the employer and the students (employment contract).
	Funding/ Incentives		The funding is via the city of Graz (the co-founder of the university).
	Payment/ Credits	yes	Payment depends on the company, but the approximate wage is 750,00€ gross per month (x 14 month). The practical part in the company (wbl) is awarded with 30 ECTS by the educational institution through reports about the practical period and the evaluation report by the in-company mentor.

	Learning Workload described	yes	<p>180 ECTS overall: 150 ECTS for the theory and 30 ECTS for the practical part in the company. The student is the first year a full-time student, the practical part or the internship begins at the 2nd study year as shown in the table below.</p> <p>Taking the practical period as a whole, students either undertake a kind of trainee programme in various production-related departments or work in cross-departmental projects, in line with their increasing knowledge and experience. In the fifth semester, students decide on an assignment together with the training company and a lecturer and choose the topic of their second Bachelor's thesis which they complete in the sixth semester at the company.</p> <div data-bbox="730 728 1356 1182"> <p>ENGINEERING Institute for Applied Production Sciences</p> <p>FH JOANNEUM University of Applied Sciences</p> <p>Schemes in the third level of education</p> <p>University of Applied Sciences</p> <p>in general</p> <p>1st semester</p> <p>2nd semester</p> <p>3rd semester</p> <p>4th semester</p> <p>5th semester</p> <p>work experience 6th semester / BT</p> <p>dual / co-operative program</p> <p>1st semester</p> <p>2nd semester</p> <p>summer internship</p> <p>3rd semester internship</p> <p>4th semester internship</p> <p>5th semester internship</p> <p>6th semester bac thesis</p> <p>12</p> </div>
	Learning Supervisors described	yes	<p>There is a supervisor. Each lecturer is responsible for a certain number of students. There is also an in-company mentor, in some cases also two (HR department + direct mentor at the work place).</p>
	Learning Location described	yes	<p>The theory part the student is doing at the university. The preparation and review of lessons take place at home or in the library. The practical part at the company starts with the summer internship after the 2nd semester. In the following semesters the student is 3 months (12 weeks) in the company three months at the university and alternating.</p> <p>In detail:</p> <ul style="list-style-type: none"> Orientation Practice: after 2nd semester (August to October) Company Practice 1: February to April (3rd semester) Company Practice 2: August to October (4th semester) Company Practice 3: February to April (including first Bachelor's thesis, 5th semester) Company Practice 4: July to September (including second Bachelor's thesis, 6th semester) <p>Duration: 12 weeks of 40 hours each</p>

			A student can enter the study in the second or third semester if he or she has completed a secondary technical school (HTL) in mechanical or operational engineering.
	Quality	yes	Following standards are applied: EFQM, Ökoprofit, Gütesiegel für Betriebliche Gesundheitsförderung, Akkreditierung nach EN17025, FIBAA, FIBAA Premium.

Type of Apprenticeship Co-op study program		Yes or No	Austria
National language Master Studium Engineering and production Management			
Core Dimensions	Agreement	Yes	It is a form of contract between the employer and the students (employment contract). In AT there is no three-part contract. Just an oral agreement between the company and the university.
	Funding/ Incentives		The funding is via the city of Graz (the co-founder of the university)
	Payment/ Credits	yes	Payment depends on the company, but the approximate wage is 750,00€ gross per month (x 14 month). The student gets paid also during the time he is on the university, during study period. The internship in the company (wbl) is awarded with 20 ECTS by the educational institution through reports about the practical period and the evaluation report by the in-company mentor.
	Learning Workload described	yes	120 ECTS overall: 120 ECTS for the theory (20 ECTS for the master thesis) and 20 ECTS for the internship in the company.
	Learning Supervisor(s) described	yes	There is a supervisor appointed by the FHJ (also the mentor for the thesis + contact person for organisational purposes) and there is also an in-company mentor.
	Learning Location described	yes	The theory part the student is doing at the university. The preparation and review of lessons take place at home or in the library. The internship is 15 months long. The theoretical blocks are designed so that they can be ideally combined with work commitments.
	Quality	yes	Following standards are applied: EFQM, Ökoprofit, Gütesiegel für Betriebliche Gesundheitsförderung, Akkreditierung nach EN17025, FIBAA, FIBAA Premium.

Type of Apprenticeship Integrated study program		Yes or No	Austria
National language Berufsbegleitendes Studium			
Core Dimensions	Agreement	Yes	It is a form of contract between the employer and the students (employment contract). The students are primarily employees.
	Funding/ Incentives		Some universities have tuition fees (non, some ca. 363€/ semester, private universities more (eg. 2.700,00€))
	Payment/ Credits	yes	Because the students are employed they get the normal salary. In some cases, also the company helps with the paying the fees for their employee. 180ECTS (10 ECTS for internship)
	Learning Workload described	yes	The program is organised in a way that also employed people can join the lectures – weekend sessions (Friday, Saturday whole days) or in the evenings. Some with online studying possibilities (e-learning), some with obligatory presence. Internship in 3 rd and 4 th semester, 40 working days, parallel to the studying time
	Learning Supervisor(s) described	yes	There is a university mentor appointed for the professional modules.
	Learning Location described	yes	The theory part the student is doing at the university on Fridays and Saturdays. Otherwise the student is employed.
	Quality	yes	Qualitätssiegel der AQ-Austria, Diploma Supplement Label, Erasmus Charta 2014-2020.

England

Type of WBL: Apprenticeship		Yes or No	England
National language			English
Core Dimensions	Agreement	Yes	All apprenticeships in England are based on an 'employment contract' between apprentice and employer. There are no school or college based apprenticeships. Apprenticeships are paid jobs which incorporate on and off- the-job training. There must be an apprenticeship agreement between apprentice/employer stipulating the apprenticeship standard – trade, skill, occupation - to be used.
	Funding/Incentives	Yes	From 2017 apprenticeships will be mainly paid for by an apprenticeship or training levy on medium and large organisations. A 0.5% levy is being levied on all organisations that have a payroll bill of over £3 million. Organisations with a payroll below that receive 90% of the costs of apprenticeship training. Apprentices aged 16-18 are fully subsidised by the government; older age groups receive government subsidies for the off-the-job training element, based on a differential funding system related to subject delivery costs such as the use of workshops and laboratories.
	Payment/Credit	Yes	Wage: Apprentices are entitled to statutory minimum apprentice and wage rates and other employee rights. Learning Credit: Only a qualification as part of an apprenticeship programme attract learning credit. Not all apprenticeship standards identify a relevant qualification.
	Learning Workload described		Any apprenticeship must take a minimum of 12 months and maximum of 4 years to complete, and apprentices must be employed for a minimum of 30 hours per week and receive 20% of learning hours off-the-job. Apprenticeship Standards are set at English Qualification levels: 2 – 7. All on and off-the-job training should be related to the outcomes – skills, knowledge, behaviours - specified in the relevant apprenticeship standards document. At levels 4 and above they are called higher apprenticeships (4/5) and at level 6+ degree apprenticeships
	Learning Supervisor(s) Described		There are no agreed occupational or professional titles for workers involved in on-the-job training related to apprenticeships. They could be called trainers, instructors, learning supervisors or learning assessors. Off the job

			education/training providers' staff are usually called instructors, teachers or lecturers.
	Learning Location described		At least 80% of an apprenticeship takes place at an employer's premises; and at least 20% at an education/training providers premises. The apprenticeship could also include visits to other employer's premises and field trips.
	Quality	Yes	Internal quality assurance is the responsibility of the employer and education provider. External QA depends on the level of the standard/identified qualification and type of qualification. Standards documents are signed off by the Institute for Apprenticeships. Qualifications are the responsibility of awarding bodies and organisations (HEIs) and professional associations. Usual ECTS and ECVET rules apply. External QA will be organised by the Institute for Apprenticeships, OFSTED and the Quality Assurance Agency (QAA) if the programme includes an HE qualification such as an HNC/D, Foundation degree, Bachelors, Masters.

Type of WBL: Trainee/Internship		Yes or No	England
National language			English
Core Dimensions	Agreement	Yes and No	Traineeships and internships are not an integral part of England's HE and HVET sectors. Some universities/colleges may help their students to access trainee/internships with organisations – or as part of a scheme such as Erasmus + Traineeships - during or soon after they have completed their studies. If the traineeship is part of a scheme organised by a third party there will be a written agreement indicating roles and responsibilities. Other types of traineeship could involve no agreement, a verbal agreement or a written agreement. In English law if an intern is counted as a worker s/he will be entitled to the national minimum wage and other employment rights. The designation of 'worker' is a decision made by the organisation providing the internship not an education provider.
	Funding/Incentives	No	Funding is not available unless the internship is part of a scheme.

	Payment/Credit	No Yes if intern is a 'worker'	In English law if an intern is counted as a worker s/he will be entitled to the national minimum wage and other employment rights. There are no learning credits attached to a trainee/internship.
	Learning Workload described		It is the responsibility of the organisation hosting the trainee/internship to decide the trainee/intern's workload. Traineeship can also apply to a work experience placement of circa 6 months as a precursor to entering an apprenticeship programme. This type of traineeship includes mathematics and English tuition and is often aimed at younger people with a disrupted education.
	Learning Supervisor(s) Describe		It is the responsibility of the organisation hosting the trainee/internship to decide if the trainee/intern will be supervised in some form. If the intern is designated as a worker they will have an employment contract which must detail employer and employee duties and responsibilities. This may or may not include on-the-job training.
	Learning Location described		Trainee/internships take place on an employer's premises.
	Quality	Limited	There is employment advice and guidance around trainee/internships aimed mainly at employers. At VET level and some occupational/professional courses OfSTED (A government education inspection agency) externally assures. The Quality Assurance Agency (QAA) has a light touch assurance role for higher education, expectations and process described in their Quality Code – Chapter B10 Managing HE provision with others.

Type of WBL: Clinical/Work Placement		Yes or No	England
National language			English
Core Dimensions	Agreement	Yes	We can identify two sub-types of work placement in the English context – a work placement often offered as part of a technically-orientated HE or HVET programme; and a work or clinical placement as part of occupational or professional training. In the former, many technically-orientated programmes at degree level offer students a work placement related to their studies usually with an associated assessment. These placements can vary from 2 to 8 weeks, and are usually set up by the provider. They will include a written

			<p>agreement setting out expectations, roles and responsibilities.</p> <p>Clinical placements are developed by a provider and the relevant professional body – and practice is often assessed against a set of professional standards. The programme, including the clinical placement, is accredited by the professional body leading to professional registration.</p> <p>There are circa 160 registered professional, statutory and regulatory bodies (PSRB) in the UK, the majority involved in developing and accrediting clinical placements and programmes. In all cases a written agreement will be signed by the three parties – provider, employer/placement and student.</p>
	Funding/Incentives	Yes/Limited	<p>Work placements in technically-orientated degree level programmes are not funded. Provider teaching subsidies exist for programmes including clinical placements particularly in STEM subjects, and in some cases such as social work and teaching student bursaries are available which include costs towards travel to placements.</p> <p>Hard to recruit or shortage subject areas attract larger student bursaries.</p>
	Payment/Credit	Limited	<p>There is not usually a payment for attending a work or clinical placement. Extra monies can be available in bursaries if long home to placement journeys are involved.</p> <p>Academic learning credit is used to credit work and clinical placement learning.</p>
	Learning Workload described		<p>A range of learning models can be utilised for these placements:</p> <ul style="list-style-type: none"> • Curriculum-integrated learning: learning that describes the development of integrated lessons helping students make connections across subjects and disciplines. • Work-related learning: Planned activity that uses the context of work to develop knowledge, skills and behaviours useful in the workplace, including learning through the experience of work, learning about work and working practices, and learning the skills for work. • Work-based learning: provides students with real-life work experiences where they can

			<p>apply academic and technical skills and develop their employability skills?</p> <ul style="list-style-type: none"> • Work-integrated learning: forms of experiential learning where the site of learning either occurs in the workplace or where the learning is strongly associated with a workplace. <p>Problem-based learning and teaching techniques are also becoming popular, especially in health related professional training.</p>
	Learning Supervisor(s) Described		<p>There are no agreed occupational or professional titles for staff involved in supervising work/clinical placements. They could be called learning or placement supervisors, placement coordinators or clinical placement assessors. Education/training providers' staff are always called professors, teachers or lecturers.</p>
	Learning Location described		<p>Work/clinical placements take place in the workplace, which could include community settings.</p>
	Quality	Yes	<p>At VET level and some occupational/professional courses OfSTED (A government education inspection agency) externally assures. The Quality Assurance Agency (QAA) has a light touch assurance role for work/clinical placements, expectations and process described in their Quality Code – Chapter B10 Managing HE provision with others. The PSRBs also have significant input into the content and structure of clinical placements, including the power to withdraw accreditation if necessary.</p>

Type of WBL: Work Experience/Shadowing		Yes or No	England
National language			English
Core Dimensions	Agreement	Yes but not mandatory	<p>Work experience and work shadowing are arguably the least regulated of the WBL types in England. Work shadowing could for example be for just one day, although that would be unusual.</p> <p>Work experience and work shadowing (sometimes used interchangeably) as part of an HE or HVET course would normally amount to a minimum of 2 weeks.</p>

			It is very likely that a short written agreement would be in place signed by the employer, provider and student. There might be an assessment in place.
	Funding/Incentives	No	There is no payment for attending work experience/shadowing. Academic learning credit may be used to credit work experience learning; more likely any learning in the workplace would be used to inform provider-based assessments and consequent credit.
	Payment/Credit	No	Academic learning credit may be used to credit work experience learning; more likely, any learning in the workplace would be used to inform provider-based assessments and consequent credit.
	Learning Workload described		It is unlikely that significant usage would be made of work-based learning and teaching techniques and models. More likely, teachers would use any work based learning to enhance students understanding of academic and theoretical learning.
	Learning Supervisor(s) Described		Not applicable
	Learning Location described		Work experience/shadowing – on employer premises
	Quality	No	This type of experience is not clearly externally quality assured, although HE providers are likely to take cognizance of the QAA Quality Code and HVET providers both OfSTED and QAA guidance.

Germany

Type of WBL: Apprenticeship Dual Study Programmes at Cooperative Universities / Vocational Academy		Yes or No	Germany
National language DHBW, Berufsakademie			
Core Dimensions	Agreement	Yes	<ul style="list-style-type: none"> - The form of the contract depends on the education institutions' law and on the state law. - The student needs to have a formal contract (apprenticeship, internship, employment contract, etc.) to be given the possibility to study at the dual study programme of the cooperative university or vocational academy.
	Funding/Incentives	Yes	<ul style="list-style-type: none"> - The tuition fees may or may not be accepted by the training company.
	Payment/Credit	Yes	<ul style="list-style-type: none"> - Payment depends on state law and the company with which the student signs the agreement. Some pay during the work period as well as the period within the education institution. In other states or other education institutions the theoretical part at the education institution is not paid. It usually corresponds with the regular training wage applicable. In i.e. Bavaria to pay the practical periods is mandatory, the theoretical phases not. - The practical part in the company (wbl) is awarded with 30 ECTS points by the education institution mostly through reports about the practical period and a special task within it -
	Learning Workload described		<ul style="list-style-type: none"> - 210 ECTS overall: 180 ECTS for the theory part at the education institution and 30 ECTS for the practical part at the company. -
	Learning Supervisor(s) Described		<ul style="list-style-type: none"> - The specialist departments provide professionally qualified Care and sufficient time for the instructions Students' safety. - Students have a permanent supervisor/coach for the duration of your studies. In regular discussions, the student receives feedback professional and personal development. - Students are supervised by their Coach also in the last year of study and Find help in finding suitable tasks For the preparation of the Bachelor thesis.

			<ul style="list-style-type: none"> - In addition, the tutor/coach is Advising students on the selection of the first Post job after completion. This brings His knowledge of the operational environment and The personality and qualifications of the student, thereby supporting the professional Access to mutual benefit.
	Learning Location described		<ul style="list-style-type: none"> - Generally 3 years alternating 3 months at the cooperative university/vocational academy and 3 months at the company. - Possibility in most study programmes to study a semester abroad.
	Quality	Yes	<p>Internal quality assurance is the responsibility of the employer and education provider. External quality assurance by the respective accreditation agency of the education institution.</p> <ul style="list-style-type: none"> - In addition to accreditation, the obligation for internal evaluation by universities is now anchored in all state university laws. "The universities ensure by suitable measures that their work [...] corresponds to the recognized quality standards. An essential part of the internal quality assurance system is the regular performance of evaluations ... "(BerlHG, § 8a, Abs. 1). - The definition of a standard period of study for Bachelor courses of six to eight semesters, the imparting of scientific basics, methodological competence and vocational qualifications, the formal requirements of modularisation (the modules should be in terms of content and qualification objectives, forms of teaching, conditions for participation, usability, the duration and frequency of the module's offer as well as the requirements for awarding credits and the amount of work required) and the equipment of the courses with a credit point system so that at least 180 ECTS credits are earned with the Bachelor's degree. - Structural quality: compliance with the organizational requirements and standards are checked in the context of accreditation procedures. - Module evaluations on the quality of study and teaching, student surveys, faculty surveys, graduate survey, practice partners survey

Type of WBL: Apprenticeship Advanced Vocational Qualification		Yes or No	Germany
National language Meister, Techniker, Fachwirt			
Core Dimensions	Agreement		- ?
	Funding/Incentives	No	<ul style="list-style-type: none"> - Skilled workers with a completed initial education or a comparable vocational qualification according to the Vocational Training Act (BBiG) or the Handicrafts Regulations (HwO) can provide training to the master in accordance with the "Aufstiegsausbildungsförderungsgesetz" (so-called master-bafög). The prerequisite is that you take part in a training that is specifically prepared for a corresponding public-law examination. - The funding includes both part-time and full-time measures. The "Maßnahmebeitrag" is a contribution to the course and examination fees (maximum 10,226 euros) and to the cost of the test piece (maximum of 1534 euros) and is granted independently of income and property. In the case of full-time measures, a contribution to livelihoods can be granted, depending on income and assets. 30.5% of the funding is awarded as a grant, 69.5% as a loan. The grant to the test piece is granted exclusively as a loan. - Since 1 July 2009, an additional 25% of the loan may be converted to a subsidy on request, which must not be repaid. Further conversion is possible upon request if the subsidy establishes or takes over an establishment and at least employs a permanent social security employee or trainee. In this case, 33% of the loan can be issued for the course and examination fees. The minimum amount of loan (Mindestdarlehenssumme), however, is 33% of the original loan, even if several remission reasons coincide. <p>The Federal Ministry of Education and Research also offers a further education scholarship for particularly good companions.</p>
	Payment/Credit	Yes	<ul style="list-style-type: none"> - Student still works in his/her occupation while doing the further vocational training. - In Germany, the federal government and the Länder, as well as other partners, agreed in February 2012 to classify master letters acquired in craft, Chambers and Chambers of Commerce as part of the creation of the European Qualifications Framework (EQF) at level 6.
	Learning Workload described		<ul style="list-style-type: none"> - The master's trainings are basically divided into four parts: <ul style="list-style-type: none"> o practical part (i) o Subject-Theoretical part (II)

			<ul style="list-style-type: none"> ○ Business and legal part (III) ○ Vocational Education (IV)
	Learning Supervisor(s) Described		-
	Learning Location described		<ul style="list-style-type: none"> - Most of the master schools offer both full-time and partial-term courses. While full-time tuition takes place weekly in the block, part-time master students usually sit on Friday afternoon and Saturday at school. For part-time courses it is possible to work by the way. - There are well over 3,000 master schools in Germany. However, some courses are only offered in certain locations. - Many chambers of crafts or master schools have flexible course offers, so that someone who actually does a part-time course can slide in between one week and block lessons. At some master schools, master students can also complete individual course parts online. The respective Chamber of Crafts informs about the offers.
	Quality		

Type of WBL: Apprenticeship Dual Study Programme Practice-Oriented (Universities, UAPs)		Yes or No	Germany
National language Parxisintegrierendes Studium			Either required by law at education institution (mandatory) or voluntary
Core Dimensions	Agreement	Yes	<ul style="list-style-type: none"> - The university offers only such models as a dual course of study, in which the cooperation between trainee/student and training company is regulated in a written contract - In degree programmes with in-depth practice, the university and the respective Training Company act as partners, the essential cornerstones of the cooperation should be regulated in an agreement. A regular exchange of experiences takes place. - Cooperation between trainee/student/R and training establishment shall be defined in a written contract
	Funding/Incentives		<ul style="list-style-type: none"> - The tuition fees can be accepted by the training company.

	Payment/Credit	Yes	<ul style="list-style-type: none"> - The remuneration of the student is obligatory for the operational phases. A continuous remuneration for the external phases is also recommended. The amount of the remuneration should initially be at least 80% for bachelor programmes, and from the third semester 100% of the remuneration of the corresponding training occupations in the second year of apprenticeship. - There are ECTS credits awarded for the practical parts of the study programme.
	Learning Workload described		<ul style="list-style-type: none"> - The duration of the studies with deepened practice includes – like the regular university studies – 6-8 semesters (i.e. 3-4 years) in Bachelor's programmes. - The teaching contents of the dual study programmes correspond to those of the regular courses of study. - The practical phases, the university agrees with the respective training company. - The amount of practical experience in the sponsored period is at least 50% higher for all bachelor's programmes than in regular studies. The additional practical part is usually completed during the semester break.
	Learning Supervisor(s) Described		<ul style="list-style-type: none"> - If possible, the students receive a contact person or mentor at the university, who accompanies the students with questions in their studies, is in contact with the training company and has the company's training/practice plan is informed. - In the sense of a training partnership between the University and the training company, students should, if possible, receive a contact person or mentor in the training company, which will also provide the students with professional The contact person at the university is regularly in contact and knows the study and examination regulations.
	Learning Location described		The practical part of the study programme takes place at an employer's premises all others at the education institution. There is also the possibility to study a semester abroad.
	Quality	Yes	<ul style="list-style-type: none"> - In addition to accreditation, the obligation for internal evaluation by universities is now anchored in all state university laws. "The universities ensure by suitable measures that their work [...] corresponds to the recognized quality standards. An essential part of the internal quality assurance system is the

			<p>regular performance of evaluations ... "(BerlHG, § 8a, Abs. 1).</p> <ul style="list-style-type: none"> - The definition of a standard period of study for Bachelor courses of six to eight semesters, the imparting of scientific basics, methodological competence and vocational qualifications, the formal requirements of modularisation (the modules should be in terms of content and qualification objectives, forms of teaching, conditions for participation, usability, the duration and frequency of the module's offer as well as the requirements for awarding credits and the amount of work required) and the equipment of the courses with a credit point system so that at least 180 ECTS credits are earned with the Bachelor's degree. - Quality at universities is a multi-dimensional phenomenon and, as such, dependent on different concepts and goals - Structural quality: compliance with the organizational requirements and standards are checked in the context of accreditation procedures. - The university is working to ensure that the practice of the company is of high quality and that it is geared towards future work. - The company is to ensure practical training and practical work, which is professionally oriented towards later work. For the practical phase, which is assigned to the practical study semester in the Bachelor/Diploma course, the practical contents of the study and examination regulations have to be guaranteed. The students are to take at least one of their own projects (minimum 8 weeks) for all degrees and are also involved in larger projects, which are geared to the later work. In order to provide a broad practical training, it is recommended that students be used in several departments throughout the entire course of studies.
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Type of WBL: Apprenticeship Pre-Study Internship		Yes or No	Germany
National language Vorpraktikum			English
Core Dimensions	Agreement	Yes	- According to legislation (§ 26 Vocational Training Act), a written internship contract is not a requirement. However, such a contract

			<p>serves as an important legal safeguard for both the company and the intern.</p> <ul style="list-style-type: none"> - A written internship contract creates security for both parties. Thus, the intern is informed about his rights and duties during the internship. The company, on the other hand, can use a written contract to present the framework conditions of the internship and the requirements to the interns in a transparent manner and, if necessary, to prevent litigation.
	Funding/Incentives	No	
	Payment/Credit	Yes	<ul style="list-style-type: none"> - The minimum wage is 8.84 Euros per hour in Germany. - The gross salary of trainees is therefore ø 1,414.40 Euros per month. - Minimum wage applies only for voluntary internships over three months, but not for a mandatory internship. Details of the remuneration are then mandatory in the contract. - Law at school or university requires a compulsory internship e.g. as admission requirement. The employer is not obligated to pay. If the employer nevertheless pays a remuneration, the salary entitlement for sickness is omitted in the compulsory internship. - The average intern salary of non-minimum wage earners is ø 950.43 euros. - There are no credits awarded.
	Learning Workload described		<ul style="list-style-type: none"> - Depends on the length of the internship - The working time during an internship is based on the usual working hours of the employing company. However, this must be within the limits of the current working Time act. - Generally 40 hours a week full-time internship - According to § 3 Working Time Act, the working day of interns may not exceed 8 hours on average for half a year. The maximum working time of one working day must not exceed 10 hours. In accordance with § 10 of the Working Time Act, the legislator only allows exceptions to a limited extent, for example in the area of care, organisation of events or in the media sector.

	Learning Supervisor(s) Described		<ul style="list-style-type: none"> - There are no agreed occupational or professional titles for workers involved in on-the-job training related to internships. They could be called trainers, instructors, learning supervisors or learning assessors. - One contact person is generally from the human resource department, with whom the internship contract is signed. - Then there is a contact person in the department the student is working in. - How much a contact person is acting as a learning supervisor often depends on the individual motivation of this person and his/her time capacity.
	Learning Location described		100% of the pre-study internship takes place at an employer's premises.
	Quality	Yes	Internal quality assurance is the responsibility of the employer.
Type of WBL: Apprenticeship Dual Study Programmes (Universities, UAPs) Vocational Training and integrated study, work attendant learning programmes		Yes or No	Germany
National language Ausbildungsintegrierendes Studium			
Core Dimensions	Agreement	Yes	<ul style="list-style-type: none"> - The form of the contract depends on the education institutions' law and on the state law. - The student needs to have a formal contract (apprenticeship, internship, employment contract, etc.) to be given the possibility to study at the dual study programme of the university of UAPs - The cooperation between the trainee/student/R and the training establishment shall be defined in a written contract. - In joint studies, the University and the respective Training Company act as partners, the essential cornerstones of the cooperation should be regulated in an agreement. A regular exchange of experiences takes place.
	Funding/Incentives		<ul style="list-style-type: none"> - The tuition fees may or may not be accepted by the training company.
	Payment/Credit	Yes	<ul style="list-style-type: none"> - Payment depends on state law and the company with which the student signs the agreement. Some pay during the work period as well as the period within the education institution. In other states or other education institutions the theoretical part at the education institution is not paid. It usually corresponds with the regular

			<p>training wage applicable. In i.e. Bavaria to pay the practical periods is mandatory, the theoretical phases not, but recommended.</p> <ul style="list-style-type: none"> - The practical part in the company (wbl) is awarded with 30 ECTS points by the education institution mostly through reports about the practical period and a special task within it (Hochschule Dual Bayern – Cooperative Education in Bavaria) - The average intern salary of non-minimum wage earners is ø 950.43 euros.
	Learning Workload described		<ul style="list-style-type: none"> - 210 ECTS overall: 180 ECTS for the theory part at the education institution and 30 ECTS for the practical part at the company (overall 16 months at the company plus the bachelor thesis). - THE 180 ECTS follow the normal study programme of each student registered, cooperative students sit together with regular students, no differentiation is made during the theory part. - The practical scope of business training in the commercial sector should be at least 17 months, in the technical field at least 21 months BETRAGEN1 (Exceptions: Collaborative study models in which a suitable pre-selection requires good operational training/ Can also be ensured in a shorter period of time). - After successfully passing a vocational examination, further employment in the company is to take place during the semester-free period and in the practical term. - Work Attendant Learning Programmes is comparable to work related learning plus at UAPs work based learning.
	Learning Supervisor(s) Described		<ul style="list-style-type: none"> - The professor who is responsible for the study programme is also responsible for the cooperative students as for all other regular student. - If possible, the students receive a contact person or mentor at the university, who accompanies the students with questions in their studies, is in contact with the training company and has the company's training/practice plan is informed. - In the sense of a training partnership between the University and the training company, students should, if possible, receive a contact person or mentor in the training company, which will also provide the students with professional The contact person at the university is regularly in

			contact and knows the study and examination regulations.
	Learning Location described		<ul style="list-style-type: none"> - The theory part the student is doing, as all the other students (not in cooperative programmes), during the regular semester in the education institution. The preparation and review of lessons takes place at home or in the library. - The practical part at the company starts before the regular begin of the study programme and continues during semester break and practical semester. Overall flexible and can be discussed with the company. - The practice phases are agreed by the University with the respective training company. <p>The organization of the University of Cooperative studies is to be organised in such a way that stays abroad without extension of the study are possible.</p>
	Quality	Yes	<ul style="list-style-type: none"> - In addition to accreditation, the obligation for internal evaluation by universities is now anchored in all state university laws. "The universities ensure by suitable measures that their work [...] corresponds to the recognized quality standards. An essential part of the internal quality assurance system is the regular performance of evaluations ... "(BerlHG, § 8a, Abs. 1). - The definition of a standard period of study for Bachelor courses of six to eight semesters, the imparting of scientific basics, methodological competence and vocational qualifications, the formal requirements of modularisation (the modules should be in terms of content and qualification objectives, forms of teaching, conditions for participation, usability, the duration and frequency of the module's offer as well as the requirements for awarding credits and the amount of work required) and the equipment of the courses with a credit point system so that at least 180 ECTS credits are earned with the Bachelor's degree. - Quality at universities is a multi-dimensional phenomenon and, as such, dependent on different concepts and goals - Structural quality: compliance with the organizational requirements and standards are checked in the context of accreditation procedures.

			<ul style="list-style-type: none"> - The university offers only such models as a collaborative study, in which the cooperation between trainee/student and training company is regulated in a written contract. - It should also be ensured by the university that the practice is professionally oriented to the later professional activity and the level of a Auszubildendentätigkeit significantly exceeds. - The quality of occupational vocational training must be guaranteed in its entirety by the company.
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Malta

Type of Apprenticeship MCAST (Previously ESTS- Extended Skill Training Scheme and TAS-Technician Apprenticeship Scheme, run by ETC)		Yes or No	Malta
National language			
Core Dimensions	Agreement	Yes	Formal Contracts are established between the company and the apprentice - MCAST also signs the contract (replacing ETC in the previous scheme). MCAST has put a specific regulation in place that ensures apprentices are covered by insurance in case of injuries at the workplace. This is a measure to overcome a law gap that leaves the Apprentices uncovered.
	Funding/ Incentives	Yes	The Maltese Government supplies "Maintenance grants" to the Apprentices, as a way to support part of their salary.
	Payment/ Credits	Yes	A salary is paid to the Apprentices – a wage supported by the employer and a "Maintenance Grant" supplied by the government. Apprentices are also entitled to half the annual statutory bonus payable by the employer.
	Learning Workload described	Yes	Curriculum integrated, in the shape of systematic long-term training, alternating periods on the job with periods of learning in an education and training institution or training centre

Type of Apprenticeship MCAST (Previously ESTS- Extended Skill Training Scheme and TAS-Technician Apprenticeship Scheme, run by ETC)		Yes or No	Malta
National language			
			Workloads are defined by law. Duration (previously defined by law for TAS and ESTS) was of 2 to 4 years, in Full time or Part time. The study didn't found examples with a duration longer than 3 years and found that MCAST is substituting TAS and ESTS with Apprenticeships of 2 years duration.
	Learning Supervisor(s) described	Yes	At the time of the study, companies do not receive formal accreditation and do not have a formal obligation to assign a qualified staff member (tutor) to mentor/accompany apprentices. In practice, however, companies assign one person to follow apprentices, but the incapacity to nominate mentors is among the reasons why companies (especially sMes) withdrew from apprenticeships. MCAST is involved, as per the legal framework, in monitoring apprentices at the workplace; cooperation and exchange between the teachers in the veT colleges and the trainers at the workplace is not usual. However, due to the MCAST takeover of the the Apprenticeship schemes in Malta, they will take the leading role in cooperation with the companies, in a move welcomed by social partners, chambers and companies themselves as bringing the two learning venues closer together. To formalise it, MCAST will sign a memorandum of understanding with company. MCAST is also planning to introduce the obligation for companies to appoint in-company tutors. MCAST plans to define requirements for such tutors (such as level 4 qualification, work experience and journeyman qualification) and also to support companies through organisation of good training for company tutors. Monitoring apprentice progress in the company will be carried out by specially appointed teachers with experience in industry. Teachers' union representatives raise concerns over the 'academic freedom' of teachers as well as their responsibility for any injuries apprentices may sustain while learning on the job. The number of monitoring visits will increase from two to four times per year. Ideally two lecturers should visit and communicate with mentors. Monitoring responsibilities will be counted as contact hours. Companies welcome that monitoring will be carried out by teachers as they are seen as technical and pedagogical experts. One other positive effect is that teachers will improve contact with companies and in-company tutors, and communication on apprentice behaviour and progress at school. Teachers' links with the industry will be improved

Type of Apprenticeship MCAST (Previously ESTS- Extended Skill Training Scheme and TAS-Technician Apprenticeship Scheme, run by ETC)		Yes or No	Malta
National language			
			through their new monitoring responsibilities. The accredited learning outcomes, identified by MCAST and the training company for the on-the-job training, will be a basis for the logbook which will be kept and filled in online. The logbook will help MCAST and the company to monitor progress, and apprentices to do their self-assessment.
	Quality		<p>The Apprenticeship programme is made up both of an accredited and a non-accredited part, that could be described as a non-integrated/non-holistic approach to apprenticeships.</p> <p>The assessment responsibility is shared between Trade Testing Boards (TTBs), leading to unaccredited certification; and MCAST or other education institution, leading to accredited certification by the NCFHE.</p> <p>Apprentices receive a double certification: The journeyman's certificate (unaccredited) and the MCAST award (accredited by NCFHE).</p> <p>The accredited certification of qualification is linked to MQF – EQF Levels 3 and 4.</p>

Spain

Type of Apprenticeship Dual Degree		Yes or No	Spain
National language Título Dual			
Core Dimensions	Agreement	Yes	<p>A formal agreement between the student, the company and the HVET institution detailing calendar, salary/grant, roles and responsibilities of each part.</p> <p>The agreement also includes an insurance similar to the company workers. Unemployment insurance is not necessary.</p> <p>It could be with a work contract.</p>
	Funding/ Incentives	Yes	<p>Incentives offered by regional governments reducing companies' costs (500€/month/student during 3 months) at the end of the dual degree (Final year project).</p> <p>The government fixed an exemption in Social Security payments for curriculum-integrated apprenticeships.</p>
	Payment/ Credits	Yes	<p>Payment: Payment is mandatory during the work period. The minimum wage is defined by the university. This fee is paid, monthly, directly to the student during the work period</p> <p>Credits: If completed satisfactorily, attracts between 25% and 50% of the 240 ECTS degree programme.</p>
	Learning Workload described		<p>240 ECTS overall: The learning part at the company is defined between 25% and 50% of the 240ECTS degree programme (including the bachelor thesis). All the students follow the same programme.</p> <p>The model could be part time during the week or an intensive full time model over several months.</p>
	Learning Supervisor(s) Described/	Yes	<p>There is a coordinator supervising the whole dual degree programme.</p> <p>Student supervision is done by an academic and a company tutor.</p> <p>University tutor defines or validates the learning agreement, monitors the learning process and assesses the student.</p> <p>Company tutor defines the learning agreement, mentors the student during the academic year and collaborates with the academic tutor in the assessment. The assessment system is in line with the development of competences (technical and transversal competences).</p>
	Learning Location described		<p>The education institution, and for dual activities, at the respective company.</p>

	Quality	Yes	<p>The quality system of the dual degree is integrated in the HVET quality system (SGIC Sistema de Garantía de la Calidad de la formación universitaria).</p> <p>Short term: Faculty dual committee.</p> <p>Medium term: Companies +Faculty committee.</p> <p>Student and company surveys.</p> <p>The dual degree is approved by the Regional/National Quality Agency</p>
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Type of Apprenticeship Dual Programme		Yes or No	Spain
National language Itinerario DUAL			
Core Dimensions	Agreement	Yes	<p>A formal agreement between the student, the company and the HVET institution is signed. This agreement includes information detailing calendar, salary/grant, roles and responsibilities of each part.</p> <p>The agreement also includes an insurance similar to the company workers. Unemployment insurance is not necessary.</p> <p>The agreement could be a work contract, depending on the company, who takes the decision on signing an agreement or a work contract.</p>
	Funding/ Incentives	Yes	<p>At this moment there are incentives offered by the regional government. This incentive consists of 500€ per month during 3 months at the end of the Dual programme (Final year project).</p> <p>Apart from that, the government fixed an exemption in Social Security payments for curriculum integrated apprenticeships.</p>
	Payment/ Credits	Yes	<p>Payment: Payment is mandatory during the work period. The minimum wage is defined by the university.</p> <p>This fee is paid, monthly, directly to the student during the work period.</p> <p>Credits: As a result of taking part in the Dual Programme, the student receives (if completed satisfactorily) between 25% and 50% of the 240 ECTS of the degree programme.</p>
	Learning Workload described		<p>Considering a 240 ECTS programme: The learning part at the company is defined between 25% and 50% of the 240ECTS of the degree programme (including the bachelor thesis developed in the fourth year).</p> <p>Depending on the programme, the model could be part time during the week, 3+2 model (3 days in HVET institution, 2 days in a company) or an intensive full time model over several months.</p>

			At the university, the students follow the normal programme of each student registered. Students sit together with regular students and no differentiation is made during this part.
	Learning Supervisor(s) described	Yes	<p>Each student has a workplace mentor (a person who has a 4-year vision of student), a workplace assessor (the person who helps the student in daily tasks and this may change every year if the task to be done changes) and a tutor in the university.</p> <p>University tutor defines or validates the learning agreement, monitors the learning process and assesses the student. Company tutor defines the learning agreement, mentors the student during the academic year and collaborates with the academic tutor in the assessment.</p> <p>They have, at least, 3 meetings a year. The first meeting is at the beginning of the academic year to sign one-year agreement and establish the task the apprentice will do during this year. The second meeting is at the end of the first semester to evaluate his/her work in the company. Final meeting is held in the company, at the end, of the course to evaluate how his/her work has been done.</p> <p>The assessment system is in line with the development of competences (technical and transversal competences).</p>
	Learning location		The education institution, and for Dual activities, at the respective company.
	Quality	Yes	<p>The quality system of the dual programme is integrated in the HVET quality system (SGIC Sistema Interno de Garantía de la Calidad).</p> <p>Apart from that, there are different ways to do the follow up. In the short term, the faculty dual committee evaluates how the system is running (at the end of the academic year). In the medium term, companies and faculty committee evaluate the 4th year programme. Meanwhile, student and company surveys are completed at the end of the academic year.</p> <p>On the more official side, the dual programme is approved by the Regional/National Quality Agency</p>

Type of Apprenticeship VET Dual programme		Yes or No	Spain																																																																																																	
National language FP DUAL																																																																																																				
Core Dimensions	Agreement	Yes	A three-way agreement between the student, the company and the VET school detailing calendar, salary/grant, roles and responsibilities of each part. It could be with a work contract.																																																																																																	
	Funding/ Incentives	Yes	Work contract: 2000€ grant for the company given by regional governments and reduction in Social Security payments for curriculum integrated activities. Agreement: reduction in Social Security payments for curriculum integrated activities.																																																																																																	
	Payment/ Credits	Yes	Payment: Payment is mandatory during the work period. The minimum wage is defined by the collective agreement of the company or the minimum inter-professional salary. Credits: A student involved in the dual system, during the 2 nd year receive 125h of learning hours off-the-job and the recognition of 360h of the dual programme.																																																																																																	
	Learning Workload described		School ≈1515h Company ≈1250h The model could be part time during the week or an intensive full time model over several months. <table border="1"><thead><tr><th rowspan="2"></th><th colspan="12">1st year</th><th colspan="12">2nd year</th></tr><tr><th>September</th><th>October</th><th>November</th><th>December</th><th>January</th><th>February</th><th>March</th><th>April</th><th>May</th><th>June</th><th>July</th><th>August</th><th>September</th><th>October</th><th>November</th><th>December</th><th>January</th><th>February</th><th>March</th><th>April</th><th>May</th><th>June</th></tr></thead><tbody><tr><td>School</td><td colspan="12">■</td><td colspan="12">■</td></tr><tr><td>Company</td><td colspan="12"></td><td colspan="12">■</td></tr></tbody></table> During the 2 nd year, dual students sit together with regular students. DUAL students have 1h free every day in comparison to regular students to have the possibility to go to the company. Maximum 8h per day.		1 st year												2 nd year												September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	School	■												■												Company													■											
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School	■												■																																																																																							
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Learning Supervisor(s) described	Yes	Each student has a workplace mentor (who helps the student in daily tasks) and a tutor in the school. The school teacher is responsible for the study programme and cooperates with the mentor of the company to define the programme. The tutor monitors the learning process and assesses the student.																																																																																																		
Learning location		The education institution, and for Dual activities, at the respective company.																																																																																																		
Quality	Yes	The quality system of the dual programme is integrated in the HVET quality system (SGIC Sistema Interno de Garantía de la Calidad). The DUAL agreement is approved by the regional government.																																																																																																		

Type of Apprenticeship Practicum		Yes or No	Spain
National language Practicum			
Core Dimensions	Agreement	Yes	Educational Cooperation Agreement: a two-way formal agreement between the university and the school or institution making clear the collaboration between both parts, also defining the roles and responsibilities of each part and insurance.
	Funding/ Incentives	Yes	<p>Incentives offered by regional governments reducing companies' costs (500€/month/student during 3 months) at the end of the programme (Final year project).</p> <p>The government fixed an exemption in Social Security payments for curriculum-integrated activities.</p>
	Payment/ Credits	No/Yes	<p>Payment: Payment is not compulsory.</p> <p>Credits: If completed satisfactorily, attracts a maximum of 25% of the 240 ECTS degree programme.</p>
	Learning Workload described		<p>The apprentice earns a maximum of 25% in the school or institution of the 240 ECTS distributed in a 4 year degree. In this strategy, students develop both academic and technical skills in real work contexts, applying what they have learned in the academic frame to real situations, so we could define this as work based learning.</p> <p>The model is an intensive full time model over several months. The presence in the institution could be as follows:</p> <ul style="list-style-type: none"> • 1st year: no internship • 2nd year: internship from November to December. 2 months for 8 hours every day. 8 ECTS. • 3rd year: internship from January to February. 2 months for 8 hours every day. 6 ECTS. • 4th year: internship from November to December and March to June 8 hours every day. 30 ECTS.
	Learning Supervisor(s) described	Yes	<p>There is a coordinator supervising the whole practicum programme.</p> <p>Student supervision is done by an academic and a school or institution tutor.</p> <p>University tutor defines and monitors the learning process and assesses the student.</p> <p>School or institution tutor mentors the student during the internship and collaborates with the academic tutor in the assessment.</p>

			The assessment system is in line with the development of competences (technical and transversal competences).
	Leraning location		The university and the respective institution
	Quality	Yes	The quality system of the practicum programme is integrated in the HVET quality system (SGIC Sistema de Garantía de la Calidad de la formación universitaria). The degree is approved by the Regional/National Quality Agency

Slovenia

Type of WBL: Practical Education (PE) in Higher Vocational Colleges		Yes or No	Slovenia
Praktično izobraževanje (PRI) v višjih strokovnih šolah			English
Core Dimensions	Agreement	Yes	<ul style="list-style-type: none"> - All apprenticeships on level 5 EQF are based on a three partite agreement between apprentice, provider and employer. - The students search for a suitable company and placement after enrolling into the first year of studies. The provider supports and guides them during this process. Once the company and student agree on the placement the provider confirms if the placement meets all the requirements. Once confirmed by the provider the agreement is signed for 1 or both years of study.
	Funding	No	<ul style="list-style-type: none"> - The company funds the apprenticeship process. - There is a national public EU funded incentive for companies to take students for placements. The requirement is that the apprentice successfully completes his final year of studies. The amount varies between 750,00 € and 1.250,00 € for the entire apprenticeship period within the 2-year studies. The companies are provided with this incentive retrospectively and we cannot be certain that they will be offered every year. As there were some years in the last decade that the incentives were promised by the ministry but the not provided.
	Incentives	Yes	
	Payment/Credit	No	<ul style="list-style-type: none"> - The company may or may not pay the student. The payment requirements are set in the collective contracts and may differ by sector/trade union. According to our survey from 2017 65% of students are paid for their apprenticeship. According to demand of the labour market there might be extreme differences depending on the region and sector. Within the same institution students of one study programme may receive no payment while the students of another programme in very high demand can be fully paid and even negotiate the payment amount which can reach much more than 1.000,00 € per month.
	Learning Workload described		<ul style="list-style-type: none"> - For the overall study programme the students are awarded with 120 ECTS. The 800 hours of practical education is awarded with 26 ECTS. The diploma thesis which is based on the practical education is awarded with additional 5 ECTS.

			<ul style="list-style-type: none"> - The apprentice usually spends 400 hours per year of study at the company. The student is additionally required to provide different seminary, research and project work based on the practical education within different subjects of the curriculum. - Each study year the apprenticeship period is assessed by the provider during an oral examination during which the student presents the knowledge, skills, competences, learning outcomes achieved and tasks or projects worked on during his/her practical education. - The learning outcomes with a detailed curriculum of practical education needs to be followed. - The companies also have to provide the students a specially designed training and exam on <i>Care and safety on the work placement</i>.
	Learning Supervisor(s) Described		<ul style="list-style-type: none"> - In the company a mentor/trainer is assigned to the student during the entire period of the placement. The mentor/trainer has to fulfil legislative requirements. His/her duties is to introduce, support, guide and assess the student to/on the various work places within the company and in accordance with the curriculum agreed. - In the providers institution a placement organiser/supervisor is assigned to the student and mentor/trainer as support, guidance and final assessor of the practical education. He/she is also plays a key supporting and guiding role during the selection of the company and placement as well as proposing and guiding students to their diploma thesis, which is based on the practical education.
	Learning Location described		<ul style="list-style-type: none"> - 40% (400 hours each study year) of the curriculum is in company practical education. - The company needs to fulfil all the legislative requirements for provision of practical education. - The practical education can also be provided abroad if the legislative requirements are met. - In most cases the practical education is provided as a one consecutive period of 10 weeks per study year within the companies. Some study programmes (e.g. agriculture) divide the 10 weeks within the study year according to seasonal requirements to fulfil the curriculum requirements.
	Quality	Yes	<ul style="list-style-type: none"> - Internal quality assurance is the responsibility of the company and education provider.

			<ul style="list-style-type: none"> - External quality assurance is the responsibility of the national accreditation agency for higher education.
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Annex 3 Survey

The consortium tested the typology, by conducting a review of 50 HVET institutions providing apprenticeships across Europe. The survey will attempt to identify:

- The prevalence of each type of work-based learning
- Any kinds of apprenticeships not captured by the literature review
- Any variations in the characteristics of each type of apprenticeships not captured by

The following survey was developed:

Type of Apprenticeship		Yes or No	<ul style="list-style-type: none"> • Description informed by explanatory notes • What type of Apprenticeship do you offer? + Short description
National language			
<ul style="list-style-type: none"> • Core • Dimensions 	<ul style="list-style-type: none"> • Agreement 		<ul style="list-style-type: none"> • Does an agreement exist between the organisation and the education provider? Yes; no • Does an agreement exist between the organisation and the student? Yes; no • What form of agreement is used? Verbal, or written
	<ul style="list-style-type: none"> • Funding/Incentives 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • How is this type of WBL funded? <ul style="list-style-type: none"> a. State (central/regional) subsidies via the education provider b. State subsidies via the learner c. State subsidies via the employer d. Some form of learning/training levy on employers e. By employers • Wages only • Learning/Training costs only • Wages and Learning/Training costs • Other – please specify <ul style="list-style-type: none"> f. By learner/student fees <p>[Please tick all that are applicable]</p>

			<ul style="list-style-type: none"> ○ If yes to (d) briefly summarise how that levy system works. • If the subsidy is for the learner is the support in the form of a <ul style="list-style-type: none"> ○ Repayable Loan ○ Grant ○ Loan and grant ○ Other • Does funding for this type of WBL include some form of incentive for employers or providers or students to access. If yes – please briefly explain how this works? •
	• Payment	•	<ul style="list-style-type: none"> • Is there a wage or allowance for this type of wbl? If yes, how much: <ul style="list-style-type: none"> ○ under 5 Euro per hour ○ 5-7 Euro ph ○ over 7 euro ph • How are the wbl courses programmes schemes accredited in your organisation? Programme accredited, or system accredited, both system and programme accredited • What is the status of the wbl learner? <ul style="list-style-type: none"> ○ Student; ○ employee, ○ combined student/employee ○ other – please specify here •
	• Learning Workload described	• • •	<ul style="list-style-type: none"> • Does this WBL type include the achievement of some form of accredited qualification? Yes/No • Does this WBL type use stated learning outcomes of

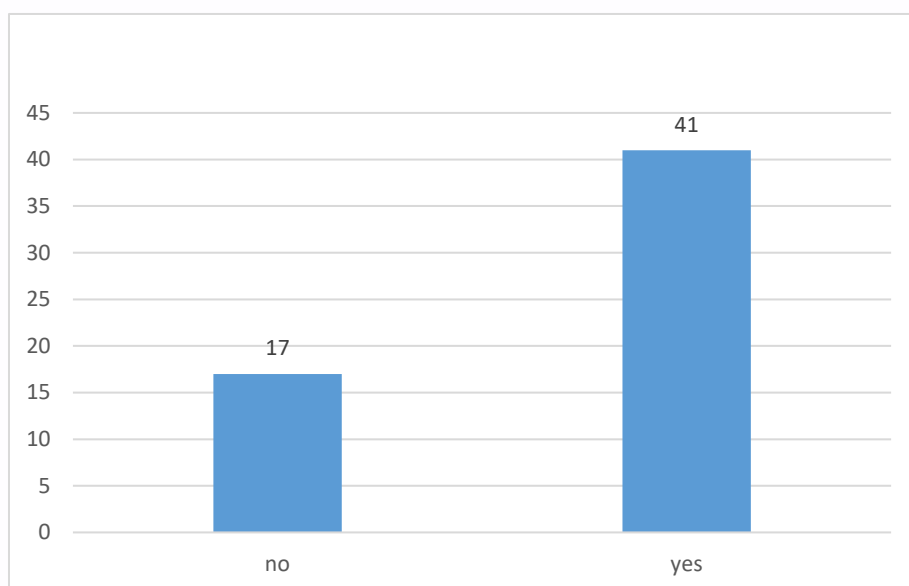
			<p>skills/knowledge/behaviours that the learner/student/apprentice needs to demonstrate or achieve as part of an assessment? Yes/No</p> <ul style="list-style-type: none"> • What is the typical duration of this WBL type? <ul style="list-style-type: none"> ○ Less than one month ○ One month to six months ○ Six months to 1 year ○ Over 1 year <p>Is this WBL type full or part time in the workplace?</p> <ul style="list-style-type: none"> ○ Part time – less than 15 hours per week ○ Full time – 15 hours + per week <p>What technical education learning and teaching methods are utilised in this WBL type?</p> <ul style="list-style-type: none"> ○ Independent study, ○ Practice in the workplace, ○ Demonstration in the workplace, ○ Experiencing new workplace processes, ○ Other – please specify •
	<ul style="list-style-type: none"> • Learning Supervisor(s) described 	<ul style="list-style-type: none"> • • • 	<ul style="list-style-type: none"> • • What are the titles of wbl supervisors at this wbl type? <ul style="list-style-type: none"> ○ trainer; ○ teacher of occupation-related practice, ○ apprenticeship instructor/teacher, technical tutor, ○ work-based teacher/assessor, ○ other – please specify • Is there a legal/professional requirement to be a learning supervisor? Yes no

			<ul style="list-style-type: none"> • What types of qualifications do these supervisors possess? <ul style="list-style-type: none"> ○ professional/ technical degree; ○ professional /technical qualification, ○ teaching qualification •
	<ul style="list-style-type: none"> • Learning Location described • 	<ul style="list-style-type: none"> • • • 	<ul style="list-style-type: none"> • What location are used for this type of wbl type? <ul style="list-style-type: none"> ○ Wbl provider, ○ workplace, ○ simulation (college restaurant, etc.) <p>Are there opportunities to study in other countries? Yes no?</p> <ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Quality 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • In this WBL type who is responsible for internal quality assurance (QA)? • Provider • Employer • Student • Provider only • Employer only • Provider/Employer • Provider/Student/Employer • Briefly summarise the key characteristics of the internal QA system/processes for this WBL type – such as some form of self-evaluation/assessment process validated by the governing body of the institution. • Briefly summarise the key characteristics of the external QA system for this WBL type. This will need to include • Name of responsible external QA agency

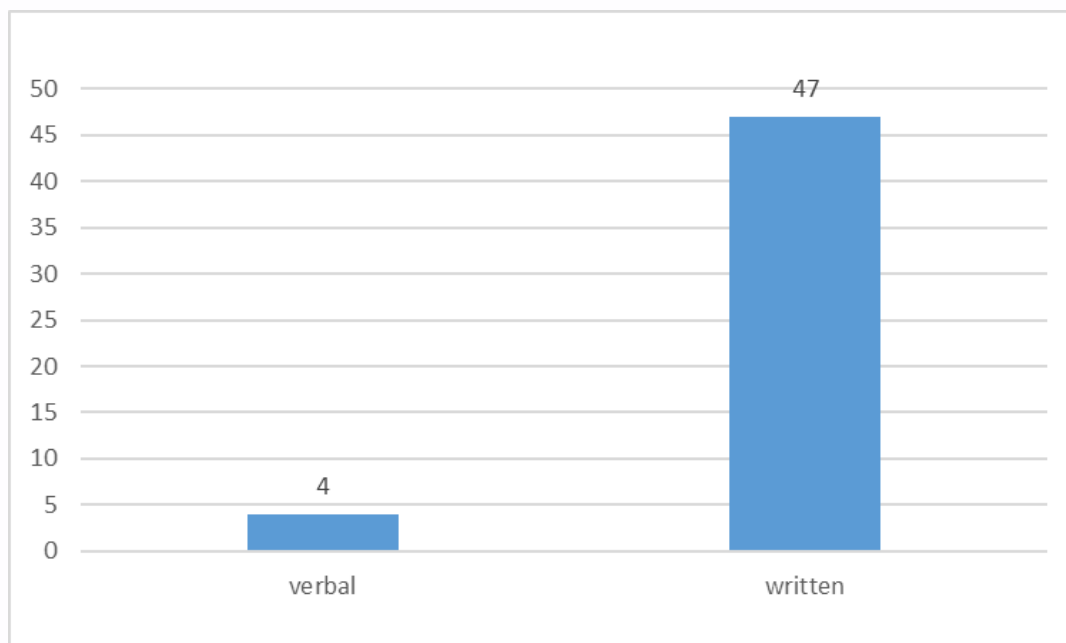
			<ul style="list-style-type: none"> • Does the process cover both provider-based and WBL? Or are there separate processes? • How the external assessment process relates to the internal process • Does the external process include a site visit? • Possible outcomes and sanctions? • Appeals process • Other significant characteristics
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Annex 4 Results of Survey

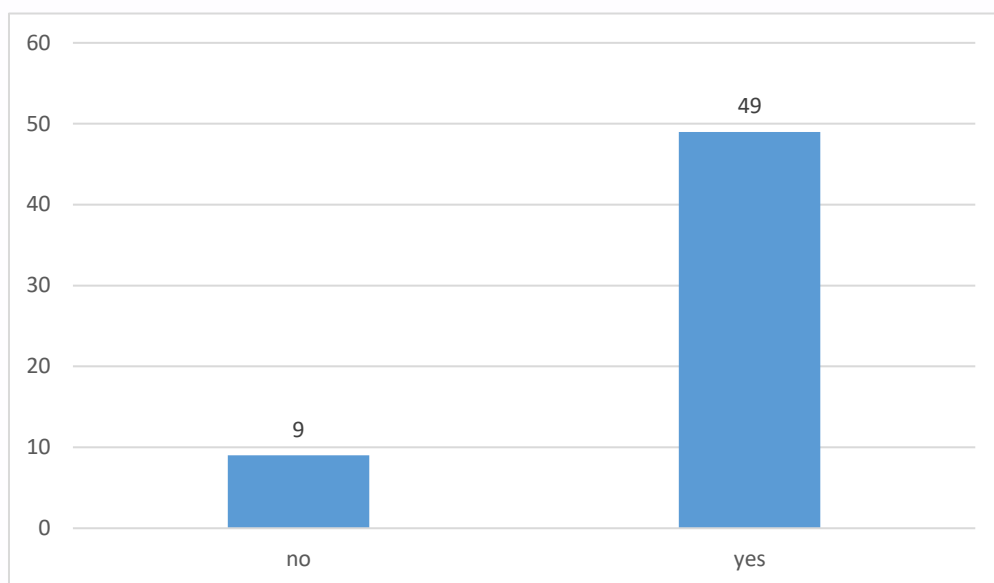
Does an agreement exist between the employer/Organisation and the education provider?



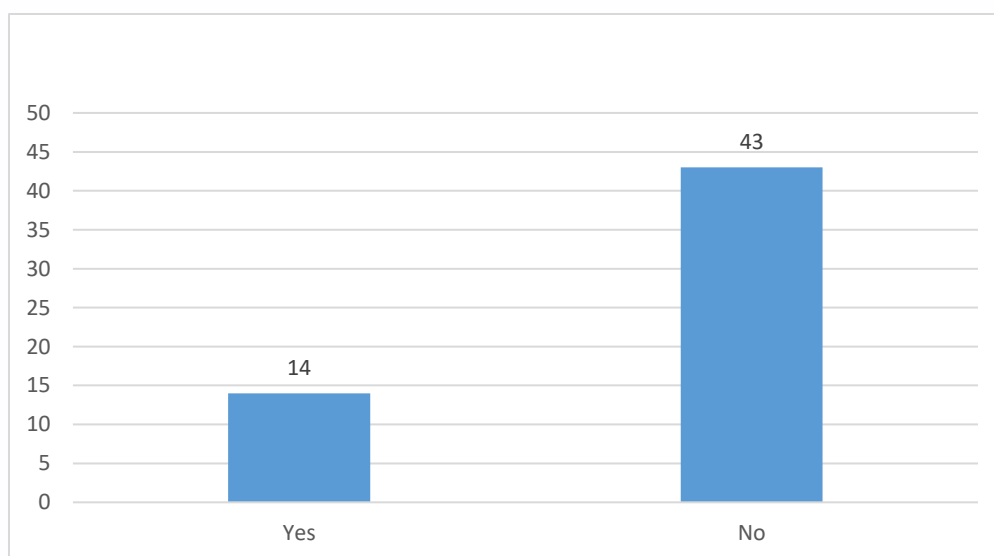
If yes, what form of agreement is used between the employer/organisation and the education provider?



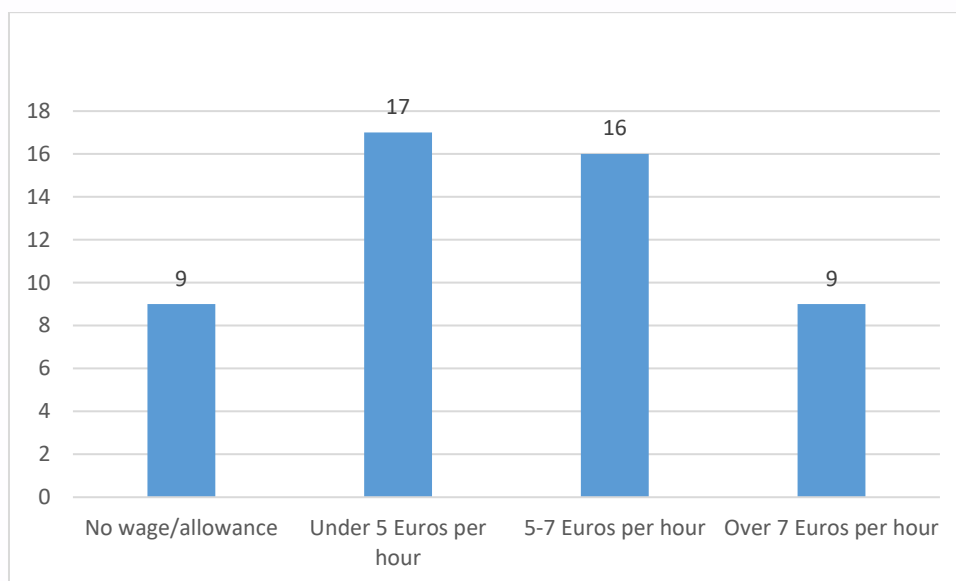
Does an agreement exist between the organisation and the student?



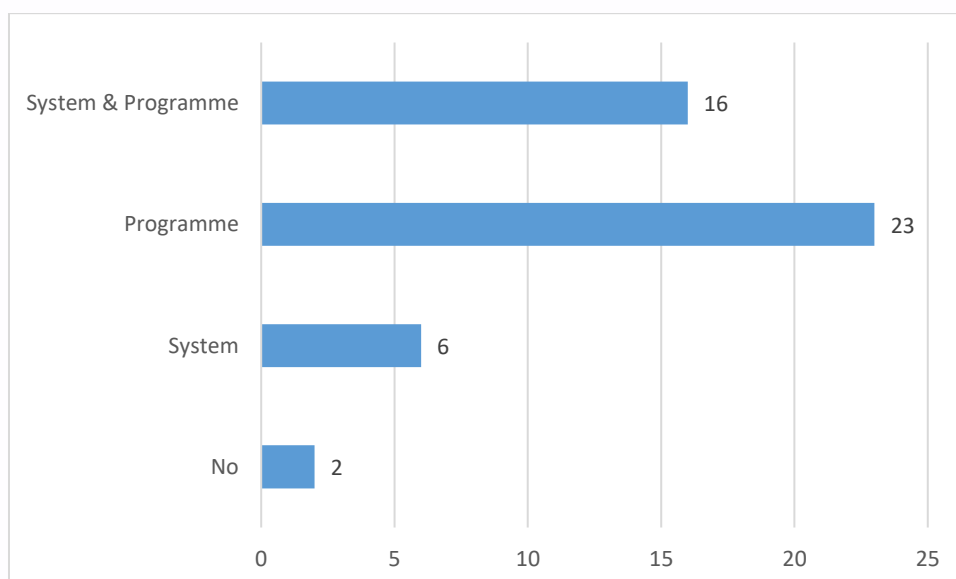
Does funding for this type of wbl include some form of incentive for employers or providers or students to access?



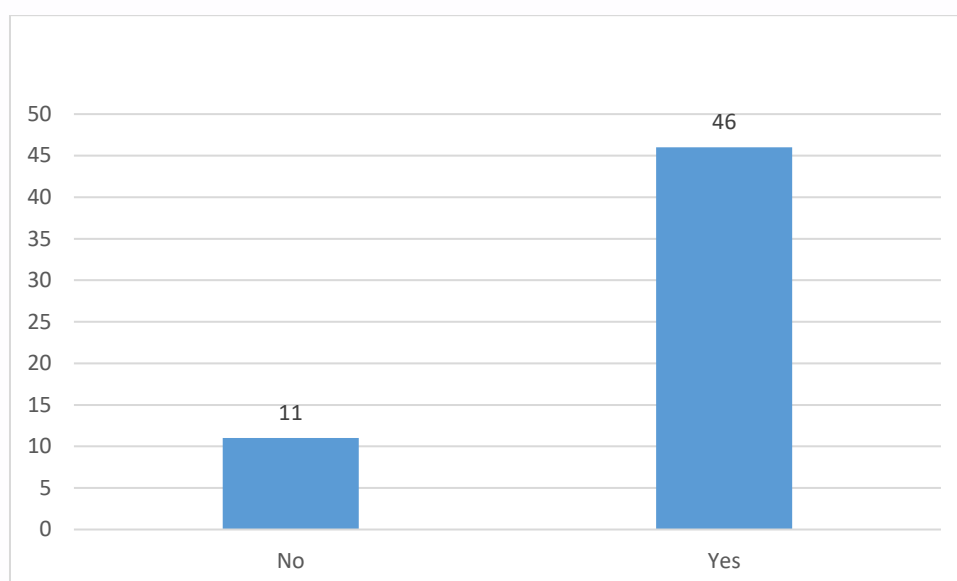
Is there a wage or allowance for this type of wbl? Please indicate how much:



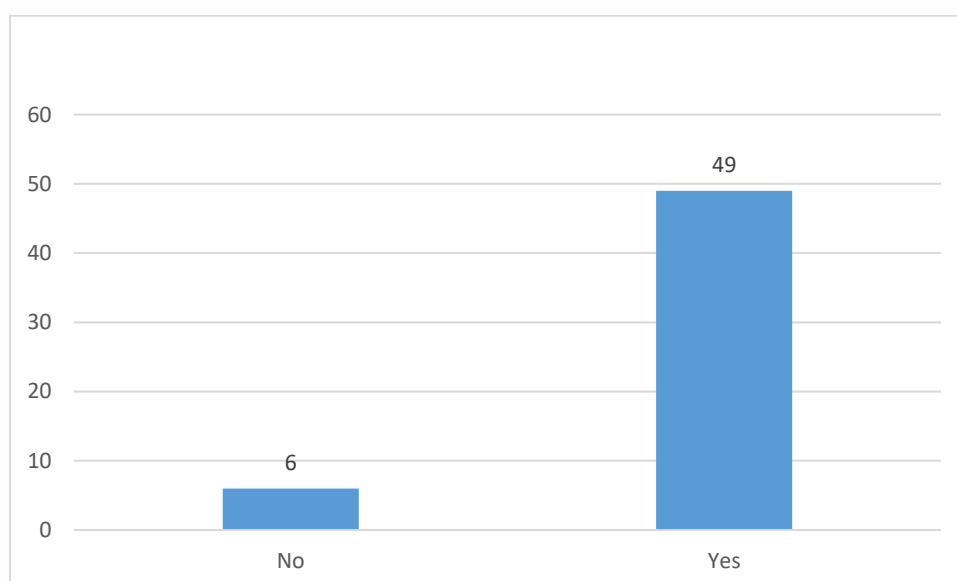
How are the wbl course programme schemes accredited in your organisation?



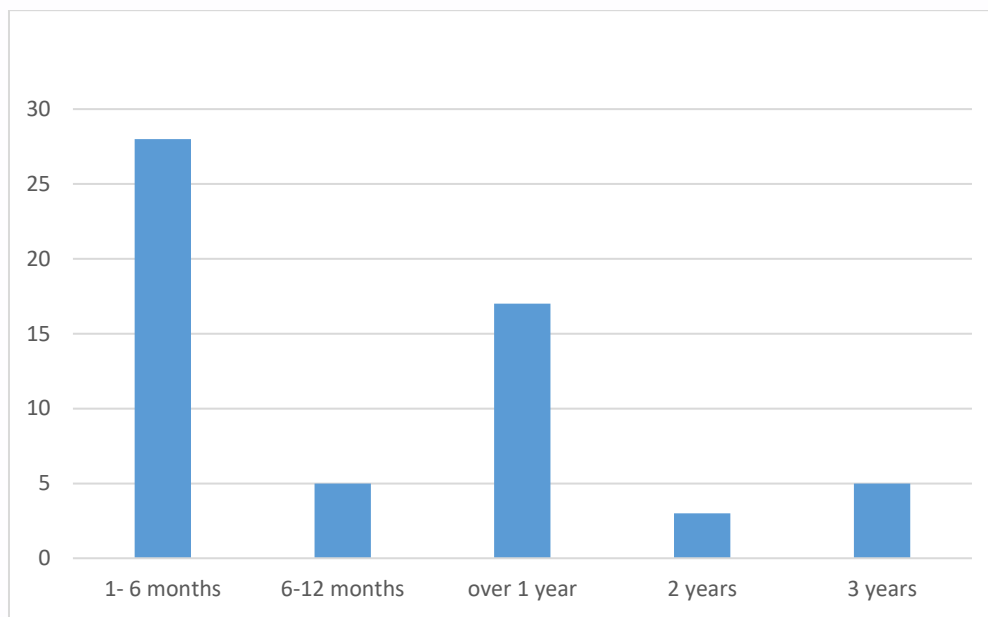
Does this wbl type include the achievement of some form of accredited qualification?



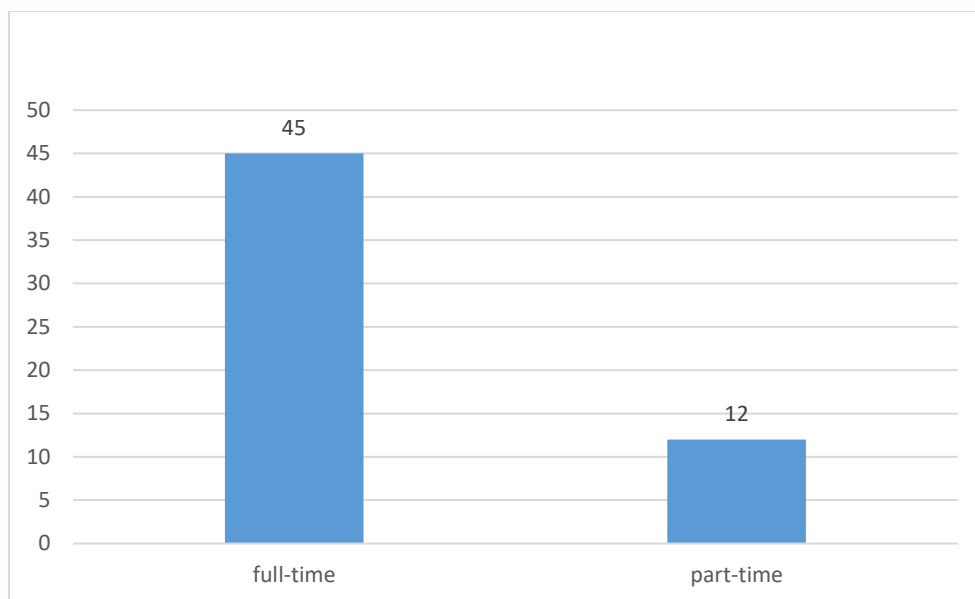
Does this WBL type use stated learning outcomes of skills/knowledge/behaviours that the learner/ student/ apprentice needs to demonstrate or achieve as part of an assessment?



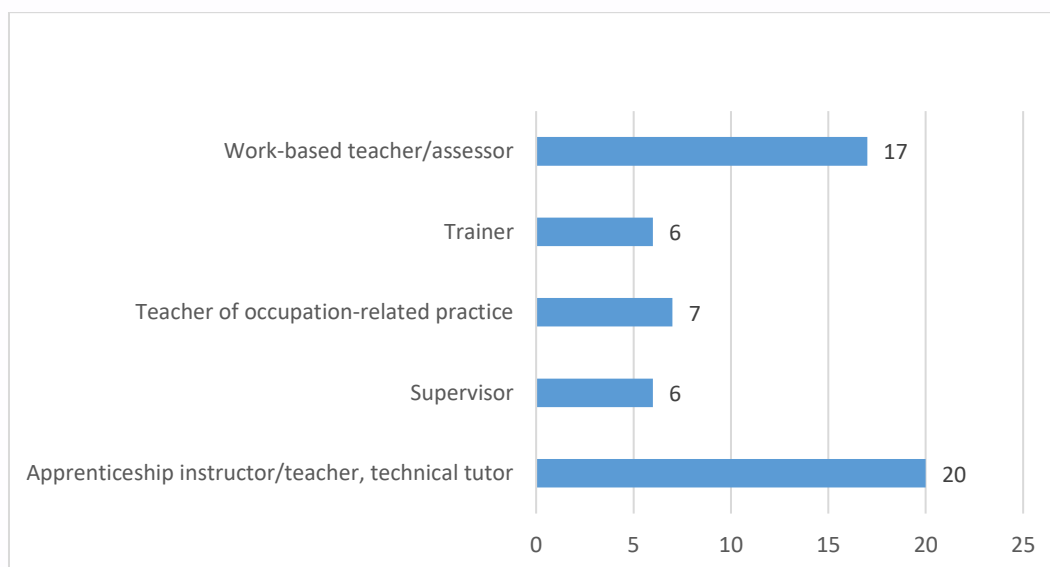
What is the typical duration of this wbl type?



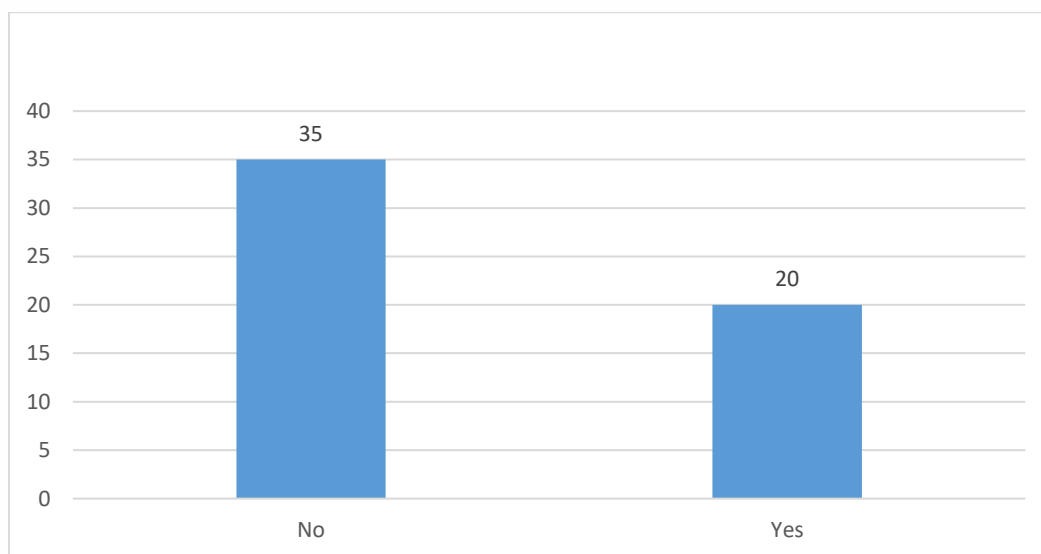
Is this wbl type full- or part-time in the workplace?



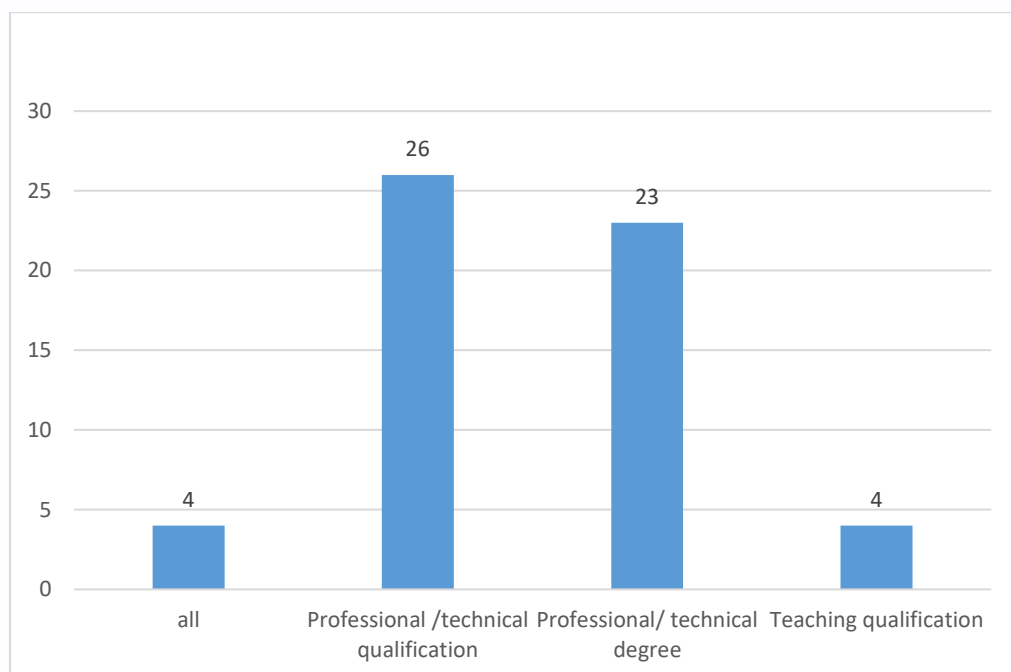
Generally, what is the title of wbl supervisors at this wbl type?



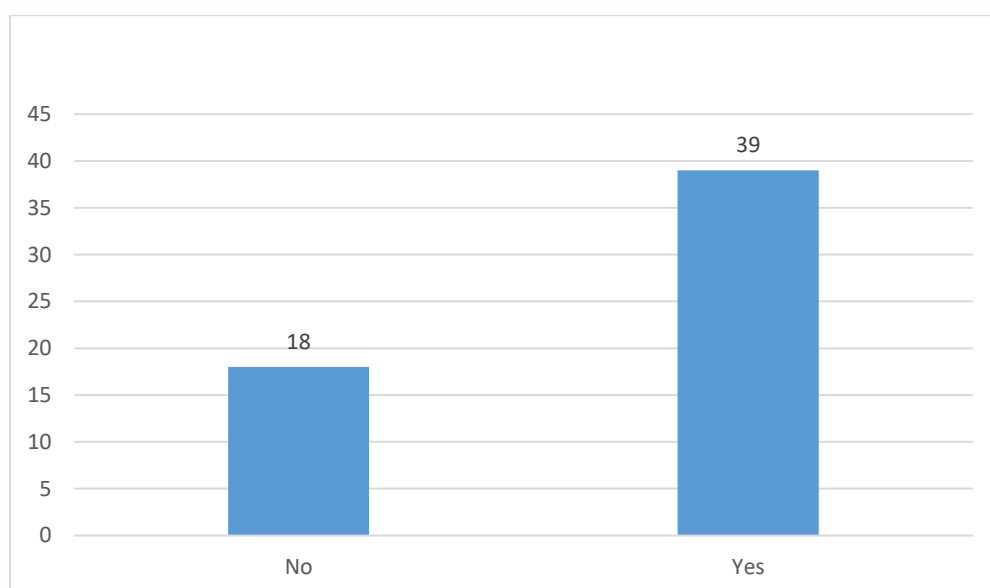
Is there a legal/professional requirement to be a learning supervisor?



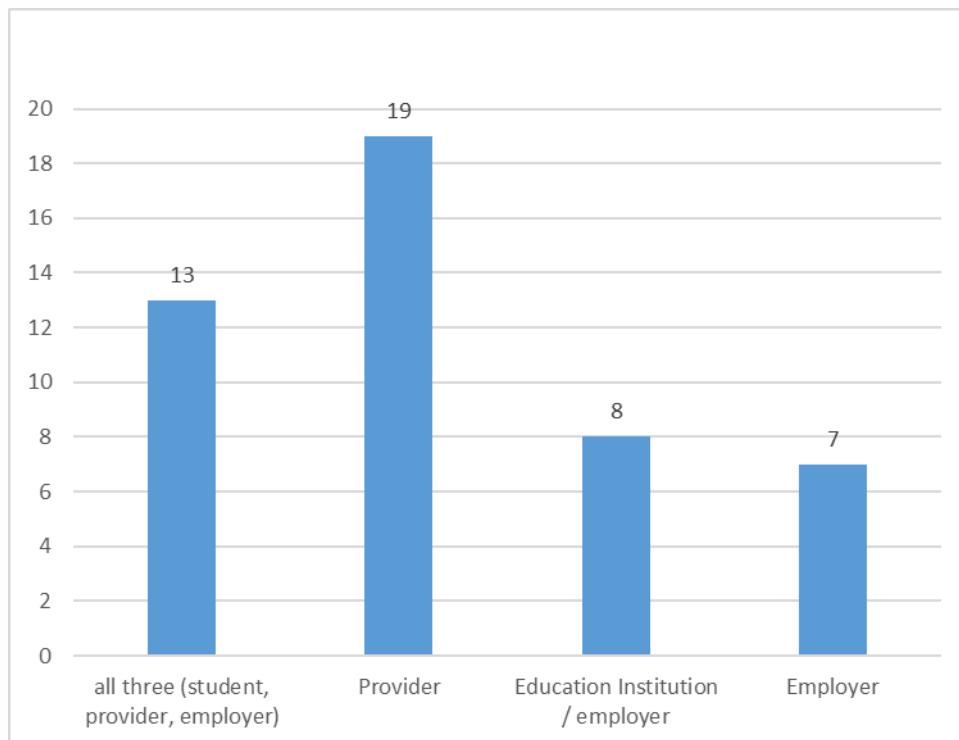
What type of qualification do these supervisors typically possess?



Are there opportunities to study in other countries?



In this wbl type who is responsible for internal quality assurance (QA)?



Briefly summarise the key characteristics of the internal QA system/processes for this WBL type – such as some form of self-evaluation/assessment process validated by the governing body of the institution:

- Wbl handbook & assessment process
- Self-evaluation /assessment achievement rates
- Follows awarding bodies standards and frameworks
- Feeds into regular quality review and annual review
- Regular feedback talks
- Evaluation
- Assessment sheet for students/tutors, etc.
- Internship reports, internship diary, quality audits
- designed with quality indicators and evidences related to the recognition of the Dual programme
- Field visits
- ...

Who is the responsible external QA agency for this type of wbl?

- Validating and awarding organisation/body
- external QA assessment provided by the regional Educational Government department.
- Office for students/QAA
- Internal report
- Evaluation / assessment sheets
- Visits
- An Evaluation Committee visit the institution and assesses all matters related to accreditation, authorisation, follow-up, accreditation-renewal and other processes related with the assessment of study programmes.

References

ACVT – Advisory Committee on Vocational Training (2016). Opinion of the Advisory Committee on vocational training (ACVT) addressed to the European Commission on A Shared Vision for Quality and Effective Apprenticeships and Work-based Learning. December 2016. Available at: <https://www.ceep.eu/wp-content/uploads/2016/12/final-version-ACVT-opinion.pdf> .

Cedefop (2015). High-performance apprenticeships & work-based learning: 20 guiding principles. Available at: <http://www.cedefop.europa.eu/hr/toolkits/vet-toolkit-tackling-early-leaving/resources/high-performanceapprenticeships-work-based>

EC - European Commission (2013). Council Recommendation on a Quality Framework for Traineeships (QFT). December 2013. Available at: <http://ec.europa.eu/social/main.jsp?catId=1045> .

EC (2013). Council Recommendation on a Quality Framework for Traineeships (QFT). December 2013. Available at: <http://ec.europa.eu/social/main.jsp?catId=1045>.

EP – European Parliament (2009). Recommendations of the European Parliament and of the Council of 18 June 2009 on the establishment of a European Quality Assurance Reference Framework for Vocational Education and Training. June 2009. Available at: <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:155:0001:0010:EN:PDF>

EQAVET - European Quality Assurance Reference Framework. Available at: <http://www.eqavet.eu/gns/policy-context/european-quality-assurance-reference-framework.aspx>.

ESG (2015) Standards and guidelines for quality assurance in the European Higher Education Area. May 2015. Available at: <http://www.enqa.eu/index.php/home/esg/>.

ETF – European Training Foundation (2018). Work-based learning: a handbook for policy makers and social partners in ETF partner countries, by Richard Sweet, 2nd ed. Available at: https://www.etf.europa.eu/sites/default/files/2018-09/Work-based%20learning_Handbook.pdf

ETU & Union Learn: European Trade Union & Union Learn (2014). Towards a European quality framework for apprenticeships and work-based learning. Best practices and trade union contributions. Available at: https://www.etuc.org/sites/default/files/publication/files/ces-brochure_unionlearn-uk-rouge.pdf

ETUC - European Trade Union Confederation (2016) A European quality framework for apprenticeships: a European Trade Union proposal. Available at: https://www.etuc.org/sites/www.etuc.org/files/publication/files/a_european_quality_framework_for_apprenticeships_en.final_corr_.pdf.

European Parliament (2017) Skills Development and Employment: Apprenticeships, Internships, and Volunteering. European Parliament. April 2017. Available at:

[http://www.europarl.europa.eu/RegData/etudes/STUD/2017/602056/IPOL_STU\(2017\)602056_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2017/602056/IPOL_STU(2017)602056_EN.pdf).

About the ApprenticeshipQ Project and this publication

The lack of work experience and the skills mismatch between labour demand and supply are two of the greatest challenges for young people to transition from the world of education to the world of work and a promising way to face those challenges are apprenticeships. To support them, the ApprenticeshipQ Project aims to develop management tools that will help higher education institutions and employers to offer and direct high-quality apprenticeships and that can serve as a basis for the development of formal international standards and guidelines.



Co-funded by the
Erasmus+ Programme
of the European Union