Working paper series No 3 / September 2021

short papers

APPRENTICESHIP GOVERNANCE AND IN-COMPANY TRAINING: WHERE LABOUR MARKET AND EDUCATION MEET Cedefop community of apprenticeship experts:

🖸 cedefop

The European Centre for the Development of Vocational Training (Cedefop) is the European Union's reference centre for vocational education and training, skills and qualifications. We provide information, research, analyses and evidence on vocational education and training, skills and qualifications for policy-making in the EU Member States.

Cedefop was originally established in 1975 by Council Regulation (EEC) No 337/75. This decision was repealed in 2019 by Regulation (EU) 2019/128 establishing Cedefop as a Union Agency with a renewed mandate.

Europe 123, Thessaloniki (Pylea), GREECE Postal: Cedefop service post, 570 01 Thermi, GREECE Tel. +30 2310490111, Fax +30 2310490020 Email: info@cedefop.europa.eu www.cedefop.europa.eu

Jürgen Siebel, *Executive Director* Barbara Dorn, *Chair of the Management Board*

Please cite this publication as: Cedefop et al. (2021). Apprenticeship governance and in-company training: where labour market and education meet: Cedefop community of apprenticeship experts: short papers. Luxembourg: Publications Office of the European Union. Cedefop working paper; No 3. http://data.europa.eu/doi/10.2801/065622

Luxembourg: Publications Office of the European Union, 2021

© Cedefop, 2021. Creative Commons Attribution 4.0 International (CC BY 4.0).

This working paper should not be reported as representing the views of the European Centre for the Development of Vocational Training (Cedefop). The views expressed are those of the authors and do not necessarily reflect those of Cedefop.

PDF ISBN 978-92-896-3261-4 ISSN 1831-2403 doi:10.2801/065622 TI-BA-21-001-EN-N

Foreword

Apprenticeships have been constantly a policy priority in VET at the European level, from the Bruges communiqué (2010) to the Osnabrück declaration (2020). The work of EU Member States on expanding existing apprenticeship schemes or introducing new ones, also supported by the European Alliance for Apprenticeships (EAfA), has been followed by additional attention to their quality and effectiveness. The European framework for quality and effective apprenticeships (EFQEA) is a milestone and a key point of reference in this direction.

Governance and in-company training seem to be two focal areas for quality, relevance and effectiveness of apprenticeships. While apprenticeship governance has attracted research interest, apprenticeship in-company training has been under-researched. In both cases, though, there is still a need to explore further how these two core aspects of apprenticeships are essentially designed and work in EU Member States. Acknowledging this need, Cedefop's community of apprenticeship experts have chosen to write the papers collected in this publication. In an attempt to go beneath the surface, they describe in detail how apprenticeship governance works in relation to cooperation between labour market and VET actors and how apprenticeship in-company training is designed and delivered. The papers reveal a number of critical issues pointing to what would need to be done on the way to reaching higher quality and effectiveness of this particular form of vocational education and training.

Real and in-depth collaboration between education and the labour market is still to be reached. Strong partnership of all actors involved must cover everything, from strategy to implementation. Work still needs to be done to ensure that the incompany part of apprenticeship training is based on a structured approach to training, so that it addresses the needs of the corresponding qualification and does not merely offer a context for gaining any kind of work experience. And learning experiences must not be excessively firm-specific but comparable and of value for the sector or the occupation.

Drawing on the papers, we are convinced that this publication will contribute to better-informed political decisions for improved quality apprenticeships in the years to come. Cedefop would like to thank the experts and their author partners for their valuable input and the overall voluntary contribution to the community.

Jürgen Siebel Executive Director, Cedefop Antonio Ranieri Head of department for learning and employability

Acknowledgements

This publication was produced by the European Centre for the Development of Vocational Training (Cedefop), Department for learning and employability (DLE), under the supervision of Antonio Ranieri.

The publication is a collection of the papers authored by members of the Cedefop community of apprenticeship experts on apprenticeship governance or on apprenticeship in-company training design and delivery.

The publication was prepared by Vlasis Korovilos and reviewed by Ramona David and Lisa Rustico, all Cedefop experts.

Contents

For	eword	2
1.	Introduction	5
Paf	RT I APPRENTICESHIP GOVERNANCE IN RELATION TO COOPERATION BETWEEN LABOUR MARKET AND VET ACTORS	8
2.	Summary of findings	9
3.	Apprenticeship, Belgium, German-speaking Community	18
4.	Dual learning scheme, Belgium, Flanders	23
5.	Dual training, French-speaking Belgium	31
6.	Work-based learning, Bulgaria	39
7.	Apprenticeship contract, France	44
8.	Apprenticeships, Ireland	50
9.	VET in a form of apprenticeship, Lithuania	56
10.	Work-based learning, Latvia	64
11.	Apprenticeship contract, Luxembourg	70
12.	Dual pathway, Netherlands	77
13.	Apprenticeship at the workplace, Romania	86
14.	Apprenticeship in upper secondary school, Sweden	93
PART II APPRENTICESHIP IN-COMPANY TRAINING DESIGN AND DELIVERY		
15.	Summary of findings 1	00
16.	Dual apprenticeship, Austria 1	10
17.	New modern apprenticeship, Cyprus 1	17
18.	Apprenticeship, Denmark 1	24
19.	Dual VET, Germany 1	31
20.	EPAL apprenticeship (post-secondary year – apprenticeship class), Greece	39
21.	Type 1 apprenticeship, Italy 1	47
22.	Vocational preparation of juvenile workers, Poland1	53
23.	Apprenticeship programmes, Portugal 1	60
24.	Apprenticeships, England1	64
25.	Conclusions: main messages 1	73
Acr	onyms 1	79

CHAPTER 1. Introduction

The increased political attention paid to apprenticeships in the past decade resulted in numerous policy initiatives to improve, modernise and expand apprenticeship provision in Europe. In the context of monitoring overall VET developments since the Bruges communiqué, Cedefop has systematically taken stock of several apprenticeship-related reforms and initiatives. At the same time, Cedefop worked closely with selected countries to review their apprenticeship systems and schemes (¹), exploring in depth how they are designed and implemented.

Cedefop's cross-nation overview of apprenticeships in Europe has been a significant contribution to identifying and analysing the different purposes and functions associated with apprenticeships in Europe, investigating whether and how they differ in terms of organisation. The study was complemented by a database that collects and provides information on stable, system-level features of apprenticeships in a structured and therefore comparable way across EU Member States, Iceland, Norway and the UK. Both the cross-national overview and the database brought more prominently to surface the differences among and within EU Member States in understanding what apprenticeships are, and what they are for: their identity, function and purpose.

The intention to move from simply increasing apprenticeship provision and participation to raising its quality and effectiveness has become central to the European debate on apprenticeships. Following EU-level social partners views on effective apprenticeships, the European framework for quality and effective apprenticeships (EFQEA) was adopted in 2018. It offers a reference to Member State activities through an extensive set of conditions that aim at improving apprenticeship quality, setting criteria both for the framework and for learning and working conditions. Despite some progress at national levels, there is a lot of work to be done in raising quality and effectiveness. Cedefop's recent reports link this effort with the identity of apprenticeship within and across countries; they argue that this identity poses a series of implications and challenges in terms of quality and effectiveness that policy-makers may face when designing, implementing and evaluating their interventions.

⁽¹⁾ Apprenticeship system: a set of interrelated structures, rules and procedures underpinned by a legal framework, which regulate apprenticeship provision and make it work as a unitary whole. Apprenticeship scheme: a systematic arrangement about how apprenticeship provision should be designed, delivered, assessed, certified and governed within the overall VET system. More than one scheme may exist in an apprenticeship/VET system. See Cedefop's analytical framework for apprenticeships.

To better address the need for in-depth understanding of how apprenticeships are designed and structured, Cedefop decided to establish a community of apprenticeship experts, consisting of experts from the (then 28) EU Member States, Iceland and Norway. The community aims at strengthening and expanding the knowledge on apprenticeships in Europe. The voluntary long-term collaboration of the community experts among themselves and with Cedefop helps generate insights into apprenticeships within the national contexts, cover existing gaps in information retrieval from the countries in specific areas of concern, and provide the knowledge base for comparative analyses.

The community's first activity was to consolidate and update information available through Cedefop's database on apprenticeship schemes. Experts' voluntary contributions in 2019 and 2020 (²) resulted in updated country and scheme (³) fiches for most EU Member States, Iceland and UK-Scotland. Building on this updated knowledge, they moved on to produce new evidence and analysis on topics that they identified to be of interest at European and national levels for apprenticeship: governance in relation to cooperation between labour market and VET actors, and in-company training design and delivery.

This publication is a collection of 21 papers authored by the respective community experts and, in some cases, their colleagues, as noted in the corresponding chapters (⁴). The papers are presented by topic, in two parts.

Part I includes papers on apprenticeship governance in relation to cooperation of the two parties involved in apprenticeship: the education side (VET actors) and the labour market side. The question asked of experts was how governance can facilitate an effective link and cooperation between labour market actors and VET actors, to meet apprenticeship demand. The papers describe and analyse how apprenticeship governance is set up to give room to labour market actors to work together with the education side in selecting which occupations should be reached through apprenticeships (or which should be the apprenticeship specialties or programmes), how to develop curricula that reflect labour market needs and how to express demand for apprenticeships.

Part II includes papers on in-company training and delivery in apprenticeships. The question asked of experts was how in-company training is designed and

^{(&}lt;sup>2</sup>) In 2020, community experts, under Cedefop's coordination, contributed to a synthesis report on how the COVID-19 outbreak affected apprenticeships in the EU, Iceland, Norway and the UK, and what steps were taken to address the emerging challenges

⁽³⁾ The database contains only apprenticeship schemes considered as such in the national official definitions, i.e. what governments define as such by means of norms and minimum legal requirements, that have a stable/valid legal basis and which are system-level or mainstream schemes and lead to formal qualifications. Pilot schemes, even when underpinned by a legal basis, are out of the scope of the database.

^{(&}lt;sup>4</sup>) Annex 1 provides the methodology followed and a list of the schemes covered.

delivered at employer level to ensure comparable learning outcomes leading to the same qualification and parity of opportunities among learners and employers. The papers describe and analyse how the in-company part of training is designed and delivered (on what basis, by whom), also reflecting on the comparability of learning experiences or outcomes at the workplace and the role of apprenticeship in-company trainers and other company staff in these processes.

Each part starts with a comparative section authored by Cedefop that brings to the surface the main messages of the corresponding papers.

In the conclusions, Cedefop experts share their reflections on the key messages that emerge from the papers. These conclusions should not be interpreted as views of the Community members, but as the views of Cedefop experts after analysing the experts' contributions.

Part I

Apprenticeship governance in relation to cooperation between labour market and VET actors

CHAPTER 2. Summary of findings

2.1. Cooperation in identifying apprenticeship occupations, specialties or programmes

The participation of labour market actors in the identification of apprenticeship occupations or specialties depends on whether or not the processes are designed specifically for apprenticeships or are common to both school-based VET and apprenticeships. Apprenticeship-specific processes seem to allow greater room for labour market actors both to propose and approve apprenticeship occupations, specialties or programmes. Where processes refer to VET in general, labour market representative contributions may be less decisive, or it can be that a VET provider and an employer decide if training should be in the form of apprenticeships.

Capturing labour market interest in apprenticeships is normally the first step in identifying apprenticeship occupations or specialties. However, the papers show that approaches followed vary from getting intelligence on skill needs in general, to capturing overall interest in VET, checking the interest in apprenticeship programmes, and collecting employer requests for a specific apprenticeship occupation or programme.

Several countries have no apprenticeship-specific occupations, so stakeholders make centralised decisions on what should be the VET occupations, specialties or programmes, either when introducing new or reaffirming the provision of existing ones (Box 1). Then, the decision to offer a VET programme in the mode of apprenticeship is usually taken at the level of individual VET providers and employers, depending on their preferences and availability. These processes often, but not always, limit the opportunities for labour market representatives to make significant contributions in proposing which occupations should be offered through apprenticeships. Even in these cases, their contribution can still be significant, as they can provide arguments on why a programme should be accepted for offer as apprenticeship instead of school-based VET.

Box 1. Identification of apprenticeship occupations/specialties on the basis of VET ones

- In Sweden, the decision whether a VET programme will be offered as an apprenticeship is decided at local level, between the school, the learner and a company. 12 national programme councils exist for each VET programme offered. Labour market actors (both employer and employee organisations) are represented in an advisory role. The councils have the general aim to improve VET relevance in response to labour market needs but have little impact on the identification of apprenticeship occupations in particular. This could partly explain employers' low involvement in apprenticeships, as opposed to traditional workbased learning options in specific sectors based on industry-specific agreements.
- In Latvia, there is no separate identification of occupations and programmes suitable for apprenticeship in particular, but for all VET programmes. It is largely the choice of the VET institution whether and which programmes to offer in apprenticeship form. The tripartite Sub-Council for Cooperation on VET, consisting of representatives of ministries, employers and employee organisations, meets regularly to link education and employment policies better, including for apprenticeships. Sectoral expert councils, bringing together representatives of employers' organisations, trade unions, ministries of education, economy and welfare, as well as other ministries, and the State Employment Agency, are advisory bodies supporting the implementation of quality VET programmes that can also be offered as apprenticeships. A labour market forecasting system has been put in place. The outcomes of skills forecasts inform the offer of vocational education programmes, including apprenticeships. Quantitative forecasts are supplemented with qualitative forward-looking scenarios, along with further involving in the process sectoral expert councils, education institutions and regional forums for more precise identification of labour market needs at regional level.
- In Lithuania, there are no apprenticeship-specific qualifications. Current
 regulation allows employers or their associations to propose new qualifications or
 updates to existing ones. Sectoral professional committees (SPCs), consisting of,
 inter alia, employer representatives and trade unions, have an advisory role and
 should express opinions regarding the possibility of offering VET in an
 'apprenticeship form'. The SPCs have a strong contribution in the process of
 introducing new qualifications or updating existing ones, as they discuss the
 proposed content and their endorsement is required for a new qualification to be
 introduced as a sectoral qualification standard or an existing one to be amended.
- In France, professional branches, as well as training providers and the State, can be 'certifiers' of certifications to be included (registered) in the national register of vocational (professional) qualifications (RNCP). Apprenticeship contracts can be concluded only for training related to professional activities linked to these certifications. For each RNCP certification, reference frameworks are developed with the participation of national employment committees of branch associations. Skills operators (OPCOs) support branches in developing certifications that are clear and correspond to professional activities. Inclusion of a certification in the national registry of vocational qualifications (RNCP) requires the involvement of national joint commissions of professional branches. These are tripartite commissions and professional employer organisations. *France Competénces*, which regulates the RNCP, ensures that vocational certifications meet labour

market needs through its quadripartite governance that brings together the State, the regions, trade unions and employer organisations, and qualified individuals.

- In the Netherlands, the occupations for which apprenticeships are offered must relate to the VET programmes being offered in the Dutch upper secondary vocational education (MBO) system. Since 2015, through its sectoral committees and subcommittees, the Foundation for Cooperation in VET and Labour Market (SBB) is the platform through which VET actors and the 'business community' (employer associations and trade unions) can select, review and update MBO occupations. The business community may request new qualifications or update of existing ones before the five years are up. SBB collects and provides qualitative and quantitative information on the labour market, work placements and apprenticeships, and the efficiency of VET study programmes. A specific bipartite body (VET institutions on the one side, employer and trade union on the other) is set up to this end. Labour market information strongly informs the processes of updating the MBO qualifications, where apprenticeship is offered.
- In Bulgaria, apprenticeship is a recently (2015) introduced VET option that can be offered in principle for any occupation or specialty from the List of occupations for VET. The list was established by the 2014 VET Act and approved by the Minister for Education in cooperation with the Minister for Labour and the national level employers' and employees' organisations.
- In Romania, the law explicitly stipulates that apprenticeships may be organised only for occupations that are included in the Romanian classification of occupations (managed by the Ministry of Labour and Social Protection) and only if occupational and training standards exist for these occupations.

Source: Cedefop, based on individual papers submitted for this publication.

In another set of countries, identification of suitable occupations, or alternatively of specialties and programmes, is an apprenticeship-specific process, and therefore more targeted and often structured (Box 2). The examples described and analysed by community experts show that these cases, more often than not, offer a concrete, regulated and substantial role to labour market actors to decide which these apprenticeship occupations or specialties/programmes should be, alongside the contributions from the State and training provider representatives.

Box 2. Identification of occupations/specialties that can be offered as apprenticeships in particular

In the French-speaking part of Belgium, a procedure is in place allowing sectoral branches (but also VET providers, public employment services, the ministries or other actors) to submit requests for the creation of job profiles (occupations) linked to qualifications that can be achieved through apprenticeships. Branches may collect companies' requests through the chamber of trades. Requests are submitted once a year to a single point, the French-speaking service for trades and qualifications (SFMQ), where social partners are represented together with representatives of VET providers, the public employment service, OFFA (the French-speaking Belgium Office of apprenticeships which also brings together the social partners, VET providers and representatives of ministries) and other actors. SFQM members take into consideration the outputs of the annual survey on vacancies and the lack of competences carried out by the public employment

services to identify skills needs and discuss which should be the (new) occupation profiles for which apprenticeships can be offered.

- In German-speaking Belgium, not every VET programme can be offered as an apprenticeship. Once a year, the Institute for vocational and educational training in small and medium-sized companies (IAWM) develops a plan to determine which apprenticeship occupations and curricula should be renewed and which new ones should be added. A working group of VET and labour market actors and the public employment service recommend which sectors should be prioritised for apprenticeship promotion, on the basis of high demand or of shortages. Sector representatives, groups of companies or a single company, as well as job centres and VET providers, may initiate the revision or the addition of a new occupation. Proposals should consider the labour market situation, regional development plans and needs. Proposals need to be examined by the economic and social council (WSR). The IAWM has to prove that there is a minimum number of potential training places sufficient companies interested in the new apprenticeship occupation and that at least three companies endorse the relevant curriculum.
- In the Flemish Community of Belgium, after initial assessment by labour market actors, government agencies draft a list of potential new apprenticeship programmes ('standard trajectories'). This is presented to the Flemish Dual Learning Partnership, a council where employers and employees are represented together with education stakeholders and the government, and to the labour market (and education), for their assessment. Only after the partnership's contribution can State agencies finalise the list which is then approved and ratified by the Flemish government. The overall process gives labour market actors a significant say in the proposals brought forward. The extensive involvement of labour market representatives is a way to ensure that labour market needs will be met, and that a sufficient number of apprenticeship posts will be available, reducing the risks of supply and demand mismatch.
- In Ireland, the newly established Apprenticeship Council is industry-led and chaired by an industry representative but its membership is more participatory. comprising representatives from industry, trade unions, further and higher education representatives, and the Department of Education and Skills. They all work together with education authorities in assessing and approving proposals and project plans for new programmes that are submitted by industry-led consortia. The fact that new apprenticeships are proposed by consortia of companies is automatically a testament of labour market interest in the occupation/specialty. Moreover, the establishment of the multi-partite Apprenticeship Council has provided a strong basis for the expansion of apprenticeship in areas where there is a clear labour market interest. The VET authority (SOLAS) runs its own process of collecting intelligence (Skills and Labour Market Research Unit), that feeds and complements the work of an Expert Group on Future Skills Needs in advising the government on projected skills requirements at national and sectoral levels and making recommendations on how education and training systems might be adapted to better effect.
- In Luxembourg, the four professional chambers (of employees, of agriculture, of commerce, of skilled trades and crafts, involved by law in apprenticeship governance) can express sectoral demand for new apprenticeship programmes by submitting their proposals to the VET steering committee (*groupe de pilotage*) for further consideration. The committee brings together representatives of the VET department of National Education, the national representatives of the board of school directors and two delegates of each professional chamber. Representatives of employers, trade unions or professional associations sit in sector committees which decide if a certain occupation is suited for

apprenticeship training along with other forms of VET, or if it is suited only for apprenticeship training. Ministries of Education and Labour, sector representatives and social partners are developing a cross-sectoral, data-based approach for anticipating future skill needs and apprenticeship demand.

Source: Cedefop, based on individual papers submitted for this publication.

These examples show that structured skill intelligence mechanisms to capture or anticipate labour market and skills needs often exist. Their outputs are used by apprenticeship stakeholders to adjust apprenticeship offers when identifying new or reaffirming the provision of existing apprenticeship occupations, specialties or programmes. In some other cases, the interest of companies in participating in apprenticeships is not based on general skill needs mechanisms but is expressed in the processes foreseen for introducing new apprenticeship occupations or programmes. In this case, stakeholders proposing occupations or programmes need to demonstrate sufficient labour market interest, such as through endorsement by a certain number of employers, or by giving groups of employers the role of proposing new occupations or programmes.

2.2. Cooperation in curriculum development

Both education and labour market sides frequently contribute to curriculum development. Labour market representatives may provide input to curriculum development specialists (such as national institutions), participate themselves in committees that draft apprenticeship curricula, or endorse curricula that were developed by specialists and committees in which they did not participate. As was the case also for identification and approval of apprenticeship occupations, the intensity of this contribution seems to be linked to whether processes clearly refer to apprenticeship curriculum development (Box 3) or not (Box 4).

Box 3. Stakeholder participation in committees for developing apprenticeship curricula

- In the Flemish Community of Belgium, curricula development committees bring together nominated experts from the relevant sectors with training provider representatives and national agencies. Committees are also consulted and asked to approve the update or apprenticeship curricula, that are distinguished in three levels: minimum, intermediate and maximum adaptation (the national government needs only to approve the maximum ones).
- In the French-speaking part of Belgium, the SFMQ, where social partners are represented, is given a specific mandate to develop training profiles (curricula) for VET, including those to be used for apprenticeship, ensuring correspondence to the occupational profiles selected for apprenticeship. A parallel system of

apprenticeship curricula from training providers also exists due to delays in the main institutional processes (both systems lead to the same qualification).

- In Luxembourg, national education and training committees (*commissions nationales de formation*), where representatives of the respective professional chamber(s) and VET providers (plus of the national committee for general education) collaborate, are set up to design and revise training programmes.
- In German-speaking Belgium, the IAWM has the responsibility to design apprenticeship curricula. Input from labour market actors is provided in various instances in a structured process. First, IAWM's pedagogical advisor consults a working group of professionals, company representatives and apprenticeship teachers to identify all the competences that should be included in a new curriculum. The proposed curriculum is shared with selected companies in the respective sectors. Endorsement of at least three companies is required before the curriculum is brought for approval to the IAWM, where labour market actors are represented. Only then is the curriculum submitted to a Ministry Committee and formally approved by the government.
- In France, involvement of branch representatives in developing new certifications for which apprenticeships can be offered, also includes the development of three reference frameworks regarding the professional activities to be carried out, of the skills to be developed and of the assessment. As a result, they have a say on the content of the training and the tasks to be performed.
- In Ireland, the Apprenticeship Council, together with education authorities, approves occupational profiles that represent the basis for the apprenticeship programme and include information on the learning outcomes and content of modules for on- and off-the-job training.
- In Romania, sector committees, where employers, trade unions and professional associations are represented, approve occupational and training standards, upon proposals by companies or groups of companies.

Source: Cedefop, based on individual papers submitted for this publication.

There are other ways through which labour market actors collaborate with education stakeholders and the State/national agencies to indirectly inform apprenticeship curricula. This could include through informing the relevant occupational profiles or overall VET standards and curricula. These can offer the basis for apprenticeship training where its content is agreed at local level between the school and the participating employer.

Box 4. Labour market actors' contribution to qualifications or VET standards

- In Latvia, most recently revised occupational standards and modular education programmes have been developed in close cooperation with sectoral expert councils, social partners, and sectoral associations. They allow flexibility in offering a VET programme either in a school-based mode or as apprenticeship.
- In Lithuania, VET curriculum design always involves both VET and the labour market side. There are cases when the curriculum development is led by national employers' associations. Expert groups decide the length of the programme and its individual units (modules), learning outcomes, proposed themes of training

and assessment criteria. Employers' representatives also participate in the evaluation of curricula under preparation.

- In Bulgaria, national-level organisations of employers and employees have direct influence on the State qualification standards that are the basis of the schoolbased apprenticeship curricula, as these standards are set by national committees which by law involve representatives of the national level employers' and employees' organisations. Although curricula for the workplace-based training are developed and agreed between each VET school and its partner company/companies, they should still be in accordance with the State qualification standards and the school-based curricula.
- In the Netherlands, apprenticeship training goals are directly informed by the qualification a student is training for. Common national level procedures for qualification development and company accreditation ensure a certain level of comparability in training content. However, the company (already accredited to offer training in a qualification or part of that qualification) and the school jointly decide on the training content, allowing for some flexibility for the student to be trained according to regional or company needs.

Source: Cedefop, based on individual papers submitted for this publication.

2.3. Matching apprenticeship supply and demand

Platforms that collect demand for apprenticeship, showing apprenticeship openings and, in some cases, training companies, are frequently used. They intend to help VET providers direct their apprenticeship provision, and interested learners find a suitable employer for their in-company part of the apprenticeship training. However, traditional fragmentation of apprenticeships in certain countries, or recent funding for web platforms has often led to the development of more than one tool where apprenticeship demand (and supply) is collected. This decentralisation of information, though, does not help clearly communicate how many apprenticeship posts are available (and where).

Box 5. Approaches to publishing apprenticeship posts in platforms

- In German-speaking Belgium, the IAWM publishes every open training place on a dedicated section of their website (*Lehrstellenbörse* apprenticeship market).
- In the Netherlands, accredited companies and their apprenticeship vacancies are published on Stagemarkt.nl, under the administration of SBB.
- In the French-speaking part of Belgium, various websites exist where company demand for apprenticeships is collected and promoted. A certain level of centralisation exists in vocational training providers, though vocational education providers (CEFA, that operate under the Ministry of Education) develop their own tools individually. OFFA developed a single online portal that should allow online matching of apprenticeship demand and supply by the end of 2021, also promoting a new, single brand for apprenticeships (ALT+).
- In the Flemish Community of Belgium, all accredited training companies are available on a specific website, so that learners and VET providers can be informed of their willingness to participate in apprenticeships. SYNTRA

Vlaanderen has developed a complementary online tool (Radardual) that offers additional information on apprenticeship supply and demand, signalling local shortages in posts or apprenticeship programmes but also helping identify cases of excessive supply, where many VET providers offer the same apprenticeship programme in a small geographic area.

• In Luxembourg, the expression of employer demand for apprenticeship is centralised through the registry of the Public Employment Service's Professional Guidance Service (ADEM-OP). Although companies must declare an opening before signing the contract, in practice most open apprenticeship positions are not published before a suitable candidate is selected from the applications. As a result, the registry primarily serves to monitor apprenticeship offer and demand rather than to facilitate matching per se.

Source: Cedefop, based on individual papers submitted for this publication.

Even when structured systems and platforms exist, personal relationships between VET teachers and companies remain a strong enabler for collaboration between the two sides (education and labour market). This can work both ways: companies are usually those contacting VET providers, or providers look for interested companies. Although rare, there is also the case where apprentices themselves need to assume a leading role in finding an interested employer.

Box 6. Examples where interest is channelled through personal contacts

- In Bulgaria, the expression of interest in apprenticeships by a company (or group of companies) is directly addressed to the VET principal of the school providing training of interest to the employer.
- In French-speaking Belgium, links between companies and schools at local level exist thanks to the willingness and availability of the training staff for developing relationships with companies. Although this approach traditionally works, arguably it cannot support a larger-scale apprenticeship system in the long run.
- In the case of Cyprus, apprentices are those who need to find a company interested in taking them on as apprentices.

Source: Cedefop, based on individual papers submitted for this publication.

In this process of matching interest in apprenticeships, introducing structures that can guide VET providers and companies to express and match their needs could be a strong tool to link mutual needs better and help them participate in apprenticeships. The papers reveal that stable, structured, formalised bodies and platforms similar to those at national levels are not often reported when it comes to the local and regional levels. Collaboration might exist at lower levels but does not seem to be based on structures and processes that ensure stable, longstanding participation of labour market actors together with VET providers in a wide range of topics related to adapting or providing apprenticeships.

Box 7. Examples of structured local-level collaboration

- In Flanders, SYNTRA Vlaanderen and regional initiatives (e.g. *Regionaal Overlegforum*) inform training providers on (regional) labour market needs and gaps in provision, supporting them in deciding what apprenticeship programmes to offer. In many sectors, sectoral consultants are very active in identifying companies willing to participate in apprenticeships and have been working efficiently with SYNTRA Vlaanderen to this end.
- In Ireland, collaboration between labour market and education actors exists also at lower levels: a steering group, consisting of several participating companies and the actual training provider (VET or higher education) comes together to ensure that the apprenticeship programme meets labour market needs.
- In Latvia, as stipulated by the VET Law, VET institutions (competences centres) have established advisory bodies (conventions) where their administration, local or regional employers, local and national government organisations are represented to coordinate better the local/ regional and national priorities for improved links of education and employment/labour market.
- In the Netherlands, as well as central websites that collect demand for apprenticeships, SBB's advisors also play an important role looking for vacancies during accreditation and quality monitoring visits to companies, administrating vacancy information on their behalf, or reaching out to (current or potential) companies at the request of VET institutions when students experience difficulties in finding an appropriate vacancy. Some VET institutions make their own agreements with companies, either directly or through intermediaries, and some invest heavily in relationship management with nearby companies.
- In Sweden, every upper secondary school offering VET programmes, regardless of the scheme, can set up one or several local programme councils to support closer cooperation between education providers, employers and their representative organisations, and trade unions.

Source: Cedefop, based on individual papers submitted for this publication.

CHAPTER 3. Apprenticeship, Belgium, German-speaking Community

By Verena Greten, IAWM and member of the Cedefop community of apprenticeship experts, and Chantal Fijalkowski, IAWM

3.1. Introduction $(^5)$

VET in the German-speaking Community is offered to people aged between 15 years and maximum 29 years. Under certain conditions (⁶), it is possible to begin an apprenticeship at greater than 30 years. In practice, the average target group has been between 15 and 18 years old but in recent years, new apprenticeship contracts show that the average age for beginners is slightly above 18 years. After apprenticeship, graduates may continue their education, taking classes at craftsman level which lead to a higher diploma (*Meisterbrief*). There are no age restrictions to attend craftsmen classes (⁷).

Apprenticeship programmes always have the same duration (three years) and the same form of alternation: apprentices have one day class at a VET school and spend the rest of their 38h-working week at their training company. There is one exception: if apprentices have prior job-relevant knowledge, contracts might be shorter and still lead to the certificate of apprenticeship (*Gesellenzeugnis*).

In the German-speaking Community, the IAWM (*Institut für Aus- und Weiterbildung im Mittelstand und in kleinen und mittleren Unternehmen* – Institute for vocational and educational training in small and medium-sized companies) (⁸) is considered the expert on VET. Its administrative board is composed of trade unions, guilds, ministry, VET providers and company representatives.

- (7) Master or craftsmen classes simply require a first graduation or a proven intention to start up a business.
- (⁸) The IAWM was founded when the German-speaking Community became autonomous in education and training, which included apprenticeship and craftsmen classes. Its objectives as well as its organisation and functioning, are based on a decree on vocational and educational training in small and medium-sized companies (*Dekret über die Aus- und Weiterbildung im Mittelstand und in kleinen und mittleren Unternehmen vom 16. Dezember 1991*). The IAWM is financed by the Government of the German-speaking Community of Belgium.

^{(&}lt;sup>5</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

⁽⁶⁾ E.g. benefitting from another kind of (social) income as e.g. unemployment benefit or social welfare, to complement the apprenticeship income, considered to be too low to make a living.

IAWM's focuses on managing apprenticeship. It provides apprenticeship curricula and contracts and manages relationships with companies hosting apprenticeship training. It is also in charge of the financial, administrative and pedagogical supervision of two VET providers, the adjustment of the legal base, and contacts to other VET stakeholders in Belgium and abroad.

Companies are audited and certified by the IAWM before they are allowed to train apprentices. The regulatory framework also sets duties for the apprentices. If duties are not respected, sanctions may be applied. Possible sanctions for both companies and apprentices are, for example, the termination of an existing apprenticeship contract or the withdrawal of the accreditation for a new contract.

3.2. Identification and update of apprenticeship occupations

With its 78 000 inhabitants, the German-speaking Community is the smallest community of Belgium but, with its 500 apprentices, has the highest ratio of vocational training. Law requires a low minimum of only four apprentices in one class, which means that there are at least four training places in companies. To ensure this, the IAWM must analyse the labour market prospects and pre-select; not every type of VET programme can be realised as an apprenticeship in this small region. In case of specific interests and needs, cooperation agreements with other regions of Belgium and neighbouring countries allow apprentices to attend classes and complete their professional training.

Once a year, the IAWM develops a work plan for the revision of apprenticeship programmes and determines which occupations and curricula will be renewed, or which ones might be added to the long list of existing professions. A request for revision or addition for a new occupation may also be initiated by the sectors, companies or one company, job centres or VET providers. Proposals should consider the situation of the labour market, regional development plans and requirements. For this reason, every new profession needs to be examined by the economic and social council (*Wirtschafts- und Sozialrat*, WSR). The IAWM has to prove that there is a minimum number of potential training places, indicating that there are sufficient companies interested in the new occupation.

Once a new occupation and the related curriculum have been identified and created, it is the number of signed apprenticeship contracts which decides whether classes at VET providers in the German-speaking Community should be open or closed. If classes are closed, apprentices move to either IFAPME (vocational training provider in French-speaking Belgium) or Germany.

Due to the community size, establishing new apprenticeship occupations is quite simple. Throughout the years, the IAWM has specialised in managing the

identification of apprenticeship occupations. There is no need for extensive consultations with apprenticeship stakeholders, once there is a proof of labour market demand and enough potential training places in companies.

3.3. Design and update of apprenticeship curricula

Competences and skills to be acquired in apprenticeship programmes are to be discussed with different stakeholders. The IAWM is responsible for designing apprenticeship curricula. Its pedagogical advisor decides on what a curriculum should consider and seeks advice from teachers, professionals and companies.

The IAWM generally starts with the preparation of new templates for curricula. It then contacts teachers or professionals, chosen by the pedagogical advisor in charge, to identify all necessary competences to be included in apprenticeship curricula to get apprentices fit for the labour market. Those teachers and professionals work together on the curriculum with the pedagogical advisor, who is the leader of this working group. The working group discusses the different aspects of the curricula based on IAWM templates and decides what needs to be adapted or omitted.

Once a draft proposal is ready, the draft is sent to selected companies chosen by the pedagogical advisor among those working in the same profession as described in the curriculum. These companies are asked to examine the new curriculum and decide whether it corresponds to labour market's expectations. The pedagogical advisor needs at least three positive reports from employers to introduce the curriculum to the IAWM Administrative Council, which must then vote on it.

Afterwards, the curriculum is submitted to the committee of compulsory education at the Ministry of Education of the German-speaking Community. Only if this report is also positive is the curriculum formally approved by the Government of the German-speaking Community with a ministerial decree. The total process takes about six months at least.

While it takes little manpower to write a new curriculum, sometimes, the process is long and intense and consumes a lot of time before the approved curricula are finally in use. This risks creating a gap between the practical part of apprenticeships taking place in companies and what is taught in schools and training centres. Sometimes new technologies or new demands on the labour market change so quickly that curricula might not react Immediately. However, the involvement of different stakeholders, from education and the labour market, ensures that the new programmes meet labour market expectations and enough training places in companies will be available.

As VET providers employ only teachers who are still working in the profession taught, they can pass on the most recent developments in their professions.

3.4. Expression of apprenticeship demand

The IAWM supports matching of supply and demand and publishes every open training place on its website under the heading *Lehrstellenbörse* (apprenticeship market). Available places are thus widely shared with the public. All training programmes are available and accessible by everyone.

VET and labour market actors work together on the initiative Working group school and economics. Representatives from VET providers and public employment services work together with some of the biggest companies in the Community to promote apprenticeship. They organise a regular event, which is usually held in a company of a sector where apprenticeships are typically used, such as the metal sector, media, logistics. The working group decides which sector to promote according to the recommendation of the public employment service, based on the proposal of the working group members. The promoted sector is either chosen from a list of occupations of which there is a shortage (⁹) or proposed by the authority because of high demand in a particular sector (such as media).

The IAWM collaborates intensely with public employment services and discusses openly any demand for VET, including apprenticeships. Discussions often remain on a theoretical level, as the legal frameworks of both the IAWM and the public employment services are not easy to combine.

The different operators in the German-speaking Community benefit from its small size and personal contacts between the different stakeholders. The advantage is that new ideas and projects may be set up quickly as long there is no conflict in the legal framework. People have already been working together for a long time and trust each other. The inconvenience is that this personal approach is less transparent and depends on personal contacts.

3.5. Conclusions

Demographic trends are causing a challenge for VET because there are fewer young people in our society. On top, the general trend of 'bachelorisation' (the fact that parents prefer higher education for their children) leads to less interest in VET. As a result, not all apprenticeship places offered by companies can be filled. The IAWM needs continuously to promote the attractiveness of apprenticeship by many

^{(&}lt;sup>9</sup>) In general, if apprentices choose a profession from the shortage list, they might keep their unemployment benefit on top of their apprenticeship renumeration.

different initiatives. The whole image of VET has been modernised by social media appearance, new logos, slogans, website, creative job fairs to promote VET professions, videos of best practices and image campaigns.

The results of the questionnaire, which apprentices complete the moment they sign their contract, shows the impact of the efforts in communication through public media have its effects: VET is no longer the last possible choice, but a voluntary option with an excellent perspective on the labour market. More than 90% of the certification holders are employed within six weeks following the end of their apprenticeships. So far, the number of new apprenticeship contracts has been stable throughout recent years, but the challenge of maintaining participation levels high will not be easier in the future.

CHAPTER 4. Dual learning scheme, Belgium, Flanders

By Carl Lamote, Department of Education and Training (Flanders) and member of the Cedefop community of apprenticeship experts, and An Katrien Sodermans, Ditte Kimps, and Lieve Lembrechts (SYNTRA Vlaanderen knowledge centre) (¹⁰)

4.1. Introduction (¹¹)

In Flanders, there are currently three different apprenticeship schemes at play. Two of them (part-time vocational secondary education and apprenticeships *leertijd*) are in transition, to bring them within the new, third, framework: dual learning. All of these schemes are focused on the level of secondary education. The coalition agreement of the current Flemish Government aims at expanding dual learning towards adult and higher education.

The current system of dual learning is an innovative system with shared responsibilities between education and social partners. It aims at providing training to obtain a qualification equivalent to those awarded in the 'non-dual' track regular secondary education. As such, its ambition is to raise the perception of dual learning and make it a first-choice option; this contrasts with the two existing schemes, in which students often enrol after experiencing some drawbacks in the full-time system.

4.2. Identifying and updating apprenticeship occupations

The process of identifying new apprenticeship occupations consists of several yearly steps. First, the government Agency for Higher Education, Adult education, Qualifications and Study grants (AHOVOKS), in collaboration with SYNTRA Vlaanderen (the agency responsible for the in-company training of dual learning)

^{(&}lt;sup>10</sup>) The descriptions of the processes are based on desk research of available reports, studies, legal documents, decrees, (Cedefop) databases, interviews with key stakeholders (policy officers of the government agencies AHOVOKS and SYNTRA Vlaanderen), and a questionnaire provided to the members of the Flemish Dual Learning Partnership for which we received eight completed questionnaires. The analyses presented in this paper are based on a combination of the responses from the key stakeholders, the questionnaire, insights based on previous research and our own critical reflection.

^{(&}lt;sup>11</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

and the administrations of work and education (¹²), drafts a list of potential new apprenticeship programmes that could be developed, known as 'standard trajectories. The framework used is the 'matrix secondary education'. This is part of a recent reform in secondary education and consists of eight domains (including economy, language), combined with three types of educational outcomes (to go to higher education, to go to the labour market or both). Dual learning is only possible for the latter two types. Potential apprenticeship programmes must be based on one or more 'vocational qualifications' developed by labour market representatives.

Next, this list is provided to social partners and representatives from education (¹³). They assess, for each programme, whether there is labour market demand, whether a sufficient number of companies will be available to train an apprentice, and whether there are enough potential apprentices for the programme. They are also able to propose additional apprenticeship programmes. SYNTRA Vlaanderen coordinates the process of requesting input from the field.

The updated list is then discussed by the Flemish Dual Learning Partnership, a council with representatives of employers and employees, education institutions, other providers of dual learning, and the government.

The list is finally returned to AHOVOKS which then identifies whether the newly proposed trajectories fit within the educational matrix. Subsequently, the final list of apprenticeship programmes is approved by the Flemish Government. Thereafter it is transformed into a decree. The total process, starting from the initial list until the finalisation of the decree, takes about six months.

An analysis of the process raises several issues. The involvement of different stakeholders, both from education and the labour market, creates common ground and support in the field among all stakeholders. Although it takes time to involve all the partners, this results in a list of programmes that is shared by both education and the labour market. In this way, it can be ensured that the newly developed apprenticeship programmes really meet labour market needs and that a sufficient

⁽¹²⁾ The Department of Education and Training and AHOVOKS are public agencies under the supervision of the Minister for Education; the Department of Work is under the supervision of the Minister for Work. The Flemish Dual Learning Partnership is a shared responsibility between the ministries of education and work. The agency SYNTRA Vlaanderen was dissolved in December 2020. The activities of dual learning are transferred to the department of Work and Social Economy, the public employment service and the Department of Education and Training (the last only concerning tasks related to the Flemish Dual Learning Partnership). This text was written before the integration of SYNTRA Vlaanderen.

^{(&}lt;sup>13</sup>) Although these partners are part of councils (the Flemish Educational Council and the Social and Economic Council of Flanders), the list is provided to the individual partners and not to the council. The individual partners can use criteria such as the number of companies or students. They can use additional (internal) criteria.

number of apprenticeship positions will be available for the apprentices. This process reduces the risk of mismatch between learners and apprenticeship positions for certain programmes and occupations. These positive effects on apprenticeship demand should remain a focus in the future, especially when this process is adapted in the upcoming new legislation in education.

There should be more flexibility in creating new apprenticeship programmes. The starting point for creating new apprenticeship programmes is the matrix. A fixed and known framework may be clear and transparent but it can be rigid and slow to adapt to labour market needs. Although new apprenticeship programmes can be proposed every year, only programmes that fit within the matrix can be selected. There is a process in place to evaluate and adapt the matrix every five years, but this is a relatively long period from the labour market perspective. Sometimes, labour market changes require quicker adaptation of new programmes.

More transparency about the process and the responsibilities is needed. The process described above is not always clear to all stakeholders, nor are all steps written in law. For example, it is not always clear why proposed programmes do not enter the final list and who decides what. Particularly in the last phase of approval at political level, lobbying activities and non-transparent decision-making takes place.

There should be more focus on contemporary programmes. There needs to be greater variety in the selected programmes; the chosen ones are rather traditional vocational occupations (such as hairdresser, baker). More contemporary programmes are lacking, for example in ICT, automation, and digitisation. To ensure that dual learning could help bridge the skills gaps caused by digitisation and automation, a significant part of the apprenticeship programmes should focus on these types of skills. One of the reasons for the lack of more contemporary programmes is the absence of vocational qualifications for such occupations.

4.3. Design and update of apprenticeship curricula

The selected apprenticeship programmes are designed into apprenticeship curricula by development committees. The members of a development committee are the (nominated experts of the) relevant sectors, the relevant training providers, the public employment service, SYNTRA Vlaanderen, and AHOVOKS. In general, one to five committee meetings are needed to develop an apprenticeship programme into a curriculum, depending on its complexity and the number of vocational qualifications it is based on. Committees are organised per sector or education organisation if needed. The sector partner guarantees labour market

expertise, while the education partner contributes experts from the pedagogical counselling service.

AHOVOKS is the process coordinator and supervisor, preparing the template based on the vocational qualifications and inviting the relevant members for each curriculum. The committee discusses the different aspects of the curriculum based on the template and what needs to be adapted or omitted. The aspects under discussion are adaptations to the content, the composition of modules, the share of the in-company training, and admission requirements. This step in the process takes approximately two months.

Next, AHOVOKS sends the finalised curriculum to the Flemish government for approval, which results in passing a decree with the content of the apprenticeship curriculum. This step takes up another month. The Department of Education, AHOVOKS and SYNTRA Vlaanderen inform all stakeholders.

After finalising the design of the curriculum, the next phase in the selection process is the programming procedure by training providers (¹⁴). Each provider can select and sign in on their preferred apprenticeship programmes. They make their selections based on local expectations of learners and available apprenticeship positions.

If the curriculum is in need of adaptations, AHOVOKS will take the lead in the process. They make a distinction between three types of adaptation: minimal, intermediate and maximal. In the last case the adaptations need to be approved by the Flemish government. In all three types of adaptation, the development committees are consulted and asked to approve the changes.

An analysis of the process followed raises several issues. The involvement of different stakeholders creates common ground. By involving the different stakeholders in this step of the process, curricula are designed on the basis of dialogue and consensus, which pays off during the implementation phase. It creates common ground and support in the field.

Labour market needs and expertise is taken into account from the start. The involvement of the relevant sectors at this phase has two main advantages. First, the sectors have knowledge about which competences can be learned during the in-company training, and which ones are difficult or impossible. Second, the sectors learn the details of the apprenticeship curricula at an early stage, which enables them to make better decisions when accrediting companies and to provide adequate support to companies during the training.

Using vocational qualifications as a basis of curricula has advantages and disadvantages. First, the vocational qualifications have as an advantage that they provide a clear and transparent framework to start with. Unfortunately, the

^{(&}lt;sup>14</sup>) The current training providers are: full-time vocational schools, centres for part-time vocational education and centres for apprenticeships in SMEs.

development of vocational qualifications is a rather slow process, which has a negative impact on the development of apprenticeship programmes, because it makes it more difficult to adapt quickly to labour market changes. Qualifications are not always adapted to the most recent developments of the sector, although sectors can always apply for an update.

The process is constructive but demanding. This process brings good results and is highly valued by the different stakeholders, but it is demanding because of long and multiple meetings/discussions. This is the case especially for members of several commissions, and for AHOVOKS preparing and guiding the different commissions. Curricula are developed in a short time frame, as a result of the long duration of the selection of apprenticeship programmes. At the moment, the durations of both processes are out of balance.

4.4. Expression of apprenticeship demand

Several stakeholders, initiatives and tools have a role in meeting apprenticeship demand.

Companies must be accredited to be able to offer apprenticeship, after which their candidacy as training company is made public on a specific website. This list is made available to the general public, training providers and potential learners.

Sectors and sectoral partnerships are important actors in the search for suitable apprenticeship positions. Training counsellors and teachers for training providers (¹⁵) often build up a network with companies offering apprenticeship positions, and contact them directly.

SYNTRA Vlaanderen also supports the matching between supply and demand. When SYNTRA Vlaanderen receives a request for a suitable apprenticeship position, the request is dispatched to the sector or to the workplace counsellor (training coordinator in a company). SYNTRA Vlaanderen also offers the application *Radarduaal*. This online tool provides more elaborate information than the list of accredited training companies and gives an overview of the supply and demand for apprenticeship positions; it also signals local shortages in apprenticeship positions or educational programmes. Soon, *Radarduaal* will be accessible for all interested stakeholders. SYNTRA Vlaanderen also organises kick-off meetings in collaboration with educational to inform and support training providers in search of apprenticeship positions.

The Flemish Dual Learning Partnership, SYNTRA Vlaanderen and the department of Education and Training carefully monitor, on the basis of coupled

^{(&}lt;sup>15</sup>) Training counsellor: person in the school/centre responsible for the guidance and counselling of the student. Workplace counselior: person at the workplace, responsible for the daily training of the student within the company.

databases, the number of learners, training providers, programmes, contracts, mentors and training companies to meet apprenticeship demand. Stakeholders are mobilised in cases of shortage and problems are discussed in the Flemish Dual Learning Partnership.

On a regional level, there are local initiatives such as the *Regionaal Overlegforum* to support training providers in deciding which programmes to offer, based on criteria such as gaps in the current offer or regional labour market needs.

Analysis of the process followed raises several issues. Meeting local or regional apprenticeship demand could be improved: good collaboration exists between labour market actors and VET actors/training providers aimed at the development of educational programmes, which results in programmes adapted to labour market needs. Even though the selection of programmes is based on mutual agreement, some gaps exist. More precisely, it occurs that one and the same programme is offered by several training providers situated in a small geographic area, while there is little demand for such skills on the labour market. Regional fine-tuning of education programme provision is needed. *Radarduaal* is useful for gaining insight into regional needs, since it supports the identification of gaps in the supply and demand of apprenticeship positions.

There is positive synergy and cooperation between several stakeholders: the sectors have an important role as 'matchmakers' between companies and training providers. The contacts between sectors, training providers and companies are usually sufficient. Sectoral consultants are active in their search for companies willing to offer apprenticeship positions, but some sectors are lagging behind. The collaboration between SYNTRA Vlaanderen and sectoral partnerships in the search for apprenticeship positions is efficient. More general, the search for apprenticeship positions, as well as the successful completion of the apprenticeship, depends strongly on a bond of trust between the actors involved. Most of the time, that bond is well developed, especially the bond between companies (mentors), training providers (training counsellors) and learners, mostly in specific local areas, as well as the bond between the stakeholders in the Flemish Dual Learning Partnership. The personal bond between workplace counsellors and training providers is an important asset in the search for organisations offering apprenticeship positions. Workplace counsellors also find their way to the support offered by SYNTRA Vlaanderen, if necessary.

There is a need for efficient communication, essential in the search for apprenticeship positions. Some parts of the communication process go smoothly but there is room for improvement as it is not always clear for training providers and learners who their single point of contact is (training counsellor, sector consultant, contact in the company). More specifically, the flow of information from sectors to training providers should be optimised, as training providers lack information about where to find support and which sectoral partnership is responsible for the programmes training providers organise. The general website brings together important information for multiple stakeholders. Though it is easily accessible, not every stakeholder knows the website and how to use it. Also, the added value of the website is not always clear, in relation to the support SYNTRA Vlaanderen and sectoral consultants offer to training providers and companies.

There is no information on the actual number of open apprenticeship positions. After companies have been accredited to be able to offer an apprenticeship position, their candidacy as training company is made public on the website but this does not inform about the actual number of open apprenticeship positions. Companies may be registered as an accredited training company, but may not actually make a workplace available for learners, while others have more than one open position. Organisations offering apprenticeships are held responsible for keeping this up to date via Werkplekduaal (a digital registration tool and database), but it is difficult to motivate them to do this. Moreover, even when there are sufficient apprenticeship positions according to the website, matching may still be an issue because of the individual needs of companies (in terms of skills) and learners (in terms of geographic location). At this moment, matching is only possible after individually contacting the accredited companies, or after contacting a company and encouraging them to obtain an accreditation. Sectors can support in this process but, most of the time, schools/training counsellors make the first contact based on their own network. The search engine needs to be optimised, alongside with the process of matching individual learners to companies.

4.5. Conclusions

Currently, apprenticeship governance in Flanders, in relation to how apprenticeship demand is met, facilitates an effective link and cooperation between labour market actors and training providers. The current processes for the selection of apprenticeship programmes, the design of curricula and promotion of apprenticeship positions, have as a first main strength that the involvement of several stakeholders in the three processes creates common ground and support from the different stakeholders in the field. A second strength is that the needs and expertise of the different stakeholders are taken into account in the three processes, which benefits effective collaboration in the long run. Constructive communication, the third strength, in the form of dialogue, consultations, discussions, and supported by digital innovations such as the website, the database, and *Radarduaal*, enables the links and cooperation between the labour market and training providers. These three strengths together lead to trust between

the different stakeholders. It is recommended to keep these strengths as the focus in the future and in the upcoming new legislation in education.

As well as strengths, current apprenticeship governance in Flanders has some weaknesses as well. First, it should be improved with regard to process transparency and distribution of responsibilities. Second, the selection and design of apprenticeship programmes could profit from a general focus on more innovation and flexibility to adapt quickly to a changing labour market and society and should become less time-consuming. Third, apprenticeship demand could benefit from more streamlined communication between specific stakeholders, and from improvement in the promotion of actual apprenticeship positions. More streamlined communication will lead to a better matching procedure and more opportunities for learners.

CHAPTER 5. Dual training, French-speaking Belgium

By Michel Urbain, OFFA, member of the Cedefop community of apprenticeship experts (¹⁶)

5.1. Introduction (¹⁷)

In French-speaking Belgium, *formation en alternance* represents the major apprenticeship scheme on offer. Its legal basis was established in 2008 through a framework cooperation agreement signed by the Walloon Region, the French Community (now: Wallonia-Brussels Federation) and French Community Commission of the Brussels-Capital Region. Since 2015/16 it is offered at upper secondary level, targeting young people aged 15 to 25; it can be organised:

- (a) by education authorities through CEFA centres (*Centres d'Education et de Formation en Alternance*) which are attached to a secondary school and under the responsibility of the Ministry of Education (*enseignement en alternance*);
- (b) by SME training centres: the SFPME (*Espace Formation PME*) in Brussels and the IFAPME (*Institut wallon de formation en alternance et des indépendants et PME*) in Wallonia (*formation en alternance (apprentissage*)).

5.2. Identifying and updating apprenticeship occupations

The French-speaking service for trades and qualifications (*Service francophone des métiers et des qualifications*, SFMQ) identifies and develops the qualifications achievable in apprenticeship (*formation en alternance*), for both vocational education and the vocational training sub-schemes under which it is organised (¹⁸). It brings together representatives of public employment services, social partners, VET providers (CEFA for vocational education; IFAPME and SFPME for vocational

^{(&}lt;sup>16</sup>) This paper was compiled by Lisa Rustico, Cedefop expert, based on an interview of Michel Urbain for the purpose of this publication.

^{(&}lt;sup>17</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

^{(&}lt;sup>18</sup>) See (Cedefop, 2019) for more information on apprenticeships in French-speaking Belgium.

training), socio-professional integration operators, the Skills Validation Consortium and OFFA (¹⁹), the French-speaking Belgium Office for apprenticeships.

The SFMQ mandate and the procedures it leads, including the development of apprenticeship occupations, have a legal basis and are highly institutionalised and transparent (²⁰). Coref, the SFMQ trades profiles Commission, is in charge of creating occupational profiles (the basis for all vocational education and vocational training programmes) that reflect the reality of occupations, as they are based on a clear identification of skill needs that are regularly updated.

Once a year, the SFMQ draws up its work plan, considering the requests for the creation of job profiles (occupations) it receives from sectoral branches (²¹). It collects company requests through the chamber of trades, VET providers (both vocational education and vocational training) through the chamber of education and training (*chamber enseignement formation*), public employment services the ministries and sometimes, although not often, intermediate bodies such as a childhood care organisation dealing with occupational profiles in the childhood care service).

The stakeholders' recommendations take into account the situation in the labour market, regional plans, common themes defined by the *Bassin Enseignement qualifiant-Formation emploi*, the so-called 'emerging' professions, and, where appropriate, the volume of people involved in training. These recommendations and proposals are sent to the SFMQ by 30 June every year.

The entire process within the SFMQ is quite complex and involves several chambers and committees working on occupational profiles. The SFMQ rates the priority of the requests it receives according to a number of criteria, including the applicant (the minister's request is a priority), the size of potential employment demand and the requests already planned. Further, based on the annual survey on vacancies and the lack of competences carried out by the public employment services (*Le Forem and Actiris*), skills needs are identified and discussed in cooperation among the various stakeholders sitting in the SFMQ.

The SFMQ process is the way things should ideally work. In practice, VET providers are not obliged to adopt the occupational profiles selected and developed

^{(&}lt;sup>19</sup>) OFFA (French speaking Belgium office for apprenticeships) has been created to implement the 2015 alternance training reform. It brings together the social partners, VET providers and representatives of ministers.

⁽²⁰⁾ For more clarifications about transparency, visit http://www.sfmq.cfwb.be or the SFMQ work-plan for 2020.

^{(&}lt;sup>21</sup>) Sectoral branches operate within the sectoral funds. These are managed by the social partners and organise different types of services to the affiliated companies and to the employees of the sector. Within the sectoral fund, a branch provides workers in companies with further training or upgrading, often in partnership with training and education operators.

by the SFMQ. Sometimes, the formally selected occupations are not valid until any education or training provider has implemented them.

After a slow start in its operations, the SFMQ has reached a 'cruising speed'. However, the process has been criticised for being time-consuming and complex, preventing companies from finding the skills and hiring the apprentices they would need. The ordinary institutional pathway through the SFMQ takes one or two years to complete, thus failing to respond to companies' urgent requests for skills, with an impact on apprenticeship take-up and employment. In addition to the lengthiness and complexity of the system, the lack of staff slows procedures down.

To respond to the limitations of the institutional process through the SFMQ or to address specific needs (either local or specific to a segment of the population or an occupation), education and training providers have used two parallel pathways ('off-track') to identify and develop apprenticeship occupations in real time.

The first option is when a single company asks a school (education providers only, i.e. CEFA) to develop a specific occupation and the related programme to provide companies with quick answers to their urgent skill needs, e.g. in one or two months. Although any company could submit such a specific request, in practice this is something that happens rarely (maybe once a year in a specific area). Such requests are submitted by single companies, at local level, hiring a limited number of people. Usually, the beneficiaries of this off-track option are dropouts and the purpose of this track is to promote employment creation rather than training people. In any case, apprentices eventually get a specific vocational qualification (so-called Article 45), which could be recognised through a process of validation. This off-track option works thanks to the effective, although informal, link and cooperation at the local level between the labour market (companies) and VET providers. It is not likely to become the main way but could be recognised and integrated in the main institutional process of occupations identification.

The second option for an 'off-track pathway' is the one through which a vocational training provider (SFPME) and vocational education providers (CEFA) take the initiative to design their own profiles in some specific situations, to respond to the demand of some very specific skills at short notice.

In the vocational education subsystem, these are pilot processes leading to qualifications equivalent to those acquired in fully school-based pathways (so-called Article 49). For example, the craft bakery sector may express the need for a specific apprenticeship occupation and the related programme and ask the education provider administration to build them. The education administration can draft the requested curriculum, which must be approved by the ministries in order to be used by all vocational education providers. VET providers can certify the learning outcomes of students who undertake such curricula, who would therefore have the possibility to get a full and recognised certificate.

The two off-track options seem to work well not only because their scope is narrower but also because the dialogue is more informal, involving fewer people. The process is more effective and efficient, at least in terms of time. Ideally the offtrack alternatives should be integrated with the institutionalised track through the SFMQ.

5.3. Design and update of apprenticeship curricula

The SFMQ has a specific mandate to design curricula, for both sub-schemes (vocational education and vocational training). In principle, through the institutional link between labour market stakeholders and VET actors, in addition to developing occupational profiles, the SFMQ is in charge of:

- (a) designing training profiles (curricula) that correspond to the occupational profiles selected for apprenticeship and thus ensuring the consistency of the relevant training with the needs of the labour market. The training profiles commission of the SFMQ (Coprofor) oversees this;
- (b) providing education and training providers with common training profiles to allow permeability of pathways, ensuring that learners' prior learning is taken into account and help promoting their mobility;
- (c) improving consistency between the education and training system and job offers, by working closely with the public employment services.

As a rule, the SFMQ develops curricula for apprenticeship occupations based on standards that are the same for CEFA and vocational training centres (IFAPME and SFPME) and regardless of the way of training delivery (fully school-based or alternance). If the system worked effectively, the IFAPME, SFPME and CEFA would have the same curricula for 90% of their occupational profiles.

Education and training providers may implement the SFMQ curricula but this not mandatory. In practice, they do not do it all the time, as they can design their own curricula. The reason why an education and training provider would offer a curriculum different from the one designed by the SFMQ is to overcome the delay caused by the time it takes to develop curricula through the main institutional procedures, which creates distance between the practice of a real business occupation and what is taught in schools and training centres. Differences between the two curricula are minor most of the time and students enrolling in a programme learn about the final certification they will get, not the curriculum they will follow.

In French-speaking Belgium, curriculum design is not the main problem. The apprenticeship system catalogues a mismatch between companies' demand for apprenticeships and the number of candidates. The lack of apprentice supply has been a problem for years and is becoming more severe. Very few people are enrolled in apprenticeship in French-speaking Belgium and the numbers are decreasing year after year. Boosting the apprenticeship offer, and having more young people enrolled in apprenticeship, is the policy priority for the country. For example, there are 5 000 employment positions in the building sector that are without job seekers. The same applies to many other sectors, such as logistics, the transport sector, and the food industry (²²).

The real problem in governance is that the system is too complicated, as it comprises three different education networks, and communication is divided as people have to be addressed at three different levels. The goal should be harmonisation and the integration of greater flexibility.

5.4. Expression of apprenticeship demand

If and how VET and labour market actors cooperate to express apprenticeship demand may differ according to the VET provider that organises apprenticeship.

Vocational training providers manage apprenticeship demand relatively more efficiently as they have a single administration centre. IFAPME has stronger links with companies developed through tradition and experience in alternance training. IFPME and the SFPME also have a website dedicated to apprenticeship, which makes the process more organised and easier. The question remains for vocational education providers (CEFA). There is no common communication policy developed by the Education Ministry. Nor are there specific tools to match offer and demand. As a result, each CEFA develops its own website.

Most of the time, links between companies and VET providers exist at local level thanks to the willingness and availability of the training staff to develop relationships to liaise with companies. But this is not a systemic or sustainable solution in the long run and for a system of larger size.

OFFA is partly addressing these issues through setting up an apprenticeship brand (ALT+) and an online portal to match apprenticeship demand and supply. The new brand enables harmonised communication on apprenticeship (*formation en alternance*). Communication to the public will be uniform for all stakeholders, avoiding getting lost in the details of the different sub schemes and VET providers. Questions and requests from the public will be redirected by the OFFA to the VET provider concerned depending on the geographical location.

To aid identifying apprenticeship demand among companies and apprentices, to increase the number of apprenticeship enrolments and facilitate the matching of learners and companies, in November 2019, OFFA launched OPLA. This is a unique and interactive platform for apprenticeships that features all companies that are accredited and all apprenticeship candidates. Data are shared between the

⁽²²⁾ https://www.leforem.be/former/horizonsemploi/metier/index-demande.html

VET providers, the social partners and the sectoral branches. By the end of 2021, it will be possible to match offer and demand online. Every school and training centre will receive demand from both companies and apprentices. They will have the possibility to respond directly to the demand or, if they cannot do so, they will insert the relevant entries on the platform. In time, the system shall reach full functionality, improve training quality and support learner mobility.

The mechanisms in place in terms of governance are well designed because there is a tradition and accountability among individual VET providers. There is potential for considerable improvement in terms of transparency and mobility of people.

5.5. Conclusions

Apprenticeship (*formation en alternance*) in French-speaking Belgium underwent a profound governance reform in 2015, with the aim of finding solutions to the system's complexity. After an initial period, the SFMQ, created under this reform, has reached its cruising speed and produces occupational profiles and curricula requested by companies and VET providers, which are increasingly adopting them. Challenges remain related to the time and burdensome procedures that might be misaligned with the fast-changing labour market needs.

Simpler governance mechanisms may work in the direction of more transparency and eventually support finding a solution to the main apprenticeships problem in French-speaking Belgium, which is the lack of young people interested in it. Work needs to be done to attract young people to VET and apprenticeships, by showing that this is a way of self-realisation and a good life.

5.6. References

[URLs accessed 18.6.2021].

ALT+. https://www.alt-plus.be

Bassin EFE (2016). Cadastre 2016 de l'offre francophone d'enseignement qualifiant et de formation professionnelle en Région de Bruxelles Capitale: année de référence: 2014 [Register 2016 of the Francophone offer of qualifying education and vocational training in the Brussels Capital Region: reference year: 2014]. https://ccfee.be/fr/publications/cadastre/cadastre

Cedefop (2019). Flash thematic country review on apprenticeships in Frenchspeaking Belgium. Luxembourg: Publications Office. https://www.cedefop.europa.eu/files/4174_en.pdf Commission communautaire française (2003). Décret portant assentiment à l'avenant du 4 juin 2003 modifiant l'accord de coopération conclu le 20 février 1995 par la Commission communautaire française de la Région de Bruxelles-Capitale, la Communauté française et la Région wallonne relatif à la Formation permanente pour les Classes moyennes et les petites et moyennes entreprises et la tutelle de l'Institut de Formation permanente pour les Classes moyennes et les petites et moyennes entreprises. [Decree approving the amendment of June 4, 2003, modifying the cooperation agreement concluded on February 20, 1995 by the French Community Commission on of the Brussels-Capital Region, the French Community and the Walloon Region relating to continuing education for the middle classes and small and mediumsized enterprises and the supervision of the Institute for Continuing Education for middle classes and small and medium-sized Enterprises].

http://www.ejustice.just.fgov.be/cgi_loi/change_lg.pl?language=fr&la=F&cn= 2003060448&table_name=loi

Commission communautaire française (1995). Accord de coopération du 20 02 1995 (Relatif à la Formation permanente pour les classes moyennes et les petites et moyennes entreprises et la tutelle de l'Institut de formation permanente pour les classes moyennes et les petites et moyennes entreprises par la Commission communautaire française et la Région wallonne). [Cooperation agreement of 20 02 1995 (Relating to permanent training for middle classes and small and medium-sized enterprises and the supervision of the Institute of permanent training for middle classes and small and medium-sized enterprises by the French Community Commission and the Wallon Region)].

https://www.ejustice.just.fgov.be/cgi_loi/change_lg_2.pl?language=fr&nm=1 995022051&la=F

Communauté française (1991). Décret organisant l'enseignement secondaire en alternance [Decree organising secondary education in alternance]. Decree of 3 July 1991.

https://www.gallilex.cfwb.be/fr/leg_res_01.php?ncda=16421&referant=I01

- Communauté française; Commission communautaire francophone (COCOF) and Région wallonne (2016). Décret portant assentiment à l'accord de coopération entre la Communauté française, la Région wallonne et la Commission communautaire française concernant le service francophone des métiers et des qualifications, en abrégé «SFMQ» [Decree approving the cooperation agreement between the French Community, the Walloon Region and the French Community Commission concerning the French-speaking service for trades and qualifications, abbreviated 'SFMQ'], Bruxelles, Moniteur Belge 19.1.2016. https://www.gallilex.cfwb.be/document/pdf/42051_000.pdf
- Communauté française; Commission communautaire francophone (COCOF) and Région wallonne (2008). Accord de coopération-cadre relatif à la formation en alternance [Framework cooperation agreement relating to alternance training], Brussels, 24 October 2008.

https://wallex.wallonie.be/eli/autre/2008/10/24/2009200861/2014/09/01

Office Francophone de la Formation en Alternance. https://www.formationalternance.be

Service Francophone des Métiers et des Qualifications. https://sfmq.cfwb.be/

CHAPTER 6. Work-based learning, Bulgaria

By Petya Evtimova, independent expert and member of the Cedefop community of apprenticeship experts

6.1. Introduction (²³)

The Vocational Education and Training Act (1999) and its amendments (2014 and 2018) (²⁴) set the legal basis for the apprenticeship scheme. The 2015 Law on preschool and school education defined work-based learning (apprenticeship) as a specific form of training, in which the professional qualification is acquired through practical training in a real working environment and training in a vocational school. It can be offered by VET providers and one or more employers, for students 16 years or more, who are in the second stage of upper secondary education.

6.2. Identifying and updating apprenticeship occupations

The 2014 VET Act established a list of occupations for VET which is approved by the Minister for Education and Science in cooperation with the Minister for Labour and Social Policy and the national level employers' and employees' organisations. The rules and procedures for maintaining and updating the list are proposed by the Governing Board of the National VET Agency (NAVET) and approved with an Order by the Minister for Education and Science. The list includes occupations and specialties of occupations for which VET can be organised. There is no list of professions or occupations identified specifically for the apprenticeship scheme, work-based learning (dual system of training). In principle, apprenticeship could be organised for any occupation or specialty from the list of occupations for VET.

In practice, however, there are statutory regulations in place that impose specific requirements for some occupations that need to be learned through apprenticeships. There are occupations for which specific legislation does not allow apprenticeships for persons under a certain age (different from the minimal labour contract age, which is 16 for Bulgaria) as being considered too dangerous

^{(&}lt;sup>23</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

^{(&}lt;sup>24</sup>) State Gazette No 68/30.7.1999, last amendments State Gazette No 21/13.3.2020. The VET Act covers both upper secondary and post-secondary dual training.

for the health or life of young students (²⁵). Other limitations are included in specific legislation for certain occupations; examples include elevator technicians, high voltage electrical technicians and workers in mines for which practical training cannot be organised for people under the age of 21. This means that students in upper secondary VET schools – between 16 and 19 years of age – cannot be trained in apprenticeship for these occupations. There are also occupations which are not suitable for apprenticeship for reasons such as work with toxic or carcinogenic materials, in a radiation environment or under extreme low or high temperatures, noise or vibrations. These conditions are evaluated individually by the Labour Inspectorate Department when issuing a work permit for apprentices.

While these reasons are all in favour of the promotion of apprentices' health and safety, too many different requirements, as in the starting age of different occupations established in numerous legislation documents, make it very difficult for all stakeholders to abide by the law.

It would be useful both for employers and for students to identify occupations suitable/not suitable for apprenticeship in a specific list. As apprenticeship does not have a long history in Bulgaria (introduced in 2015), most probably in the years to come and with the experience gathered the moment will come when the State institutions and the employers' and employees' organisations will agree on such a specific list. Such a development would make it clearer for companies willing to take apprentices for which occupations they can cooperate with VET providers and start apprenticeship programmes. This would set the basis to improve cooperation between companies and VET providers. It would also help to plan investments in apprenticeship in a more effective and concentrated way by prioritising apprenticeship occupations.

In 2020, the existing list of occupations for VET was analysed and discussed among all VET stakeholders with the aim of updating to meet labour market demand better. Although the issue of introducing a specific list of apprenticeship occupations was expected to be part of this analysis, the final document does not make any recommendations on this issue.

6.3. Design and update of apprenticeship curricula

Apprenticeship in Bulgaria is structured along two curricula: one for school-based training and one for workplace-based training. The former is designed following the

^{(&}lt;sup>25</sup>) For example, some limitations are included in a joint Ordinance No 6 of 24 July 2006 of the Minister for Labour and Social Policy and the Minister for Healthcare for the requirements and procedure of issuing work permits for persons under the age of 18. *State Gazette* No 64/8.8.2006, amendments *State Gazette* No 46/23.6.2015 and *State Gazette* No 64/8.8.2017.

State qualification standards (not occupation profiles), developed within committees at national level which involve representatives of the national level employers' and employees' organisations. The participation and the role of the representatives are guaranteed by the legislation (VET Act), so employer and employee organisations have direct influence on the content of the State qualification standards on which the school curricula for apprenticeship are based. These organisations also participate with their representatives in the final examinations of students graduating VET including dual VET.

Curricula for workplace-based training are developed and agreed upon between each VET school and its partner company/companies in accordance with the State qualification standards and the school-based training curricula.

In 2018, the VET Act (Art. 13d(5)) amendment introduced the requirement that VET curricula, including those for apprenticeship (both school-based and workplace-based component), should be updated at least once every five years.

Although the role and participation of representatives of national level employers' and employees' organisations in the national level committees which develop the State qualification standards for VET is guaranteed by law, these organisations are not always active enough. They often appoint professionals who do not have adequate work experience to discuss the content of the qualification standards within the committees. Representatives are also sometimes not active enough when they participate in the evaluation of students' final exams, although their role is defined by law along with the participation of representatives of the company where the practical training has taken place. The lack of participation may be due to the fact that social partners organisations are usually large organisations with many other tasks; it would be much more effective if branch chambers and associations were more involved in the design of the curricula and the State qualification standards at national level. Branch chambers and associations know better the needs of the companies in the specific branch and are much more interested in the knowledge and skills acquired by VET students and apprentices. However, regulation only foresees a role for national level employer and employee organisations, not for branch associations or chambers. This may be partly explained by the fact that membership of a professional association or chamber is not mandatory for Bulgarian companies. However, their participation in the definition of the content of qualification standards and in the final examination procedures would improve the quality of the training provided.

Cooperation between VET providers and companies on curriculum content is also not easy. A national survey carried out in 2019 (²⁶) among 500 companies and

^{(&}lt;sup>26</sup>) Survey: Knowledge, attitudes and practices among Bulgarian companies and schools regarding the dual vocational education and training, Gallup International Balkan Ltd., 2019.

200 VET providers showed that only 17% of the companies have established very good cooperation with a VET provider, 16% have good cooperation and the rest either do not have any or they are not happy about it. Only 24% of the companies responded that they would let their professionals participate in the committees for elaboration of VET curricula; 37% responded they would let their professionals participate under certain conditions (as these workers will be away from work), 26% that they would not let their professionals be away from work to participate in committees for elaboration of VET curricula, and 13% could not respond at that moment.

Among companies which already take apprentices, the percentage of those willing to participate with professionals in the design of VET curricula is 55%. The largest share (84%) of the companies already taking apprentices said they have a very good partnership with a VET school and 16% answered they have established a good partnership. Of VET providers, 25% in the survey responded that more legislative measures are needed to foster the involvement of business in the elaboration of VET curricula for apprenticeships. These findings show that there are still VET providers in Bulgaria which do not have any, or not good, cooperation with companies, which may lead to lower quality of practical skills acquired by students in these providers.

6.4. Expression of apprenticeship demand

According to the Ordinance for work-based learning (²⁷), the expression of apprenticeship demand comes from the individual employer. Demands are to be addressed to the VET principal of the school providing the training of interest to the employer, by 15 December of the year before that when the apprenticeship should begin. The request should include the occupation and the number of students the employer would like to have as apprentices. The VET school then is responsible for organising the selection and enrolment process. Apprenticeship is organised through a partnership agreement between the VET school and one or more employers. In the latter case, a few employers jointly request a VET school to start an apprenticeship programme for the same occupation. The expression of demand is highly decentralised and can come down to the specific needs of individual employers.

There is no procedure that regulates the process of expressing demand for apprenticeship. It could happen through a branch association. As most VET schools in Bulgaria are State-owned, a more centralised approach to managing

⁽²⁷⁾ Ordinance No 1 of 8 September 2015 on the requirements and procedure for workbased training (dual system of training), issued by the Minister for Education and Science, State Gazette No 70/11.9.2015, amended State Gazette No 40/15.5.2018.

apprenticeship demand, with the support of branch associations/chambers, could be taken into consideration. Branch associations, though, would prefer to act nationally, as one of their roles is to encourage its member companies to get in touch with VET providers themselves.

6.5. Conclusions

In Bulgaria the governance of the apprenticeships is regulated to a large extent. The role of national level employer and employee organisations is regulated by law, as is the role and responsibilities of individual employers and VET providers.

It is a legal requirement that curricula for VET, including apprenticeship, should be updated at least once every five years. More efforts should be made to encourage active participation of social partner representatives and professionals in the process of elaborating and updating curricula.

As a recommendation, the role of the branch associations and chambers could be legally strengthened and a list of occupations for apprenticeship could be defined as a subfunction of the existing list of occupations for VET.

References

[URLs accessed 18.6.2021]

Council of Ministers of the Republic of Bulgaria (2014). Strategy for the developments of the vocational education and training in the Republic of Bulgaria for the period 2015-20.

http://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&ld=934

Gallup International Balkan Ltd. (2019). Survey about the knowledge, attitudes and practices among Bulgarian companies and schools regarding the dual vocational education and training. http://dominoproject.bg/wp-content/uploads/2019/10/Gallup-DOMINO-Project-survey-report-EN.pdf

CHAPTER 7. Apprenticeship contract, France

By Romain Pigeaud, Centre-Inffo, member of the Cedefop community of apprenticeship experts

7.1. Introduction (²⁸)

In France, the two main apprenticeship schemes in law are the 'apprenticeship contract' (*contrat d'apprentissage*) and the 'professionalisation contract' (*contrat de professionalisation*). In both cases, apprenticeships are the subject of individual labour contracts signed between an apprentice (or his/her legal representative) and an employer. Through this, employers commit to remunerate the apprentices and deliver effective training and tutoring to them for the duration of the contract. Apprentices commit themselves to work effectively for the employer within the full duration of the contract. The reform of apprenticeships brought by the Law of 5 September 2018 on 'the freedom to choose one's professional future' aims to develop apprenticeships hugely.

7.2. Identifying and updating apprenticeship occupations

The 'apprenticeship contract', the certification to which it leads, and the professional activity carried out are all connected. Apprenticeships can be offered for certifications that are already included in the national registry of professional qualifications (RNCP). As a result, they combine learning in a training centre with training in one or more companies, based on one or more professional activities directly related to the certification that is the subject of the apprenticeship contract (French Labour Code, Article L6211-2). The employer entrusts the apprentice with activities enabling work to be carried out in accordance with defined annual progression, by agreement between the apprentice training centre and the company representatives (French Labour Code, Article L6223-3). The employer assumes the responsibility for participating in activities to coordinate the training provided in both venues (French Labour Code, Article L6223-4).

^{(&}lt;sup>28</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

A 'certifier' is responsible for registering the certification in the RNCP. The certifier can be a ministry, the social partners/professional branches, consular bodies or training bodies. The certification must include:

- (a) a professional activity reference framework, that describes the corresponding activities and work situations, and the trades or jobs envisaged (French Labour Code, Article L6113-1);
- (b) a skills reference framework, that clearly identifies and formalises the knowledge and skills, including cross-functional skills;
- (c) an evaluation reference framework, that defines the criteria and procedures for assessing learning, and how skills and knowledge are acquired that are necessary to carry out the professional activities should be validated (French Labour Code, Article L6113-1).

One of the factors emphasised by those involved in governance is the final certification, the key role of the certifier, and the regulation of *France compétences*, a national public institution under the supervision of the ministry in charge of vocational training. Its strategic orientations are determined by quadripartite governance consisting of the State, the regions, trade unions and employer organisations, and qualified individuals.

This governance structure has an impact on the activity of the training centre because the centre that plans to offer training must take into account the reference network of the certification, and may or must obtain accreditation or approval from the public or private certifier under whose authority this certification is issued. Procedures may vary from one certifier to another. For example, approval for certificates from the French Ministry of Employment is issued by the regional prefect (French Education Code, Article R338-8).

Criteria for evaluating applications for registration in the RNCP include involvement of national joint employment commissions of professional branches in the elaboration or validation of the reference framework. These are tripartite commissions involving representatives of the State, employee trade union organisations and professional employer organisations (sectors). For example, certifications issued on behalf of the State now require a favourable opinion from a professional advisory committee (CPC). Reference frameworks are developed with the support of business lines and professionals. Professional branches are responsible for setting the level of support for each certification and the training needs for the sectors they represent The RNCP and its governance make it possible to offer certifications that are directly related to the needs of companies.

Branches and authorities that develop the certifications and their guidelines aim at developing certifications that are clear and correspond to real professional activities (²⁹). The clearer a certification is, the more training centres have the tools and media to provide training and the more clearly identified the skills needed for the employment in question will be. Skills operators (OPCO) support branches in constructing their certification standards and in overall support to the development and implementation of their professional training policy. OPCO check the quality of documents prior to applications for the registration of certifications, coordinates the network of certification evaluators (³⁰). They also finance apprenticeships.

France compétences manages the RNCP, ensuring that the certifications meet the needs of the economy. It registers the certifications listed in the RNCP (Article L6113-5 of the French Labour Code) and supports certifiers, for example by publishing briefing notes about the obligations of certifiers, in relation to the criteria for being registered in the RNCP. *France compétences* also regulates the management of contracts and monitors and assesses the apprenticeship system.

The requirement to register certifications guarantees the clarity of these certifications, identification and update of apprenticeship occupations. This is one of the challenges of professional training and one of the missions of *France compétences*. By using the apprenticeship contract, the end users of the system, in practice the apprentices and their employers, attest to the link between the labour market and the players in this professional training system.

7.3. Design and update of apprenticeship curricula

The reference frameworks included in each certification are particularly comprehensive. For example, the certification 'professional title of catering agent' contains nine professional skills sheets that describe technical expertise. As a result, the concept of certification goes beyond the notion of curricula since it describes skills that are directly related to a job.

Apprenticeship training is implemented in accordance with the certification frameworks. Training objectives must be expressed in terms of professional skills and/or abilities to be acquired and/or the certifications targeted (indicator 5).

Training centres assess the skills acquired by apprentices, in accordance with the rules defined by each certifier (Article L6231-2 of the French Labour Code).

^{(&}lt;sup>29</sup>) In the new regulations on certification, the ministerial certifications, for example of the Ministry of Labour, are based on employment, activity and skills reference frameworks historically constructed jointly with the professional branches and based on a strict evaluation system. Their regular review with the professional branches also guarantee companies that the certification is in line with the expected changes in the professions. http://occitanie.direccte.gouv.fr/Les-titres-professionnels-du-ministere-du-Travail-en-Occitanie-en-2018

⁽³⁰⁾ Example: https://www.opcalia.com/actualites/certifications-lappui-renforce-des-opcoaux-branches

First, the training centre must contact the certifying body to understand the training guidelines and assessment criteria and procedures. The training centre, therefore, builds its curricula according to the certification framework and the standards imposed by the certifier. The training centre is obliged to set up a development committee that examines and discusses issues relating to its organisation and operation, particularly with regard to the education project (French Labour Code, Article R6231-4). The composition of this board is no longer legally defined, but representatives of the branches and employers can be part of it.

The certifier is responsible for the educational monitoring of apprenticeship training and of the training centre, which is carried out by inspection bodies or public officials authorised by the certifying ministers and representatives appointed by professional branches and consular body (French Labour Code, Article L6211-2). Monitoring checks provision of training according to the reference framework of the certification concerned (French Labour Code, Article R6251-2). Certifiers also provide information and support to training centres for all pedagogical aspects, particularly during periods of diploma reform, as well as regulatory monitoring.

Apprenticeship training is also regulated by quality or regulation obligations, and by rules from the Ministry of Labour and *France compétences*. Training curricula are designed taking into account these obligations. For example, the French Labour Code requires that, subject to the rules set by the certifier for the certification in question, the duration of apprenticeship training in the training centre may not be less than 25% of the total duration of the contract (French Labour Code, Article L6211-2). In this case, the Ministry of Labour determines a standard that applies in the event that the certifier has not developed its own standard.

For apprentices, certification is a guarantee in terms of securing their career path through a visible signal of their qualification, professional integration – as the skills acquired are in line with the needs of the labour market – and recognition of their professional skills. For employers, certification is a reliable reference point for recruitment and for covering the skills needs of the labour market.

When the training centre provides training services leading to a professional certification, it ensures that the content of the service meets the requirements of the certification concerned (quality indicator 7). Prior to the signing of a contract between the apprentice and the company, the beneficiary's needs are analysed based on the purpose of the training (quality indicator 4). The training centre communicates the results indicators, adapted to the nature of the services implemented and their target audiences (quality indicator 2). It assesses the achievement of the service objectives by the beneficiaries (quality indicator 11).

The employer must be capable of familiarising itself with the activities that will be carried out by the apprentice. For the training centre, the challenge is to develop, make available or suggest informational and monitoring tools for the employer. The centre must coordinate with the employer so that the apprentice's activity matches the reference framework for the certification in question.

The quality reference framework and its governance presented above are used to attest to the quality of the process implemented by the training centres to carry out apprenticeship training actions that contribute to skills development.

Implementation of the current professional certification system has been accompanied by provisions concerning their governance allowing an approach focused on skills related to the targeted professions. This governance ensures that the certifications are well adapted to the changing needs of the labour market. The training centres design apprenticeship training, and hence their programmes, according to the guidelines and under the governance of the certifier.

7.4. Expression of apprenticeship demand

Until 2019, when the law on the freedom to choose one's professional future was implemented (³¹), the regions regulated the supply of apprenticeships, and not all the qualifications listed in the RNCP were open to apprenticeships. Since then, there is no maximum number of apprentices. It is the end users, the employers and apprentices, who express the demand for and availability of apprenticeship contracts, guaranteeing the relevance of the training/certification offered. It has been noted that employers have recruited apprentices for certifications that, until this reform, had not been open to apprenticeships by the regions. Registration in the RNCP implies a guarantee of employability, just as professional integration is a mandatory prerequisite to be able to offer apprenticeship training. The relevance of certification, adequacy of labour market needs, impact in terms of access and return to employment (³²) are key points monitored by *France compétences*.

New funding has been put in place for training providers. Each apprenticeship contract results in funding for the training provider. The branches determine the financial cost of the contract, depending on each certification, and propose levels of coverage. These levels take into account the recommendations of *France Compétences* in terms of costs and levels of coverage. In September 2019, *France Compétences* approved and published the costs for nearly 3 500 certifications which can be proposed for an apprenticeship contract (³³). *France Compétences*

^{(&}lt;sup>31</sup>) Law No 2018-771 of 5 September 2018 on the freedom to choose one's professional future.

^{(&}lt;sup>32</sup>) A statistical indicator is followed: certification obtained/insertion in the employment corresponding to the certification. See Note d'information, No 19.11, April 2019.

⁽³³⁾ https://www.francecompetences.fr/fiche/16-09-2019-le-referentiel-sur-les-niveaux-deprise-en-charge-des-contrats-dapprentissage-est-paru/

guarantees the financial sustainability of the system and distributes apprenticeship funds to the OPCOs.

This contract financing system is a method of cooperation between training actors and company representatives, via the professional branches. This new mechanism is an incentive for training providers: the more apprentices they train, the more funding they obtain. This is funding for business activities.

Regions may supplement funding of apprenticeship contracts, taking into account regional specificities. Their presence in governance guarantees apprenticeship offer across the country. Their additional funding aims to improve quality and educational innovation, to invest in the creation of new training centres and to carry out major renovations (French Labour Code, Article L6332-1).

7.5. Conclusions

The 2018 apprenticeship reform reinforces the role of several stakeholders in apprenticeship governance. The professional branches in particular, which are crucial to meeting the needs of companies and facilitating the integration of young people, are being given a central role alongside the OPCO (skills operators) and *France Compétences*.

Contract subsidy encourages training providers to offer apprenticeship training. Training providers must comply with quality obligations, in addition to their obligations towards the certifier. The RNCP acts as a guarantee of employability, since certifications correspond to labour market needs.

The new governance structure ensures a strong link between the business world and training providers. It aims at the professional integration of apprentices, the transparency of the entire system and a guarantee of the quality of the training offered.

CHAPTER 8. Apprenticeships, Ireland

By Alan McGrath, SOLAS, member of the Cedefop community of apprenticeship experts

8.1. Introduction (³⁴)

Apprenticeship forms a key element in the Irish Government's policy to establish and significantly grow work-based learning as a core contributor to growth as a society and economy. This is as outlined in the Action plan to expand apprenticeship and traineeship in Ireland 2016-20. The 1967 Industrial Training Act sets out the overall structure of the national system and the protections for, as well as the responsibilities of, apprentices, employers, and education and training providers. The 2012 Qualifications and Quality Assurance Act also underpins apprenticeship, supporting validation and quality assurance of programmes nationally.

SOLAS, the further education and training authority, has primary responsibility for management of apprenticeship nationally, working in partnership with the Higher Education Authority, Quality and Qualifications Ireland, industry, and education and training providers across further and higher education. SOLAS responsibility includes maintenance of a register of employers approved to take on apprentices and a register of apprentices nationally.

Following a period of review and reform that started in 2013, a new model of apprenticeship was announced in June 2014 (³⁵), bringing greater flexibility in terms of the sectors involved in apprenticeship as well as the content, duration, award levels, models of delivery, target groups, providers, and governance.

The establishment of the Apprenticeship Council, launched by the Minister for Education and Skills in November 2014, is an essential part of the new model and a key action in the implementation of recommendations from a 2014 Review of apprenticeship training in Ireland (³⁶). The Council is industry-led and chaired by an industry representative, but its membership comprises representatives from industry, trade unions, further and higher education representatives, and the

^{(&}lt;sup>34</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

⁽³⁵⁾ https://www.education.ie/en/Publications/Policy-Reports/Review-of-Apprenticeship-Training-in-Ireland

^{(&}lt;sup>36</sup>) Ibid.

Department of Education and Skills (³⁷). This broad membership allows for the views of all key stakeholders to be included in the national governance structure.

8.2. Identifying and updating apprenticeship occupations

The Apprenticeship Council is tasked with the expansion of apprenticeship into new sectors of the economy and identifying sectors where new apprenticeship programmes can make a real difference to both employers and employees. Its composition is the first essential element in the better capture of labour market needs and the alignment of apprenticeship offers with these, as it represents a governance model that sets the labour market actors in the driving seat, but still in close cooperation with education authorities.

In carrying out its role, the Council takes account of current and future skills needs, including through data and reports produced by the Expert Group on Future Skills Needs (EGFSN) and the Skills and Labour Market Research Unit within SOLAS; these examine either sectoral and/or regional skills needs. The EGFSN consists of government departments, labour market representatives (employer, trade unions), VET and higher education authorities. Since 1997 it has advised Government on projected skills requirements at national and sectoral levels and made recommendations on how education and training systems might be adapted to better effect. SOLAS works closely with a network of regional skills forums across Ireland to meet the emerging skills needs of each region. The Skills and Labour Market Research Unit conducts regular research to analyse employer needs and inform programme development. The reports allow the Council to determine labour market needs and skills shortages, which in turn helps to ensure that the new apprenticeship programmes developed and funded are linked explicitly to an identified labour market need.

Post-2016 apprenticeships are industry-led, allowing consortia of labour market actors to take the first step and submit their proposal on new sectors/occupations for which a new apprenticeship programme may be developed and offered. There were two national calls for new apprenticeships, in 2015 and 2017. Consortia may submit their proposals even in the absence of a call. The proposed programme must demonstrate it is meeting an industry need, hence the absolute importance of industry support and involvement in its development.

^{(&}lt;sup>37</sup>) https://www.apprenticeship.ie/more/about

Figure 1 outlines the 10-step approach to the development of an apprenticeship programme, including who is responsible for each step (³⁸). The Council oversees the full process and plays a key role in the following steps linked with selecting sectors where apprenticeships can be offered:

- (a) assessment and approval of the submission for development. The Council assesses the submissions and makes recommendations to the Minister for Education and Skills. The assessments are based on the criteria outlined in the call for proposals. The Ministry of Education and skills also has a role in this step, next to the labour market actors represented in the Council;
- (b) approval of a project plan and the allocation of development funding. A consortium of industry and education providers develops and submits a project plan for the development of an apprenticeship programme. This is reviewed and approved by the Council, with funding allocated to support the apprenticeship development. SOLAS, representing VET and the Higher education authority, also has a role in this step.

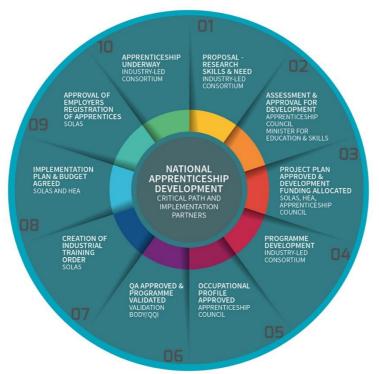


Figure 1. The 10-step approach to the development of an apprenticeship programme

Source: SOLAS, 2017. https://a.storyblok.com/f/83224/x/7baa14492b/handbook_document.pdf

As of June 2020, the Council has overseen the launch of 30 new apprenticeship programmes, increasing the number of operational apprenticeship

^{(&}lt;sup>38</sup>) SOLAS et al. (2017). *Developing a national apprenticeship: handbook*. p.9.

programmes in Ireland from 25 to 55. The 30 new programmes span both further and higher education awards and are led by consortia made up of industry and education stakeholders working in partnership. They cover a wide span of sectors, including information technology, manufacturing, hospitality, accounting technician, financial services, sales, auctioneering and bio-pharma. They are targeted at a wider range of participants (not just school-leavers), with a focus on addressing identified skills shortages. The original 25 programmes, offered under the coordination of SOLAS (not consortia-led) in areas that were traditional for apprenticeships (such as electrical engineering, motor mechanics, carpentry, plumbing) should also undergo full quality reviews (including their content) every five years (validated by Quality and Qualifications Ireland, QQI).

The *Topic specific: Statutory quality assurance guidelines*, developed by the QQI (³⁹) and used by all statutory apprenticeship providers, introduce the consortium steering group (CSG) for an apprenticeship programme. The guidelines detail the ideal composition: key industry stakeholders, including several employers who are in a better position to convey the industry requirements, work together with education authorities (one appointed as coordinating provider, more could be delivering), whose staff is more competent in terms of learning content development and structure (modules). The CSG acts as a liaison between employers and the providers. The guidelines set its role as 'to ensure that the apprenticeship programme conforms to, and evolves with, the requirements of the occupation. Its purpose would be to ensure that the apprenticeship programme is enterprise-led and meets labour market needs'. The guidelines have significantly assisted engagement of industry and education providers for apprenticeship expansion in a range of sectors.

8.3. Design and update of apprenticeship curricula

After the project plan is approved and funding is allocated, the industry-led consortia move on to develop the programme further. They submit an occupational profile for approval by the Apprenticeship Council (step 5, Figure 1).

The profile becomes the basis for the apprenticeship programme and includes information on the learning outcomes and content of modules for on- and off-thejob training. It is reviewed by the Council (including employee representatives) to ensure there is sufficient industry support for the apprenticeship and that there is no significant overlap between the proposed programme and an existing one (generally no more than 50% overlap). Usually, the proposals are significantly well

^{(&}lt;sup>39</sup>) QQI is a State agency responsible for promoting quality and accountability in education and training services.

developed before they come to the Council, but an occupational profile can be revised and amended, if needed.

After the approval of the occupational profile, consortia again have to develop further the learning outcomes and seek accreditation by the QQI or any other awarding body (such as the University of Limerick which has full awarding authority).

The CSG has to ensure adequate consultation with stakeholders in the development, delivery and review of the programme and to develop systems that ensure that employers and labour market trends influence and lead curriculum development. The CSG ensures that 'on-the-job' training is maintained and delivered at the appropriate standard with the specified learning outcomes and that it is implemented effectively by employers and the coordinating provider.

Box 8. The case of the Lean Sigma Manager master of science

The Lean Sigma Manager Apprenticeship is a two-year programme developed by the University of Limerick (UL) and industry partners. It leads to a master of science award upon completion. The programme registered 21 apprentices in January 2020 on its first intake. The consortium leader is the ICBE (Irish Centre for Business Excellence). Despite the existing relationship between the ICBE and the University of Limerick in the area of lean and operations excellence, the development of apprenticeships created different challenges.

First, the establishment of a CSG, including UL as the coordinating provider of the apprenticeship, was specifically required to develop the apprenticeship. As a CSG includes several employers, the process required and resulted in more a detailed engagement and partnership approach than regular course development, including negotiation and agreement on a programme structure.

The delivery mode of apprenticeship, as a work-based learning programme, provided an additional challenge. The fact that the apprentice is employed by the company during their apprenticeship, and there is a commitment by the company to provide support and time for study, access to data, case studies, test areas, and the provision of an internal mentor who will support the student, are also critical elements in the difference between a taught master and an apprenticeship at master level.

The development of the occupational profile was another element which needed to be discussed and agreed. In developing the profile, it was important to balance the requirements of a master award and the actual role that a participant would be expected to do within an organisation to qualify as a Lean Sigma manager.

Following approval of the occupation profile by the Apprenticeship Council, the next step was to proceed into development and accreditation. The occupation profile was translated into a series of learning outcomes which became the programme outcomes for the academic award and the supporting apprenticeship delivery models, such as community of practice company visits. Academic and industry representatives reviewed the delivery of the on- and off-the-job learning.

The academic award has the same validation and review cycles of all UL programmes. Monitoring and evaluation of teaching and student experience is

follows the UL academic programmes management and review procedures, with the apprenticeship requiring an additional phase of oversight and quality review.

Source: author.

8.4. Expression of apprenticeship demand

Since consortia of labour market actors take the first step and submit proposal on new apprenticeship programmes in the new model, their proposals are in essence a direct demonstration of an industry need for apprenticeships. Key industry stakeholders, including several employers who are in a better position to convey industry requirements, do so through their inclusion in the CSGs.

8.5. Conclusions

The 2013 review of apprenticeship has resulted in a significant expansion of apprenticeship provision, keenly focused on addressing skills needs, with the number of apprenticeship programmes growing from 25 to 55, and many more in development. The Apprenticeship Council has provided the basis upon which the national expansion has been managed and has facilitated the new approach for apprenticeships which are now of different durations, include higher education awards and address current skills needs in a much broader range of industry sectors. Key to this progress has been the representation of a wide range of stakeholders, including trade unions, in the council, and the fact that it is chaired by an industry representative.

National guidelines for providers of statutory apprenticeships have also played a key role in the successful development of new apprenticeships. Having the CSG in place to guide and steer these processes is key to overcoming the challenges that will be present for a consortium seeking to develop an apprenticeship programme. In the case outlined above, the close interaction of employers who could lead on industry requirements, plus the academic experience of UL staff in terms of learning content and modules, allowed for the process to be successfully completed and the first MSc level apprenticeship award in Ireland to be delivered.

CHAPTER 9. VET in a form of apprenticeship, Lithuania

By Lina Vaitkute, Lithuanian Qualifications and VET Development Centre, member of the Cedefop community of apprenticeship experts

9.1. Introduction (⁴⁰)

In Lithuania, apprenticeship represents one possible way to provide VET. Both apprenticeship and school-based routes (⁴¹) are aimed at the same qualifications and are based on the same qualification standards. Apprenticeship is regulated by several legal acts such as the Law on VET, the Law on Employment, the Procedure for organisation of VET in apprenticeship form (Lithuanian Government, 2019), the Labour Code, and the Procedure for formal VET implementation (Ministry of Education, Science and Sports, 2012). Apprenticeship is in early implementation (just 3.1% of VET learners in 2019).

9.2. Identifying and updating apprenticeship occupations

National coordination of apprenticeships is shared by the Ministry of Education, Science and Sport (MoESS) and its Qualifications and VET Development Centre (QVETDC), the Ministry of Economy and Innovation and the Ministry of Social Security and Labour and its Employment Service. The Ministry of Finances participates in planning apprenticeship funding. The QVETDC has been delegated to provide methodological support and advice to VET providers and companies in organising VET as apprenticeship (Lithuanian Government, 2019).

These institutions cooperate with the major employer representatives and exchange views in inter-ministerial groups (such as for preparing the procedure for the organisation of VET in the apprenticeship form, or planning allocation of the European structural funds for apprenticeship) and in non-formal settings. These

^{(&}lt;sup>40</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

^{(&}lt;sup>41</sup>) In the apprenticeship route, an apprenticeship labour contract (*pameistrystés darbo sutartis*) between an apprentice and an employer must be signed and the employer should implement at least 70% of the training programme. In the school-based route, 70% of the programme is dedicated to practical training, which can be implemented in school workshops and laboratories or at the workplace. The final module (110 or 220 hours) is usually organised at the workplace.

groups may include other institutions, such as Invest Lithuania, the official agency for foreign direct investment and business development.

The Law on VET foresees that sectoral professional committees (SPCs) should express their opinion regarding the 'possibilities of implementing VET in the apprenticeship form' (Lithuanian Parliament, 2017). SPCs are advisory structures of the QVETDC that link VET and labour market actors in a particular sector (⁴²). A major part of their members are representatives of employers (chambers and other national employers' organisations, branch associations). They also include representatives of Ministries of Education, Economy and sectoral ministries, trade unions and education and training institutions. The first attempt at such consultation by the QVETDC at the beginning of 2019 did not result in concrete proposals due to the low awareness of apprenticeship among SPC members and a lack of instruments, capacity and labour market information for this activity.

Development of qualification standards is a national level process involving employer representatives, education providers (for the development of qualifications and their endorsement), ministries, national authorities, and the trade unions (for the endorsement of qualifications). Qualification standards (*profesiniai standartai*) specify the titles of qualifications and their content in terms of units of qualification and lists of competences characteristic to a qualification (Cedefop; Qualifications and Vocational Education and Training Development Centre, 2019) (⁴³). They are developed for a particular economic sector, describing the most important qualifications in the sector at different levels of the National Qualification Framework. They should be revised every five years.

The initiative for new qualifications or changes to existing ones may come from VET providers, employers or their associations who address the QVETDC. The relevant SPC then discusses the content of a new qualification profile or the proposed changes to existing qualifications; for approval, a new qualification is translated into a relevant sectoral qualification standard or the qualification profile is accordingly amended (Lithuanian Government, 2018). SPCs endorse sectoral qualification standards and make proposals to the QVETDC on the update of standards or on new qualifications. The QVETDC has overall responsibility for this process. Qualification development does not distinguish between apprenticeship or the school-based route but keeps in mind both options.

In 2020, an apprenticeship unit was established in the QVETDC to provide methodological support and guidance to companies and VET providers, and to

^{(&}lt;sup>42</sup>) See list of sectoral professional committees.

⁽⁴³⁾ See sectoral qualification standards. In 2020, a total of 21 standards were approved and four more were being developed. The first standard was adopted in 2017, the others are more recent.

collect, analyse and publish information about apprenticeship (⁴⁴), including on apprenticeship demand and supply.

The interviews (45) carried out when preparing this paper revealed that overall governance (decision-making and coordination) and supportive roles are not clearly distributed, and some uncertainty remains over who does what. At national level, Ministries involved in the scheme and the national employers' organisations mainly cooperate on the preparation of legal acts and the planning of EU investments. The collaboration is irregular and addresses strategic system-level issues only a little. The recommendation of Cedefop's thematic country review for establishing 'a standing forum on the development of apprenticeship' of ministries involved has not yet been implemented (Cedefop, 2015). Cedefop's thematic country review and the interviewees contacted stressed the importance of an institution that would be a mediator between VET and the labour market actors, that would provide advice and would assist in minimising the administrative burden of apprenticeship actors. The capacity of the QVETDC apprenticeship unit (established at the beginning of 2020) needs to be strengthened (as the formation of the team is ongoing). Trust in employers in a national authority structure as a consultancy body was also raised as an issue. Clarification of roles and coordination of supportive/intermediating activities between the QVETDC and the Employment Service on the matters of initiating and implementing apprenticeship is also a challenge.

Apprenticeship is seen as a free initiative of employers and/or VET providers to respond to labour market needs. Employer interest in apprenticeship is low due to a lack of cultural background, apprenticeship traditions and clear and stable financial and non-financial support measures. Respondents expressed the opinion that, if this interest remains low, there is a risk that apprenticeship system will become State-governed instead of labour market-driven.

The legal basis foresees that demand for apprenticeship occupations/qualifications should be expressed through the SPCs. It is vaguely defined what 'expression of opinion' regarding 'possibilities of implementing VET in apprenticeship form' covers. Systemic interaction among VET and labour market representatives in the SPCs still needs to be realised. It is also questionable if the SPCs are prepared and equipped for such a role. For example, their decisions could be supported with labour market information on the employed, unemployed, job openings from the employment service and national human resources monitoring information from STRATA (Government strategic analysis centre).

^{(&}lt;sup>44</sup>) See tasks of the unit.

⁽⁴⁵⁾ When preparing the analysis, interviews were conducted with representatives of Ministries of Education, Science and Sports and Ministry of Social Security and Labour, employer organisations, Invest Lithuania, VET providers, QVETDC (N=9).

Employer organisations and, to a degree, trade unions were involved in qualification design through sectoral qualification standards development and their endorsement. Existing arrangements allow to initiate new qualifications or update existing ones at a short notice; however after adoption of sectoral qualifications standards such initiatives are scarce. Once the standards have been adopted, employers and trade unions organisations are not proactive in proposing qualification-related changes. One reason may be that qualification standards already describe a sufficient variety of qualifications in all major sectors, and rollout of recently aligned VET programmes (also applicable to apprenticeship routes) requires time.

Apprenticeship is not yet a part of strategic regional and local (municipal) level stakeholder discussions which cover VET programme enrolment.

The most dynamic cooperation can be observed at the VET provider/company level. Although, according to VET providers, companies' lack of active contribution impedes apprenticeship (Orlauske and Kapočius, 2020), there are many examples when a company addresses a VET provider directly and they work together to meet apprenticeship demand from identifying relevant occupations, design of curriculum and opening of apprenticeship places. When existing qualifications are appropriate for the companies, more intensive work is needed for updating and adjusting the curriculum. There was a case when two new qualifications were initiated to meet the demands of a plastic manufacturing company and, accordingly, a sectoral qualification standard of machinery, equipment production, vehicle manufacturing and repair services was updated. Field research and interviews revealed that employers' administrative capacities to initiate apprenticeship are limited and adequate support by the QVETDC, VET providers or other bodies (such as national employers' organisations) is needed.

9.3. Design and update of apprenticeship curricula

Arrangements exist at national and local (institutional) levels for cooperation on design and update of VET curricula. Lithuania can be characterised by strong State regulation of VET qualifications and training programmes. Training in apprenticeship and school-based routes follows the same compulsory curriculum, which is designed nationally under the coordination of the QVETDC (⁴⁶). The curriculum follows precisely a qualification profile (title, units of qualification and list of competences that a learner should possess at the end of training) from the sectoral qualification standard. VET programme preparation requires that an expert group designing curricula should involve VET teachers and (or) employers'

^{(&}lt;sup>46</sup>) See national VET programmes.

representatives (MoESS, 2018). In practice, curriculum design groups always involve VET and the labour market side. There are cases when curriculum development is led by national employers' associations. Expert groups work to decide on the length of the programme and its individual units (modules), learning outcomes, proposed themes of training and assessment criteria. Employers' representatives also participate in the evaluation of curriculum under preparation.

At implementation level, a VET provider and a company adapt the curriculum to the apprenticeship format. VET teachers and company staff analyse the national curriculum and adjust it to the company context within the limits of allowed changes. According to the VET organisation procedure, VET providers may change up to 15% of curricula according to company and local needs (MoESS, 2012). The VET provider and the company prepare an individual training plan for each apprentice. VET providers collect feedback about curriculum implementation from employers and learners annually and use it for curriculum update. This interaction allows VET providers to understand labour market demands better and make learning more authentic. If a need to design or update the curriculum substantially arises, this proposal should be articulated to the QVETDC and a qualification should be designed or updated.

In this context it is obvious that in updating/ adjusting a curriculum close cooperation between vocational teachers and company trainers is necessary. Company trainers need to know how the VET system operates, to be able to interpret national curricula and match to the company reality. A tandem training programme for in-company and VET providers' trainers was developed (⁴⁷) with more than 300 VET teachers and in-company trainers participating in 2018-19. This approach strengthened the interaction of teachers and trainers and increased collaboration between VET providers and companies (JAMK university of applied sciences, 2020). MoESS and the QVETDC have committed to further support it.

The procedure for organisation of VET in apprenticeship form foresees that the QVETDC provides methodological assistance and guidance to VET providers and employers, including adaptation of curricula to apprenticeship format.

At the moment, VET programmes are intensively designed and updated based on sectoral qualification standards; initiatives for new curricula that could be related specifically to apprenticeship are scarce.

Strong State regulation of qualifications and VET programmes might reduce flexibility in meeting the specific needs of regions or individual companies but improves transparency and comparability of learning outcomes. It also prevents segmenting the VET system and prioritising narrow, company-specific, vocational skills at the expense of knowledge and key competences. Interviews showed that

⁽⁴⁷⁾ Erasmus+ project Testing new approaches to training VET and workplace tutors for work based learning (TTT4WBL).

not all companies welcome holistic national curricula covering a wide range of competences. Some find it difficult to implement them and prefer to design and use separate company-specific modules or non-formal programmes (alternative schemes foreseen in regulation). In this case they can develop a unique programme or adjust a formal VET programme according to their preferences.

9.4. Expression of apprenticeship demand

So far, the main collaboration on expressing apprenticeship demand is at provider level; there is some at regional level. Companies that would like to offer apprenticeship positions usually address VET providers with a relevant curriculum. Alternatively, opening of an apprenticeship position may be initiated by VET providers if they address a company with a cooperation proposal.

As companies expect that their apprenticeship costs will be at least partially covered by the State, an apprenticeship offer is usually linked to VET providers' annual funding of their enrolment plans by the State budget (Law on VET, Article 18). By each October a VET provider discusses the prospective apprenticeship openings with its institutional council and includes them into its annual enrolment plan; the council comprises nine members, four of which are representatives of social partners and one of the regional development board. This is further discussed at the regional development board that consists of the mayors of the regional municipalities, delegated members of the municipal councils, a person appointed by the Government and representatives of the social and economic partners (that make up one third of all members). The board analyses the enrolment plans of all VET providers in the region and confirms their final versions. The final decision about funding apprenticeship places is made by the Minister for Education who approves the final enrolment plans for all VET providers. Enrolment into VET programmes (both, school-based or apprenticeship) is done through an online general enrolment system (LAMA BPO) twice per year, in February and May-August. Candidates for apprenticeship first enrol with a licensed VET provider. There has not yet been a case where apprenticeship was provided solely by a company.

VET providers and labour market actors question whether a system for expressing apprenticeship demand and opening apprenticeship positions is flexible enough, as a company is expected to wait until the national enrolment is finalised. This model makes overall process of 'meeting apprenticeship demand' lengthy: identification of occupations, the design and update of the curriculum, preparation/acquisition of training resources, apprenticeship positions/openings. Field research and interviews revealed that employers' administrative capacities to initiate apprenticeship are limited and that adequate support needs to be provided by QVETDC, VET providers or other bodies (such as national employers' organisations).

It is foreseen that sectoral professional committees will play an active role in expressing sectoral apprenticeship demand. The apprenticeship unit of the QVETDC will manage a portal (under development) which will serve as a platform for registering apprenticeship positions offered by companies.

9.5. Conclusions

Lithuania needs to improve apprenticeship governance arrangements that would be based on clear distribution of decision-making, coordination and supportive roles. The framework of recently prepared qualification standards and modularised VET programmes gives the country a good starting point. However, to make apprenticeship more responsive to labour market needs, cooperation between labour market and VET actors at regional and sectoral levels should be more dynamic. Cooperation is stronger at VET provider company level rather than sectoral level. The Law on VET mandates sectoral professional committees of the QVETDC to function as platforms for exchanging information and expressing sectoral apprenticeship demand; however, the trial of such consultation at the beginning of 2019 did not result in concrete proposals due to the low awareness of apprenticeship by SPC members and a lack of instruments for this activity.

Economic sectors' activity and familiarity with apprenticeship and its benefits varies (STRATA, 2019; JAMK university of applied sciences, 2020). Financial and non-financial support for VET providers and companies is being developed but lacks clarity. Mediation, guidance and information campaigns are needed. Building the capacity of the QVETDC as a support structure with effective SPCs is of utmost importance. The system needs to be flexible to meet the increasing interest of non-national companies in apprenticeship (Intersurgical, Continental). The flexibility of the system in terms of balancing national curriculum and company needs, and timely apprenticeship openings is also a challenge. VET teachers and in-company trainers training should continue improving their interaction at micro level.

9.6. References

[URLs accessed 18.6.2021]

Cedefop (2015). Apprenticeship review: Lithuania. Signposting the apprenticeship path in Lithuania. Luxembourg: Publications office. Thematic country reviews. http://data.europa.eu/doi/10.2801/710428

- Cedefop (2019). Vocational education and training in Europe: Lithuania [From Cedefop; ReferNet. Vocational education and training in Europe database]. https://www.cedefop.europa.eu/en/tools/vet-in-europe/systems/lithuania
- JAMK university of applied sciences (2020). Does the tandem approach work? Research on the experimentation testing the professional development model for tutors in work-based learning in the Baltic countries. Finland: JAMK Publications. http://urn.fi/URN:ISBN:978-951-830-558-6
- Lithuanian Government (2019). *Lietuvos Respublikos Vyriausybės 2019 m. spalio* 23 d. nutarimas Nr. 1065 "Dėl profesinio mokymo organizavimo pameistrystės forma tvarkos aprašo patvirtinimo" [Procedure for organisation of VET in apprenticeship form], 2019, No 1065. Teisės aktų registras [Register of legal acts], 28.10.2019, No 2019-17049.

https://www.e-tar.lt/portal/lt/legalAct/c36026f0f97111e99681cd81dcdca52c

Lithuanian Parliament (2017). *Lietuvos Respublikos profesinio mokymo įstatymo Nr. VIII-450 pakeitimo įstatymas [Law on vocational education],* 2017, No XIII-888. Teisės aktų registras [Register of legal acts], 27.12.2017, No 21305. https://e-

seimas.lrs.lt/portal/legalAct/lt/TAD/b0b6cda0eb0a11e7a5cea258c39305f6

Ministry of Education, Science and Sports (2012). *Lietuvos Respublikos švietimo ir mokslo ministro 2012 m. kovo 15 d. įsakymas Nr. V-482 'Dėl Formaliojo profesinio mokymo tvarkos aprašo patvirtinimo'* [Legal act regarding the procedure for formal VET implementation]. Valstybės žinios [Official Gazette], 24.3.2012, No 35-1734.

https://www.e-tar.lt/portal/lt/legalAct/TAR.5F67B3357CBE

Ministry of Education, Science and Sports (2018). Lietuvos Respublikos švietimo ir mokslo ministro 2018 m. lapkričio 22 d. įsakymas Nr. V-925 'Dėl Profesinio mokymo programų rengimo ir registravimo tvarkos aprašo patvirtinimo' [Legal act regarding the procedure for preparation and registration of VET programmes]. Teisės aktų registras [Register of legal acts], 22-11-2018. Nr. 18816. https://www.e-

tar.lt/portal/lt/legalAct/9a25b870ee3911e88568e724760eeafa/asr

- Orlauskė M. and Kapočius Ž. (2020). *Pameistrystės sėkmės receptas. Ko dar trūksta Lietuvai*? [Recipe of success of apprenticeship. What else does Lithuania need?].
- STRATA (2020). *Profesinis mokymas Lietuvoje 2019* [Vocational training in Lithuania].

https://strata.gov.lt/images/tyrimai/2020-metai/svietimo-politika/20200316-profesinis-mokymas-lietuvoje-2019.pdf

CHAPTER 10. Work-based learning, Latvia

By IIze Buligina, Ministry of Education, member of the Cedefop community of apprenticeship experts

10.1. Introduction (⁴⁸)

In July 2015, amendments to the VET Law formally introduced apprenticeship (⁴⁹) as a form for implementing a VET programme in Latvia. Following this, regulations 483 and 484 were adopted by the Cabinet of Ministers (15 July 2016) on the Procedures for the organisation and implementation of work-based learning (⁵⁰), and the implementation of the operational programme Growth and employment 8.5.1, specific objective 'To increase the number of qualified VET students through their participation in work-based learning or training practices at an enterprise'. In June 2017, the Ministry of Education developed *Guidelines on the organisation and implementation of WBL* to provide common principles and methodological support to the partners involved in apprenticeship implementation.

10.2. Identifying and updating apprenticeship occupations

Although apprenticeship is a high priority in Latvian VET reform, introduction of apprenticeship programmes is not compulsory. It is mostly the choice of the VET institution whether and which programmes to offer in apprenticeship form. VET providers are strongly encouraged to increase apprenticeship provision, especially in STEM sectors. For example, apprenticeship provision is part of the annual assessment of the performance of a VET institution and its director.

The Employment Council brings together the Minister for Economy, the Minister for Education and Science, and the Minister for Welfare to improve

^{(&}lt;sup>48</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

⁽⁴⁹⁾ Although the term 'work-based-learning' is being used in Latvia, to avoid misinterpretations, in the present paper the term 'apprenticeship' will be used consistently, since the scheme complies with the principles of apprenticeships according to Cedefop definition and the 2015 European Commission publication Highperformance apprenticeships and work-based learning: 20 guiding principles WBL/apprenticeships.

^{(&}lt;sup>50</sup>) http://likumi.lv/ta/id/283680-kartiba-kada-organize-un-isteno-darba-vide-balstitasmacibas

coordination between education (including IVET and CVET) and employment policies and support the involvement of employers. Its tripartite Sub-Council for Cooperation on VET, involving representatives of ministries, employer and employee organisations, promotes links between education and employment policies in concrete terms, with a particular emphasis on apprenticeships. Any issue can be discussed in the sub-council, until the partners agree on a common beneficial solution. If the issue has a high-level policy context, the Employment Council discusses it among the three relevant ministers for education, economy and employment, allowing for solutions at that level.

Sectoral expert councils are advisory bodies supporting the development of quality IVET programmes in line with labour market needs (⁵¹). Employer organisations, trade unions, ministries of Education, Economy and Welfare, other branch ministries and the State employment agency are represented.

As stipulated by the VET Law, VET institutions (competences centres) have established advisory bodies (conventions) where VET provider administrations, local or regional employers, local and national government organisations are represented, to coordinate the local, regional and national priorities to meet education and labour market needs better. Information exchange within the conventions allows for better informed decision-making by the VET institution, also regarding the offer of apprenticeship programmes in cooperation with local employers.

The State employment agency, in cooperation with the Ministry of Economy is carrying out a national level ESF project Development of labour market forecasting system (2016-21), aiming at informing policy-making, taking into account labour market needs. The system provides information on skills and professions in the short, medium and long term. Offers of apprenticeships can be based on the skills forecasts' outcomes. Quantitative forecasts are supplemented with qualitative forward-looking scenarios; they also further involve in the process sectoral expert councils, education institutions and regional forums for more precise identification of labour market needs at regional level.

Continuing administrative reform foresees a strengthened role for regional actors in relation to local labour market developments and training planning.

This work, since 2013, indicates the existence of strong social dialogue at various levels: VET institution, local and regional level, sector level, ministerial and social partner level. The social dialogue covers various aspects, such as drafting the legal framework, developing standards and curricula, responding to labour market demands, determining priority areas, incentives and, increasingly, also

^{(&}lt;sup>51</sup>) The sectoral expert councils are operating in compliance with Cabinet of Ministers Regulation of 15 July 2016, No 485, *Procedure for the development of sector expert councils, their tasks and coordination of activities.*

graduate tracking. The demand for particular future qualifications is determined by sectoral expert councils, and the Ministry of Education and Science plans enrolment accordingly. It is up to the particular VET institution to plan whether the programme will be implemented in school-based or apprenticeship mode (frequently both in parallel), depending on demand from the student side.

The role of conventions and sectoral expert councils has been growing since their establishment in 2015; it takes time for newly formed organisations to acquire a meaningful role in collaboration on education and employment. The Ministry of Education, after analysis of the achievements and lessons learned so far, is planning measures to support and optimise their work in the coming planning period of 2021-27. It has also taken time for the regional stakeholders to become fully aware of the conventions' ability and capacity to empower VET institutions as meaningful regional players. The key challenge identified for the Sectoral expert councils is developing a genuine sense of ownership of sectoral developments in collaboration with VET institutions and other relevant stakeholders.

This suggests that the existing institutional mechanisms are formally well designed for addressing apprenticeship issues at all levels and on all relevant components. The remaining challenges are to increase and strengthen the capacity and sense of ownership for the conventions and the sectoral expert councils.

10.3. Design and update of apprenticeship curricula

The VET curriculum reform that started in 2010 is now close to completion. It has played a crucial role in the implementation of apprenticeship, since it allows for flexibility in implementing a VET programme either in a school-based mode or as apprenticeship. It is not necessary to design a specific apprenticeship programme, as an existing VET programme can be adjusted to the apprenticeship mode by developing a study plan and an individual plan for each learner. There is a standardised procedure on how a VET programme is formalised, regardless of whether delivered as school-based or apprenticeship. Its content is based on an occupational standard or qualification requirement of a VET programme. The standards, programme content and examination content (regardless of the mode of delivery) are being developed by the National Centre for Education in collaboration with relevant stakeholders, taking into consideration the latest developments. Most revised occupational standards and modular education programmes have been developed in close cooperation with the sectoral expert councils, social partners, and sectoral associations.

The principles of the European credit system for vocational education and training (ECVET) were also taken into consideration; the learning outcomes

approach is being implemented, as well as the possibility of accumulating, transferring and recognising them, thus ensuring flexible learning anywhere and anytime also for apprenticeships. Similarly, through the use of learning outcomes in formal, non-formal and informal learning, recognition of qualifications is designed to ensure their comparability between different VET institutions, as well as between countries, through gradual accumulation of learning outcomes for a potential full qualification. Lifelong learning opportunities are expanded by combining formal and non-formal learning: every adult will have the opportunity, if they wish, to improve their general and professional skills, as well as to be upskilled, to change their way of life or profession in cooperation with employers and in compliance with labour market demand.

The Head of a VET provider that choses to offer a VET programme as an apprenticeship issues an order stating that the programme is being delivered (also) in this mode. An implementation plan reflects the alternance periods between school and company, and an individual learning plan is drafted for each student. For each apprentice, an individual study plan is prepared and an agreement is concluded between the VET institution, the company and the student.

VET institutions must introduce all relevant data on the revised apprenticeship programme and its students in the State education information system (VIIS), so that the process can be monitored and necessary data for analysis obtained.

VET teachers and in-company trainers in apprenticeship programmes must have pedagogical competences. For those lacking the required competences, a modular programme of a minimum of 32 hours is offered.

Even though implementation of VET programmes in apprenticeship mode is not compulsory, certain shifts in the traditional delivery can be observed. Initially, only some of the VET institutions committed to apprenticeships, and employers were hardly persuaded about its benefits for the company, but the situation is gradually changing. A survey by the Ministry of Education and Science (⁵²) shows that employers start seeing apprenticeship as a tool for preparing their future workforce, which was not the case in initial stages of the process. Employers are becoming more active in communicating their needs to VET institutions as well.

Learners, as well as improved skills acquisition through apprenticeship, also point out the socialisation aspects, as induction to the company environment itself contributes to their growth as responsible persons, citizens and future employees/ employers. VET institutions acknowledge the clear benefits of apprenticeships, at

^{(&}lt;sup>52</sup>) The results from the survey and the data obtained from the Employers Confederation of Latvia have been used by the Ministry of Education and Science for drafting a policy report to the Cabinet of Ministers on the implementation of work-based learning in Latvia, http://tap.mk.gov.lv/mk/tap/?pid=40319533, April, 2019

the same time pointing out the amount of work required to ensure high quality of individualised approaches and organisational procedures.

It can be concluded that, since the first pilot seven years ago, a shift in thinking paradigms of the parties involved has taken place in support of apprenticeship.

10.4. Expression of apprenticeship demand

Apprenticeship was piloted in 2013, prior to the adoption of the legal framework, with a 'bottom-up' approach by six VET institutions in cooperation with employers (⁵³). The Ministry of Education and Science is encouraging VET institutions to increase the implementation of apprenticeship programmes, especially in STEM subjects, as the shortage of skilled labour is particularly marked in this domain. There are also certain motivating mechanisms in place for the stakeholders involved (VET institutions, students and companies) through additional ESF funding (⁵⁴).

To analyse the results achieved up to the end of 2018, the Ministry of Education, in cooperation with the University of Latvia, carried out a survey among employers, VET students and VET institutions on the implementation of apprenticeship and the acquisition of labour market relevant skills (⁵⁵).

According to the survey data, around 2 600 employers, 37 VET institutions and almost 4 000 learners have been involved in apprenticeship provision since the start of the ESF SAM 851 project, with around 27 000 students in VET in total. As apprenticeship is not a compulsory demand but the choice of the school, great attention is being paid to encouraging VET providers, students and companies to get involved. A communication plan is being put in place within the ESF project and the apprenticeship activities promoted via the regional apprenticeship consultants.

^{(&}lt;sup>53</sup>) The results of the pilot phase can be found in the Report by the Ministry of Education and Science to the Cabinet of Ministers of August 2014 On the feasibility of the implementation of work-based learning in the context of the Latvian vocational education and training system. http://tap.mk.gov.lv/mk/tap/?pid=40319533

^{(&}lt;sup>54</sup>) Currently the key policy instrument for promoting and implementing apprenticeship is an ESF project On the participation of VET learners in apprenticeships and training in companies (hereinafter SAM 851 project), implemented by the Employers' Confederation of Latvia. The SAM 851 project has also invested in the development of regional affiliations to promote apprenticeships to employers in all part so the country.

^{(&}lt;sup>55</sup>) The results from the survey and the data obtained from the Employers Confederation of Latvia have been used by the Ministry of Education and Science for drafting a policy report to the Cabinet of Ministers on the implementation of work-based learning in Latvia, http://tap.mk.gov.lv/mk/tap/?pid=40319533, April, 2019.

Analysis of the mid-term results made evident that priority was given to the services sector, compared to the production sector which is crucial for national economic growth. Tourism, catering and the beauty industry were the most popular options, followed by metal and machine building, entrepreneurship, woodwork, construction, ICT and transport sectors; the involvement of energy, chemistry and agriculture sectors was still limited. As a result, policy dialogue promotes support for apprenticeships in STEM or related sectors in the current and next planning period of 2021-27, in compliance with the priorities of the national economy where demand for labour is or will be high in the short and medium term.

10.5. Conclusions

The legal framework for the implementation of apprenticeships has been in place in Latvia since 2016: the VET law, several regulations by the Cabinet of ministers and the implementation guidelines. The legislation has been drafted following a bottom-up pilot phase in 2013-15.

The existing institutional mechanisms are well designed to address issues at all levels and on components related to deciding on priority areas for apprenticeship, its content and composition of curricula, and exams required for a qualification, allowing for taking necessary decisions and follow up the processes. The Employment Council, the labour market forecasting system, sector expert councils, the tripartite Sub-Council for Cooperation on VET and the VET institution conventions all play their distinctive role in social dialogue and decision-making at various levels, from local and regional to national.

There are also mechanisms in place to follow up the decisions taken at various formats, to address burning issues or monitor policy implementation results.

The thinking paradigms of the stakeholders involved – the VET institutions, the companies and learners – are gradually changing. The benefits of apprenticeships are becoming more visible and appreciated as an investment in competence and future developments. Companies are starting to see apprenticeships as a tool for preparing their future work-force (which was not the case in the initial stages), and students appreciate apprenticeships also as a possibility for personal and social growth (apart from actual competence development); this is indicated by the Ministry of Education and science survey. The additional workload for VET institutions to organise the individually oriented process is still a challenge to be addressed to keep the VET institutions' motivation high.

CHAPTER 11. Apprenticeship contract, Luxembourg

By Diana Reiners, Ministry of Education, member of the Cedefop community of apprenticeship experts

11.1. Introduction $(^{56})$

In Luxembourg, by law, the VET system is based on a partnership between the State, the professional employers' chambers and the professional employees' chamber (Vocational Training Act 2008, Art. 3). The 2008 reform of vocational training aimed at strengthening collaboration between education and the labour market by involving professional employers' chambers and the employees' chamber (an institutional body involved in VET by regulation, different from trade unions) on several levels of apprenticeship governance. The reform reinforced integration of school-based and work-based learning content, and introduced a modular, competence-oriented approach, based on professional situations.

11.2. Identifying and updating apprenticeship occupations

Apprenticeship occupations are updated annually by Grand-Ducal regulation. In the 2019/20 school year, 92 different apprenticeship programmes were offered, (i.e. about three quarters of all VET programmes). Apprenticeship occupations are available at three qualification levels: vocational capacity certificate (EQF 2), vocational aptitude diploma (EQF 3) and technician diploma (EQF 4) (⁵⁷).

All vocational programmes are continuously monitored and updated by the Department for Vocational Training of the Ministry of Education.

Stakeholders are involved at all levels of apprenticeship governance. Professional chambers (⁵⁸) express sectoral demand for new apprenticeship

^{(&}lt;sup>56</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

^{(&}lt;sup>57</sup>) See Vocational education and training in Europe: Luxembourg, 2018.

^{(&}lt;sup>58</sup>) Composition of the professional chambers is determined by elections within each socio-professional group represented; any person who practices a profession falling within the competence of one of the professional chambers is mandatorily affiliated to the respective chamber. As a specificity of Luxembourg, the government must seek the advice of the professional chambers whenever new laws or grand ducal

programmes or curricula update to the Ministry. Four professional chambers are involved in apprenticeship governance: Chamber of Employees, Chamber of Agriculture, Chamber of Commerce, Chamber of Skilled Trades and Crafts.

Their suggestions are discussed in the VET steering committee (*groupe de pilotage*), composed of the director and vice-directors of the vocational training department of National Education, two delegates of the National Education's Didactic Research and Development Department, two representatives of the board of school directors, and two delegates of each professional chamber (⁵⁹). The mission of the steering committee is to coordinate VET development and validate curriculum updates in the framework of VET development. Its proposals are presented to the minister for approval. (Vocational Training Act, Art.10)

Direct representation of stakeholders on governance level and an agile and lean decision-making cycle allow timely reaction to upcoming labour market skill demand. It also helps to adapt professional profiles of existing apprenticeship occupations or to develop new apprenticeship programmes to train young people for rapidly changing skill requirements and the green and digital transitions. Demand for new apprenticeships can be swiftly addressed, even in the following school year.

There is little evidence on how anticipation of apprenticeship demand for specific occupations is determined in the sectors. To date, few sectoral initiatives that identify skills and training needs based on assessment tools, such as surveys and data-based skill needs anticipation, are publicly available (⁶⁰). Apart from national data collected in the CVTS survey on in-company training (⁶¹), a larger cross-sectoral approach and data-based assessment of future skill needs, skill anticipation and apprenticeship demand are not yet in place.

Further involvement of research institutions in evidence-based monitoring of enterprises' prospects or upcoming skill shortages can contribute to understanding the highly diversified skill demand in a heterogenous demography of enterprises, especially with regard to knowledge transfer from an ageing workforce and new continuously evolving requirements to keep pace with digital and ecological transition. The European skills agenda also stresses the importance of development in skills intelligence. This requires real-time skills forecasts based on big data, to inform not only governance decisions but also the choices of learners and employment seekers about their pathways and training opportunities.

regulations are being prepared within the scope of one or more sectors represented by the respective chamber.

^{(&}lt;sup>59</sup>) See relevant legislation.

⁽⁶⁰⁾ See Les qualifications de demain dans l'industrie.

^{(&}lt;sup>61</sup>) The survey reports primarily on enterprises' CVET activities; one section is dedicated to the readiness to train apprentices. For further information, see here and Bulletin No 4/2017.

To tackle the challenges of a rapidly changing skills ecosystem and the disruptive effects of the pandemic on the labour market, new skills initiatives are at the core of a multilateral concertation between the Ministry of Education, Children and Youth, Ministry of Labour, Employment and the Social and Solidarity Economy, sectoral representatives and social partners. A comprehensive study on national skill demand and supply, carried out by the OECD, is part of the initiatives; results are expected for the first semester 2022.

Several new vocational tracks programmes have recently been introduced (⁶²) in line with an overarching national digital education policy that aims at preparing young learners for future skill needs, fostering digital skills and improving human meta-competences (communication, collaboration, creativity, and critical thinking) necessary to master the technological developments of the future (⁶³) (⁶⁴).

Two features of the apprenticeship scheme enable further flexibility in response to demand:

- (a) the modular, competence-based design of apprenticeship programmes allows combination of existing modules (a common track) with specialised ones;
- (b) the VET system allows for cross-border apprenticeships in a number of occupations, defined annually by regulation, for which theoretical training is not available in Luxembourg schools, due to the small number of participants. In this framework, in-company training can be carried out in a Luxembourgish enterprise, with school training in a neighbouring country. Mobility and international collaboration allow sharing expertise and specialisation with school programmes in neighbouring countries, which supports quick updating of apprenticeship offer and avoids relatively long curricula development cycles. However, as practical training is carried out in Luxembourg-based companies, cross-border apprenticeships respond to national skilled labour demand and increase learners' chances of future employment in the training company. For incoming apprentices, mobility offers a stepping stone into a multilingual and dynamic labour market.

^{(&}lt;sup>62</sup>) New technician diploma programme in Smart Technologies (robotics and automatisation, infotronics, renewable energy, smart energy; e-controls) and three higher technician diploma tracks in Cloud computing, IoT or Game design; see here.

⁽⁶³⁾ https://digital-luxembourg.public.lu/initiatives/digital4education

^{(&}lt;sup>64</sup>) However, most tracks leading to the technician diploma (EQF 4) and higher technician diploma (BTS), (EQF 5) are not available under apprenticeship, but practical training is provided by extensive traineeships, high-end school-based ICT laboratories and innovative links to companies, e.g. the integration of on-campus start-up companies in vocational educational programmes.

https://gouvernement.lu/dam-assets/documents/actualites/2019/06-juin/TalentHub-LAM.pdf

11.3. Design and update of apprenticeship curricula

Recent regulation foresees a strong role for labour market representatives in developing apprenticeship curricula, in close collaboration with education actors.

The 2008 Vocational Training Act involved professional chambers in the design of both training framework programmes and curricula of apprenticeship programmes. For each individual occupation or group, a curriculum committee (*équipe curriculaire*) was set up, composed of an equal number of national education system representatives and representatives of apprenticeship companies, proposed by the professional chambers. Curriculum committees were given several tasks: define the training framework programmes (⁶⁵); ensure coherence between the objectives of in-company vocational training and general school-based training; establish guidelines and evaluation modes for school-based and work-based training; and design and assess the 'final integrated project' module.

In 2011, by regulation, the system of defining the training programmes (curricula content), formerly organised by subjects, underwent revision. National education and training committees (*commissions nationales de formation*) were established for each occupation or group reached by programmes in vocational capacity certificate (EQF2) and vocational aptitude diploma (EQF3). They are composed of a representative of each school offering vocational education in the occupation, one representative of the national committee for general education and one delegate appointed by the respective professional chamber. For healthcare occupations (responsibility of the Ministry of Education), representatives of the health care sector ensure the link to the professional world. These committees:

- (a) advise the minister concerning training cycles, objectives, training programmes, timetables, teaching methods, training language, training manuals, and evaluation modes of modules;
- (b) design and revise training programmes for each module;
- (c) advise on coordination of teaching in different modules;

^{(&}lt;sup>65</sup>) Training framework programmes consist of:

⁽a) the professional profile, which determines the tasks and activities executed in the framework of a certain profession or trade;

⁽b) the training profile, based on the professional profile, which determines, for each domain of learning, the set of competences to be acquired;

⁽c) the directive programme (*programme directeur*), based on the training profiles, which determines the schedule, the accountable units and the description of the modules for each individual trade and profession;

⁽d) the apprenticeship assessment booklet and the internship assessment booklet.

(d) advise on directive programmes (*programmes directeurs*) and evaluation repositories within their competence (⁶⁶).

The involvement of stakeholders in governance and curriculum design generally provides an effective link between professional expertise and schoolbased learning; however, to date, an overarching assessment, based on statistical data in relation to skill demand is not in place.

Since 2017, the Ministry of education set up an evaluation procedure for apprenticeship curricula. The educational research and development department (SCRIPT) (⁶⁷) carries out a comprehensive evaluation of vocational training curriculum documents, to analyse if curriculum content matches the actual labour market skills profile. Desktop research is combined with qualitative interviews with employers, teachers and learners in order to determine needs to adapt programmes to companies' skill needs. The approach is based on occupations or groups of occupation. Every apprenticeship programme is revised over a five- to six-year cycle. Reports take also into account changes in the regulatory framework, conjunctural developments or changes in collective agreements that might impact an increase or decrease in labour market demand. They allow curricula committees to closely monitor and update curriculum content according to changing skill needs in the respective sectors.

The general organisation of curriculum design cycles into (groups of) occupation brings efficiency to setting learning objectives for specific professional skill profiles according to labour market demand.

11.4. Expression of apprenticeship demand

The expression of employer demand for apprenticeship is centralised through the Public Employment Service's Professional Guidance Service (ADEM-OP).

Declaration of open apprenticeship positions is mandatory, as is registration of apprenticeship candidates with the Professional Guidance Service, responsible for the placement. In practice, the Professional Guidance Service transfers a list of apprenticeship position offers to suitable applicants, who may autonomously contact potential employers and apply for an interview. Proactive apprenticeship

⁽⁶⁶⁾ Règlement grand-ducal du 30 juillet 2011 portant institution et organisation des équipes curriculaires, des commissions nationales de formation et des commissions nationales de l'enseignement général pour la formation professionnelle de l'enseignement secondaire technique.

^{(&}lt;sup>67</sup>) Cellule de compétences pour la conception curriculaire de la Formation professionelle, Service de coordination de la recherche et de l'innovation pédagogiques et technologiques.

search by the candidates is officially admitted and recommended (⁶⁸). The company must declare the apprenticeship opening before signing the contract and provide proof of their accreditation as a training enterprise. The responsibility for selection of the candidates lies with the training company (⁶⁹).

In practice, though, most open apprenticeship positions are not published by the employers at the Professional Guidance Service prior to the selection of a suitable candidate among proactive applications. Despite its potential as a matching tool, the registry of open positions primarily serves to monitor apprenticeship offer, apprenticeship demand and the match between the number of available posts and the number of applicants, for each occupation.

In 2019, apprenticeship position offer and demand were approximately balanced, as 93% of registered initial apprenticeship seekers found a position. The remaining 7% of 1 518 initial apprenticeship seekers who could not be placed may not be overlooked; this share rises to a 13.6% among apprentices in programmes leading to a vocational capacity certificate (EQF 2). To prevent early school-leaving (⁷⁰) or avoid its potential scarring effects on young learners, public training centres offer an alternative scheme under apprenticeship convention, with the in-company training being carried out at the training body (⁷¹).

While initial apprentices represent almost two thirds (63.2%) of placements, adult apprenticeships account for 36.8% of occupied positions.

The expressed demand for apprentices was slightly higher than the rate of non-occupied apprenticeship seekers: 8.3% (201 of 2 433) registered apprenticeship positions remained open by December 2019 (⁷²).

A closer sectoral perspective shows that unsatisfied apprenticeship demand mainly concerns the health and care occupations that are in high need of labour: one third of the apprenticeship offers remained unsatisfied. Other sectors where demand exceeded the number of candidates were administrative and commercial agents (by 12%), and the restaurant sector (by 14.4% for cooks) (⁷³).

The effects of economic recession in the aftermath of the COVID-19 pandemic are not yet fully grasped but signal a lower number of apprenticeship openings. To

⁽⁶⁸⁾ https://adem.public.lu/fr/demandeurs-demploi/definir-son-projet-professionnel/faireun-apprentissage.html

^{(&}lt;sup>69</sup>) Portail de l'emploi – Recruter des apprentis.

^{(&}lt;sup>70</sup>) Learners who did not find a training company cannot continue the school-based part.

^{(&}lt;sup>71</sup>) In 2019, 419 learners participated in CCP and DAP tracks in public training centres (school years 2018/19 and 2019/20), 68 of which attended a 'preparatory employer's training'. This is a one-year training programme aimed at adjusting the level of professional and social skills and enabling learners to switch to the second year of regular in-company training in the private sector.

^{(&}lt;sup>72</sup>) Each year, apprenticeship contracts have to be signed, by regulation, until 31 October.

^{(&}lt;sup>73</sup>) 56% unmet demand for waiters is not representative due to small scale (25 placements/14 open positions).

mitigate this impact, the existing incentives (such as State subsidies for social contributions) are complemented by financial bonuses for enterprises to keep training their apprentices, and an extension of the period of signing contracts. The number of places for apprenticeship candidates who could not find an apprenticeship contract at public training centres was expanded in the school year 2020/21, to allow apprentices to complete practical training at school.

11.5. Conclusions

With the major reform of 2008, revised in 2019, and regulatory adjustments, Luxembourg has established close involvement of labour market actors at each level of apprenticeship governance, including the identification and update of occupations and programme design and update. Short decision cycles allow for agile response to labour market skill requirements and swift implementation, which is particularly important for adopting measures to mitigate the effects of the pandemic on apprentices, and of rapidly changing skills. Data-based skills anticipation and skills intelligence, as well as collaboration with higher education, are currently being explored further, as in a comprehensive OECD study.

Centralised registration of apprenticeship openings and candidates allows close monitoring and matching positions offered and supporting potential candidates.

In the light of the current crisis, besides immediate support measures to secure apprenticeship provision, a precise and realistic picture of skill needs and employment opportunities from a longer-term perspective should be a feature addressed by effective apprenticeship governance. This could guide young VET learners into stable, quality and future-proof employment.

CHAPTER 12. Dual pathway, Netherlands

By Robert van Wezel, SBB, and member of the Cedefop community of apprenticeship experts

12.1. Introduction $(^{74})$

In the Netherlands, learning in practice, known as work placement (*beroepspraktijkvorming*, BPV) is an important part of vocational education and training. Work placement is a mandatory part of completing a nationally and formally certified VET programme in Dutch upper secondary vocational education (MBO, *Middelbaar Beroepsonderwijs*). Apprenticeships (dual pathway) have a higher share of BPV (60% or more of total duration) compared to the school-based pathway (where practice placements have 20-60% BPV) (⁷⁵).

12.2. Identifying and updating apprenticeship occupations

Each VET programme is aimed at training the student for a specific occupation. The occupations for which apprenticeships are offered must, therefore, follow the VET programmes offered in the MBO system. For each programme, a qualification provides a detailed description of the requirements a student must meet to obtain a diploma. The qualification structure contains all the qualifications offered by the MBO system, so it also contains all the occupations apprenticeships must be offered for.

There is strong central coordination at the national level on the VET programmes offered in the Dutch MBO system, and by extension on the identification of occupations for which apprenticeships are offered, based on the role of the Foundation for Cooperation in VET and Labour Market (SBB, *Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven*). SBB is the central governance structure for cooperation between VET institutions and labour market actors, with a presence at national, regional, and sectoral levels. It is a national-level bipartite body, representing VET institutions (both publicly and privately funded) on the one hand, and the business community, represented by employers'

^{(&}lt;sup>74</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

^{(&}lt;sup>75</sup>) Information in the paper applies to both the dual and school-based tracks.

associations (both top-level and branch associations) and top-level trade unions, on the other. Both sides are equally represented on the SBB Board. It is financed by the Ministry of Education and was founded in 2015 as the centralised successor to 17 bipartite sectoral-organised 'knowledge centres'.

SBB maintains the MBO qualification structure, as one of its threefold statutory responsibilities: the other two include accreditation and guidance on work placement companies (⁷⁶) and collection and provision of qualitative and quantitative information on the labour market, work placements and apprenticeships, and on programme efficiency. The qualification structure is monitored and amended by SBB's sectoral committees and subcommittees.

SBB hosts nine bipartite sectoral committees concerned with sector-level implementation of its statutory responsibilities and making sector-specific agreements (⁷⁷). Each committee consists of branch-level representatives of VET institutions and the business community (branch associations or individual companies) and meets at least four times a year. The sectoral committees are advised by 35 underlying specialised bipartite subcommittees, also hosted by SBB and meeting four times a year. SBB hosts three bipartite thematic committees focused around each of the three statutory responsibilities. Additionally, SBB hosts the Student Chamber (*Studentenkamer*), which ensures consultation with representatives of the VET student population.

Every qualification is reviewed approximately every five years and amended or suspended, according to the judgement of the committees and subcommittees. The business community may request either to develop new qualifications or to update existing ones before the five years are up. This process is strongly informed by the labour market information collected by SBB (particularly the expected demand for practitioners of specific occupations) and the knowledge provided by the parties involved. It is designed to support a good match between supply and demand on the labour market. As the qualification structure changes, so does the need for apprenticeships related to those occupations being trained for.

In 2018, three years after the foundation of SBB, an evaluation of SBB's functioning was carried out by an independent consultancy at the behest of the House of Representatives (Ministry of Education and Science, 2019; Berkhout et al. 2018). Much of the following analysis draws from this evaluation.

^{(&}lt;sup>76</sup>) The Adult and Vocational Education Act (WEB) makes it obligatory for MBO students to follow the practical part of their training (apprenticeship or work placement) at an accredited work placement company.

^{(&}lt;sup>77</sup>) The sectoral committees are: Technology and built environment; Mobility, transport, logistics and maritime technology; Healthcare, wellbeing and sports; Trade; ICT and creative industry; Food, agriculture and hospitality; Business services and security; Specialist workmanship; Entry (EQF1).

The evaluation concluded that transparency, practicality, and professionalism of the process of maintaining the qualification structure (and therefore the identification of occupations for which apprenticeships must be offered) was increased compared to the pre-SBB situation. The basic maintenance schedule (revision of qualifications at least once every five years) improves the qualitative match between VET, including apprenticeship, and the labour market requirements and practice within companies. There has been some discussion on SBB's role regarding the quantitative relevance of qualifications, including oversupply or shortage of VET-trained workers for specific occupations. Increasingly, however, SBB appears to be the arena in which these issues are addressed.

Sectors with strong cooperation and involvement under the system of 'knowledge centres' felt that the involvement of sectoral experts had decreased. Some actors felt that the new sector boundaries were drawn too widely, losing sector specificity. Previously less well-organised sectors, on the other hand, felt that consultation and cooperation had improved. Overall, the organisation of all the knowledge centres into SBB has reduced the influence of the business community while favouring VET institutions for two reasons. First, trade unions were no longer an equal third party but rather considered as part of the 'business community'. Second, labour market actors are organised along more fragmented lines, while publicly funded VET institutions are organised in the MBO Raad (VET Council). Nonetheless, stakeholders are positive about the more systematic and transparent way in which cooperation and consultation between VET and labour market actors are organised under SBB.

The centralised process of updating the qualification structure has improved the consistency of how qualifications are described and related to occupations, as well as the consistency of how qualifications relate to each other, reducing overlaps between them. However, VET institutions expressed some discontent at the lack of ability to react flexibly and quickly to developments on the labour market, such as the need for specific new skills or the emergence of occupations cutting across sectors. This was primarily attributed to the level of detail at which qualifications are described. Despite the criticism, researchers concluded that the national level at which consultation between actors takes place provides a better basis for speedy innovation. This is achieved in practice in several pilot projects and experiments with regional and cross-sectoral qualifications under the auspices of SBB, some of which were initiated by local or regional cooperation between individual VET institutions and companies.

12.3. Design and update of apprenticeship curricula

The content of apprenticeships and work placements is defined in two steps. The first is the accreditation of a company for a specific qualification or parts of a qualification. SBB's work placement advisors visit companies to establish whether a company is fit to be accredited, and for which qualifications or parts of qualifications. For a company to be accredited, it must provide the student with the opportunity to practise the skills as described in the qualification or part of the qualification. The advisors regularly monitor the quality of work placements and whether accreditations continue to be valid. The accreditation criteria agreed by VET institutions and the business community set the following requirements:

- (a) a proper and safe workplace directly related to the qualification;
- (b) the appointed workplace trainer is aware of the requirements of the training and capable of guiding and coaching students on the shop floor;
- (c) the company provides the necessary time, space, and financial means to enable the workplace trainer to carry out the relevant duties;
- (d) the company is prepared to cooperate with the school and SBB and provides the necessary information;
- (e) the company publishes company details on the website Stagemarkt.nl.

In the second step, the accredited work placement company and the school jointly decide on the content of the work to be done by the student as part of the work placement. This is set down in a work placement agreement signed by the student, the VET institution and the company. Each VET institution designs a format for the agreement, which is approved by the VET institution's student council. According to the law, the agreement must contain at least:

- (a) start date, end date, and duration of the work placement (number of hours, spread over number of years);
- (b) manner of supervision of the student;
- (c) the specific qualification or part of the qualification to which the work placement applies, as well as manner of examination;
- (d) conditions under which the agreement may be annulled.

VET institutions are free to add and/or specify elements further.

Training goals of a work placement are directly informed by the qualification a student is training for; these are determined at national level in close consultation between branch-specific VET and labour market actors. Also, work placement companies are accredited by SBB according to a single set of rules and guidelines. These processes ensure a degree of consistency in content and quality between apprenticeships and work placement across VET providers, regions, and qualifications. At the same time, at the level of the workplace agreement, individual VET institutions and work placement companies are relatively free in the design of

apprenticeship curricula, and how the qualification is applied to the work placement. This allows for some flexibility for the student to be trained according to regional or company needs.

In the 2018 evaluation, students and work placement companies were found to be satisfied with SBB's services with respect to accreditation and quality monitoring. Companies found the processes more formal and uniform, and therefore more transparent and consistent. Accreditation through a national organisation, rather than sectoral ones, has also allowed companies to be accredited for a greater variety of qualifications. Accreditation by a national, independent organisation such as SBB also prevents the interference of particular interests in the process, so it is experienced by companies as fair. Both VET institutions and companies furthermore acknowledge SBB's expertise when it comes to work placements.

Since 2016, SBB has monitored the quality of apprenticeship experienced through the BPV Monitor (work placement monitor), a survey distributed among students and workplace trainers. The time period during which monitoring has taken place is too short to identify clear trends, but some conclusions can be drawn, also regarding the fit between what is taught at VET institutions, learning goals, and the content of work placements.

Students consistently agree (around 90%) with statements such as 'My work placement gave me a good idea about the occupation', 'My work placement matched well with my level of education', 'I am satisfied with the opportunities to reach my learning goals' and 'I am satisfied with what I learned during my work placement'. Lower scores (around 60%) were found for the statements 'The assignments from school matched well with the work at the work placement' and 'What I learned at school was useful during my work placement'. From these scores, we may conclude that the greatest room for improvement lies in the match between the theory taught at VET institutions and the practice in companies; this may be achieved through closer direct contact between VET institutions and companies at the local and individual level. On the whole, however, the current system of consultation and cooperation appears to lead to satisfactory placements.

A similar conclusion can be drawn from the responses of the workplace trainers, who give consistently high scores (nearly 90% agree) for the statements concerning satisfaction with the students' contribution to the work during the work placement, the kind of work the students did, and the students' ability to reach their learning goals. Slightly lower scores (just above 70% agree) were given for the cooperation between the VET institution and the work placement company. Again, the most promising remedy would seem to be increased direct contact between VET institutions and companies at the local and individual level.

12.4. Expression of apprenticeship demand

There are some 247 000 accredited work placement companies, 10 000 of which are outside the Netherlands. More than 300 000 vocational trainers provide direction to the students in work placements. The accredited work placement companies and their vacancies for apprenticeships and work placements are published on Stagemarkt.nl and Leerbanenmarkt.nl (the latter is aimed at the adult working population considering retraining for a different occupation). These websites are under the administration of SBB. The information is ideally updated by the accredited work placement companies themselves through an online SBB portal. Companies wishing to be accredited file an online application, after which an SBB work placement advisor pays them a visit for the accreditation procedure. After successful accreditation, vacancies may be published.

Besides companies updating their own information, SBB's work placement advisors also play an important role in updating the information. They enquire after vacancies during accreditation and quality monitoring visits and encourage companies to update the information. As an additional service to large chain companies, advisors may administrate vacancy information for them. Advisors may also be requested by VET institutions to recruit or reach out to (current or potential) companies when students experience difficulties in finding an appropriate vacancy. Some VET institutions make their own agreements with companies in their respective regions for the placement of students, either directly or through intermediaries. Some invest heavily in relationship management with surrounding companies and organisations to ensure sufficient vacancies for their students.

SBB also plays a role in monitoring demand for apprenticeships from the student side. It gathers and analyses information on student enrolment at the level of VET institutions, regions, and qualifications. Combined with the information on apprenticeship vacancies available through the *Stagemarkt* database, and contact with the business community through the work placement advisors and the sectoral committees, SBB is able to identify potential mismatches in apprenticeship supply and demand and take action accordingly.

The fact that companies and organisations must be formally accredited to offer a valid work placement or apprenticeship means that there is a greater risk of oversupply of students than of vacancies. This is also reflected in some of SBB's additional activities, such as a website where students and VET institutions can report vacancy shortages (*Meldpunt Stagetekorten*), and work placement company recruitment campaigns in 2016 and again in 2020 following the corona crisis. However, the centralisation of the accreditation function in SBB (as opposed to the 17 knowledge centres before) has, according to the 2018 evaluation, helped attract companies. It has improved the consistency and uniformity in rules and procedures, making accreditation more predictable and easier for companies interested. This is reflected in the growing number of accredited companies since SBB's foundation. The accredited companies surveyed as part of the evaluation expressed satisfaction with the administrative ease, speed, clarity, and fairness of the process.

Although opinions varied, VET institutions tended to be more critical when it came to SBB's role in organising vacancies for work placements. Many indicated that they received little to no support from SBB in ensuring sufficient work placement vacancies for their students. Further, the information on Stagemarkt.nl was frequently found to lag behind the actual situation. Some VET institutions, however, consider themselves primarily responsible for ensuring sufficient work placement opportunities for their students. Among these institutions are those investing heavily in relationship management with the surrounding business community to this end. As careful monitoring of vacancy shortages by SBB in the wake of the corona crisis has also shown, such VET institutions experience far fewer problems in placing their students with companies.

It appears that, when it comes to monitoring and expressing the demand for apprenticeships, SBB's focus lies more with the companies than with the VET institutions. At the same time, VET institutions may invest heavily in their own bilateral contacts with companies. This relative lack of central coordination (compared to, for example, the process of maintaining the qualification structure), leads to more regionally (and possibly sectorally) fragmented results when it comes to the match between apprenticeship supply and demand.

The corona crisis is a severe blow to the economy which negatively affects the availability of work placements and apprenticeships for more than 500 000 MBO students, prospective students, transfer students and those returning to the labour market. In response, SBB has formulated an action plan consisting of national and regional initiatives aimed at sustainably providing companies with the skilled personnel they need and providing students with the best practical training with good job prospects. A total of 12 actions are being carried out or prepared:

- (a) calling the business community to continue work placements and apprenticeships;
- (b) introducing special measures to accredit aspiring work placement companies;
- (c) monitoring the availability of work placements and apprenticeships in each sector and region;
- (d) monitoring demand for work placements and apprenticeships among VET institutions;
- (e) drawing attention to the vacancy shortages website (Meldpunt Stagetekorten);
- (f) making a variety of efforts to update the Stagemarkt.nl database;
- (g) drawing attention to the possibilities of financial support;
- (h) increasing work placements and apprenticeships at accredited companies;

- (i) creating a new website for apprenticeships: Leerbanenmarkt.nl
- (j) promoting innovative cooperation at regional level;
- (k) sharing best practices at national, regional and sectoral levels;
- (I) making optimal use of available labour market and work placement information.

12.5. Conclusions

Multi-partite consultation and cooperation is strongly centralised and formalised in the Dutch higher secondary VET system. VET institutions (both publicly and privately funded) and the so-called business community, which includes employer associations, individual companies and organisations, and trade unions are the main actors. Student involvement is organised in the Student Chamber. SBB is the public body tasked with the implementation of this governance structure, the decisions following from consultation, and ensuring, as much as possible, equal representation of the two main parties.

Through this governance structure, both VET and labour market actors have significant say over which occupations students are trained for (which qualifications have a place in the qualification structure), and by extension which occupations require the availability of apprenticeships. They have significant say over the content of the individual qualifications, through involvement in qualifications maintenance, and thereby over the content of apprenticeships. Content of apprenticeships is further specified in agreements between individual VET institutions and companies. Both VET and labour market actors are also frequently consulted about apprenticeship shortages identified by SBB, while companies provide data on vacancies directly for Stagemarkt.nl.

The analysis has shown that coordination at the central level is useful, but not sufficient. There appears to be much to gain from closer direct contact between VET institutions and local and regional business communities in both quantitative and qualitative improvement of apprenticeships and work placements. SBB plays a role below the central level as it aids regional bipartite initiatives (such as experiments with regional and cross-sectoral qualifications), but more at arm's length. Additionally, locally stationed individual work placement advisors may choose to play a proactive role in regional bipartite cooperation. Where direct local cooperation between VET and labour market actors does not spontaneously arise, they may be able to play a greater role in encouraging direct cooperation.

12.6. References

[URLs accessed 18.6.2021]

Berkhout, B et al (2018). *Evaluatie Wet van wijziging SBB* (Evaluation Legislative Amendment SBB), 11 December 2018.

https://archief06.archiefweb.eu/archives/archiefweb/20190215133209/https://ww w.rijksoverheid.nl/binaries/rijksoverheid/documenten/rapporten/2018/12/11/eval uatie-wet-van-wijziging-

sbb/Eindrapport_Berenschot_Evaluatie_Wet_van_Wijziging_SBB.pdf

- MBO Raad (2019). Servicedocument Praktijkovereenkomst (Service document/ guidelines work placement agreement). Version 5.0., March 2019. https://www.mboraad.nl/sites/default/files/publications/servicedocument_pra ktijkovereenkomst_2019-2020.pdf
- Ministry of Education and Science (2019). *Kamerbrief over resultaten evaluatie wetswijziging SBB* (Letter to the House of Representatives about the results of the evaluation of the law of amendment concerning SBB), 22 January 2019. https://archief06.archiefweb.eu/archives/archiefweb/20190511192537/https://www.rijksoverheid.nl/binaries/rijksoverheid/documenten/kamerstukken/2019/01/22/kamerbrief-over-resultaten-evaluatie-wetswijziging-

sbb/1468363 + Aan biedings brief + en + reactie + evaluatie + wetswijziging + SBB.pdf

- SBB. BPV Monitor (Work Placement Monitor). https://www.s-bb.nl/feiten-en-cijfers/bpv-monitor
- SBB. www.s-bb.nl

CHAPTER 13. Apprenticeship at the workplace, Romania

By Catalin Ghinararu (78)

13.1. Introduction (⁷⁹)

Apprenticeship is a way of achieving what is generally called craftsmanship. This is generally a tedious, long and laborious process of learning by doing and doing to learn more. Apprenticeship is intimately linked to the creation of a middle segment of the economy (*mittelstand*) where value is added to the product through the painstaking and highly qualified labour of the one who is crafting the product. To need apprenticeship, an economy and a labour market first need this middle segment of laborious production processes where products are crafted. Large, automated assembly lines eliminate crafting in production but also in repairing and maintaining products. Where mass production models are predominant, craftsmanship and craft-related services are vanishing, and demand for apprenticeship is lower. This explains why, for the Romanian economy, which displays structurally a 'hollow middle', apprenticeship represents only a marginal phenomenon. Seen from the point of view of achieving craftsmanship as opposed to mere acquisition of simple repetitive skills needed for an assembly line worker, apprenticeship is not and should not be viewed as a 'second chance' but as the primary option for those willing to achieve craftsmanship (or excellence in a craft).

In Romania, the main frame of governance for the scheme Apprenticeship at the workplace is set by Law No 279/2005 and its numerous modifications and amendments (⁸⁰). Most of them have been geared towards improving

^{(&}lt;sup>78</sup>) The current text represents the personal opinion provided by the author, as an independent expert. In no way may the present analysis or criticism be attributed to the National Scientific Research Institute for Labour and Social Protection (INCSMPS) nor have any bearing upon the position of scientific secretary which the author holds with the said institute.

^{(&}lt;sup>79</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

^{(&}lt;sup>80</sup>) Key laws, also used for this paper, are:

 ⁽a) Law No 279/2005, the apprenticeship act (Legea privind ucenicia la locul de munca) re-published in the Romanian Official Journal (Monitorul Oficial al Romaniei) No 498/201;

⁽b) Law No 76/2002, the unemployment insurance act (Legea privind sistemul asigurarilor de somaj si masuri pentru stimularea ocuparii fortei de munca),

apprenticeship governance. The apprenticeship foreman was replaced by a certified training provider, the upper age limit of 25 was lifted as apprenticeship represents a form of continuing learning, and the duration of the apprenticeship is linked the level of qualification attained.

13.2. Identifying and updating apprenticeship occupations

The link of qualification level and duration means that the higher the level of qualification (up to level 4) the longer the duration of the contract: for level 1 of qualification it is six months while for level 4 it may last 36 months. This progression improves the way employers identify the occupations and justify the allocation of the suitable resources by the enterprise.

The law explicitly stipulates that apprenticeship programmes may be organised only for occupations that are included in the Romanian Classification of Occupations (managed by the Ministry of Labour and Social Protection) and only if occupational and training standards exist for these occupations. Employers and representatives of the unions or professional associations sit in sector committees which decide if a certain occupation is suited also for apprenticeship training, among other forms, or if, as the case may be, a certain occupation is suited only for apprenticeship training. The Sector committees are also legally entrusted with the task of approving the corresponding occupational and training standards, upon proposals by companies or groups of companies. So, in terms of system design and governance, there are provisions for stable contribution of labour market representatives in the selection of apprenticeship occupations.

In practice, the process is more complicated for a single enterprise willing to participate in apprenticeships, which will need first to check that the occupation in question is included in the classification. Then the occupational standard will have to be approved by the relevant sector committee prior to its approval by the National Authority for Qualifications. This can take months and is more complicated if an applicant aims to secure a 'letter of acceptance'/'favourable opinion' (*aviz/aviz favorabil*) from different bodies, such as employers' associations, unions, relevant specialists or relevant specialty bodies (such as research institutes which are generally more open and likely to support innovative endeavours). Such endorsement states that the employer's proposal is worth being approved by the

published in the Romanian Official Journal (*Monitorul Oficial al Romaniei*) No 103/2002, with amendments to date, re-published;

⁽c) Law No 53/2003, the Romanian Labour Code (*Codul Muncii*), published in the Romanian Official Journal (*Monitorul Oficial al Romaniei*) No 72/2003, with amendments to date, re-published.

sector committee as well as by the National Authority for Qualifications; also states what needs to be improved for such an approval to be given. It might be questioned why these entities have no regulatory power but are given a significant role in an activity that falls in the domain of individual enterprises, under their own processes. Finally, a training standard is required through a similarly cumbersome procedure.

Despite the accentuated dynamic changes in occupations, the process of introducing new occupations into the Classification remains cumbersome and getting standards approved by a sector committee adds to this administrative burden. As a result, most enterprises prefer not to engage in such processes and get involved in apprenticeships. This is probably the best explanation for the marginal role of this form of dual VET in Romania. This is exacerbated by the difficulty of companies to secure a subsidy for their participation in apprenticeship. This bureaucratic jungle acts as a deterrent for many and explains thoroughly, alongside factors relating to the structure of the economy, why 15 years since the adoption of the law and with many changes in the governance structure, what could a useful for of VET remains a marginal footnote in the landscape of the Romanian labour market.

This is why the law foresees involvement of 'certified training provider', a training organisation (often a public school) that has all accreditation required for a certain occupation.

13.3. Design and update of apprenticeship curricula

Training standards (as well as occupational standards on which they are based) are generated by enterprises or groups of enterprises who submit proposals to the sector committees. These in turn are responsible for approving the standards. Therefore, curricula to be used in apprenticeship training are dictated by the approved corresponding standard. This may or may not correspond to the single training company's actual needs, it may or may not have been updated (update is as much of a hassle as the approval) and also depends on the willingness and capacity of the training provider (often a public school) to adapt to the needs of the company.

First, designing apprenticeship curricula should be an area of greater enterprise 'sovereignty' as this is the level the requirements of practical and theoretical knowledge for any occupation are better identified. There is no single technological process nor one single technology to be applied, as they differ according to, for example, the working conditions in a particular training company, the technological capacity of a certain production establishment, the requirements of the main customers for a certain product and/or service. In this respect, adherence to curricula agreed at a different level can be considered as a major hindrance for Romanian employer participation in apprenticeships, especially since apprenticeship is that particular type of VET where companies should benefit from practical training for its own production specificities on which the apprentice is trained. 'Portability of skills and knowledge' is a good concept for modern times but, in essence, it is alien to traditional apprenticeship, as craftsmanship implies 'stability' on the craft master it. That is why apprentices traditionally had 'masters' nearby, under the guidance of which they were apprenticed the craft (⁸¹) (⁸²).

The requirement for a company to partner with a training provider for an apprenticeship to take place may become challenging, especially if, for a certain occupation in a certain area, there is one single provider which is certified for that occupation in accordance with the standards. The company cannot in any way skip the so-called theoretical training, nor escape the obligation of having the apprentices certified at the end of their apprenticeship period. At the same time, such certification cannot be produced by the training company itself. The law clearly stipulates that apprenticeship is precisely designed to assist companies in hiring and training labour for their own needs. While nobody wants of course a return to apprenticeship as 'indentured servitude', the fact that the company actually organising and paying for the apprenticeship cannot certify the training and cannot act in the absence of an actor which is external to it (and which in many cases may share little interest with the company) cancels the principle of the law. It should be remembered that apprenticeship is the particular form of VET where training takes place not in general but in particular settings and in a particular production establishment. Therefore, linking unnaturally the production establishment-related training with the formality of certification by an entity outside the establishment itself, which in most cases has nothing to do with what actually are the needs of the respective establishment, can be a significant impediment.

In practice, the current framework related to curriculum development favours the training provider over the production establishment through the administrative machinery of various 'standards'. The current system tends to turn apprenticeship from a particular, company-oriented form of VET, into just another form of VET whereby the apprentice, 'of sorts', benefits from a bit more practical knowledge

^{(&}lt;sup>81</sup>) Apprenticeship comes from the French apprendre, or to learn and to learn by appropriating or taking actually ('à' and 'prendre' is something to be 'taken' through the obvious giving by somebody else)

^{(&}lt;sup>82</sup>) It has to be noted that in pre-industrial, and even in the early industrial times, apprenticeship was often a form of 'indentured labour', under not enviable conditions. This was for those apprentices who did not have the means to pay for their apprenticeship. There were also apprentices who paid for this to their master and thus their condition was different. The archives of the former Saxon (German) cities in Transylvania document the various forms of apprenticeships (see Philippi, M. (1987). *Die burger von Kronstadt in der 14 und 15 jahrhundert* [The citizens of Kronstadt in the 14th and 15th centuries]. Wiena: Bohlau.

and has the guarantee of a job for the entire period of the apprenticeship contract, if the employer has applied and been granted the subsidy from the unemployment insurance fund.

Therefore, the benefits accrue actually to the apprentice rather than the enterprise, which has to surmount various administrative hurdles. In this context it is not surprising that enterprises have no, or limited, participation in apprenticeships. There are simply too many preconditions to be met, too little leeway and no guarantee that the trained person will remain with the company. This is supposing that what the beneficiary company wants is really to retain him or her. In many cases this may be doubtful, especially when subsidies are involved (⁸³).

13.4. Expression of apprenticeship demand

An enterprise may decide how and when to engage in apprenticeship training, if and how to finance such a scheme as well as how many apprenticeship contracts to conclude. The State, through the budget of the unemployment insurance fund, provides a subsidy of 2250 RON (approximately EUR 470). Disbursement of such subsidies depends on the availability of funds. Given the limited amounts allocated, to benefit from the subsidy, enterprises have to plan apprenticeship training in advance if they want it. They also need to sign an apprenticeship contract and register it with the Labour Inspectorate, though they may also have contracts for which they do not request a subsidy.

^{(&}lt;sup>83</sup>) If the employer makes use of the subsidy from the Employment Services (ANOFM) then it is obliged under the penalty of returning the sums received and with interest, to maintain the apprenticeship contract for the period for which it has been concluded. After the end of the apprenticeship, the law (No 279/2005, Art.10) specifies that the signatory parties may, and this is the keyword, agree to sign another labour contract for a period of time at least equal to the one spent in apprenticeship, or agree that the former apprentice reimburses the expenses made for him or her during apprenticeship. However, there is no particular sanction if the former apprentice does not agree with the employment conditions proposed, which obviously cannot be imposed, and there is also little alternative for the second option other than to resort to courts. Thus, after this period of course the parties may agree to conclude a contract, but they may also freely agree that such a contract is not in their mutual interest and part ways. Since one party has received the certificate of qualification (the so-called 'apprentice') while the other party (the employer), has financed its expenses out of the subsidy from the unemployment insurance fund, then their mutual interest is satisfied. However, this does not qualify as apprenticeship but rather as a mere way of disguising a form of publicly subsidised labour for some enterprises through the shrewd use of legislation. Essentially apprenticeship is used as a cover-up for cheap and, what is more, 'publicly subsidised labour' of what are private enterprises. Thus, one easily may deem this as unfair competition.

More important for the expression of apprenticeship demand, if companies wish to get the subsidy, there is the legal obligation to announce their apprenticeship vacancies with the local public employment service (the *judet*, county employment office: *Agentia Judeteana pentru Ocuparea Fortei de Munca*). The local employment services may check if the vacancies have been notified with the employment services according to the unemployment insurance act (Law No 76/2002 with subsequent amendments) and, if not, apply a penalty. In contrast, there is no legal obligation for the would-be apprentice to be registered or to have been registered with the public employment services prior to his or her application for an apprenticeship post.

In practice, most employers request the subsidy, which is quite understandable given the administrative hurdles related to taking part in apprenticeships: bureaucracy associated with the subsidy and by subsequent controls, labour inspection supervision and verifications. As a result, most employers post their vacancies in PES. This means that offer and demand for apprenticeship is expressed through the public employment offices: although private ones also exist, they are not entrusted with the administration of the unemployment insurance fund, the very source of the subsidy for apprenticeship.

This also has an impact on the type of apprenticeship supply. Apprenticeship candidates primarily come from the unemployed and low-skilled people registered with the employment offices. Given the meagre sums of unemployment benefit in Romania, these tend to be the ones that are at the most difficult to integrate into the market. Employers have few options in selecting apprentices. Thus, at the termination of the apprenticeship period, the employer may not want to hire the apprentice. This approach is rather skewed towards the social protection side of the process: this exists and always existed, even in the form of 'indentured labour' practised in the pre-industrial times, as the indentured labourer or servant benefited from conditions far better than he or she would have actually enjoyed if 'free').

Even in these circumstances, real cooperation between an (important) local employer, the local public employment services and local certified training providers may in the end deliver benefits for all. However, for this to happen, the employer needs to be in the centre of the process, able to adapt curricula and harness the selection and profiling of candidates jointly with the public employment services, to get candidates that are suited for the job (and not just for the subsidy). How often this happens is hard to say. From the fact that 15 years after the adoption of the law apprenticeship remains marginal, the conclusion may be that this does not happen very often.

13.5. Conclusions

While the system in appearance gives the enterprise willing to engage in apprenticeship a large degree of freedom, in practice it constrains it quite severely. The numerous administrative hurdles to be crossed for an occupation to be qualified for apprenticeship, and the need to appeal to a certified training provider (often a public school operating under a completely different set of incentives than a private enterprise) make the process unattractive for employers. To compensate for these hurdles, enterprises may request subsidy provided from the unemployment insurance fund, only to face additional hurdles linked to the processes and a limited amount for subsidies. This situation explains the rather low number of apprenticeship contracts on the Romanian labour market, 15 years after the adoption of the law and many later amendments.

However unsatisfactory the landscape may look at the moment, it has to be said that the possibility to use EU funds has improved participation, even though EU funds are often subject to more requirements than national ones. In the meantime, linking the subsidy system with the public employment services ensures that apprenticeship also provides a chance of employment with training for the ones that are most at disadvantage on the labour market. Although this may skew the whole system in favour of the labour supply side, this may be its least problematic feature. Improvements are necessary, but given the structure of the Romanian economy, which is not likely to change in the foreseeable future, apprenticeship will remain a marginal phenomenon of the labour market.

CHAPTER 14. Apprenticeship in upper secondary school, Sweden

By Lotta Naglitsch, Apprenticeship developers in Sweden AB, and member of the Cedefop community of apprenticeship experts

14.1. Introduction (⁸⁴)

The Swedish VET system offers 12 national vocational programmes that aim at preparing students for the labour market and can be pursued through two different modes of delivery: the school-based scheme that includes compulsory in-company training, and the apprenticeship education scheme. Both tracks lead to the same vocational diploma and largely share the same curriculum, as well as admission and diploma requirements and goals. Both require students to spend time in a workplace but in different proportions. In the apprenticeship track, at least 50% of the total time, calculated from the moment the student starts the apprenticeship, should be spent in the workplace. Students may switch from the school-based to the apprenticeship track and back. All apprentices sign a training contract and, since 2014, employers may offer an apprenticeship employment contract as well ('upper secondary apprenticeship employment') and pay wages.

Apprenticeships within the regular education system are the same but still do not start from a uniform model. Upper secondary apprenticeship has been around for 10 years and is the most widespread form, with around 15 000 students. The starting point is that students who attend apprenticeships in upper secondary school or upper secondary special school spend more than half of their education in one or more workplaces. In adult education, there is the educational form apprentice for adults. Every year, more than 3 500 adults are trained in this model around Sweden. The goal is then the same as in upper secondary school but, in adult education, as much as 70% of the education must be workplace-based.

14.2. Identifying and updating apprenticeship occupations

VET providers (schools) are responsible for most of the implementation tasks (both administrative and content-wise) of apprenticeship in upper secondary education.

^{(&}lt;sup>84</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

They have responsibility not only for the administration and coordination of the scheme and but also for the learning that takes place both at school and in a company, including identifying and defining the learning outcomes, organising, planning and following up apprentice progress, and allocating an apprentice to a company. This means that the stakeholders have very little impact on identifying apprenticeship occupations. VET providers have overall responsibility for ensuring the preparation and implementation of the learning contract that the apprentice, the education provider, and the company must sign; this defines the roles and responsibilities of the different stakeholders, and the content and scope of workplace-based learning. Companies do not select apprentices and they receive grants through the school (per student per term) and a subsidy for qualified workplace trainers.

Many social partners are now developing their own competence standards, based on which they make their own tools for validation. The goal is to apply for their qualifications to be placed in the Swedish national qualification framework scale. This could result in the competence standard for one occupation being described in two different ways, one within the formal system and one in the informal system.

One problem identified in this context is that the Swedish system is not clear enough, is far too diverse and sometimes not sufficiently adapted to the needs of industries and employers. The needs become clearer when there is a great shortage of qualified workers. In Sweden there is a long tradition of apprenticeshiplike education in several industries. Among the apprentice-like variations, the vocational work introduction programme (YA employment) was introduced, combining work with learning in the workplace. This form of employment requires industry-specific agreements, a designated supervisor and an individual plan for supervision and learning. Depending on the industry and collective agreements, the regulations and subsidies for 'vocational work introduction' are different. In industries such as construction, electricity, painting, sheet metal and plumbing, there is a long tradition of such apprenticeship-like schemes, based on collective agreements and disconnected from the regular education system.

In EU countries with strong apprenticeship training, it is common to offer apprentices a salary from the beginning of the training, as employers see their participation in apprenticeship as a long-term investment and part of their skills supply. However, salary is not mandatory in Swedish apprenticeships that are offered as an alternative to the school-based track.

Upper secondary 'apprenticeship employment' has been added as an option within apprenticeship offers in the recent years (SFS No 421, 2014), under which apprentices should receive a salary during the time they are at the workplace. The idea of having a paid job during high school education has had a hard time gaining a foothold in the Swedish education system. This may be due to the fact that it has

existed for a relatively short time, but also because employers, the social partners and industries have not been sufficiently involved in the development process. For the system of apprenticeships to be accepted in the Swedish labour market, it is probably necessary that the current structure is changed and better adapted to how the Swedish labour market is structured.

There are still some question marks among industries about the relationship between education and production: to what extent the student is only to be regarded as in education or can also be used in current production. It is crucial that the parties agree on apprentice status in the workplace. One question is how to make more transparent which collective agreements should apply.

Professional committees should play a central role in the process, including in identifying competence needs, and defining education levels and education plans.

14.3. Design and update of apprenticeship curricula

There are 12 national programme councils, one for each of the 12 national vocational programmes, consisting of 6 to 10 representatives from industry, from employer and employee organisations within the specific vocational area, and from some national or regional authorities. The national programme councils work as permanent forums for dialogue on the quality, content and organisation of VET between the National Agency for Education and labour market stakeholders. The national programme councils are not decision-making bodies, as they have a consultative function with respect to the National Agency for Education. The overall aim of their work is to make the VET pathway at upper secondary level more responsive to the needs of stakeholders and to improve correspondence between VET programmes and labour market demands. As the apprenticeship track is a mode of delivery for VET programmes, they are also key players in relation to apprenticeship.

Apprenticeship should allow progression to higher education levels and not be a dead-end. It is important that it leads to the same vocational certificate, diploma, degree or defined qualifications that are placed in the NQF system.

At the local level, every upper secondary school offering VET programmes, regardless of the scheme, can set up one or several local programme councils to support closer cooperation between education providers, employers and their representative organisations, and trade unions on each specific programme the school offers. Although the law does not specify their tasks, the local programme councils may assist VET providers on several levels: arrange workplace-based learning placements for their students for both school-based VET and apprenticeship schemes; organise and assess diploma projects; and address issues such as workplace environment, workplace safety, working hours, and the

expectations of the different stakeholders, as far as student presence at the workplace is concerned. There is a gap between the national and the local level because of the lack of connection between the two. There is a need for a more regional level that can support VET providers and stakeholders.

One problem that has been identified is the difficulty in terms of coordination, matching and quality work at the intersection between the responsible education provider, employer and apprentice. There is a need for more clearly designed and defined national and regional responsibilities. Apprenticeship training may need structures that regulate, support and create clarity. To tighten the gap between the national and local level, there is a need for a regional actor to connect the apprentice, the employer and the principal responsible for education. There is a need for a function/authority/organisation that helps employers to be connected with VET providers and vice versa. This function could be referred to as a 'regional vocational training centre'. It could be, for example, the chambers of commerce in Sweden or the regions. A regional vocational training centre should be able to consist of various regional actors, authorities, or collaborative constellations such as chambers of commerce or municipalities in regional cooperation. These centres should be linked to the responsible national authority. The tasks of the regional authority may include appointing suitable education providers for apprenticeships in the region and mapping and accrediting guality-assured workplaces that are to be 'apprentice workplaces'. The latter also includes ensuring that there is a trained supervisor and that there is an overall plan for the workplace training. Vocational training centres could also provide apprenticeship coordinator(s) between a VET provider and the workplace, strengthening vocational teacher competence, registering training contracts and coordinating work between regional programme councils with members from the competence platforms, trade unions, and representatives of education centres.

Vocational training centres should be able to provide vocational examinations, refer to actors who validate vocational skills and issue vocational certificates against the adult education or upper secondary school's grading system. They should be able to refer to vocational schools, for example when the local educator does not have current vocational teacher competence or when one or more employers cannot provide the entire educational content at their workplace. Vocational providers are becoming increasingly important in a proposed organisation for this purpose. Education providers and employers, especially SMEs, should be able to receive administrative support from the regional centre.

14.4. Expression of apprenticeship demand

There are many different variants of apprentice or apprentice-like educations, such as establishment jobs, trainees, YA employment, industry apprentices, apprentice adults, high school apprentices and apprentice-like education. This makes it difficult for both VET providers and employers to find the right one and understand what form of commitment or education is relevant in each situation. The term 'apprentice' means many different things and it is difficult to get a good overview. It can be inferred that this extensive complexity also makes it difficult for interested companies to grasp the specificities of each option and express their demand for 'apprenticeship' to the corresponding authorities, as in VET providers.

Both apprentice and employer needs must be at the centre and an apprentice salary must be the norm. Employers who receive apprentices should be given stronger financial incentives to employ them and to train supervisors. A possible development of these forms of support could be to let them support a general model that is adapted to the competence needs of different employers and industries. If wage costs were subsidised in connection with apprenticeships, interest in these forms of education could increase among employers, especially small ones. This could include tax deductions or support for supervision/supervisor training. In addition, incentives for VET providers to offer apprenticeships need to be strengthened.

There should be two ways to be admitted to an apprenticeship. Either the individual applies for an apprenticeship via the principal of the VET provider, or an apprentice can be accepted directly via an application procedure with an employer approved by the regional vocational training centre as an apprenticeship. Apprenticeships should be advertised as other jobs. This requires that the employee is given an education place at a school and that admission can also take place in ways other than through grades. An apprenticeship system must work together with the needs of different industries and be able to be adapted to the agreements of different collective agreement areas and also function in workplaces without collective agreements.

It must be possible to make a switch between apprenticeship training and school-based vocational training at upper secondary school. Those who have chosen an apprenticeship should be able to switch to a school-based education and must have the opportunity to read the courses required as a supplement. After completing education, it should be possible to build on it with new qualifications, for example via municipal adult education or Higher vocational education.

14.5. Conclusions

Swedish working life needs skilled, professionally trained employees. The labour market is facing an alarming lack of skills and presents major matching problems in terms of supply and demand for skilled workers. An important part of this supply of skills is the vocational education given at upper secondary level in upper secondary school or in adult education, as well as education within higher VET. In recent years, it has become clear that an apprenticeship system, where a large part of the learning takes place in the workplace, is needed to complement the usual vocational training. There is a need to simplify and make apprenticeship training in Sweden clearer. One system, both for adult and young students would be easier to communicate. In forming that system, it is important to learn from apprenticeship options that exist. Different industries and professions have different conditions, which an apprenticeship system should take into account. The industry or employer should, therefore, have a great deal of influence over the design of apprenticeship. The starting point must be the individual's need for an education that provides jobs and that employers have recruitment needs that must be met. It is also important to see apprenticeship as a qualified vocational education that leads to a vocational certificate and/or vocational degree, that could complement, or in some cases replace, other VET options. The basic principle should be that the apprentice has a job with the employer and that the job is adapted to the collective agreement structure that is appropriate. Apprenticeships should be age-neutral and work for narrow professional areas and work for a long time to come. The industries and the regular education system should have joint responsibility to ensure the quality of education at all levels.

The training provider should, in collaboration with the regional apprenticeship centre, be responsible for ensuring that there is a training contract between the apprentice, the training provider and the employer. The training providers are responsible for the preparation of the training contract. Professional committees should play a central role in the process, including when it comes to identifying competence needs, and defining education level and education plan.

Many employers have a long-term need to recruit skilled workers, but the pace of change in the labour market demands on new and flexible solutions. At the same time, young people's interest in vocational programmes in upper secondary school is not high enough to meet the needs, which means that the supply of skills must also take place to a greater extent from people who are no longer part of upper secondary school. Recent experience of vocational training has also shown that some students learn better if more of the learning takes place in a workplace.

Part II Apprenticeship in-company training design and delivery

CHAPTER 15. Summary of findings

15.1. In-company training design

The existence of minimum standards or curricula for the company-based part of the apprenticeship training may be considered as sine-qua-non for the comparability of learning outcomes or learning experiences at the workplace. In this case, company staff tasked to design in-company training for their apprentices (often together with VET provider staff) refer to such standards. It can be also expected that reference to such standards would be seen as a positive, supporting factor by company staff.

Box 9. In-company training based on standards/curricula specifically developed for the workplace

- In Germany, training regulations contain common, binding minimum standards for the company-based part of apprenticeship training. They are issued by the Ministries of Education and of the respective industry, but in a participatory approach that involves social partners and is overseen by BiBB. This process supports both relevance and consensus, perceived value and trust. Company staff involved in designing in-company training can benefit from specific standards for the workplace and, one can assume, are more inclined to use them as they have the 'stamp' of the corresponding employer representative.
- In Austria, a training regulation is developed by the Ministry of Economy on the basis of the occupational concept: to cover broader needs of the occupation and not of single companies. The training regulation is binding for the training provided in the companies participating in apprenticeships. It is the task, as well as the responsibility, of accredited in-company apprenticeship trainers to adapt these general provisions to the specific context and production process of the individual employer (company training plans).
- In Denmark, national trade committees design the learning objectives (*praktikmålene*) for each apprenticeship programme, which are reflected in 'apprenticeship declarations' signed between the school and the employer offering training. Given the type of alternation followed in Denmark (block), these declarations cover much of the workplace component. In some programmes, national trade committees design short apprenticeship declarations with only a few, broad learning objectives; in other programmes, the national trade committees have formulated apprenticeship declarations with numerous and specific learning objectives. As a result, company staff involved in further designing the in-company training has a significantly different basis depending on the programme/occupation. Similarly, comparability of learning experiences at the workplace depends on how elaborate the declarations are.

Source: Cedefop, based on individual papers submitted for this publication.

In several countries, though, the company-based part of the apprenticeship training is not supported by minimum standards or curricula but may refer to the general apprenticeship standards applying irrespective of the place of learning.

Box 10. In-company training based on general apprenticeship standards applying irrespective of the place of learning

- In the UK, groups of employers may develop apprenticeship standards and their accompanying end-point assessment requirements, and then training providers develop the curriculum on the basis of these assessment requirements. Although these standards set agreed outcomes that are generally respected, they extend only to 20% of the total training at both venues: that of the so-called 'off-the-job training', which can be delivered either by a provider or at the workplace. The majority of in-company training (80% of total duration) can happen while working ('on-the-job training') on the basis of other occupation-relevant tasks that are not directly linked to the outcomes intended to be developed by the apprenticeship. Different standards may be developed within the same sector by different companies or groups of companies.
- In Portugal, apprenticeship training standards are included in the National catalogue of qualifications (CNQ), consisting of the sociocultural, scientific, technological and work-based learning (WBL) components. The WBL component is the only one not described in the CNQ but is still regulated by the Institute of Employment and Vocational Training (IEFP), through a guide included in its regulation for the implementation of apprenticeship programmes. However, extensive adaptation of training guidelines is required at company level, where in-company trainers work closely with an assigned staff member ('pedagogical responsible') of the VET provider (or even an extended team of VET staff).
- In the recently (2016-17) established Greek EPAL apprenticeship scheme, apprenticeship curricula are being developed at national level by the Institute of Educational Policy (IEP). IEP was traditionally oriented to school-based curriculum development and has limited expertise when it comes to defining the workplace component. As a result, standards for the workplace component are either broadly stated or not yet developed. Employers, with the help of VET teachers, make their own adaptation to the broad apprenticeship curriculum, which might result in significant variation in what part of it is taught by each employer.

Source: Cedefop, based on individual papers submitted for this publication.

In a last group of countries and schemes, there is lack of apprenticeshipspecific standards/curricula, so the VET ones of corresponding specialties or occupations are used instead, after various degrees and approaches of adaptation (Box 11). A first repercussion of the absence of clear reference is the effort required by company staff (and VET staff) involved in designing in-company training. Staff involved in apprenticeship are required to develop an in-company training plan with little reference/basis of what this should be about. Requirements or guidelines are often expressed in a language that is not easily understood by the labour market representatives. To do so, they need to allocate more time than what would be needed to adjust an existing framework to the needs and realities of the specific employer. They may turn to the teachers at the VET providers for support in this endeavour, which in principle is beneficial, but it may again require excessive effort from teachers too in comparison to a case that a reference exists. There are cases where, when faced with this additional requirement, companies avoid such engagement and offer any kind of training or simply any type of work experience to their apprentices, thus weakening the educational aspect of this particular type of training.

A clear concern in this process relates to the level of comparability of the learning experiences of apprentices between one workplace and another. It is not always clear to which extent such flexibility is applied on common ground regarding what is to be taught in different companies for the purpose of the same qualification.

Box 11. Examples where in-company training design is based on adaptation of VET curricula/standards

- In Italy, curricula used in apprenticeship are essentially an adaptation of those developed for the corresponding school-based VET programmes: no standards exist for in-company training. Some adaptation also happens at regional level with the support of regional social partners and authorities, but in-company trainers still need to engage closely with school teachers in developing individual training plans for each apprentice that properly combine the training to be carried out in both venues (workplace and VET provider). This is often considered by trainers as a demanding procedure.
- In Poland, 'programme bases' are developed for programmes offered under the so-called 'branch schooling' and are a form of VET standards/curricula; they refer to the range of knowledge and skills to be acquired during practical activities at the workplace, not only through apprenticeship but also in other forms of workplace learning. Further elaboration of training programmes is needed between school directors and companies for each apprenticeship, resulting in a written agreement or contract. As school directors' involvement, based on the respective programme basis, is considered to work in favour of comparability of learning outcomes gained at the workplace, it possibly hints at the limited attention previously given to the programme bases by company staff.
- In Cyprus, apprenticeship-specific curricula have not yet been developed. Those developed for school-based VET are used instead, without guidelines on how to be adapted for apprenticeship and without a specific reference to the workplace component. Apprenticeship school inspectors and trainers need to work closely together to determine the content of the in-company training in each case, but this cooperation does not always result in formalised training plans. There might be great differences in the learning experiences of apprentices within the same programme/qualification, which is only exacerbated by the difference in training capacity between micro-companies and larger ones.

Source: Cedefop, based on individual papers submitted for this publication.

In-company training agreements between employers and VET providers (and sometime learners) are potentially a significant tool to design and structure the incompany training. More often than not, such training/learning agreements are used. They normally provide a clear reference of what is to be taught (or what is to be performed by the apprentice) during the workplace periods to the company staff involved in designing (and then delivering) the in-company part of the apprenticeship training.

Box 12. Examples where in-company training design and delivery benefits from training plans/agreements

- In Portugal, an Individual activity plan is jointly defined by VET staff and the company (trainer/tutor). It defines the activities and the skills to be acquired or consolidated in the company for each learner, based on the competences provided for in the technological training component. Trainers work closely with an assigned staff member of the VET school ('pedagogical responsible'), but other VET staff are also involved in planning in-company training: these include 'professional guidance technician', 'social worker', and VET school 'trainers'. The significant effort in developing individual plans is followed by similar attention during training delivery.
- In England there are various tools that can be used to help design in-company training. An apprenticeship agreement is signed by the apprentice and the employer, along with a commitment statement by three parties (including the VET provider). An individualised learning record (ILR) is also used. These tools provide a sufficient platform for designing (and monitoring) in-company training, and they are widely respected. However, they set agreed outcomes essentially for the 'off-the-job training' which is 20% of total apprenticeship duration, regardless of whether it is delivered by a training provider or in the company.
- In Italy, in the absence of standards for the in-company training, individual training plans, developed jointly by in-company trainers and VET staff, are central to apprenticeship training. However, the need to have a common language align competences, activities and the overall curricula requirements is a cumbersome process for in-company trainers, even more so in micro companies. The difficulty for companies to align activities with overall training requirements raises concerns about the extent to which individual training plans are properly completed by companies, especially micro ones, and used for delivering training.

Source: Cedefop, based on individual papers submitted for this publication.

Sometimes though, training agreements are seen as a burden for companies, either in their development or during the monitoring of the training provided. Papers explain that this might be due to lack of knowledge on what they should include and how they can be used in practice, or to the fact that training agreements are, in rare cases, mostly a formality linked to subsidies for participating companies.

For better support to individual company involvement in designing the workplace component of apprenticeship training, and to aid their overall engagement in apprenticeships, guidance and resources are provided by national VET/apprenticeship institutions, chambers or ministries. In this way, standards/curricula and training/learning agreements can also be complemented by tips, guides and practical information on how apprenticeship training should be planned and structured. This approach draws attention not only to requirements and expectations (standards), but also to ways of designing training on a practical level (and ways to address issues that may rise during its delivery).

Box 13. Examples of tools supporting training design by employers

- In Germany, BiBB issues an implementation guide that presents the competence profile, explains roles and helps companies design and plan their training.
- In England, employers find information about their role in the apprenticeship programme in the guidelines issued by the Department for Education (2019).
- In Austria, training guidelines, checklists, best practices and various other tools are developed by ibw Austria, on behalf of the Ministry of Economy and the chambers, to help participating companies design their contribution better.
- In Portugal, the Institute of Employment and Vocational Training (IEFP) issues a guide covering the work-based learning (WBL) component, which makes up for the absence of specific standards for this component.

Source: Cedefop, based on individual papers submitted for this publication.

Experience from the adoption of such tools is mostly positive from countries, especially as long as they are well-developed and easy-to-use. This might be a small, but effective factor in improving the process followed at company level for the design (and then the delivery) of in-company training. Guidance and tools for companies could complement standards and help stakeholders draft suitable learning agreements and counterweight their absence when this is the case.

15.2. In-company training delivery

Various factors come into play regarding how in-company training delivery is organised at employer level and may affect the content of training offered, its quality and the extent to which it meets what is designed in earlier steps.

Monitoring of training delivery could be a significant tool in helping employers to improve its quality and effectiveness, but the processes followed are not always rigorous and structured across the countries and schemes explored. A significant variety of approaches can be observed regarding how training delivery is followed, and how learning outcomes are achieved as intended and agreed. In some cases, it is based on the use of logs, in others on the communication of teachers and trainers (visits, phone calls).

Box 14. Variation in the approach, intensity and usefulness of monitoring how in-company training is delivered

- In England, a log-type approach is used: the individualised learning record (ILR) contains the volume of planned 'off-the-job' training hours, for the full duration of the apprenticeship. Use of ILRs seems rigorous, also because it is linked to funding. However, this covers only the 20% of total training offered, including that in the VET provider, and is better suited to defining and easily assessing the quantity of the training provided rather than its quality.
- Although Italy has tools for monitoring and registering the achievement of learning outcomes (including individual dossier, logbook), especially in microcompanies there is a lack of capacity to handle these tools, as in no person in charge of managing them. This weakens the value of individual training plans that are jointly drafted by teachers and trainers.
- In Portugal, activities carried out by the learner at the workplace are systematically assessed, and a set of tools helps ensure that all learning outcomes are achieved. The trainer is responsible for monitoring training delivery at the workplace, but a VET provider staff member ('pedagogical responsible') is responsible for guaranteeing supervision, guidance and fulfilment of each learner's pathway.
- In Denmark, the 'apprenticeship declarations' are not always properly used, or, in some cases, not used at all as a reference to monitor and document workplace training. This might reflect the differences in how elaborately they are designed by the corresponding national trading committee and, even more, how detailed are the accompanying assessment procedures.
- In Greece, frequent teacher site visits seem to be a key remedial factor for the great variation in in-company learning experiences which are a result of the absence of in-company training specifications. Apprenticeship teachers are required to check apprentices' progress periodically (on top of other tasks such as teaching and often finding companies).
- Similarly, in Cyprus sufficiency and quality of in-company training depends greatly on monitoring performed individually by schoolteachers who are appointed as apprenticeship inspectors.

Source: Cedefop, based on individual papers submitted for this publication

The importance of and intensity in monitoring workplace training delivery varies with the presence of other measures aimed at guaranteeing the minimum level of quality in the in-company training. For example, where there are minimum standards or curricula for the in-company part of the apprenticeship training, and they are typically respected, less attention to monitoring is reported. In contrast, where such standards or curricula do not exist or are not widely accepted, experts refer to an increased effort from teachers to work with trainers and oversee the sufficiency and quality of training provided in companies. Similarly, the better and wider the accreditation of companies as training providers, and the assessment procedures, the less important and/or intense the monitoring.

Box 15. Accreditation and assessment

- In Austria, there is emphasis on the accreditation of employers that wish to engage in apprenticeships and then on the final assessment of apprentices. During the apprenticeship, there are no mandatory assessment instruments or procedures at company level, although often training companies document the learning achievements on their own initiative. External quality control mechanisms and instruments can be considered as 'soft', as focus is on the selfinterest of training companies to exert good training quality. The combination of an obligatory framework (training regulations) with these quality assessment mechanisms is considered to be working well, leading to comparable learning experiences within a qualification despite the flexibility in adapting regulations to company training plans.
- In England, there is less monitoring during the apprenticeship (such as Ofsted inspections), but external quality assurance bodies such as Ofsted, Ofqual and the QAA inspect end-point assessment to ensure that it is fair, consistent and robust across different apprenticeship standards and between different assessment organisations.
- In Poland, examination requirements are common for all VET, and work in favour of comparability of learning outcomes achieved at different workplaces, as they are common for 'branch schooling' apprenticeships or other WBL options, or even when apprenticeships are organised entirely within a company and VET standards do not apply ('labour market qualifications').

Source: Cedefop, based on individual papers submitted for this publication

Papers showed that the role of labour market actors in monitoring how incompany training takes place is much more limited compared to their contribution in processes that happen at higher levels, such as the design of curricula or standards (or occupational profile).

Where single companies fail to cover the whole range of learning objectives foreseen in a qualification or curriculum, cooperative models emerge as a response. They include rotation of apprentices across more than one training company, or cooperation of a training company and a sectoral training centre for the workplace component, on top of the regular VET provider (school) that covers the school-based part of the curriculum. Such approaches are almost non-existent in most countries covered by the papers. In Denmark, where specialisation in the training provided by certain employers is an issue, the opportunity for rotation or apprentice-sharing is legally introduced but rarely used, apart from exceptions where this is mandatory (such as social and healthcare workers). In England, the Construction Industry Training Board (CITB) offers construction companies with inhouse training centre opportunities to apply to become a CITB Approved Training Organisation, signalling that the quality of their in-house training meets the industry agreed standard. There is more room for employer associations to step in and cover the gaps. Rotation within company departments seems to be used more often, especially in bigger companies but not solely.

Such safety nets can ensure sufficient provision of training, according to agreed/intended outcomes. Some initiatives have been promoted in recent years, often financed by EU funds, but, in most countries, they seem to retain a pilot, project-based nature, not formally foreseen or regulated.

While companies are generally required to assign an in-company trainer, formal minimum requirements on who may fulfil this role are less common. For example, in Denmark, national trade committees are afraid that such a requirement might deter companies from participating, and that workers will not find motivation in a mandatory course to become a trainer. As a result, there is neither a requirement nor a reward/incentive for companies to train their staff accordingly.

Box 16. Different approaches in requirements for in-company trainers

- In Germany, the formally appointed trainer must be professionally and personally competent to oversee the overall learning experience of an apprentice; aptitude tests are in place for this purpose.
- In Austria, the authorised trainer needs to possess not only previous professional qualifications but also proof of knowledge and skills related to vocational pedagogy and law. Candidates have to take the IVET trainer examination, which is one module of the master craftsperson examination, to assess their knowledge and skills or complete a 42-hour IVET trainer course.
- In Denmark, accreditation of training companies does not include requirements for pedagogically educated trainers (despite reports hinting at this).
- In the UK, no requirements exist for in-company trainers, but significant attention is paid when assigning trainers or staff with other roles.
- In Greece, Italy and Cyprus there are general requirements for a person to be nominated, but detailed requirements for their profile and background are essentially not in place.

Source: Cedefop, based on individual papers submitted for this publication.

The roles of in-company trainers are complex and demanding. The tasks that are central or peripheral to apprentice training are numerous: from designing the in-company training content and individual training plans, to delivering and monitoring training, to offering guidance and support, and handling administrative tasks. Most or all tasks often fall on the shoulders of a single person.

Box 17. Variety of roles and tasks assigned to in-company staff regarding apprenticeship training design and delivery

- In Germany, there is a difference between the appointed trainer and other training specialists who are involved in specific parts of training.
- In Austria, the authorised trainer may provide training himself/herself, or delegate it to another competent employee. Most trainers train in parallel to their regular work, though, in larger companies, there may be full-time trainers and training managers may. Evidence from Austria shows that the majority of trainers

'sometimes' or 'very often' dedicate time to addressing behavioural and personality traits of their apprentices, on top of training, time spent on planning and designing the training, and on organisational or administrative aspects. Surveys showed that trainers see themselves as technical experts, role models, organisers, counsellors, supervisors, confidants, colleagues and then teachers, educators/social workers.

- In England, although not formally required, mentors or coaches are often assigned to apprentices from the very beginning to help settle, track progress and keep contact with the training provider. Their roles vary from on-the-job learning to general wellbeing. Technical apprenticeships require considerable investment of resources in workplace training; in the services sector, light supervision is sufficient to support the apprentice.
- In Portugal, the in-company trainer has a significant role in drafting the Individual activity plan together with the VET school team. He/she is responsible for creating the conditions for adapting training to the apprentice's needs (as per the individual plan), integrating the apprentice and reporting to the staff member responsible ('pedagogical responsible') of the corresponding VET provider.
- The complexity of the role of trainers is similarly acknowledged in Greece and Cyprus, where trainers have a bigger role in adapting the training content to the workplace reality.

Source: Cedefop, based on individual papers submitted for this publication.

This wide range of duties adds pressure, particularly to micro-companies, where owners, being the actual trainers, lack the time to engage properly in apprenticeship training and work in depth and in a structured way with the apprentice.

Collaboration with VET providers often seems to offer one solution. In Italy, where collaboration of teachers and trainers is intensive, especially in jointly designing the individual training plans, a recent project (Qualit) promotes a more structured approach based on a single, standardised, nationwide 'dual trainer' profile, for both in-company trainers and VET teachers involved in apprenticeship. It builds on joint requirements (skills, competences), a common training programme and a single qualification as 'dual trainers', which could then lead to an advanced 'master-trainer' qualification.

In larger companies, it is not only training procedures and infrastructure that are available more often, but also more people can be involved and share tasks that are central or peripheral to apprenticeship training. Those formally responsible for supervising training do not have to do the training at all, and can benefit from colleagues with particular expertise in specific tasks included in the agreed training content. Other company staff might be involved in overall coaching, or in administrative tasks and induction to the company.

In schemes where in-company training content is less structured, mandatory and common across companies, trainers are required to step in and engage intensively in designing and monitoring in-company training, and spend significant time working with VET staff to this purpose. Although flexibility in the workplace component is generally perceived as a benefit for participating companies, excessive room for adjustment seems to add pressure on trainers.

Focusing on the training practices and methods used in individual companies is a demanding exercise. A detailed reference to how training actually takes place in individual workplaces remains less clear. However, several papers provide useful information on general approaches and methods used in principle, that can inform and guide the practices followed at company level.

Box 18. On-the-job training approaches and methods

- In Austria, apprenticeship trainers are free to choose a suitable didactic/pedagogic approach to be followed so that the expected learning outcomes are achieved, following their overall responsibility to adapt general provisions, set in occupational profiles and training regulations, into a specific company training plan. The novice-expert model is usually followed (add reference), but a broad variety of didactic approaches may complement. Training that is not directly linked to the production process (such as separated learning workshops/ateliers) is rarely used.
- In most workplaces in Denmark trainers or regular workers give the apprentice close guidance and direct assessment at the beginning of the apprenticeship. When the apprentice learns the on-the-job routine, trainers often focus on asking questions, approving the apprentices' work or helping them reflect on action. At the end of the apprenticeship, when apprentices have become experienced and independent workers, trainers support when asked for help.
- In Portugal, VET staff and in-company trainers must bear in mind the learner's characteristics when selecting the methods to apply in each training session. Particular focus is on developing competences such as autonomy, initiative, teamwork, critical analysis, problem solving and lifelong learning skills, along with technical skills and adopting active methods.

Source: Cedefop, based on individual papers submitted for this publication.

CHAPTER 16. Dual apprenticeship, Austria

By Kurt Schmid, IBW Research, and member of the Cedefop community of apprenticeship experts

16.1. Introduction (⁸⁵)

Austria has a demand-driven apprenticeship system (matching first takes place between applicants and training companies with subsequent placement at parttime vocational schools) with high involvement of the social partners as governance stakeholders. About 70-80% of total training duration is provided incompany; the remaining 20-30% is usually spent in obligatory part-time vocational schools. There are over 220 training occupations, with a typical duration of three to three and a half years. Apprentices earn a wage below the 'minimum wage' of a skilled employee (determined by collective bargaining at sectoral level for each apprenticeship occupation) that rises with training duration. Training companies receive some financial subsidy. All relevant aspects are defined in a separate dual VET law (BAG, *Berufsausbildungsgesetz*). Apprentices have a special 'apprenticeship contract' that combines employment and qualification/training and stipulates that the apprentice has to attend compulsory part-time vocational school. About 80% of an age cohort chooses IVET: half of these take apprenticeship, the other half attend full-time IVET providers.

16.2. In-company training design

For each individual apprenticeship trade, the Minister for Economy issues an Austria-wide training regulation (*Ausbildungsordnung*), which is binding for the training provided in the training companies. The basic background design is the occupational concept: an occupation is defined as being composed of a comprehensive bundle of typical tasks. To fulfil these tasks, a person needs to have the command of a set of competences.

Training regulations, therefore, stipulate the occupational/job profile (*Berufsbild*) specific to the respective apprenticeship trade. In a catalogue organised by apprenticeship years, the occupational profile covers the minimum occupational basic skills, knowledge and skills that must be taught in the course of

^{(&}lt;sup>85</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

company-based training. Nowadays these are formulated as competences-based learning outcomes (as a competence profile, *Berufsprofil*); these are the competences, apprentices will acquire by the end of their training in both learning sites (training company and part-time VET school).

Typically, the social partners are the initiators of establishing new or updating existing profiles. It's also they – usually supported by external research institutes (such as the ibw) – who draft these profiles (⁸⁶). The drafts are the starting and reference point for the corresponding curriculum development process for the parttime vocational school. Ideally, the involvement of social partners (and especially those from different sectors of the employer-side) in the conceptual design and definition of the profiles will result in training regulations that incorporate probable varying qualification demands of companies.

Training regulations do not contain any normative specification on how these learning outcomes should be achieved (⁸⁷). It is the task and the responsibility of the authorised in-company apprenticeship trainer/s (*Ausbilder*) to adapt general provisions into the specific context and production process of the enterprise through company training plans. The trainer is free to choose the didactical/pedagogical approach. Basically, apprenticeship training follows the novice-expert model (see Mayerl et al. 2019, p. 237 referring to Dreyfus and Dreyfus, 1980).

With respect to ensuring that all learning outcomes for the in-company training component are delivered and achieved, Austria deploys a front- and back-end quality approach: training companies have to be accredited when they first start to train a specific apprenticeship trade and final exams assess (at the individual level of apprentices) whether learning outcomes have been achieved. There are no obligatory assessment instruments between these two, though training companies often voluntarily document the learning achievements of their apprentices) at company level. In part-time vocational schools yearly grading is applied.

That approach, as well as the didactic and pedagogical expertise for apprenticeship trainers, are topics of recurrent debate. Typically, representatives of employees advocate for mid-term assessments of apprentices as well as for deepening the didactical and pedagogical competences of apprenticeship trainers. The employer-side is largely against these requests, favouring voluntary additional support and offers instead (such as documentation, assessment tools, and CVET for apprenticeship trainers). Most of these tools are designed by ibw Austria, on behalf of the Ministry of Economy and the Austrian Economic Chambers, and

^{(&}lt;sup>86</sup>) See Apprenticeship – Dual vocational education and training in Austria: modern training with a future, p. 22.

^{(&}lt;sup>87</sup>) The amount of training at the workplace, the requirements in terms of equipment and suitability of the trainers etc. are regulated by law.

offered online (⁸⁸). They include training guidelines, checklists, best practice examples, support for the apprenticeship leaving exam (clearing office for the exam, exam assignments for commercial apprenticeships, learning material for apprentices, manuals and curriculum for examiners), aptitude tests for selecting apprentices, and the State prize Best training companies – Fit for future.

The combination of the occupational concept, the obligatory frame of training regulations in combination with the flexibility and adaptation request to incorporate them at company-level in training plans, as well as the general setting of quality control mechanisms and instruments described, seem to work well with respect to achieving comparable learning outcomes, at least for most of training situations, companies and apprentices. Overall figures indicate favourable transmission from apprenticeship training to employment/labour market positioning (e.g. Dornmayr and Nowak, 2020, p. 140 ff; Dornmayr and Löffler, 2020, p. 215 ff; Dornmayr and Winkler, 2016). There is always room for improvement, especially in identifying companies that provide comparably weak training and motivating them to raise their training quality (or to withdraw training accreditation if no progress is made). One indicator, usually controversial in discussion, is labour turnover of employees, qualified by apprenticeship training: is a comparatively high turnover (especially in and out of occupations) an indication of having received transferable competences that might be successfully and favourably be used in other companies and even other occupation fields? Or is it a sign that those employees have to leave their 'original' occupation field in order to make a career in other companies and/or occupations?

16.3. Organisation of in-company training delivery

What is the role of in-company training staff and pedagogical approaches in the workplace in Austria? Frequently, the person authorised as apprenticeship trainer (such as the company owner) does the training. He or she may, however, entrust another competent employee with this task. Success of training is mainly determined by the trainer's professional competence and pedagogical (teaching) skills. The work of the in-company trainer not only requires certain previous professional qualifications but also proof of knowledge and skills related to vocational pedagogy and law. Candidates have to take the IVET trainer examination, which is one module of the master craftsperson examination, to assess their knowledge and skills (⁸⁹). The examination is waived upon successful

⁽⁸⁸⁾ See Voneinander lernen and Ausbildungsleitfäden.

^{(&}lt;sup>89</sup>) Some qualifications or exams (e.g. successful completion of a foreperson course) are treated as equivalent to the IVET trainer examination or IVET trainer course.

completion of a 40-hour IVET trainer course (see Q36 in the Cedefop database on apprenticeship schemes; Austria).

Most trainers educate their apprentices on a part-time basis alongside their regular work (about half of trainers do so according to Dornmayr et al. 2019, p. 27). There are, however, also full-time trainers and full-time training managers, particularly in larger companies.

No normative specification exists with respect to didactics/pedagogical approaches. In-company trainers have high autonomy to apply those methods and approaches they prefer individually: this is similar to school teachers as most of instruction time takes places behind closed classroom doors.

The development of company training plans is under the sole responsibility of in-company trainer/s. In many occupations, supportive training guidelines, material and manuals supplement the training regulation.

For decades, in-company training delivery was essentially a black box as no empirical evidence existed. Some research has been conducted recently about incompany training provision and apprenticeship trainers (Lachmayr and Mayerl 2019; Dornmayr et al. 2019). Additionally, some information may be derived from cost-benefit analyses and comparing the result with similar research for Germany and Switzerland (see Moretti et al. 2019).

Research highlights shed light on some characteristics of apprenticeship training in Austria. The majority of apprenticeship trainers are fully (70%) or at least partially (29%) familiar with training regulations and occupational profiles of the trades they train (Dornmayr et al. 2019, p. 36). The majority assess themselves as being up to date with respect to the professional expertise to train (ibid. p. 38). The preferred and most applied method of in-company training is learning by doing and work-based learning (WBL) in the production process; that didactic/pedagogical approach forms the core of apprenticeship training. Three out of four trainers regularly give individual feedback to apprentices, and two out of three trainers apply rotation inside the company departments as well as regularly communicating with the part-time VET school (ibid. p. 30). A minority of trainers (below 20%) use digital learning tools. The survey indicates that, alongside WBL, a broad variety of didactic approaches is deployed.

The tasks of apprenticeship trainers go beyond the mere transfer of knowledge and development of practical skills, theoretical know-how and fostering competences. According to research conducted by Dornmayr et al. (2019, p. 43) 36% of trainers report that they 'very often' and additionally almost 50% at least 'sometimes' have to dedicate time, effort and educational tasks for addressing behavioural and/or personality traits of their apprentices. Trainers also have administrative, organisational as well as documentary workload. Planning and designing the training (including establishing appropriate learning settings) is another important field of action; this shows that work-based learning has to be

established and designed within companies and is not achieved by simply placing apprentices with mentors, trainers or skilled workers. Therefore, trainers see themselves as having very different and diverse roles at the same time: as technical experts (95%), role models (95%), organisers (88%), counsellors (88%), supervisors (87%), confidants (82%), colleagues (78%), teachers (59%) and educators/social workers (59%).

The work-integrated training model seems to be the predominant mode of how apprenticeship training is carried out in Austria. For Mayerl et al. (2019) that corresponds to the fact (derived from cost-benefit analyses) that most of Austrian training companies engage in apprenticeship training because of having a production motive, in contrast with those companies or countries with an investment motive (90). One outcome of favouring work-integrated training might be that didactic approaches such as in-company separated learning workshops/ateliers - those not directly linked to the production process - are seldom deployed. Another effect might be that apprentices are more often trained in settings and perform productive work that can be characterised as being at unor semi-skilled level. Yet, the links between training motives of companies, company-specific characteristics (like, size, sector), human resource management strategies, other training motives (such as screening) and models/modes of learning applied in apprenticeship training are highly complex and far from providing simple answers/solutions (⁹¹).

16.4. Conclusion

The Austrian approach to guaranteeing comparable learning experiences in apprenticeship, leading to the same qualification, irrespective of the training company, is based on three elements: the occupational concept and its subsequent definition of competences-based learning outcomes in the training regulations; the binding provision that training companies have to fulfil the whole competence profile of an occupation; and the expertise and experience of

^{(&}lt;sup>90</sup>) Quoted from Schmid (2019), p. 6: 'Empirical research for Switzerland, Germany and Austria provides evidence that many companies break even by the end of the apprenticeship [...]. However, there are also others who do not; for them, retaining staff they have trained for a certain period of time after they have completed their training is essential. [...] companies from the first group (break even during training) can be characterised as having a production motive to offer training and those from the second (no breakeven during training) as having an investment motive.'

^{(&}lt;sup>91</sup>) The research model applied by Mayerl et al. (2019) results in a coefficient of determination (R-squared) of 0.1 to 0.2 meaning that up to 80-90% of variations in learning modes and production time of apprentices in skilled work might not be explained by independent variables (such as training motives and company characteristics).

apprenticeship trainers in adapting the training regulations into the specific context and production process of the enterprise (company training plans). Essentially, external quality control mechanisms and instruments are 'soft'. Focus and preference are given to the self-interest of training companies in ensuring good training quality. Empirical evidence depicts a mixed picture. On the one side, labour market transitions for most graduates are generally favourable and high apprentice satisfaction shares and scores are reported. On the other side, based on costbenefit analyses and compared to Germany and Switzerland (the two other countries with 'classical dual VET'), a higher share of Austria's training companies seem to incorporate their apprentices in productive work settings at unskilled or semi-skilled level.

The role of apprenticeship trainers goes beyond merely transferring knowledge, theoretical know-how and developing practical skills and competences; this trend seems to be increasing, suggesting how to nurture professionalism with respect to their pedagogical/didactical expertise. Up to now, CVET offers and experience-sharing activities are based on voluntary trainer engagement.

16.5. References

[URLs accessed 18.6.2021]

- Bliem, W.; Schmid, K. and Petanovitsch, A. (2014). *Success factors for the dual VET system: possibilities for know-how-transfer*. Wien: ibw. Research report, No 177. https://ibw.at/bibliothek/id/258/
- Dornmayr, H.; Lengauer, B. and Rechberger, M. (2019). Betriebliche AusbilderInnen in Österreich. Erfahrungen, Herausforderungen, Wünsche. ibw-Forschungsbericht [Company trainers in Austria: experiences, challenges, desires. Wien: ibw. Research report, No 196. https://ibw.at/bibliothek/id/497

Short English version: *In-company trainers in Austria*. Ibw research brief, No 103. https://ibw.at/resource/download/1837/ibw-researchbrief-103-en,pdf

- Dornmayr, H. and Löffler, R. (2020). *Bericht zur Situation der Jugendbeschäftigung und Lehrlingsausbildung in Österreich 2018-2019* [Report on the situation of youth employment and apprenticeship training in Austria 2018-19]. Vienna: ibw-öibf-Bericht. https://ibw.at/bibliothek/id/519/
- Dornmayr, H. and Nowak, S. (2020). *Lehrlingsausbildung im Überblick 2020. Strukturdaten, Trends und Perspektiven* [An overview of apprenticeship training 2020. Structural data, trends and perspectives]. Vienna: ibw. Research paper, No 203. https://ibw.at/bibliothek/id/521
- Dornmayr, H. and Winkler, B. (2016). Nach der Lehre: Ausbildungs- und Berufserfolg von Lehrabsolventen und Lehrabsolventinnen in Österreich. Eine

empirische Untersuchung auf Basis von amtlichen Individual-/Registerdaten und persönlicher Befragung [After the apprenticeship: training and professional success of apprenticeship graduates in Austria. An empirical study based on official individual/register data and personal interviews]. Vienna: ibw. Research paper, No 186. https://ibw.at/bibliothek/id/268

- Dreyfus, S.E. and Dreyfus, H.L. (1980). A five-stage model of the mental activities involved in direct skill acquisition. https://www.researchgate.net/publication/235125013_A_Five-Stage_Model_of_the_Mental_Activities_Involved_in_Directed_Skill_Acquisiti on
- Lachmayr, N. and Mayerl, M. (2019). 3. Österreichischer Lehrlingsmonitor. Ergebnisse einer bundesweiten Befragung von Lehrlingen im letzten Lehrjahr. Projektabschlussbericht des Österreichischen Instituts für Berufsbildungsforschung (öibf). [Austrian apprentice monitor: results of a nationwide survey of apprentices in the last year of their apprenticeship: final project report of the Austrian Institute for Vocational Training Research (öibf)]. Vienna: öibf.

https://oeibf.at/wp-

content/plugins/zotpress/lib/request/request.dl.php?api_user_id=2190915&dl key=HFJIXRVF&content_type=application/pdf

Mayerl, M.; Schlögl, P. and Schmölz, A. (2019). Wie wird berufliches Lernen im Betrieb organisiert? Empirische Einblicke in den betrieblichen Teil der dualen Ausbildung in Österreich. [How is professional learning organised in the company? Empirical insights into the operational part of dual training in Austria]. *SWS-Rundschau*, Vol. 59, No 3, pp. 234-254. https://oeibf.at/wp-

content/plugins/zotpress/lib/request/request.dl.php?api_user_id=2190915&dl key=4EYYHC7E&content_type=application/pdf

- Moretti, L. et al. (2019). So similar and yet so different: a firm's net costs and posttraining benefits from apprenticeship training in Austria and Switzerland. *Evidence-based HRM: a global forum for empirical scholarship*, Vol. 7, No 2, pp. 229-246. https://doi.org/10.1108/EBHRM-08-2018-0047
 - Schmid, K. (2019). Companies engaging in dual VET: do financial incentives matter? Approaches in Austria, Germany, Liechtenstein and Switzerland: options, pros and cons for reform processes. Zurich: ibw. https://ibw.at/bibliothek/id/500

CHAPTER 17. New modern apprenticeship, Cyprus

By Elias Margadjis, Ministry of Education, and member of the Cedefop community of apprenticeship experts

17.1. Introduction (⁹²)

New modern apprenticeship (NMA) is offered through the public VET System (⁹³) and primarily refers to the core apprenticeship in which apprentices are employed in industry/enterprises for three days per week. In-company training is mandatory in order for apprentices to obtain the apprenticeship certificate, which is equivalent to EQF level 3. Admission to the core apprenticeship is at age 15-18 years. The new structure encompasses over 40 specialisations based on labour market demands, with car mechanics, preparation of food and beverages, hairdressing, and carpentry and furniture production being the most popular. New specialisations can be developed to meet new labour market trends.

17.2. In-company training design

There is no specific regulation on the responsibility of companies regarding learning content and outcomes, apart from a general responsibility to provide incompany training. Employers can either train and guide apprentices themselves or appoint an employee as an instructor/trainer/mentor. Their role extends to the three days per week devoted to in-company training and includes the following on the design of in-company training:

- (a) determining the content of in-company training, after consultation between the employer and the school inspector, always in accordance with the detailed pedagogical and training programmes for the specialisation;
- (b) redefining, when appropriate, the in-company training programme, through continuous and constructive cooperation with the school inspector, adapting it to the learning pace and progress of the apprentice.

^{(&}lt;sup>92</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

^{(&}lt;sup>93</sup>) As of April 2015, with Decision No 78.658 of the Council of Ministers, by the Department of Secondary Technical and Vocational Education and Training of the Ministry of Education, Culture, Sport and Youth, MoECSY.

Apprenticeship in Cyprus evolves mostly around small and medium-sized enterprises (⁹⁴), therefore the owner is often the person who will oversee and train the apprentice. There are also large SMEs who also employ apprentices; in such cases, the trainee/mentor is an assigned member of staff.

Employers are guided and informed about core apprenticeship by the school inspector assigned for each specialisation, acting as the mediator between the employer and the apprentice. There is no official induction or comprehensive approach to how employers will train and guide the apprentices. The responsibility lies with each school inspector and the amount of their time available for guiding employers, given their other teaching or administrative responsibilities at school.

The design of in-company training in the workplace takes into account the detailed interdisciplinary training programmes for each specialisation, in conjunction with the school inspector's instructions. However, curricula are not exclusive to the NMA. They are also used in the technical school-based programmes for these occupations, and there are no guidelines on how to adapt them to the NMA. A specific part dedicated to workplace learning is missing from curricula. 'Consequently, there is little information on what students are expected to learn at the workplace' (Cedefop, Apprenticeship review: Cyprus, 2019/p. 38). The employer and the school inspector agree on what parts of the general programme are expected to be taught at the specific employer. During the three-year in-company training design, the learning outcomes vary because of two main components: the approach of each employer to the concept of apprenticeship and the way each apprentice evolves.

The contribution of employers is monitored frequently by the school inspector, including the quality and relevance of the in-company training. Apprenticeship officers at the Ministry of Education (MoECSY) receive feedback from school inspectors, as well as from the apprentices themselves; this suggests that employers often lack quality time to engage fully and work in depth with apprentices, particularly in small companies where they also act as trainers/mentors. This is not an ideal scenario, but it has become acceptable in the past few years because it has been quite difficult for apprentices to find employment due to the economic crisis and its aftermath. With COVID-19 and its consequences it appears that similar, if not worse difficulties, will prevail, particularly in the hotel and tourist industry; the employers' role has already been

^{(&}lt;sup>94</sup>) 'SMEs are the backbone of the Cypriot 'non-financial business economy'. Their contribution to total value added and employment is striking, at 76.3% and 83.8% respectively. Both are substantially higher than the respective EU averages of 56.4% and 66.6%. Cypriot SMEs employ 3.9 people on average, consistent with the EU average. The average annual productivity of SMEs in Cyprus, calculated as value added per person employed, is EUR 32 900 — almost three quarters of the EU average' (European Commission: Cyprus – SBA Fact Sheet 2019 – 1).

increased as much as possible by MoECSY. Additional and continuous support is provided by the regional apprenticeship directors in cooperation with the school inspectors to ensure smooth and successful apprenticeships in a rapidly changing world. A new factor experienced during lockdown is that of compulsory school absence, which can be catastrophic for apprenticeship since it requires three days per week in-company training; online classes are not currently an option and might continue not to be since many SMEs were also forced into lockdown. The focus is through constant and objective communication with employers to balance and rectify any possible gaps in the in-company training with targeted individual learning needs in relation to the programme/curriculum.

Differences in company size is another element which might not guarantee comparable learning outcomes for in-company training. A look at the most popular specialisation, car mechanics, shows that apprentices who are employed in larger companies have access to the latest technologies and working methodologies, compared to those who are employed in smaller companies, where the owner is often the only member of staff. Inevitably, there will be limited resources and workload in comparison to a dealership garage of a major automotive brand. The same applies for an apprentice who is employed in a five-star hotel, compared to another who is employed in a small restaurant. The responsibility to find an employer lies with the apprentice, even though assistance is provided by each VET school.

Such variables arise from the differences between companies/employers and consequently influence comparable learning outcomes. Part of the role of the school inspector is to balance each situation accordingly, always informing the apprenticeship regional director and working closely with the employer. At the same time, apprentice feedback is very important and there have been occasions where the technology used in some garages was so advanced that the apprentices were not even prepared by their school training how to handle it. Curricula are currently undergoing updates and additions to comply with the latest international industry standards and local market requirements. Currently, apprentices, whether employed in a small or large employer, car mechanics or the hotel industry, find their essential learning outcomes are met and additional benefits are gained. In a smaller SME the apprentice might receive in-company training that is more personal and relevant, overseeing all aspects of running such a business. The technological advances and trends of each industry demand constant skills updating, even after apprentices leave the scheme, so lifelong learning will be part of their future career training and chosen pathway. In contrast, apprentices with larger employers can benefit from advancements or higher level of in-company training, as in a large hotel compared to a local café, but might receive less knowledge of how to run a smaller SME business. Entrepreneurial and business skills could be added to forthcoming curriculum updates to compensate for any foreseeable gaps. This addition could prove fundamental for current apprentices who will need to find employment among an aging population still in key working positions. Additional skills learned during their secondary education could prove catalysts for their future careers, particularly since graduates tend not to continue to higher education studies.

The uniqueness of each person's character often influences their career and how they evolve during their education journey. Individuals who choose apprenticeship often come from lower socioeconomic backgrounds to benefit from the salary paid. The reality is that apprentices often lack enthusiasm and confidence, and often need to improve their communication skills in the workplace particularly during the first year. This can influence their interaction with the employer and the overall training process in a way that cannot guarantee comparable learning outcomes for the in-company training component. Extra support is provided by the employer and the school inspector and often the need for a mentor is vital.

The MoECSY employs specialists in career counselling and educational services, educational psychology, clinical psychology and social work. These specialists support and help all apprentices, particularly the vulnerable who often are considered high risk as potential dropouts. The ratio of the specialist team is one-to-one across all four regions/cities of the island where the apprenticeship scheme is offered. Social workers may provide additional guidance and support with house visits, to ensure that all apprentices are able to fulfil the programme requirements, including the in-company training.

17.3. Organisation of in-company training delivery

The role and responsibilities of the employer include several aspects of the organisation of training delivery and its actual implementation.

- (a) Ensuring that the apprenticeship contract is signed prior to the start of apprenticeship training, and providing systematic guidance to the apprentice or appointing a responsible instructor/trainee/mentor in the workplace, in accordance with the training framework and instructions of the school inspector, which have been predefined and mutually agreed.
- (b) Teaching and guiding the apprentice in the selected profession, taking into account the detailed in-company training programmes and the pedagogical guidelines of the school inspector, while applying the provisions of the Youth protection during employment Law No 48 (I) of 2001.
- (c) Taking special care of the safety and health of apprentices during employment and avoiding the assignment of dangerous or unhealthy tasks.

- (d) Guiding and supervising apprentices, and at the same time allowing them to be proactive.
- (e) Maintaining systematic communication with the vocational education structure through the school inspector in order to monitor the progress of the learner and to solve any problems that may arise.
- (f) Providing written input in the apprentice logbook.

'A company taking apprentices is expected to have at least one technician or related professional in the field the apprentice is studying, to act as a mentor and supervisor. There are no formal criteria for a mentor's pedagogical competences. As many Cypriot companies are small owners, they often take on the role of mentor. They are usually experienced in their field and have developed managerial and pedagogical skills. Many companies do not have enough staff to supervise and advise apprentices; however, most apprentices interviewed confirmed that someone worked closely with them during their time in the company' (Cedefop, 2019, p. 49) (⁹⁵).

Detailed guidance and supervision are provided during apprenticeships. An apprentice logbook is kept and filled in daily by the employer and the apprentice, and, at least once a month, by the school inspector. It includes learning outcomes, feedback and comments, and it keeps a record of the performance and skills acquired by the apprentice throughout the year. The employer needs to maintain smooth and systematic communication with the vocational education structure through the school inspector in order for both to be able to monitor the progress of the apprentice but also to resolve possible problems and anything else which might arise during the in-company training. The progress and development of apprentices is monitored at three levels: the employer/apprentice, the school inspector and the logbook.

The role of company staff who act as trainers/mentors for the apprentices is vital and can influence not only the career of each apprentice, but also their lives in general. They are expected to act as a role model for the learner as regards their behaviour and professionalism, as well as to have the willingness to share their skills, knowledge and know-how. Interpersonal and communication skills are essential, and so is empathy towards apprentices and cultivation of their emotional intelligence and soft skills through the in-company training. Trainers/mentors should be good and receptive listeners, and able to provide advice, guidance and constructive feedback in simple and understandable language. They should also be approachable, patient, fair, objective and non-discriminative, regardless of the apprentices' ethnicity or socioeconomic background. In addition, they should

^{(&}lt;sup>95</sup>) Cedefop (2019). *Apprenticeship review: Cyprus. Adding value: rethinking apprenticeships.* Luxembourg: Publications Office. Thematic country review.

adhere to the principles of immediacy and transparency with the apprentices, in a highly professional context. They should act as the professional link between the employer and the school inspector, maintaining frequent communication with him/her. Finally, they should be in a position to accommodate successfully the incompany training, creating a smooth and constructive workplace environment, which will lead to quality apprenticeships.

The approach of company staff trainers/mentors working with apprentices during the in-company training is based on their experience and expertise, rather than on formal pedagogical training. As a result, the experience of the apprentices at the workplace can only reflect and portray the trainers/mentors' ability to transfer knowledge without any set and clarified aims for learning outcomes, as well as without any coherence among all learners of the core apprenticeship. This is primarily due to the fact that the curricula are still being reviewed, updated and customised exclusively for the apprenticeship system.

More detailed and systematic guidance is required on the content and pedagogical methodology of in-company training, with an emphasis on the relevant training of trainers and mentors before the start of the school year.

The MoECSY has already worked constructively in this direction. Participating at two Erasmus+ programmes offered a pragmatic and inside scoping of all positive and negative aspects of in-company training realities for staff and their pedagogical perspectives and approaches at the workplace.

- (a) AppHelp4SMEs, 2016-18. The project focused on building capacity of key intermediary bodies such as chambers of commerce, employer organisations and business agencies to provide tailored support to SMEs for recruiting and placing quality apprentices in their organisation, such as through a national apprenticeship support service (helpdesk) for SMEs, an online apprenticeship toolkit, and apprenticeship facilitators. It included raising awareness among SMEs and national stakeholders of the benefits of apprenticeship schemes with high-quality in-company training.
- (b) Apprenticeship Coaches for SMEs (AC4SME), 2017-18. The project aimed at training 26 SME apprenticeship coaches in chambers of commerce and providing them with adequate tools and skills to help them convince SMEs to offer more apprenticeship placements.

17.4. Conclusion

An amalgamation of procedures is required to ensure that the in-company training and delivery guarantees comparable learning outcomes irrespective of the employers. The Department of Secondary Technical and Vocational Education and Training is working systematically towards improvements, evaluating and strengthening existing collaborations as well as forming new ones to elevate apprenticeship in pursuit of excellence, diversity and inclusion in an ever-changing and demanding educational, social and business environment.

The current Apprenticeship Law (1966) is being updated, which will allow the MoECSY the much-needed flexibility and freedom to adapt to present trends and future challenges. The Law currently involves primarily the Ministry of Labour that was responsible for the apprenticeship scheme until recently.

New curricula are being designed and should improve and support in detail the learning experience of apprentices during in-company training. They should also enable employers to follow similar pedagogical methodologies.

The MoECSY has now grasped the demographic profile of apprentices and characteristics of this generation in relation to learning methodologies such as digital learning and compliance, as well as the need to prepare them for local market demands and a complex evolving world amidst financial crisis and pandemics.

Within the context of the current reforms of the apprenticeship system, an induction course for all employers and trainers/mentors will be implemented before apprenticeship starts, followed by additional training during the school year.

The MoECSY is developing annual apprentice awards to promote apprenticeship as a career route, starting within secondary, emphasising its pedagogical aspect next to the labour market relevance. It is expected to influence indirectly in-company training through an improved image and concept of apprenticeship, and stronger relationships with small SMEs and larger employers. This can make a difference and result in more positive and professional attitudes towards apprentices and the NMA.

CHAPTER 18. Apprenticeship, Denmark

By Jan Bisgaard, NCE, University College Copenhagen, and member of the Cedefop community of apprenticeship experts

18.1. Introduction (⁹⁶)

In the Danish dual VET system, apprentices normally start with the initial period (*grundforløbet*) which is 40 weeks entirely school-based vocational training (⁹⁷). After this, they must find an employer and sign an apprenticeship contract to fulfil (⁹⁸) the main part of their vocational programme. In total, apprentices will spend approximately one third of their time at school and two thirds at a workplace during a VET-programme. The apprenticeship system is built on block release, where apprentices spend periods of up to one year in enterprises and have school periods of up to three months.

18.2. In-company training design

National trade committees (*Faglige udvalg*) play an institutionalised role at all levels of VET, from the national advisory council on vocational upper secondary education and training (*Rådet for de grundlæggende Erhvervsrettede Uddannelser*), which advises the Ministry of Education on principal matters concerning VET, to the local level through local training committees.

National trade committees also have the responsibility to approve workplaces able to train apprentices. To be approved, workplaces must demonstrate that they can give access to a variety of working tasks so the apprentice will have the possibility to fulfil the learning objectives at the workplace. There are no consequences for companies if apprentices fail to reach these learning outcomes.

Some workplaces cannot provide sufficient on-the-job training options to cover a full curriculum because they are too specialised, so apprentices receive

^{(&}lt;sup>96</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

^{(&}lt;sup>97</sup>) Apprenticeship is the dominant form of IVET. Approximately 20% of those leaving compulsory education (ninth or tenth form) opt for IVET. Apprenticeships are also available for adults (see the scheme fiche for Danish apprenticeship of the Cedefop database on apprenticeship schemes).

^{(&}lt;sup>98</sup>) Students who don't get into an apprenticeship before they enter the main programme are offered help for this, combined with training at school-based training centres.

little or almost no training concerning some of their learning objects. Therefore, the opportunity to rotate or share apprentices between different workplaces has been formally introduced, but it is rarely used, if at all. One of the reasons might be that nobody takes responsibility for the rotation and for the administration needed. Also, companies may be afraid that they will not get a return on the training investment, if they let an apprentice go to another workplace. On the other hand, some apprentices lack social skills to shift between workplaces. In some programmes, shifting between workplaces is mandatory, such as in the programme for social and health care workers and in some large companies, where apprentices often rotate between different departments.

As the economic crisis leads to a drop in apprenticeship numbers, it may be reasonable to form an institution with responsibility for quality of training in companies and for the interplay between different workplaces (ibid.)

The national trade committees also have an important role in ensuring that VET provision is in line with the needs of the labour market. So, the national trade committees design the learning objectives (*praktikmålene*) for each apprenticeship programme. The learning objectives are embedded in the apprenticeship declaration (*praktikerklæringen*), that sets out the objectives/goals for what the apprentice should learn at the workplace. It is not a plan that defines what tasks the apprentice should carry out and when. At the workplace it is decided when and what tasks the apprentice should work on. Most often, there is no plan for this step at all. The declaration is also a communication tool in between workplace and school, used by the 'working leader' at the workplace to assess the apprentice's learning outcomes before they return to school for the next period. In small companies, this person is often the owner of the company. In large firms or a public institution, it is often the local manager in the relevant department.

Even though filling in these declarations is compulsory for all workplaces, this is not always done carefully. At some workplaces, employers do not even know of the existence of these declarations or that they are obliged to fill them in and send them to the school. Others do not take this very seriously and treat it as if it was a lotto coupon (ibid.) The reason is that declarations are not always checked by anybody at school or by the national trade committees. In such cases, apprentices are often left on their own in reaching their learning objectives and connecting school- and work-based learning (Bjerre, 2002). The intention was that schools should report any gaps in apprentice learning but, often, time is short and having a lot of learning objectives in the school curriculum is an obstacle. Typically, the apprenticeship declarations do not get much attention. There is much variation in learning processes and the learning outcomes in different apprenticeship schemes, but apprentices are able to pass final examinations and get a job, despite weak learning environments in many companies.

18.3. Organisation of in-company training delivery

Despite the accreditation processes in place, there are no legal requirements for workplaces to have pedagogically educated trainers as part of their accreditation to provide apprenticeships. Several reports (Larsen, 2008; Bjerre, 2002, 2004, 2011) have suggested that more trainers should have basic training in order to deliver appropriate training of apprentices. In 2012, the pedagogical training for VET school teachers was expanded to raise the quality of VET programmes and to prevent dropout. But it is still not mandatory for workplaces to have pedagogically trained trainers. The national trade committees are afraid that such requirements might become a limitation and impair the need for having enough workplaces approved to take in apprentices, and that workers will not find motivation in a mandatory course to become a trainer (Bjerre, 2010). Therefore, it is still voluntary for workplaces to have pedagogically trained trainers and there is still no financial reward for workplaces that have a high-quality learning environment. As a result, it will continue to be a random chance whether apprentices will meet a pedagogically trained trainer and a high-quality learning environment at the workplace.

The approach to on-the-job-training at most workplaces is that trainers or regular workers provide close guidance to apprentices and direct assessment at the beginning of the apprenticeship. While the apprentice learns the on-the-job routines, the trainers will often scaffold the work of the apprentice by asking questions or approving their work or assisting them in their self-assessment by facilitating reflections on different actions. In the end, when apprentices become experienced workers, they carry out independently their work and self-assessment, like other professionals at the workplace, and the trainer only supports when asked for help (Bisgaard, 2018, 2019; Wilbrandt, 2002, 2003).

Working at different working tasks, trainers and apprentices have different roles. Sometimes their roles may change during a working situation, such as if time pressure becomes high or if the task becomes more complex. Most apprentices can cope with this and understand the changing roles. But some apprentices could be confused by these changing roles and new expectations of being able to learn to work on their own. This is often the case when apprentices expect to play the same role as in school-based learning, where teachers are often fully in charge of the learning process and available for intense guidance and direct assessments (Bisgaard, 2018, 2019, Wilbrandt 2002, 2003).

In most apprenticeships in the public sector (such as the programme for social and health care workers) and in large private companies (e.g. Novo Nordisk and Grundfos) apprentice on-the-job training and tutoring are of high priority. In these cases, apprentices are trained against well-designed and structured programmes, including introduction to the workplace and tasks related to the learning objectives. They also participate in regular meetings at the workplace with their working leader or trainer, to make sure that expectations are met. In such cases, apprentices also normally work with trainers with official pedagogical training (⁹⁹) courses with a duration from one to nine days (Larsen, 2008).

In some private sector cases there is no tradition of pedagogically educated trainers, which means that there is no trainer, working leader or regular worker responsible for the learning process and the assessment of the learning outcomes. In these cases, apprentices are only given access to the workplace and must take responsibility for their own learning process, from understanding the formal learning objectives to assessment of their learning outcomes. Apprentices in this situation often try to get access to relevant working tasks and relevant training; help can sometimes be hard to find. Some apprentices are able to handle the responsibility of their learning process: for example, they might ask for help from a colleague, who then becomes an informal tutor/trainer. These apprentices are often adults with prior working experience. But most apprentices, and especially young apprentices without prior working experience, are not able to handle this highly autonomous learning process at the workplace, which increases their chance of dropping out (Bisgaard, 2018; Nielsen, 2005a; Nielsen, 2005b).

Despite gaps in requirements for in-company trainers in the private sector, a 2009 report (COWI) showed that 78% of apprentices were satisfied with the learning environment at their workplace. The report (ibid.) points out several indicators that influence the learning environment at the workplace, such as recognition, respect and fair treatment, meaning in the work, useful feedback in case of mistakes and having experienced workers to take the responsibility for training. In 2009, most apprentices had good experiences, but around one out of 10 VET students were dissatisfied with the learning environment at their workplace and often thought about dropping out of their programme (ibid.); we do not know if this is still true. The national trade committees - responsible for the quality of practical training - have no obligation for systematic evaluation of the learning environment at the workplaces, even though they are responsible for the quality of the workplace training. The only thing we know from a yearly measurement of Danish VET student satisfaction in 2020 with their education programme is that the average satisfaction with the VET programmes in the workplace was 4.1 out of 5 points (¹⁰⁰). There are no more detailed questions about the quality of workplace training.

^{(&}lt;sup>99</sup>) See Aalborg business school – About the Centre for Career and Education.

⁽¹⁰⁰⁾ https://www.uvm.dk/-/media/filer/uvm/udd/erhverv/pdf21/apr/210423-elevtrivselnotat-2020.pdf

18.4. Conclusion

The main focus at policy level in Denmark is that not enough companies in the private sector are willing and able to train apprentices. As a result, there are very few requirements for apprenticeship training quality. Focus on the quantity of apprenticeships and not the quality of the training provided means that companies are rewarded for taking extra apprentices, but they are not rewarded for having pedagogically educated trainers and providing high-quality learning. This is probably the one of most important issues.

When apprenticeship declarations are not taken seriously, it is difficult to compare learning outcomes at different workplaces within the same programme. It is obvious that systematic evaluation of the learning outcomes in companies is of high priority to avoid a programme devaluation.

One suggestion could be that apprentice experiences are systematically monitored, aiming to set up a system more aware of how to provide the best training at the workplaces. This knowledge would be relevant in implementing the pedagogically education and coaching of trainers. If data from a systematically monitoring of the apprentice's experience of the training at their workplace were public, it would also be easier for students to access information about training in a specific company, before signing a three-and-a-half year contract.

Systematic data collection on the quality of training at the workplaces would ensure companies with the best learning environment receive financial benefit, while providing extra support and coaching to companies with a low score for quality. This would probably make it more attractive for young people to choose a VET programme and their learning is likely to be improved; in the end this would benefit companies, apprentices and society.

18.5. References

[URLs accessed 18.6.2021]

- Bisgaard, J. (2018). *Praktikkens Didaktik Ph.d-afhandling* [Didactics of practical training PhD thesis]. Copehnagen: DPU, Aarhus Universitet. https://www.ucviden.dk/da/publications/praktikkens-didaktik-hvordan-styrkes-I%C3%A6rlinge-og-studerendes-enga
- Bisgaard, J.; Pedersen, I.L. and Thanning, D. (2019). *Praktikkens Didaktik* [Didactics of practical training]. Gyldendal. https://gyldendaluddannelse.dk/products/praktikkens-didaktik-bog-48296-9788762819245
- Bjerre, C. (2012). Vekseluddannelse [Alternance eduation]. In: Størner T. and Ager Hansen J., (eds). *I lag med erhvervspædagogikken* [In line with vocational pedagogy]. Odense: PRAXIS. https://www.ucviden.dk/da/publications/i-lag-med-

erhvervsp%C3%A6dagogikken

- Bjerre, C.; Cort, P. and Hansen, M.P. (2004). *Træneruddannelse i små og mellemstore virksomheder* [Trainers' training in small and medium-sized companies]. København: Danmarks Erhvervspædagogiske Læreruddannelse, Project No 102643.
- Bjerre, C.; Gottlieb S.; Piil Hansen M. and Undervisningsministeriet (2002). *Skole-virksomhedssamspillet som indsatsområde: erfaringsopsamling, status og det gode eksempel* [The school-company interaction as an area of focus: gathering experience, status and the good example]. Copenhagen: Undervisningsministeriet. http://static.uvm.dk/publikationer/2002/samspil/
- Bjerre, C.; Larsen, J.O. and Anker, N. (2011). Kvalitetsudvikling af praktikuddannelsen. Status på indsats og initiativer – Inspiration og materialer til fortsat udvikling [Quality development of practical training. Status of efforts and initiatives – Inspiration and materials for continued development]. National Centre for Vocational Education, Metropol University College and COWI.
- COWI (2009). Lærlinge og elevers psykiske arbejdsmiljø [Apprentices' and students' mental work environment]. Undervisningsministeriet. http://docplayer.dk/18265856-Laerlinge-og-elevers-psykiskearbejdsmiljoe.html
- Danmarks Evalueringsinstitut (2013). Sammenhæng mellem skole og praktik: evaluering af skoler og virksomheders arbejde med at understøtte sammenhæng i tekniske erhvervsuddannelsers hovedforløb [Coherence between school and practical training: evaluation of schools' and companies' work to support coherence in the main courses of technical vocational education]. Copenhagen: Danmarks Evalueringsinstitut.

https://www.eva.dk/ungdomsuddannelse/sammenhaeng-mellem-skolepraktik

- Elmholdt, C. (2003). Kreativ læring er ikke nok [Creative learning is not enough]. In: Nielsen K. and Kvale S. (eds). *Praktikkens læringslandskab: at lære gennem arbejde* [The learning landscape of practical training: learning through work]. Copenhagen: Akademisk Forlag. https://docplayer.dk/4683169-Praktikkens-laeringslandskab-at-laere-gennem-arbejde-redigeret-af-klaus-nielsen-steinar-kvale-akademisk-forlag.html
- Hansen, M.P. (2004). Samspillet mellem skole og virksomhed i erhvervsuddannelserne [The interaction between school and business in vocational education]. In: Bottrup P. and Jørgensen, C.H., (eds). *Learning Lab Denmark, Vol. 2*. Frederiksberg: Roskilde Universitetsforlag.
- Larsen, J.; Buhl, R. and Piil Hansen, M. (2008). Udvikling af erhvervsuddannelsernes praktikværters kompetencer i ungdomsvejledning [Development of the vocational education practical training hosts' competences in youth guidance]. Knowledge centre for education and vocational guidance. Final report, Project 3.2.

https://www.ucviden.dk/files/121881397/Udvikling_af_erhvervsuddannelsern es_praktikv_rters_kompetencer_i_ungdomsvejledningen.pdf

Nielsen, K. (2005a). *Håndværkslæring: kundskab, magt og køn i bageriet* [Craft learning: knowledge, power and gender in the bakery]. Århus: Psykologisk Institut, Aarhus Universitet.

https://pure.au.dk/portal/en/publications/haandvaerkslaering(997f2020-9e18-11da-bee9-02004c4f4f50).html

Nielsen, K. (2005b). Når eleverne selv skal sige det: En undersøgelse af erhvervskoleelevers læring i praktikken [When the students themselves have to say it: A study of vocational school students' learning in practical training]. Århus: Psykologisk Institut, Aarhus Universitet.

https://pure.au.dk/portal/en/publications/naar-eleverne-selv-skal-sige-det(8a99c5d0-9e1b-11da-bee9-02004c4f4f50).html

Sørensen, N.U. (2001). Den store balanceakt: en kvalitativ analyse af mødet mellem elever og virksomheder indenfor hotel-, restaurant- og turismeområdet [The great balancing act: a qualitative analysis of the meeting between students and companies in the hotel, restaurant and tourism area]. Roskilde: Roskilde University.

https://www.cefu.dk/media/56409/den_store_balanceakt.pdf

- Teknologisk Institut (2010). Virksomhedernes oplæringskapacitet Virkemidler der virker [Companies' training capacity – Instruments that work]. Teknologisk Institut.
- Wilbrandt, J. (2002). Vekseluddannelse i håndværksuddannelser: lærlinges oplæring, faglighed og identitet. 1. udgave edn [Alternance education in craft education: apprentices training, professionalism and identity. 1st edition]. [Copenhagen]: Undervisningsministeriet.

http://static.uvm.dk/Publikationer/2002/veksel1/hel.pdf

Wilbrandt, J. (2003). Læring i bevægelse – mellem skole og virksomhed og fra læring til svend [Learning in motion: between school and company and from learning to journeyman]. In: Nielsen K. and Kvale S. (eds). *Praktikkens læringslandskab: at lære gennem arbejde* [The learning landscape of practical training: learning through work]. Copenhagen: Akademisk Forlag.

CHAPTER 19. Dual VET, Germany

By Isabelle Le Mouillour, BiBB, and member of the Cedefop community of apprenticeship experts

Introduction (101)

The German apprenticeship system relies on the involvement of companies as providers of, and actors in charge of, in-company training, with the support of competent bodies as defined in the Federal Vocational Act (BBiG). The competent bodies are the chambers in their relevant sectoral remits. The joint governance of the apprenticeship system by the State, employer and employee organisations provides a reliable framework that enables attracting young people.

Slightly more than half of an age group (2018: 54.5%) starts an apprenticeship in one of the 324 training occupations recognised in accordance with the Vocational Training Act (BBiG) or the Crafts Regulations (HwO). At the end of 2018, there were around 1.33 million apprentices nationwide. In 2018, 427 300 companies offered apprenticeship placements with significant differences by economic activity and company size (BIBB, 2020). Up to 80% of the vocational training takes place in companies or inter-company training centres; the remaining share is provided by part-time vocational schools.

Key success factors are the jointly developed training occupations (including examination requirements) and the framework conditions for the provision of training in companies laid down in the Vocational Training Act (BBiG).

19.1. In-company training design

Central to the German apprenticeship system are the 324 recognised training occupations and their related training regulations (according to § 90, Paragraph 3, No 3 of the Vocational Training Act). The responsible ministry, in agreement with the Federal Ministry of Education and Research (BMBF), issues the training regulations. These contain binding minimum standards for the company-based part of vocational training.

The concept and design of in-company training are embedded in the development process of the training regulations. Employer and employee

^{(&}lt;sup>101</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

associations, ministries and, in some cases, single companies via the respective sectoral associations or the Federal Institute for Vocational Education and Training (BBIB) provide the impetus for creating or updating training regulations; there are no validity limits to issued regulations. The development of a training regulation consists of three phases: preliminary phase, development phase and enactment phase. Employer and employee organisations are involved in each of the three phases as presented in the following table.

Phases	Involvement of employers
Preliminary or decisional phase	Initiating the design process for a new or updated training regulation Discussing the proposal Agreeing on key features of the forthcoming training regulations Agreeing on launch of the process during a so-called 'application meeting', consensus needed
Development phase	Elaborating the draft training regulations which include more specifically a framework training plan for the in-company training (*)
Enactment phase	Via their representatives to the BIBB board the employers issue comments on the final draft that will be consequently adopted. The responsible ministry then issues the training regulations in agreement with the BMBF and publishes them in the <i>Federal Law Gazette</i> .

Table 1. Involvement of employers in the design process of training regulations

(*) The relevant framework curricula for the school-based training, analogous to the development of the training regulations, experts from the Länder are developing the draft framework curriculum for vocational school instruction.

Source: Ulmer et al. 2020; BIBB, 2017.

BIBB initially asks the umbrella organisations of employers (KWB) and trade unions (DGB) to nominate experts. Those then work with BIBB to draw up the new regulations for the training occupations. The experts' primary task is to provide advice on training content and examination requirements from a technical and company perspective. Coordinators are usually representatives of employee and employer organisations; they support consensus building and the transfer of expert work at association or trade union levels. In addition to business community representatives, representatives of the responsible federal ministries are also involved. During the development phase, BIBB is responsible for project management, designing content and processes, moderating expert meetings, advising on content, legal and formal aspects and ensuring coordination with the Framework Curriculum Committee, which operates in parallel.

The competent bodies (chambers of crafts and trades, chambers of industry and commerce in most cases) are assigned by the Vocational Training Act (BBiG) the tasks to monitor the implementation of the vocational training and to provide guidance and support. Via their training committees they are involved, for instance, in setting administrative principles concerning the suitability of the training premises, the broad lines of which are set in the BBiG as presented below.

Box 19. **Obligations of training companies**

(1) Training employers must:

(a) ensure that the occupational competence necessary for apprentices to achieve the apprenticeship objective is imparted to them and provide initial training systematically in accordance with a syllabus and a timetable and in a form appropriate to the purpose so that the training objective can be achieved within the specified period of training;

(b) provide the training themselves or expressly entrust such training to a trainer, furnish apprentices free of charge with the materials, in particular tools, materials and specialist literature, necessary for their initial training and for taking their interim and final examinations, even if such examinations take place after the end of the initial training relationship;

(c) encourage apprentices to attend vocational school;

ensure that apprentices are encouraged to develop their personality and that they are protected from moral and physical danger.

(2) Training employers must encourage apprentices to keep their record of training (...) and must inspect it regularly. Apprentices are to be given the opportunity to keep a record of training at their workplace.

(3) Trainees may only be entrusted with tasks that serve the purpose of their training and are commensurate with their physical abilities.

Source: BMBF, 2020.

Recommendations issued by the BIBB Board (¹⁰²) further specify some of the legal provisions set by BBiG. Recommendation 162 on the suitability of training facilities (12.2017) and recommendation 135 on the professional training for incompany training staff (06.2009) are of particular interest for in-company training.

The BBiG essentially distinguishes between two groups of persons who perform training tasks in the company: the 'trainers' and persons 'who are involved in vocational training', so-called 'training specialists'. Accordingly, the person who is designated by the company as the responsible trainer *vis-à-vis* the competent authority is considered to be the trainer. This person must be personally and professionally suitable to work as an instructor. Technical aptitude comprises both the professional skills, knowledge and abilities required for the respective occupation and the corresponding vocational and occupational pedagogical qualifications. The pedagogical qualification is usually acquired through passing the Ordinance on trainer aptitude (AEVO) examination. 'Training specialists' are

^{(&}lt;sup>102</sup>) Since 1971, the BIBB Board has issued 173 recommendations.

entrusted with training tasks under the responsibility of the trainer. The Vocational Training Act only stipulates a professional qualification for such skilled workers involved in training; proof of vocational pedagogical aptitude according to the AEVO is not required. Nevertheless, many of them have successfully passed the examination. Of considerable importance for the quality of in-company training is that the basic skills imparted by the AEVO enable trainers to carry out their training activities in accordance with the basic principles of dual apprenticeship training: learning in the work process, competence orientation, development of the trainees' personality.

Employer representatives are also involved in examination boards. One leading rule is that trainers who have been carrying out the apprenticeship are not involved in the examination of their own apprentices.

One strength of the system is the role assigned to BIBB; it acts like a spider in a web for moderating, discussing and elaborating the training regulations. Notwithstanding their own agendas, actors are committed to an agreed mission and vision of apprenticeship in society and economy. Research and development activities of BIBB and other German research centres feed into the discussions and negotiations. The design process used to be lengthy but was streamlined with BIBB moderating and providing procedural support all along the process; as a rule, actualising or developing a training regulation should last one year.

Training regulations represent common minimum standards for a training profession that, nevertheless, might experience differences in implementation.

19.2. Organisation of in-company training delivery

In times of recession the readiness of companies to offer apprenticeship placements usually falls. The current COVID-19 crisis might prompt a similar trend, halting the stable trend observed since 2018 with around 427 000 companies offering apprenticeship, after a continuous fall in the number of apprenticeship companies during the last 10 years. The share of companies offering apprenticeship among all private and public companies fell from 24% in 2007 to 19% in 2018. Considerable differences exist across economic sectors, training occupations and company sizes; falls in the number of training companies are due to losses in the micro-companies in Germany. An explanation might be seen in the increasing difficulties of micro-companies in filling vacancies (BIBB, 2020). In 2020, in the pandemic context, apprenticeship placements fell by 8.8% to 527 400 compared to 2019, and young people looking for an apprenticeship position were 8.9% less at 545 700 (BIBB, 2020).

Companies can but are not obliged to offer apprenticeship and, if they do so, have to follow the state or legal regulations. This means that companies are in charge of and responsible for the apprenticeship contracts, the planning, organisation, implementation and control of the apprenticeship. Throughout the history of the apprenticeship system in Germany, the quality of in-company training as such has been a concern, also in relation to the learning process in the schoolbased part of the training; this explains the role of the competent bodies or their apprenticeship counsellors as intermediary supportive organisations. Training regulations set a minimum standard. They are conceived to be implemented in different economic sectors and by companies of different sizes. Spöttl summarises as follow: 'The vocational competence of companies and their trainers are not put into question by anyone in the system, however reservations exist as concerns the learning process and efficiency of the in-company curriculum' (Spöttl, 2016, p. 52). Differences emerge between large companies and small and medium sized companies (SMEs). Large companies usually run a department to organise apprenticeship and are thus able to adapt to new requirements set in the training and introduce technical and technological innovations regulations in apprenticeship training. The apprenticeship training within SMEs might rather be based on situational training decisions of the company owner or on pending work and orders to be completed. However, apprentices in SMEs are integrated more strongly into the work and business processes than in large companies and are better connected to real occupational tasks.

To support companies in translating the regulatory framework into practice, BIBB issues an implementation guide for each regulation. This guide presents the competence profiles of the new regulation, explains the single positions of the training regulations and includes explanations on the different training and curriculum planning (framework training plan, company training plan, and school curriculum). It also describes the examination process. Single examples and manuals complete the implementation guide, such as how to integrate digital media in the in-company training or how to act in a sustainable manner during it. The second major support for implementation is the online forum on which incompany trainers can exchange their experiences and elaborate on the implementation of the training regulations.

To cover the whole range of learning objectives and to ensure the suitability of the training premises is no easy task, even with the support of the competent bodies. Experts expect companies to be increasingly involved in apprenticeship cooperation, especially in the aftermath of the pandemic crisis. Overall, in 2019, 37% of 1 290 apprenticeship companies surveyed are engaged in cooperative apprenticeship models with one or more other companies in training. The cooperation concerns mostly the implementation of the training (incoming and outgoing apprentices) and varies by training occupation and company size. According to the authors, it is not only the high proportion that is interesting and remarkable but also the fact that 97% of those companies could carry out the apprenticeship without a partner (Ebbinghaus and Dionisius, 2020). An explanation might lie in the complexity of the organisation and design of the apprenticeship training process. For a long time now, the conceptual development of action-oriented approaches has shifted from a simple scheme (teaching – imitating phases) to the four-stage method (preparing – pretending/explaining – letting it be imitated and explained – applying independently) to the concept of complete action (inform – planning – deciding – execution – control – evaluate). This evolution also requires additional efforts by in-company trainers (Reglin, 2018).

The inside perspective on apprenticeship implementation can be partially drawn from the yearly apprenticeship report published by the German Trade Union Confederation and based on a non-representative survey among 13 347 apprentices (DGB, 2020). Acknowledging differences by sector and size of company, the survey focuses on four criteria: the apprenticeship training plan, the apprenticeship salary, the professional quality of training in companies, and the individual guidance and training received. A large proportion (72%) of the apprentices surveyed is satisfied with the quality in the training company, which they rate at its highest in the fields of industrial mechanics and administrative assistants, followed in third to fifth place by the future mechatronics technicians, electronics technicians for industrial, and bank clerks. Apprenticeship in retail trade as well as in the hotel and catering sector are at the lower end of the scale. In a more general view, the larger the company, the higher the satisfaction of the apprentices. According to the DGB survey, the good results achieved by large companies can be due to the staff and learning environment that allows for a structured and high-quality apprenticeship. Small and micro-enterprises often face the challenge of having to react flexibly to supply and demand with a small workforce. However, they are able to offer more personalised guidance and support to apprentices. Further insights include:

- (a) 66% of apprentices surveyed received a company training plan; in 90% of those cases, the company training plan is mostly applied;
- (b) 12% of the apprentices are undergoing activities which are not linked to their training vocations;
- (c) 92% of the apprentices have a trainer assigned to them;
- (d) 83% of the apprentices with a trainer assigned are satisfied with the explanations and training provided by the trainer (DGB, 2020).

The latest BIBB cost-benefit survey confirms that involvement of companies in apprenticeship can be viewed in terms of investment in their future own skilled workforce. Most companies surveyed wished to continue to employ some or even all apprentices. In 2017/18, only 18% of the companies with fewer than 10 employees were no seeking to employ apprentices permanently upon completion of the training (down from 31% in 2007); The corresponding figure for firms with 10 to 49 employees also declined significantly, from 17% in 2007 to 5%. At medium-sized and large firms in 2017, the proportions of firms not wishing to employ apprentices permanently upon completion of training were only 4% and 2% respectively. In overall terms, the analyses confirm that firms still have strong financial incentives to cover skilled worker needs via their own apprenticeship offers despite the increase in costs (Schönfeld et al., 2020).

19.3. Conclusion

An appropriate way to understand apprenticeship in Germany is to look at it from the perspective of companies, since they are the major actor in the system; not only as providers but as joint decision-makers in the development and improvement of the regulatory framework. The process of developing new occupational profiles, as practised in Germany for several decades, offers a number of advantages for companies. These, in turn, are major motives for companies to become involved in training. The implementation of apprenticeship remains an organisational and financial challenge for companies, even more so in times of crisis. Apprenticeship provides companies with highly qualified skilled workers enabling them to retain and increase their competitiveness in the market. All stakeholders engage in sustaining the apprenticeship system, as demonstrated by measures to support companies during the pandemic, or with Federal initiatives such as the Securing apprenticeship placement programme launched in 2020. Implementing and sustaining quality in in-company training means research and development activities. Data are useful but not sufficient for developing schemes, for instance to support companies in offering apprenticeship or in-company trainers in acquiring didactical competences. This review also shows that research is needed in the field of implementation of apprenticeship within companies.

19.4. References

[URLs accessed 18.6.2021]

- BIBB (2017). *Training regulations and how they come about*. Bonn: Federal Institute for Vocational Education and Training. https://www.bibb.de/dienst/veroeffentlichungen/de/publication/show/8277
- BIBB (2020). *Datenreport zum Berufsbildungsbericht 2020* [Data report on the vocational training report]. Bonn: Federal Institute for Vocational Education

and Training.

https://www.bibb.de/dienst/veroeffentlichungen/de/publication/show/16673

- BIBB (2020). Pandemie lässt Ausbildungsmarkt nicht unberührt [The pandemic does not leave the training market unaffected]. Bonn: Federal Institute for Vocational Education and Training. Press release, No 41/2020, 15.12.2020. https://www.bibb.de/de/pressemitteilung_133594.php
- BMBF (2020). The New Vocational Training Act (Berufsbildungsgesetz BBiG). https://www.bundesregierung.de/breg-en/service/information-materialissued-by-the-federal-government/the-new-vocational-training-act-1778022
- DGB (2020). Ausbildungsreport 2020 [Training report 2020]. Berlin: German Trade Union Confederation (DGB). https://www.dgb.de/++co++b7b5354c-e7ab-11ea-807a-001a4a160123
- Ebbinghaus, M. and Dionisius, R. (2020). Betriebliche Ausbildungskooperationen. Analysen zu Kooperationsbereichen und -mustern auf Grundlage des Referenz-Betriebs-Systems (RBS) [Company training cooperation. Analyses of cooperation areas and patterns based on the reference operating system (RBS)]. *BWP*, Vol. 4/2020, pp. 16-20. https://www.bwpzeitschrift.de/de/bwp.php/de/bwp/show/16778
- Reglin, T. (2018). Qualitätssicherung in der betrieblichen Bildung: Komplexe Anforderungen an alle Akteure. Aus Politik und Zeitgeschichte [Quality assurance in in-company training: Complex requirements for all stakeholders. From politics and contemporary history]. BPB Dossier-Bildung, 29.11.2018. https://www.bpb.de/gesellschaft/bildung/zukunft-bildung/281577/qualitaetdualer-ausbildung
- Schönfeld, G. et al. (2020). Training in Germany: an investment to counter the skilled worker shortage: results of the 2017/18 BIBB cost-benefit survey. Bonn: Federal Institute for Vocational Education and Training. BIBB Report, No 3/2020.

https://www.bibb.de/dienst/veroeffentlichungen/en/publication/show/16745

- Spöttl, G. (2016). *Das duale System der Berufsausbildung als Leitmodell. Struktur, Organisation und Perspektiven der Entwicklung und europäische Einflüsse* [The dual system of vocational training as a guiding model: structure, organisation and perspectives of development and European influences]. Frankfurt: Peter Lang. https://www.peterlang.com/view/title/16338
- Ulmer, P. et al. (2020). Entwicklung nationaler Ausbildungsstandards Akteure, Verfahren und Gestaltung im europäischen Vergleich Forschungsprojekt [Development of national training standards – actors, processes and design in a European comparison]. BIBB Research project, No 1.5.313. Bonn: Federal Institute for Vocational Education and Training.

https://www.bibb.de/tools/dapro/data/documents/pdf/eb_15313.pdf

CHAPTER 20.

EPAL apprenticeship (post-secondary year – apprenticeship class), Greece

By Olga Kafetzopoulou, Ministry of Education, and member of the Cedefop community of apprenticeship experts

20.1. Introduction (¹⁰³)

The National strategic framework for upgrading VET and apprenticeships (VET strategy) (¹⁰⁴) was adopted in May 2016, through Law No 4386/2016. It reiterated the expansion of the apprenticeship offer through new schemes to be offered next to the long-standing (1952) upper secondary EPAS apprenticeship scheme offered mainly by OAED, the Greek Public Employment Service (¹⁰⁵). One scheme introduced by Law 4386/2016, (this point onwards referred to as EPAL apprenticeship) was Post-secondary year – apprenticeship class. Graduates of upper secondary school-based VET supervised by the Ministry of Education (EPAL schools, EQF4) can enrol in EPAL apprenticeship for an optional additional year (EQF5) (¹⁰⁶).

The new apprenticeship scheme is positively accepted by the educational community and the labour market. Between 2016/17 and 2019/20, apprentices increased from 1 097 to 3 244, while placements in the private sector rose from 25% to 52%. The post-secondary year-apprenticeship class received a European award, as an example of successful ESF implementation across Europe, spurring apprenticeship as a route to excellence for 2019. There is a positive environment for future investments in the new scheme.

^{(&}lt;sup>103</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

⁽¹⁰⁴⁾ Εθνικό Στρατηγικό Πλαίσιο για την Αναβάθμιση της ΕΕΚ και της Μαθητείας

^{(&}lt;sup>105</sup>) Cedefop (2018). *Apprenticeship review: Greece. Modernising and expanding apprenticeships in Greece.* Luxembourg: Publications Office. Thematic country reviews.

^{(&}lt;sup>106</sup>) Benchlearning self-assessment report for post-secondary year – apprenticeship class, 5/2020, unpublished report.

20.2. In-company training design

Curriculum design in EPAL apprenticeship is regulated by the Ministry of Education, based on opinions of the Institute for Educational Policy (IEP) (¹⁰⁷).

The scheme combines seven hours of laboratory training (one day) per week in EPAL classroom or workshops, and the workplace component (Workplace learning programme – apprenticeship at work) that lasts 28 hours per week (split in four days) in public or private companies. The school-based part lasts 203 hours and the workplace component lasts 156 workdays (1 092 workhours). Curricula consist of learning fields, modules and bundles of learning outcomes (learning units/modules), covering the subject area. Flexibility and individualisation of the scheme are supported by the modular format of the curricula, the nature of the course in the school unit (workshop), the average of apprentices per class (<10) as well as the profile of apprentices who already have a strong background of vocational skills at EQF4 level.

Within the school-based part, 161 hours of workshop training (in the total duration of 203 hours) are allocated to defined learning fields and 42 hours relate to the 'flexible apprenticeship programme zone', to address apprentices' specific learning needs and interests or local labour market specificities either at the end of the programme or in between the other modules.

According to Article 4 of Common Ministerial Decision No 26385/16.2.2017 on the Quality framework for apprenticeship, workplace learning programmes, the workplace component ' ... should include the main learning outcomes (knowledge, skills, competences) that are required for a graduate's initial access to a given specialty (professional specification) and/or for the development of horizontal skills and/or for further specialisation in specialties. Learning outcomes can be developed individually (in separate modules) or in combination (technical and horizontal skills together). They can also provide learning and assessment instructions. Workplace learning programmes are developed based on existing occupational profiles of each specialty and are updated accordingly when the occupational profiles are updated, in accordance with EOPEPP (¹⁰⁸). In addition, workplace learning programmes will be developed in accordance with the (new) Framework for quality curricula. These provisions apply across all apprenticeship schemes to ensure common quality standards'. The article also foresees that individualised learning agreements (based on the specified education programme on workplace learning outcomes) are signed by the employer, the learner and the school and complement the apprenticeship contract covering the workplace-based

^{(&}lt;sup>107</sup>) See relevant regulatory framework.

^{(&}lt;sup>108</sup>) National Organisation for the Certification of Qualifications and Vocational Guidance.

learning expected. Article 3 also underlines the role of social partners 'to contribute to the development of the training programme for apprentices in the enterprise'.

Unfortunately, the specific provisions of the article are not fully implemented. As IEP is mostly oriented towards school-based VET curricula, it has little experience in developing the workplace component. Social partners are not yet involved in curriculum design and contribute only indirectly by proposing occupational profiles, that may be taken into consideration in curricula design.

According to Article 5 of Common Ministerial Decision No 26385/16.2.2017 on the Quality framework for apprenticeship, employers must, among other things:

- (a) provide good conditions for on-the-job training, have the appropriate facilities and equipment, and appoint a trainer responsible for apprentices;
- (b) must inform the apprentice of the activities, objects and areas of the job and integrate it into the work environment;
- (c) contribute to the acquisition of personal skills and the formation of work culture in the apprentice;
- (d) comply with the terms of the apprenticeship contract and the terms set out in the learning agreement.

As specific workplace curricula and individual learning agreements have not yet been introduced, the current application is to include general apprenticeship curriculum (more oriented to the school-based learning) for the relevant specialty as an annex to the apprenticeship contract (signed between the employer and the apprentice and stamped by the director of the vocational school (EPAL)), to indicate to the employer what needs to be taken into consideration in workplace training provision. Curricula give general guidance to in-company trainers but do not include specific learning outcomes for in-company training.

In practice, before signing the contract, VET teachers and employers/trainers hold informal discussions on the work-placed learning part. Usually an in-company trainer is appointed, and the VET teacher has to inform him/her on the apprenticeship scheme, employer rights and obligations, the apprentice profile and the expected learning outcomes. The company trainer then selects what exactly to train within the general curriculum. The selection is, however, based on the employer's own insight and does not rely on a centralised structure or framework. Using the selection of learning outcomes, the trainer may set up a training plan for their apprentice based on the general curriculum, translating the learning outcomes to the working environment. During apprentice induction, the company trainer and the VET teacher discuss what is expected to be taught and agree to have a continuous informal follow-up on the apprentice's learning development. Workplace learning activities are included in the learning calendar (log) and any comments on the work-based learning may be noted in the monthly monitoring report. Employers have a de facto strong role in selecting what to train, but an

informal one, and any cooperation between them and VET providers to agree on the content remains semi-structured/informal.

The limited formal role of employer representatives and individual employers in the training design is not unrelated to the limited role of the business world at system level. Based on the Hellenic Federation of Enterprises special report for initial VET (July 2020) 'Apprenticeship schemes should be characterised by a flexible structure corresponding to the qualifications required for each profession. The content of apprenticeship programmes should be derived from the needs of the labour market, in cooperation with social partners and businesses, be based on occupational profiles, have modular structure, include the development of cognitive/soft skills and should use the Labour market diagnosis mechanism and the sectoral skills councils'. Such proposals for more flexibility and strong connection of VET with labour market needs are expected to help companies formulate the content of training in the workplace based on their internal procedures and the expected learning outcomes.

The managing authority of the ESF operational programme *Human resources development, education and lifelong learning* provided specific recommendations for the above-mentioned weakness. It was suggested that the contract should include specific learning outcomes for each specialty: 'Curricula for every apprenticeship specialisation contain fields, teaching/educational objectives, indicative activities, professional work or learning outcomes. These fields reflect activities that are related to the theoretical/laboratory curriculum, but are not workplace learning programmes, but an attempt to replenish the existing gap' (¹⁰⁹). Although the IEP drafted workplace curricula for 28 specialties, as a response to the above-mentioned recommendations, reservations about their quality remain as at they do not differ noticeably from the school-based ones.

A vital point is to redesign and update VET curricula in line with the Curricula quality framework, introduced in 2017 to provide a common basis for all VET programmes, including apprenticeship (¹¹⁰). A major challenge for apprenticeship curricula is to include a simple but concrete work-based learning programme (basis of a learning agreement) so that all apprentices will achieve the same minimum learning outcomes despite the employer profile. In the absence of these learning agreements, employers may end up training different parts of the common curriculum, so experiences of apprentices at the workplace and learning outcomes may also differ considerably. In the end, different translations of different companies may lead to different learning outcomes for the apprentices, inequality of graduates in certification exams and generally lack of comparability among provision of the same apprenticeship programmes.

^{(&}lt;sup>109</sup>) Report of the MA-ESF/24.12.2019.

^{(&}lt;sup>110</sup>) EAFA – National Commitment – Greece.

Nevertheless, from 2017 until today there are some issues that address limited comparability, such as the attachment of the general curriculum that provides some framework (even if broad), the common qualification exams, and the optional preparatory certification programme (35 hours), that supports apprentices for the certification exams, taking into account both theoretical questions and work-based learning activities. The flexible zone may be used as a way to address variations in workplace learning.

Social partners through reports and studies underline their lack of involvement in designing apprenticeship curricula. According to the Centre for Educational Policy Development of the Greek General Confederation of Labour, 'the educational content of the apprenticeship scheme (determination of percentage between work and school, educational content of apprenticeship in the workplace, preparation of employers for the reception of apprentices and especially methodology of supervision of work-based learning) should be improved, since the Greek labour market is not familiar with apprenticeship rules and therefore there is a serious risk of malfunctions. The Greek labour market does not have a significant number of large enterprises and units, but in the vast majority small and very-small enterprises (from 1 to 10 employees of the employer inclusive). This feature does not facilitate the necessary supervision of apprenticeship and carries risks of exploitation or self-determination'.

Using occupational profiles to design apprenticeship curricula is a crucial procedure but requires flexibility, according the Institute for Small Enterprises of the Hellenic Confederation of Professionals, Craftsmen and Merchants: '... the link with professional profiles – where they exist – although correct in forecasting, is problematic because the existing profiles are not updated. At the same time, and in order to be able to respond immediately to the changes taking place, the development of a list of necessary knowledge and skills by profession could be adopted, allowing the competent bodies and the enterprises involved to refer to needs and prospects for the development of the professions' (¹¹¹).

20.3. Organisation of in-company training delivery

The Joint Ministerial Decision 26385/16.2.2017, *Official Gazette* B'491, on the Apprenticeship Quality Framework (Article 5) requires the employer to appoint a responsible trainer who has the responsibility for supervising the apprentice and

^{(&}lt;sup>111</sup>) Karoulas, G. (2017). Μαθητεία και μικρές επιχειρήσεις: θεσμικό πλαίσιο και προτάσεις για τη βελτίωση του συστήματος.[Apprenticeship and small enterprises: institutional framework and suggestions for improving the system]. Institute for Small Enterprises of the Hellenic Confederation of Professionals, Craftsmen and Merchants. Opinion texts.

connects the employer with the VET provider. The in-company trainer must have the necessary formal qualifications and professional rights for the corresponding profession/specialty; in the absence of such person, the employer shall appoint a supervisor who may work at an intermediate or sectoral body (requirement waived for three years). The trainer must attend a short, flexible, special training programme, focused on pedagogical knowledge and skills, and adapted to the specific needs of the scheme, and then be certified. Training and certification should be carried out by the chambers and the sectoral bodies, based on content to be prepared by the Manpower Employment Organisation (OAED) together with the social partners, in cooperation with scientific and educational institutions. In the transitional stage (that was to end in 2020), until the creation of a register of certified trainers, short seminars are held, and local structures are used to improve the skills of in-company trainers.

Most provisions of this detailed approach are not yet in place. The appointment of a company trainer is mandatory (Joint Ministerial Decision $\Phi7/158947/\Gamma\Gamma4/10.10.2019$, *Official Gazette* B'3892) but no particular roles and responsibilities are foreseen. General obligations are defined in the joint ministerial decision and in the Manual for the implementation of the EPAL apprenticeship scheme. In most companies, trainers have not received any kind of training.

A study on *Teachers and trainers in work-based learning/apprenticeships* shows that 'compared to teachers in VET institutions, professional development arrangements for trainers in company are limited, raising concerns about the quality of WBL in companies'. Conditions in the Greek economy and society (¹¹²) affect the design and implementation of learning activities in the workplace, such as the size of the enterprise (99.5% are SME's), the employer's reluctance to accept apprenticeship as an investment in human resources, the financial situation (especially after the COVID-19 crisis), the lack of information and business awareness, and the lack of motivation for SME's (clusters, intermediate bodies).

Public authorities and social partners underline the importance of training of trainers, but so far there is no systematic approach or national strategy for the training of trainers concerning the implementation of apprenticeship schemes; this is despite other apprenticeship schemes having existed in Greece since 1952 (such as the EPAS apprenticeship). There are individual initiatives for trainers training in the context of EU-funded projects but no centralised guidelines for trainers.

^{(&}lt;sup>112</sup>) Lintzeris, P. (2020). Θεωρητικές και πρακτικές διαστάσεις της βασισμένης στην εργασία μάθησης [Theoretical and practical dimension of work-based learning]. Athens: Institute for Small Enterprises of the Hellenic Confederation of Professionals, Craftsmen and Merchants. Research paper, p. 44.

Social partners took the initiative to promote apprenticeship methodology for teachers and trainers (¹¹³) in specific topics such as apprenticeship in Greece and in Europe, the role of key players in apprenticeship schemes, the development of specific training plans for workplace learning and the use of quality assurance tools in vocational education and apprenticeship. Another project aimed at attracting businesses to offer apprenticeship places, but also at supporting apprenticeship implementation, also through training in-company trainers (¹¹⁴) but it has not yet produced substantial outcomes. The Mentor4wbl project (2018-20) aimed to build a specific procedure in the selection and induction of in-company mentors, identifying knowledge, skills and abilities required from mentors/trainers, provide a pilot educational programme for trainers, and develop a system of certification/ recognition of specific qualifications. Partners from Greece, Switzerland, Turkey and the United Kingdom collaborated to develop this above and exchange good practices and tools. EU-funded projects as NAAGRCY may contribute to the design of training material.

The role of in-company trainer in EPAL apprenticeships should be highlighted and possibly recognised and formalised. The in-company trainer is a multidimensional role, required to combine previous work experience in the specific occupation, constantly updated knowledge of technical professional specialty and sufficient teaching skills ensuring that training is based on the corresponding curriculum. To do this, the trainer needs to cooperate with VET teachers, to ensure the best possible combination of practical and theoretical training. He/she should also demonstrate a strong commitment to the implementation of apprenticeship principles, deal with and solve problems and conflicts between apprentices, and promote the company culture and introduce the apprentice in internal procedures and hierarchy. There is no reliable evaluation of in-company trainer opinions for the implementation of the EPAL scheme so far and the extent to which they managed to satisfy their role or their needs. The Ministry of Education will collect feedback from trainers as part of the scheme evaluation.

According to current provisions, VET teachers should visit the workplace at least once a month to get feedback from the trainer, monitor apprentice progress and ensure that all terms and conditions laid down in the apprenticeship contract are met. After the visit, the teacher fills in and signs a monitoring report. The trainer should fill in and sign a work attendance log for all apprentices and hand it to the teacher during the monthly visit. The work attendance log is also signed by the teacher. The trainer assesses the apprentice's progress in the workplace, with a weight factor of 50% in the final assessment, based on the work attendance log

^{(&}lt;sup>113</sup>) Center for the Development of Educational Policy of the General Confederation of Greek Workers (GSEE).

^{(&}lt;sup>114</sup>) *Upgrading and enhancing apprenticeship: apprenticeship partnerships*. Union of Hellenic Chambers of Commerce (UHCC).

(learning calendar), the implementation of projects that are summarised in the learning calendar and defined in the apprenticeship contract, and the final examination, skills demonstration and presentation of projects in real or digital form. On this basis, the trainer drafts an apprentice assessment report (Joint Ministerial Decision $\Phi7/158947/\Gamma\Gamma4/10.10.2019$, *Official Gazette* B'3892).

20.4. Conclusion

Despite positive reception of the new scheme, crucial challenges remain regarding the quality of in-company training and professional development of in-company trainers. Workplace learning (80% of total duration) needs to be improved, taking into consideration the flexibility of apprenticeship curricula, the design of a learning agreement for the workplace component, the theoretical background of the apprentice, complementarity between learning at school and company, the suitability of company structure and operation and the important role of the incompany trainer.

Under the European Commission's bench-learning process (Apprenticeship support services), the EPAL scheme is assessed, with focus on:

- (a) how can stakeholders be included in designing or assessing learning outcomes and providing modifications based on professional profiles?
- (b) how can the formal training of in-company trainers be improved?
- (c) how can their role be better promoted/recognised?

CHAPTER 21. Type 1 apprenticeship, Italy

By Alessandra Biancolini, ANPAL, and member of the Cedefop community of apprenticeship experts

21.1. Introduction (¹¹⁵)

Type 1 apprenticeship is one of the three apprenticeship national schemes leading to the acquisition of VET qualifications. Type 1 apprenticeship can lead to the vocational qualification and diploma, the upper- secondary education diploma and the high technical specialisation certificate. The paper offers an overview of the current situation of in-company training design and delivery in Type 1 apprenticeship (¹¹⁶). It builds on main results and activities developed and delivered through the Italian-German Qualit project (¹¹⁷) aimed at contributing to the definition and set up of a national qualification system for in-company trainers involved in dual education pathways, including apprenticeships.

21.2. In-company training design

The 2015 reform of the apprenticeship legal framework (legislative decree 81/2015) outlines training objectives: apprenticeship in-company training should ensure the achievement of the learning objectives, linked to the relevant VET programme, based on the apprenticeship-specific occupation and the relative training profile, as stated in collective labour agreements, typically (but not only) at national level. The legal framework defined a nationwide regulatory framework concerning training standards for the school-based part, but there are no standards for in-company training. As a result, what is taught in the school- and company-based component of apprenticeship is first decided on the basis of school-based VET programmes, with the involvement and cooperation of VET providers, companies, social partners and authorities at regional level.

^{(&}lt;sup>115</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

^{(&}lt;sup>116</sup>) See more in Cedefop (2017). Apprenticeship review: Italy. Building education and training opportunities through apprenticeships. Luxembourg: Publications Office.

^{(&}lt;sup>117</sup>) The project is one of the main outcomes of closer bilateral cooperation between Italy and Germany, active since 2012 and recently renewed, in the issues of dual VET and the active labour policies, involving the Ministries of Employment and the Ministries of Education of both countries, along with related public government agencies.

Then, apprenticeship in-company training is further shaped, agreed and implemented at an individual level, for the single apprentice with the single company, formally drafted and written in an individual training plan (ITP).

When it comes to the firm level, the national regulatory framework does not currently envisage a national 'accreditation' system or detailed requirements for employers (companies, organisations) hosting apprentices.

The regulatory framework envisages two subjects in charge of guiding and carrying out dual training: the school teacher and the in-company trainer (tutor) (Inter-ministerial Decree of 12.10.2015, Article 7.). Their cooperation should characterise the whole apprenticeship experience, to ensure the success of the of the entire learning path, mostly at the start and throughout its training component (¹¹⁸), where the student is expected to be an active part of a circular relationship with the teacher and trainer. The training component of the apprenticeship contract is the result of the formal and structured training carried out either outside the working venue, in the school or VET centre (external training), or inside the working venue (internal training). The share between external and internal training depends on the type and level of learning pathway and the age of the student. The job component of the contract is made up with the working hours where national provisions exist in job collective agreements.

The training component of the contract is the bridging element between the two learning venues, but it also represents the more critical point regarding the elaboration of the individual training plan. The decree states that both in-company trainers and school teachers should work on the definition of the individual training plan (ITP) using a template which has to detail the learning units, a description of the training activity, how it is provided, for how many hours, and the corresponding number of credits. Within the learning units, competences are expressed in terms of learning outcomes that are a combination of knowledge and skills acquired in the two learning venues.

The relationship between training institutions and in-company trainers is crucial in drafting a realistic individual training plan, as the learning outcomes should result from the combination of the training activities in the two learning venues that represent very different learning environments. The need to combine

^{(&}lt;sup>118</sup>) Definitions in the Italian legal framework designed by Decree No 81/2015 reflect the hybrid nature of apprenticeship in Italian legislation, where the tool is defined as a job contract with a learning perspective. Time spent within the internal and external training is defined as national standard and is expressed as a percentage of the total time of the learning courses that each school/VET year foresees. With the aim of favouring the achievement of key competences, especially by minor apprentices, it is provided that internal training at the workplace increases in the third and fourth year of enrolment, when the student is considered more mature and able to manage schoolwork alternation more successfully. A general overview is available in (Romito, 2020, Table 11.).

the two components of training in a common language is not an easy operation for the in-company trainers who have usually a different perception of the learning environment and are not so often updated about requirements the law envisages, especially for minor apprentices. Technical and professional competences are usually expressed with reference to activities to be carried out within the company. Their learning value needs to be linked in a structured way to the curriculum of studies and with an occupation profile from the job collective agreements. These aspects are perceived as burden from the employer's side.

These obstacles and lack of capacity might result in a loss of transparency for those students who attend Type 1 apprenticeship in compulsory education; the qualification they get at the end of the experience should be exactly comparable to the one acquired in school-based general education or VET pathways.

Although the regulatory framework ensures the same value for the qualifications obtained through apprenticeship as those obtained in the schoolbased education and training system, the need for strengthening quality and for improving training skills and capacity of companies is currently among apprenticeship related policy priorities in the country.

21.3. Organisation of in-company training delivery

Usually, in-company trainers are regular employees that cover such role, normally at plant level, in dialogue with school/training providers. The law does not set any minimum professional standards or qualifications for assuming the role of trainer: it only requires identification of an in-company trainer, without offering further details about how to exercise related tasks or how to perform them. Accordingly, curricula for training in-company trainers are not defined, due to the lack of nationally agreed standards in their career development and their professional profile. However, their role is essential in guiding the apprentice in the work environment – directly, or through other staff, as mentors, to whom specific tasks might be delegated – and in view of the best possible definition of the apprenticeship learning outcomes, within individual training plans.

VET teachers have the necessary background in terms of psychopedagogical skills and knowledge, while this is not always the case for in-company trainers. In large and medium-sized companies apprenticeship trainers are usually professionals acting within the HR Department, who have specific roles defined within their individual job contracts and benefitting from career development plans with assurance of continuing training schemes. But, in small and micro-enterprises, apprenticeship trainers may be single employers, facing many obstacles in offering structured training, especially in this challenging period. Such companies lack a person in charge of monitoring learning outcomes achieved and registering them in the dedicated instruments (individual dossier, logbook).

In this context, since the 2015 reform, the issue of in-company trainers gained relevance in the public debate around the effectiveness and the quality assurance of VET and, more generally, of the success of dual learning. National and EU initiatives have been implemented, also as part of the European Alliance for Apprenticeship (EAfA) and through bilateral cooperation among the EU Member States. National programmes have been launched in the last three years with the aim of increasing the training capacity of all the actors involved in the learning experience, especially in-company trainers of micro and small companies, where the arrangements and management of young apprentices is often not an easy task.

The Qualit project aims at establishing a nationwide system for qualifying and training in-company trainers and school teachers involved in dual education pathways, at defining a structured training programme and a methodology for 'dual trainers' (¹¹⁹). The project contributes to the definition of a professional profile of the 'dual trainer', where a set of skills and competences of both school/VET centre teachers and in-company trainers are identified. It provided selected training on an agreed curriculum to nearly 300 training staff involved in dual paths, complemented by formal assessment of skills and competences and certification of their competences after the end of the training. The project involved both ministries responsible for dual education pathways (education and employment), the regions, ANPAL (technical agency for active labour market policies of the Ministry of Employment) and social partner representatives, including in the definition of course curricula.

Courses were addressed to both teachers and trainers, emphasising the need for a rational synthesis of both roles and for the development of a national professional profile to avoid fragmentation. The project is developing a common ground of perception, understanding and dialogue between the apprenticeship trainers and teachers, to smooth the inevitable difficulties of carrying out programmes that are jointly planned but implemented in different learning venues. Combining school-based and work-based didactical activities is often challenging, especially when the target audience is mainly aged 15-19. Qualit courses have been particularly devoted to the introduction of methodologies for workplace training, with a focus on those specific to minor apprentices. A final assessment and a good result in the final examination is considered a precondition for getting the certification of competence of 'dual trainer' and to be then selected for joining an advanced session of 'master trainer'.

^{(&}lt;sup>119</sup>) The Qualit project covers all dual learning schemes, including apprenticeships. Here, reference will be made only to apprenticeships.

This mechanism not only permits training the future dual trainers in their specific local or regional context (school/training institutions or company) but will contribute to setting up a network of experts at national, regional and sectoral level, assuring sustainability of the project results and accompanying the impacts at national level. Their profile of skills and competences will feed, as a first step, the definition of a standardise profile of skills and competence to be included and linked to the Atlas of jobs and gualifications, the tool to navigate the occupation profiles and link them to the Italian NQF (120). The second step will be to structure a dedicated programme for awarding these qualifications; the involvement of social partners in this second phase will be crucial. Those that have been already involved in the Qualit since the beginning, and joined the pilot course in the first phase, asked for renewed interaction, for a new programming season of training courses and pledged to expand the beneficiaries of the training provided also through the possibility of using national funds. The idea is to expand and maximise the impact of Qualit intervention through the active involvement of representatives of trade unions, employers' associations active at local level, and other subjects in charge of local development in the next period.

21.4. Conclusion

In Italy there is great room for manoeuvre to improve apprenticeship in-company training quality. Pilot initiatives carried out since the launch of the dual system in 2016, such as the Qualit project, offer a valuable example of how a capacitybuilding action might open wider and interesting perspectives to increase the quantity and improve the quality of apprenticeship workplace training by supporting in-company trainers. The project was an opportunity to establish a dialogue among the institutions responsible for the quality of apprenticeship training, focused on the need to improve standards and setting the minimum entry requirements to train apprentices in dual paths. Dialogue among stakeholders should be permanently maintained and results should be consolidated, also through the multiplier mechanisms of training-the-trainers. Further training occasions for other interested in-company trainers are now currently under way in some regions, benefiting from national funding schemes, also in view of creating a national network of dual system experts.

The establishment of a national monitoring and evaluation system would be one of the preliminary steps for scaling up the current number of companies and

^{(&}lt;sup>120</sup>) The Atlas of jobs and qualifications represents the integrated mapping of occupation profiles from job sectors, organised in areas of activities (ADA) and linked with qualifications inventories in the national and regional context, currently set in the national qualification framework.

organisations involved in the Type 1 apprenticeship system in the country; it should aim to design future policies for assessing its effectiveness and efficiency, offering also the possibility of sharing reliable, consistent and comparable data at national and international level. A register of companies willing to host young people in transition from school to work, from the national union of chambers of commerce and industry, could be adapted for such a purpose. This tool might support the monitoring of training activities of in-company trainers and offer chances to manage their careers and get certification of competences.

21.5. References

[URLs accessed 18.6.2021]

- AHK. Camera di Commercio italo-germanica progetto Qualit. https://www.ahk-italien.it/it/formazione-e-lavoro/progetti-einiziative/qualit?no_cache=1
- Cedefop (2017). Apprenticeship review: Italy. Building education and training opportunities through apprenticeships. Luxembourg Publications office. https://www.cedefop.europa.eu/en/publications-and-resources/publications/4159
- Cedefop and ReferNet Italy (2019). Italy: apprenticeship continues to grow. *National news on VET.* [database]. https://www.cedefop.europa.eu/en/news-and-press/news/italyapprenticeship-continues-grow
- INAPP (2019). *L'apprendistato tra continuità ed innovazione*. XVIII rapporto di monitoraggio. [The apprenticeship between continuity and innovation. XVIII monitoring report]. Rome: INAPP.

https://oa.inapp.org/bitstream/handle/123456789/439/INAPP_XVIII_Rapp orto_Ap%20prendistato_2019.pdf?sequence=4&isAllowed=y

- Ministry of Labour and social policies. *Dual system*. https://www.lavoro.gov.it/temie-priorita/orientamento-e-formazione/focus-on/Sistemaduale/Pagine/default.aspx
- Romito, A. (2020). International mobility in apprenticeships: focus on long-term mobility: Italy. Cedefop ReferNet thematic perspectives series. https://cumulus.cedefop.europa.eu/files/vetelib/2018/international_mobility_a pprenticeship_Italy_Cedefop_ReferNet.pdf

CHAPTER 22. Vocational preparation of juvenile workers, Poland

By Andrzej Stępnikowski, Łukasiewicz Research Network, and member of the Cedefop community of apprenticeship experts

22.1. Introduction (¹²¹)

In Poland, apprenticeship can be considered a form of practical vocational education (*praktyczna nauka zawodu*) where the practical training takes place at the workplace and theoretical part mainly at school (¹²²). In the case of upper secondary education, apprenticeship is organised in the context of the juvenile employment framework (vocational preparation of young workers – *przygotowanie zawodowe młodocianych pracowników*). Apprentices are referred to as 'young workers' or 'juvenile workers'. At upper secondary level, this framework is available mostly through three-year-long programmes offered by first-grade branch (sectoral) schools (*szkoła branżowa pierwszego stopnia* – SBI) (¹²³). The SBIs provide IVET at Polish NQF level 3. Approximately 70-80% of employers participating in the vocational preparation scheme are members of craft guilds.

Apprenticeship can be offered for 205 occupations grouped in 32 branches, corresponding to 254 qualifications. At least two qualifications are foreseen for all occupations (¹²⁴). The Ministry of Education develops and updates its classification of professions for branch schooling (KZSB), while the Ministry of Labour maintains a much wider classification, corresponding to the so called 'market qualifications' that can be also included in the national qualifications framework. Apprenticeships,

^{(&}lt;sup>121</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

^{(&}lt;sup>122</sup>) There are other forms of workplace or practical training at upper secondary level that include periods at the workplace but cannot considered as apprenticeships according to Cedefop definition and the Council recommendation of 5 March 2018 on a European framework for quality and effective apprenticeships. They may include practical activities at various venues, including those at the workplace.

^{(&}lt;sup>123</sup>) Branch (sectoral) schools is the new name for basic vocational schools (ZSZ) and supplementary technical school at ISCED level 3. it includes both public and non-public schools, that can be established by self-governing units (public) and associations, NGOs and craft guilds and chambers (non-public).

^{(&}lt;sup>124</sup>) Regulation of the Minister for National Education on the conditions and manner of assessing, classifying and promoting pupils and students and conducting tests and examinations in public schools (*Journal of Laws* of 2019, item. 373).

especially craft ones, can be organised for professions in any of the two classifications (¹²⁵).

Recent regulations are finally introducing obligatory vocational qualifications exams (conducted by the Regional Examination Board) and journeyman exams (conducted by the craft chamber's examinational board) for all vocational school students.

22.2. In-company training design

For apprenticeships organised under branch schooling, a core curriculum for 'education in occupations' is issued by the Ministry of Education, specifying the number of hours of practical vocational education according to the occupation. The Regulation of 16 May 2019 on practical vocational education defines the minimum and maximum percentages of education at the employer's premises (¹²⁶). For apprentices, the share of the workplace component depends on the agreement with the employer and the school: the minimum is 970 hours over three years, or approximately 60% of the total programme duration.

The apprentice is directed by the employer to undertake training mainly in following pattern (although other patterns of alternance may apply):

- (a) first year: one day/week at the enterprise, four days at the branch school;
- (b) second year: two days/week at the enterprise, three days at the branch school;
- (c) third year: three days/week at the enterprise, two days at the branch school.

Apprenticeship training that happens in this context is based on the Programme basis for branch education (*podstawy programowe kształcenia dla szkolnictwa branżowego*), which can be considered as VET curricula. Such curricula are created for all professions listed in the Ministry of Education classification of professions for branch schools (KZSB). A programme basis comprises competences for all students (personal and social), competences to be developed in all professions of a specific sector and occupation-specific competences within a sector. It also provides the ground for the examination standards for relevant journeyman exams in crafts apprenticeship. So, in this case, curricula (Programme basis) play a crucial role, as they are the basis for the examination standards, and both documents relate to the same set of learning

^{(&}lt;sup>125</sup>) Not all qualifications are included in both classifications; craft apprenticeships do not include qualifications for salesmen, and some qualifications are only available for adults (i.e. the Ministry of Labour classification), including beautician and horseshoe maker.

^{(&}lt;sup>126</sup>) The Regulation of Minister for Labour and Social Policy of 11 April 2014 regarding vocational preparation of adults (*Journal of Laws* of 2014, item. 497).

outcomes (in the national context, referred to as educational effects) (¹²⁷). Curricula were developed together with the employer representatives as a result of the ESF project *Partnership for growth* (lead by the Centre for Development of Education – ORE).

The range of knowledge and skills acquired by students during practical activities (at the workplace) as well as the number of hours of these activities is determined in the curriculum for a given profession. After the latest amendment of the education law there are new possibilities for school directors to shape learning programmes, including provision of additional vocational skills. School directors design the in-company training according to the corresponding curricula. The practical training programme content is finally agreed by the company owner or incompany instructor and the school director in a written contract or agreement on the basis of Article 68 of Educational Law (starting from VI.2019). Comparability of learning outcomes at the workplace is significantly improved as, in the process of agreeing the practical training programme for each company and apprentice, school directors take the curriculum (Programme Basis) into consideration.

In line with the Regulation on vocational preparation of apprentices and their remuneration (§10.1, 1996; 2019), an employer is obliged to recruit and train an apprentice in accordance with the programme of practical vocational education, and to plan the practical training of the apprenticeship.

In line with the Regulation on practical vocational education (2019), employers that take part in apprenticeships, should provide the material conditions for the implementation of practical training, appoint appropriate teachers, apprenticeship instructors and tutors and familiarise learners with work organisation and regulations, and health and safety provisions and principles.

It seems that most employers are able to deliver the planned training programme for the workplace component and the intended outcomes according to these provisions. There are also additional incentives for employers to complete the training programme and deliver quality training, as they receive a grant of approximately EUR 2 000 (*dofinansowanie*) if their apprentice passes the corresponding professional exam (EUR 2 500 for high-prospect sectors).

In cases where it is impossible for an employer to deliver the planned training due external situations or lack of machines/tools/modern equipment, apprentices are directed to another employer or training centre in order to develop competences needed for the professional exam.

^{(&}lt;sup>127</sup>) Some differences exist. For example, in the journeyman exam standards there are additional learning outcomes ('effects') connected with the entrepreneurship, but there are no strong connections with 'professional foreign language' which is taught only at school. But there is generally a strong alignment of curricula and examination standards.

After two major ESF projects focused on curricula for VET professions (in 2011-12 and 2015-17), common understanding of expected learning outcomes ('educational effects') which are connected with Polish qualification framework (and EQF) has been achieved.

Qualifications listed in the Polish national gualification register are becoming increasingly transparent to learners, parents and employers, although some company owners are disappointed with constant changes of law and new obligations. Despite some positive developments in terms of apprentice remuneration and incentives for employers during the reform of 2019, new obstacles appeared for employers that want to train an apprentice. Employers are required to have written confirmation from school directors on the conditions of practical vocational preparation, even before recruitment processes. They also need to go to VET providers and agree in writing with the director on the content of the workplace practical training. These requirements contribute to others, resulting in each employer interested in apprenticeship being required to prepare and attach as many as six or seven documents to the apprenticeship agreement (including forms for data protection statements). It can be assumed that these requirements coming from recent VET system changes will extend the fall in apprentice numbers, in parallel with the increase in 'student internships' that might seem an easier and more attractive option for employers.

In the case of apprenticeships that take place entirely in the workplace (approximately 1 800 apprentices in crafts, less than 5% of all apprentices), the training programme is based on 'the journeyman examination standard'. It may be linked to 'branch school professions' (as above) or to qualifications from the 'classification of professions and specialities from the labour market', for which programme basis (curricula) do not apply.

In the absence of a predefined curriculum, the employer uses the examination standards as a guide to plan and deliver training. Employers include vocational theory in their planning, also with regard to entrepreneurship, environmental protection and health and safety issues, and deliver accordingly as all training takes place in their premises. In this case the employer must ensure those delivering the theoretical learning hold a pedagogical qualification, statutorily specified.

22.3. Organisation of in-company training delivery

In-company trainers (instructors) in Poland provide practical training to apprentices according to the learning programme agreed with the corresponding school director and the curricula for chosen profession: since June 2019 agreements are in a written form. Instructors mainly train on practice, although they also

complement information from theory (as in technology, machine orientation) and help apprentices become good workers and citizens; responsibility for environmental protection in the company is an example.

The only recommendation for instructors (from a project on learning programme samples, developed by ORE) is to monitor the apprentice's progress systematically (¹²⁸). However, in practice, it is in the interest of the employer that the in-company trainer assumes full responsibility for apprentice vocational preparation. An additional incentive of EUR 2 000 is paid to an employer only after an apprentice passes the vocational or journeyman exam, which tests not only the practical training part but also the theoretical part (including technology, technical drawing, machine orientation, professional calculation). Failure in these exams, even in the theoretical part, has a negative financial repercussion for the employer (though not the school). In this context, an instructor has a role in supervising the overall vocational preparation of apprentices, including their progress at school (absence, grades, general assessment of a behaviour).

Until recently, an instructor of practical training (*instruktor praktycznej nauki zawodu*), for apprenticeships or other forms of practical training, had to have finished a pedagogical course of over 120 hours duration. The number of hours was then reduced to 96 and as of 1 September 2019, it is set at 48 hours (including eight hours of practice). The main goal was to attract more employers to train apprentices, but a fall in quality in those processes is expected.

This reduction in the course duration means that in-company instructors are more likely to be less prepared for training of apprentices. Some gaps may be filled, as the examination standard for craftmasters foresees some pedagogical competences such as 'basis for psychology and pedagogics' and 'didactics' (*metodyka nauczania*) (¹²⁹), but still it seems that it is not enough.

The influence of other staff members on apprentice training is hard to capture. It can be claimed that efficient (mutual) learning is possible in the real masterapprentice relationship, limited to a maximum of three apprentices. This influence can be reduced in medium and large companies where there is a weaker connection between the in-company trainer and apprentice, as the trainer needs to supervise considerably greater staff numbers. Nevertheless, other members of staff are frequently involved in apprenticeship training, as sometimes there is a need for an apprentice to acquire specific skills on particular equipment that is operated by a certain specialist but lack the authorisation to use it.

^{(&}lt;sup>128</sup>) See Projekty programów nauczania zawodu 2019.

^{(&}lt;sup>129</sup>) Stępnikowski, A. W. (2020). *Mistrz w rzemieślniczym przygotowaniu zawodowym. Kompetencje społeczne i pedagogiczne* [Master in craft apprenticeship. Social and pedagogical competences]. Radom: Wydawnictwo Naukowe Łukasiewicz – Instytut Technologii Eksploatacji.

As of 2019, cooperation between in-company trainers and VET providers is more formalised, as written agreements predict more or less regular cooperation and progress assessment. The employer-school communication is also based on the shared use of the apprentice record book (*dzienniczek zajęć praktycznych*).

This cooperation is supported by employer organisations (especially in craft guilds which should supervise the learning process). Craft companies may also use the self-assessment/benchmark information charts for entrepreneurs that employ apprentices approved by the Polish Craft Association and the Chief Labour Inspectorate (as it relates to employment). Factfinders and guidelines prepared by those institutions and by the Ministry of National Education with its agencies are also frequently used.

Some craft chambers (such as in Krakow) organise the so-called optional 'checking exams', which allow apprentices to check their progress (level of acquired skills in a part of profession) and prepare mentally for the future exam.

22.4. Conclusion

In Poland, VET and apprenticeship have been significantly reformed in the last decade, to some extent driven by ESF initiatives but also as a result of a top-down approach. In this period, some significant changes with positive effects can be acknowledged, including new curricula and training programmes, new forms of adult education, mandatory vocational exams (for a qualification or for the journeyman certificate), the population of Polish qualification framework with increasingly more 'market qualifications' that can be offered also through apprenticeships, the introduction of 'auxiliary professions' (zawody pomocnicze) for disabled apprentices and initiatives to promote VET in Poland (VET Skills weeks, Erasmus+ projects, some ESF projects such as the New quality of professional exams in craft). ESF-funded centres of vocational excellence are also a promising development, although they seem more directed towards further support of VET providers and teachers, rather than employers, trainers and apprentices. The recent apprentice pay increase (by 1%) and incentives for employers in high-prospect sectors are positive steps but are not expected to affect apprenticeship attractiveness drastically.

Although at first glance all looks quite well, there are some 'scratches on the glass'. Only in 2019 were obligatory written agreements between school directors and employers conducting apprenticeship introduced in Poland. Now the learning process and its assessment are more formally organised.

Structural reforms in the last decade have led to a serious reduction in apprentices (over 40%) and employers involved (more than 10%). It has also caused withdrawal of in-company trainers (instructors), especially in craft

companies. Despite some new flexible solutions, such as the shorter period of pedagogical courses needed for in-company trainers/instructors (which raises concerns over their quality), and some attempts to enhance vocational education in high-prospect professions, it might be hard to reach again the level of apprentices of the beginning of 2000s or 2010s.

Apprenticeship attractiveness is hampered by school director preference for school-based VET (connected to higher pubic subsidies per learner) over apprenticeships. Non-public VET providers run by NGOs, associations and craft organisations receive State subsidies only after the apprentices pass their exams, unlike public schools that receive funding in advance. Financing patterns also lead VET providers to compete for learners and concentrate their offer in specific occupations: more than half of apprentices learn in one of five professions (car mechanics, hairdressers, confectioners, carpenters and locksmiths). As a result, learners are mostly led to other forms of learning, such as post-lyceum schools, adult learning centres and universities. There are approximately 100 000 apprentices trained to be qualified workers at NQF level 3, and over 500 000 learners in other technical schools at NQF level 4 (trained to be lower-level managers and team leaders).

The second wave of the COVID-19 pandemic creates additional problems for apprenticeship training and its attractiveness (¹³⁰), as proper education and assessment standards and procedures that would efficiently involve distant learning tools, especially for in the workplace component or during the vocational exams (for a certain qualification or for the journeyman), are not yet in place.

The positive developments described above are not enough to change overall VET participation trends associated with a reduction in number and importance of apprenticeships and constant growth of students in technical schools (schoolbased or using other forms of workplace learning). The main goals of VET policy and strategies need to be reconsidered and should be better oriented towards apprenticeship development and expansion.

^{(&}lt;sup>130</sup>) Symela, K., F. (2020). Współpraca na rzecz rozwoju edukacji całożyciowej w trudnych czasach [Cooperation on the development of lifelong education in difficult times]. Continuing education of adults, No 3.

CHAPTER 23. Apprenticeship programmes, Portugal

By Fernanda Ferreira, DGERT, and member of the Cedefop community of apprenticeship experts, and Marina Vinhas, DGERT (¹³¹)

23.1. Introduction $(^{132})$

The scheme that can be considered as apprenticeship in Portugal refers to the apprenticeship programmes (*cursos de aprendizagem*) which are regulated by Portaria (Ordinance) n.º 1497/2008, de 19 de dezembro. The Institute of Employment and Vocational Training (IEFP) has promoted and managed the programmes, since 1984. They are delivered through the IEFP national network of vocational training centres.

23.2. In-company training design

Apprenticeship training standards are available in the National catalogue of qualifications (CNQ). The CNQ is a tool of the national qualifications system (SNQ) that integrates and regulates the non-higher qualifications at EQF levels 2, 4 and 5. The design of CNQ qualifications (¹³³) is in line with the European recommendations, and structures qualifications into units of competence based on and described in learning outcomes.

Training standards, for all VET offers, including apprenticeship, include the following training components: sociocultural, scientific, technological, and workbased learning (WBL). Only the WBL component is not described in the CNQ but is regulated by the IEFP, through a guiding document (*Guia de orientações de formação prática em contexto de trabalho*) included in the regulation for the implementation of apprenticeship programmes (*Regulamento especifico dos cursos de aprendizagem 2018*).

^{(&}lt;sup>131</sup>) This paper was drafted by of the Directorate General of Employment and Industrial relations (Fernanda Ferreira and Marina Vinhas) and includes expert contributions from the Qualification Unit from the Vocational Training Department of the Institute of Employment and Vocational Training.

^{(&}lt;sup>132</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

^{(&}lt;sup>133</sup>) Qualification is defined as 'the formal result of an evaluation and validation process proven by a competent body, recognising that an individual has acquired skills, in accordance with the established standards' (Decree-Law No 396/2007, of 31 December 2007, in its current wording).

In parallel, to support the in-company training, an individual activity plan is jointly set by the vocational training school (staff member responsible, nationally known as 'pedagogical responsible') and the company (tutor). It defines the activities and the skills to be acquired or consolidated in the company for each learner, based on the competences provided for in the technological training component.

The cooperation established among the public service (government) and the companies (that must be certified by the accreditation system for training providers) is a strong point of the apprenticeship programmes and distinctive from the other VET offers.

The preparation of the learner's individual activity plan is the joint contribution of several parties: the vocational training centre and the company, through the staff member responsible (desirably in cooperation with the other teachers and members of the technical-pedagogical team – see point 3.1) and of the tutor, designated by the company. All members of the technical-pedagogical team of the vocational training centre -- assigned staff member responsible, professional guidance technician, social worker, trainers – and the tutor appointed by the company are involved in the preparation, development and evaluation phases of the in-company training. Although all the previously mentioned members of the team are responsible for following the learners in the in-company training, the VET school staff responsible and the tutor are the main actors.

The individual activity plan considers the skills acquired up to the moment when the in-company training starts and the activities to be developed according to the purpose of the in-company training. It aims at consolidating the skills acquired at the vocational training centre or the development of new skills adjusted to the specific needs of the company.

The National credit system for VET, in line with the European recommendation for ECVET, allocated credit points to WBL. Regardless of the company that provides the in-company training, the successful fulfilment of WBL in apprenticeship programmes leads to 20 credits points, which supports the recognition of qualifications and learner mobility in the European area. Its implementation is an important step in valuing WBL, increasing transparency, and assisting the legibility and recognition for employers.

It is necessary to increase the participation of companies in the sectoral councils for qualification, which are structures that integrate the SNQ in order to collaborate in updating the qualifications standards of the CNQ. It would guarantee better adjustment of learners' competences to in-company training.

The relevant regulation is regularly revised and updated to keep up with constant needs of the training process and to regulate the cooperation with companies. The regulations on in-company training are quite strict to optimise the

potential of the learning environment and the security mechanisms for this learning period.

Evaluation of the in-company training is continuous, supported by the systematic assessment of the activities carried out by the learner. It uses a set of technical tools that support the development of in-company training to ensure that all learning outcomes are safely executed and achieved.

23.3. Organisation of in-company training delivery

The VET school staff responsible ('pedagigical responsible')must guarantee pedagogical supervision and guidance of learners; streamline the technical-pedagogical team, safeguarding the fulfilment of each learner and learner group paths and ensure cooperation between the team, the group of learners and the company.

The tutor of the company carries out the technical-pedagogical monitoring of the learner during the in-company training. The tutor ensures the procedures associated with the prior verification of conditions, welcoming the learner and integration, and provides the learner with the learning conditions that allow the fulfilment of the individual activity plan and, consequently, the competences to be acquired or consolidated in the in-company training.

The tutor is the central figure of the in-company training and can accompany up to five trainees simultaneously. It is especially up to the tutor to create conditions for the development of a training process adapted to the individual pace of learning and to a personalised accompaniment of the learner. He/she reports to the VET school staff responsible, whenever requested, or on his/her own initiative, the way in-company training is taking place, including the reference to problems or difficulties that he/she considers important.

Work contexts increasingly demand competences such as autonomy, initiative, teamwork, critical analysis, problem solving and lifelong learning skills. Because of the need to adapt to new social and labour realities, official guidelines recommend and reinforce the use of active methods within the framework of training processes. Aiming at acquiring these skills, and taking into account the relevance of the WBL training component, the trainer and the tutor, when selecting the methods to apply in each training session, must always bear in mind the characteristics of the learner or learner group with whom they work. However, at any point throughout the training process, they can make the necessary adjustments to find the best answers for each learner or learner group, seeking to maintain high levels of motivation, interest and knowledge acquisition.

The vocational training centre and the company share responsibility for the learning process. Agreement on the best pedagogical approaches to ensure a

favourable pedagogical relationship with the learner requires intense communication. This supports the feedback loop on several levels that include technologies, innovation and the need for up-to-date teaching methodologies.

It is essential that companies recognise the added value of welcoming apprentices. It is an excellent opportunity to identify future employees, develop projects that with only internal resources would not be possible, and disseminate the image of the company as a potential employer. This last factor is of special importance in the current situation of great scarcity of qualified labour and strong competition among companies to attract the best professionals.

Recently, the IEFP launched an Apprenticeship valorisation strategy, whose pilot project, Apprenticeship gives employment, aims to mobilise companies and relevant professional associations from various sectors of activity, introducing innovation in the development of apprenticeship programmes and reinforcement in articulation with the labour market.

23.4. Conclusion

The apprenticeship programmes of in-company training design and organisation of delivery follow rigorous rules; this is an advantage but may create some obstacles. To minimise the latter, the regulations are regularly revised and the system comprises tools that allow greater flexibility and adjustment to learner profiles whenever needed.

The role of the companies in the design has room for improvement, especially at higher level in respect of the CNQ. This is foreseen in the legislation, although in practice it is more comprehensive and not directed specifically to in-company training.

The relationship between the tutor as a key element in the various dimensions of in-company training delivery, with the staff responsible and other members the vocational training centre team is an added value and a strength in accompanying learners in the learning process.

The attractiveness of this VET offer for learners and companies is a weak point that is currently being addressed by the IEFP, but this is a VET offer that has a higher volume of in-company training when compared with others.

CHAPTER 24. Apprenticeships, England

By Andrea Laczik, Edge Foundation, and member of the Cedefop community of apprenticeship experts, and Katherine Emms, Edge Foundation

24.1. Introduction (¹³⁴)

Apprenticeships have been one of the foci of the latest policy reforms in vocational education in England. Fundamental changes have been introduced in the last few years to raise the quality and quantity of apprenticeships, and hence support the UK economy with skilled workers. These changes include setting up the Institute for Apprenticeships and Technical Education, developing new apprenticeship standards and introducing the apprenticeship levy. These represent considerable changes individually, let alone introduced together within a short space of time. Employers are again at the heart of these changes to design and take ownership of apprenticeships. The Institute for Apprenticeships and Technical Education, a public body sponsored by the Department for Education (DfE), is responsible for supporting employers to design and create high quality apprenticeships.

In the past, apprenticeship frameworks have consisted of different qualifications. However, from 2017 frameworks are being replaced with new standards developed by groups of employers (complemented by related end point assessment requirements). From 1 August 2020 all new learners start on the new, employer-designed standards. The minimum duration of apprenticeships was increased to one year in 2012. The apprenticeship levy, a tax on businesses with a payroll bill of more than GBP 3 million, was introduced in April 2017 (¹³⁵). This has led to an end of employers' voluntary contributions to education and training.

In 2015, the government set a target of 3 million apprenticeship starts by 2020 (BIS, 2015) which has now been dropped, as the number of apprenticeship starts has decreased in practice. In 2018/19 there were 393 000 starts (House of Commons, 2020) in England. This is partly due to the introduction of the new apprenticeship funding system (levy) as such, and partly due to the fact that employers have spent much of the levy on costlier higher-level apprenticeships.

Apprenticeships in England are from level 2 to level 7; intermediate levels are level 2 and level 3 and higher-level apprenticeships are from level 4 to level 7. The

^{(&}lt;sup>134</sup>) See more about the scheme in the relevant fiche of Cedefop's European database on apprenticeship schemes.

^{(&}lt;sup>135</sup>) The levy will only be paid by employers with annual pay bills in excess of GBP 3 million at a rate of 0.5%. Less than 2% of UK employers pay it.

apprentice is an employee and has an employment contract, bringing entitlement to, for example, a wage, annual leave and sick leave.

24.2. In-company training design

The introduction of employer-designed standards links apprenticeships closely with local employer needs, as standards are job specific, but lack a broad introduction to the sector. The curriculum is developed by training providers on the basis of the standards and the end point assessment requirements.

Apprentices in England commonly spend four days per week working in a company and participate one day a week in off-the-job training. Off-the-job training can happen not only off-site delivered by a training provider (further education college or private provider) but also at an employer's workplace. It is not the location but the activity that is important.

As a result, in-company training may include both off-the-job training (that happens at the workplace on the basis of agreed outcomes) or on-the job training, on top/beyond of such outcomes. Focused in-company learning and training is based on agreed outcomes of the curriculum. In-company training may also happen in the workplace when the apprentice carries out occupation-relevant regular tasks/jobs while working. This type of training focuses on work processes and regular tasks within the job. Such tasks and processes do not have to be specifically linked to the knowledge, skills and behaviours intended to be developed by the apprenticeship.

The ESFA (Education & Skills Funding Agency) provides definitions: 'Off-thejob training is a statutory requirement for an English apprenticeship. It is training which is received by the apprentice, during [what are considered] the apprentice's normal working hours, for the purpose of achieving the knowledge, skills and behaviours of the approved apprenticeship referenced in the apprenticeship agreement. By normal working hours we mean paid hours excluding overtime. It is not the same as on-the-job training, which is training received by the apprentice for the sole purpose of enabling the apprentice to perform the work for which they have been employed. By this we mean training that does not specifically link to the knowledge, skills and behaviours of the apprenticeship' (ESFA, 2020, p. 11)

All apprenticeships 'will be a high-quality opportunity that delivers the skills, knowledge and behaviours that employers are looking for' (BIS, 2015). Apprenticeships entail a maximum of 80% on-the-job and a minimum of 20% off-the-job training at all levels. When we talk about in-company training, this can happen on the job while working, and off the job as focused training delivered by the employer in the workplace or by a training provider.

Through the guidelines (DfE, 2019) based on the policy as of 1 August 2019, training providers, employers and apprentices are supported if they wish to develop a better understanding of the off-the-job training requirements. Employers find information about their role in the delivery of an apprenticeship programme. Apprentices find information about 'the nature of the off-the-job training that they are entitled to, and should be receiving, as part of their apprenticeship programme' (DfE, 2019, p. 4). Off-the-job training should lead to upskilling and new learning of knowledge, skills and behaviour, allowing the apprentice to reach full occupational competence.

The quantity of planned off-the-job training to be delivered must be recorded on the apprenticeship agreement (between the apprentice and the employer) and the commitment statement (tripartite agreement). In the apprenticeship agreement the employer commits to release the apprentice for the off-the-job training. The commitment statement is a working document developed at the very beginning of the apprenticeship and amended as necessary during the apprenticeship. It includes the outline of the commitment of all parties, key policies (such as safeguarding, health and safety), and the training plan and content to be delivered.

While the appointment of a mentor is not obligatory, it is well acknowledged that mentors are key to the successful completion of apprenticeships. The main training provider is responsible for this document, and the document has to be compliant with the apprenticeship funding rules.

The individualised learning record (ILR) also details the volume of planned offthe-job training hours, for the full duration of the apprenticeship.

When employers engage with off-the-job training that may include practical training, shadowing or mentoring, the employer becomes a delivery subcontractor.

The Education and Skills Funding Agency (ESFA) routinely monitors apprenticeship programmes on the basis of ILR data and mainly looks at quantity of training offered and that the funding rules were followed when calculating, recording and delivering off-the-job training. The quality of apprenticeship training is investigated and ensured by Ofsted (Office for Standards in Education, Children's Services and Skills), Ofqual (Office of Qualifications and Examinations Regulation) and the QAA (Quality Assurance Agency for Higher Education), depending on the level of apprenticeships, through the investigation of the end point assessment (but also through inspections by Ofsted). These external quality assurances ensure that the assessment is fair, consistent and robust across different apprenticeship standards and between different assessment organisations. Intermediate level apprenticeships (level 2 to level 5) are assessed by registered and approved external end point assessment organisations that are independent from the employer and the training provider. Intermediate level apprenticeships are quality assured by Ofsted using a common education inspection framework (2019). Higher level apprenticeships (level 6 and level 7) are quality assured by the QAA. Following a consultation in February 2020, external quality assurance will be transferred to Ofqual and the Institute of Students from 2022.

While there is a sufficient level of safeguarding for the quantity of the off-thejob training, quality assurance is insufficient considering the introduction of the new standards and the increasing number of higher-level apprenticeships (Field, 2018). We have yet to see how the simplification of current system of external quality assurance will work. There is sufficient regulation and information concerning offthe-job training; if this is delivered by the employer at the workplace, quantity is clearly defined and easily assessed. However, the quality of off-the job-training is less clear. The newly developed apprenticeship standards are narrow and job specific. They often lack the broad introduction of apprentices to the sector, hence may hinder apprentices'/employees' free movement to other similar job roles.

With the new standards, apprentices are assessed only at the end of their apprenticeships, which means that during their programme they receive only informal feedback on their progress from the training provider and/or employer.

Those apprentices who complete their apprenticeships based on standards, do not receive a qualification but a certificate of completion. This was different while using apprenticeship frameworks, within which different qualifications were built-in according to employer interest and needs. Given the guidelines and regulations, and the external quality assurance of end point assessment, comparability of outcomes with local specificity should be achievable.

There is considerably less guidance that relates to on-the-job training, even though it can constitute up to 80% of apprentice time. In brief, employers have to ensure that their apprentices work with experienced staff and learn job-specific skills. 'The role of on-the-job experience and training with the employer is to develop the concrete and specific knowledge and skills associated with a particular job' (Field, 2018, p. 32). Apprentices may receive formal training in the workplace outside productive activities and training during usual productive working activities. Field (2018) claims that:

'Typically the latter approach is more challenging for employers, as it involves careful supervision of partially skilled workers as they perform productive tasks, imparting skills while also managing the risks involved. But this approach can also be more rewarding because the apprentices contribute more to output, and may also learn faster because of the real-world demands on them' (Field, 2018, p. 18)

There are employers, particularly large ones, which offer some details about their on-the-job training opportunities for apprentices. For example, Rolls Royce offer their non-destructive testing (NDT) engineer degree apprentices: 'The NDT methods most commonly used in Rolls-Royce are x-rays (radiography), ultrasonics, eddy currents, magnetic particle inspection and fluorescent penetrant inspection. You will undertake training courses in all of these methods at a new stateof-the-art training facility in Wales – the perfect way to build your practical and theoretical knowledge.

You will also go on a variety of placements across the business, including time spent gaining hands-on experience on the shop floor and in manufacturing facility laboratories, along with office-based placements where you will help solve technical issues and run projects to help internal customers.'

Source: https://careers.rolls-royce.com/united-kingdom/students-and-graduates/apprenticeships-and-school-leavers/a-levels#non-destructive-testing-engineer-degree-apprenticeship

Barclays emphasises the individualised and constant support their foundation apprentices would receive:

"... you'll also be working in your Barclays role, and through that practical work, you'll also be learning new things every day. As you work, you'll have various skills, behaviours and knowledge topics to work through, with plenty of guidance from your manager and your team.

You'll learn alongside the people you'll be working with day-to-day – getting the same professional training as they do. You'll even benefit from one-to-one training and tuition, and have dedicated mentors (both inside and outside of Barclays) to turn to for advice and guidance.

We'll support you with both your work and your studies, with time set aside at work for you to complete your assignments. Our training is going digital (just like our customers), so we've developed a new e-learning platform you can access on the go, for help in your studies. We'll also sign you up for the Digital Driving Licence – an innovative virtual way to learn new skills to then inspire our customers and colleagues.'

Source: https://joinus.barclays/eme/apprenticeships/foundation/

These examples come from large employers offering wide range of learning opportunities for apprentices at all levels within their companies. Small and medium size enterprises often have considerably different opportunities to offer; rotation is often impractical and/or not possible.

24.3. Organisation of in-company training delivery

Mentors or coaches are often assigned from the beginning to help apprentices settle, track progress and keep contact with the training provider. Their roles vary from training to general wellbeing as exemplified by Fujitsu (L&W, 2018): 'To monitor an apprentice's progress, Fujitsu holds quarterly calls with their training providers and receives monthly reports highlighting the apprentice's progress and any issues or concerns. Apprentices also work with the provider's skills coaches to fill in monthly 'temperature checks' to demonstrate how well they believe they

are doing. In some work places more experienced apprentices or ex-apprentices support new apprentices. Fujitsu is currently developing a mobile app which will enable apprentices to track their progress digitally. The application displays apprentices' 'portfolio of evidence'...' (L&W, 2018, p. 12).

There is evidence (Daniel et al., 2019) that communication between the trainer and the employer is crucial for the apprentice to complete their programme successfully. It also signals to the apprentice that their progress and attendance is monitored. Callan et al. (2105) found that e-portfolios, where the apprentice gathers evidence, improved communication between the employer and the trainer.

Grollman and colleagues (2017) point out the difference between technical apprenticeships that require considerable investment of resources in workplace training, and those sectors, such as the service sector, where light supervision is sufficient to support the apprentice. It is also suggested that '…if the apprentice is to be successful, much of the task of occupational skills training and consolidation falls to the firm, to be fitted into the normal work schedule and delivered by an experienced technician. Depending on the provider, the employer may or may not be provided with guidance as to the ordering and scheduling of on-the-job training and must bear the costs in lost technician productivity' (Grollman et al., 2017, p. 14).

However, this can mean a real barrier for SMEs to engage with apprenticeships; supervising and training of an apprentice add extra pressure on their existing skilled workforce and overstretch their resources (p. 16).

There are also differences among sectors. For example, the Construction Industry Training Board (CITB) offers construction companies in-house training centre opportunities to apply to become a CITB approved training organisation, signalling that the quality of their in-house training meets industry agreed standard and is comparable to that offered by commercial providers.

While large companies may offer a comprehensive working experience for apprentices, it is really down to the positive learning culture that is embedded in companies, regardless of size, that matters.

There is scarce research into on-the-job training; what exists, though still relevant, is often outdated. Fuller and Unwin (2004) investigate the learning environment in four UK construction companies; they focus on the process of apprentices learning from 'expert' employees within the company, as well as apprentices acting as teachers themselves for established employees. They conclude that landscape of companies offering employees opportunities for learning and teaching is uneven, and similarly employees' engagement in these activities is irregular. 'Young people help older employees learn and vice versa as part of work groups where an age-related concept of experience and expertise has less meaning than in the past. Organisations can facilitate and support this sharing of knowledge and skill by encouraging dialogue, boundary crossing, respect for

expertise, and respect for colleagues regardless of age and status' (Fuller and Unwin, 2004, p. 40). This can be the characteristic of an 'expansive' (Fuller and Unwin, 2003; Fuller et al., 2015) learning environment. However, they request more research 'on the largely closed world of workplace learning' (p. 41).

Bishop (2017) investigated how large companies and SMEs approach their management practices and skills formation and suggests that small companies tend to have a more informal approach to working and learning processes than large ones, including workplace employee development. This, however, does not necessarily lead to a restrictive learning environment as individuals may have a greater say in what they learn and how they learn it. The owner and management of the company play a key role in shaping learning. Given the variation in how informality plays out within SMEs, he suggests that 'arguably [there is] a need for a greater statutory protection of apprentices' on-the-job learning' (Bishop, 2017, p. 83).

24.4. Conclusion

Apprenticeship training in the workplace happens mostly on the job and may also be offered as off-the-job training, based on agreed outcomes, where the activity/task is well specified and linked to sector-regulated learning outcomes. It is an integral part of the training programme and the apprentice will be assessed on it. Either at the workplace or in a VET provider, off-the-job training is more regulated, monitored and quality assured, also as it is closely linked to funding.

On-the-job training forms the larger part of an apprenticeship, is not based on agreed outcomes and is less regulated. Patchy available evidence highlights the differences between large companies and SMEs and among sectors. There is an emphasis on mentoring/coaching/supervising during which apprentices develop job-specific skills and work with more experienced staff. The gap in research focusing on on-the-job training and in-company training in general is clear.

24.5. References

[URLs accessed 18.6.2021]

- Bishop, D (2017). Affordance, agency and apprenticeship learning: a comparative study of small and large engineering firms. *Research in Post-Compulsory Education*, Vol. 22, No 1, pp. 68-86. https://doi.org/10.1080/13596748.2016.1272074
- Business, Innovation and Skills (BIS) (2015). English apprenticeships: our 2020 vision. London: Department for Business, Innovation and Skills.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads /attachment_data/file/482754/BIS-15-604-english-apprenticeships-our-2020-vision.pdf

- Callan, V. J.; Johnston, M. A. and Poulsen, A. L. (2015). How organisations are using blended e-learning to deliver more flexible approaches to trade training. *Journal of Vocational Education & Training*. Vol. 67, No 3, pp. 294-309. https://doi.org/10.1080/13636820.2015.1050445
- Daniel, E. I.; Oshodi, O. and Haywood, K. (2019). *Improving the outcomes of apprenticeship training programme in the UK construction industry: final report: Solent RIKE funded project.* Southampton: Solent University Publication.

https://pure.solent.ac.uk/ws/portalfiles/portal/10705193/Daniel_et_al_2019_I mproving_the_Outcomes_of_Apprenticeship_Training_Programme_in_the_ UK_Construction_Industry_Final_Report_.pdf

Department of Education (DfE) (2019). *Apprenticeship off-the-job training: policy background and examples: Version 3, September 2019.* London: Department of Education.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/831591/OTJ_Guide_v3_-_12092019_Final.docx

Education & Skills Funding Agency (ESFA) (2020). *Apprenticeship funding rules for employer-providers: August 2019 to July 2020: Version 2.* Manchester: ESFA.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads /attachment_data/file/856824/1920_Employer-Provider Rules Version 2.0 FINAL.pdf

- Field, S. (2018). Taking training seriously: lessons from an international comparison of off-the-job training for apprenticeships in England. London: Gatsby Foundation. https://www.gatsby.org.uk/uploads/education/finalapprenticeships-and-off-the-job-training-may-2018.pdf
- Fuller, A. and Unwin, L. (2003). Learning as Apprentices in the Contemporary UK Workplace: creating and managing expansive and restrictive participation. *Journal of Education and Work*, Vol. 16, No 4, pp. 407-426. https://doi.org/10.1080/1363908032000093012
- Fuller, A. and Unwin, L. (2004). Young people as teachers and learners in the workplace: challenging the novice–expert dichotomy. *International Journal of Training and Development*, Vol. 8, No 1, pp. 32-41. https://doi.org/10.1111/j.1360-3736.2004.00194.x
- Fuller, A.; Unwin, L. and Weatherley, L. (2015). Co-producing expansive vocational education and apprenticeship: a relational approach in key issues for education and training. London: UCL. https://discovery.ucl.ac.uk/id/eprint/1475573/
- Grollmann, P. et al. (2017). Building Apprentices' Skills in the Workplace: Car Service in Germany, the UK and Spain. London: Centre for Vocational Education Research, London School of Economics & Political Science.

Research discussion paper, No 011. https://cver.lse.ac.uk/textonly/cver/pubs/cverdp011.pdf

- House of Commons (2020). *Apprenticeship statistics.* London: House of Commons. Briefing paper, No 06113, 9. 4. 2020.
- Learning and Work Institute (L&W) (2018). Supporting young apprentices: guidance for employers. London: DfE, National apprenticeship service. https://learningandwork.org.uk/resources/research-andreports/supporting-young-apprentices-guidance-for-employers/
- Newton, O. et al. (2019). *Our plans for apprenticeships: broader, higher quality, better prepared.* London: The Edge Foundation. https://www.edge.co.uk/documents/87/edge20e2809320apprenticeships20re port2028final20-20web29_41nXjVp.pdf
- Ofsted (2019). *The education inspection framework.* London: Ofsted. https://www.gov.uk/government/publications/education-inspection-framework

CHAPTER 25. Conclusions: main messages

25.1. Labour market actors and apprenticeship governance

Their participation needs to be strengthened in many countries, especially those with strong traditions in school-based VET.

In several countries explored in the papers, the renewed attention to apprenticeships of last decade was followed by the intention to give more roles and responsibilities to labour market representatives. This goal was pursued, drawing inspiration from countries with well-established apprenticeship systems. However, a better look at the nature of the roles and responsibilities foreseen for labour market actors reveals significant differences among countries (¹³⁶).

Although there are steps towards greater inclusion of labour market actors in platforms and bodies where State and education stakeholders are also represented, their real (joint) decision-making power in relation to apprenticeships remains a challenge. Quite often they only participate in an advisory role. In several cases, these platforms and bodies are not apprenticeship specific, but cover all VET options, potentially limiting the impact labour market actors may have on apprenticeship in particular. Regardless of their level of responsibility, these bodies may have a partial mandate due to a fragmented process of identifying and designing the apprenticeship offer. Some bodies are tasked to identify apprenticeship occupations or specialties/programmes, some only approve such an identification, and some take such an identification as input and focus solely on developing the corresponding curricula.

There are also differences in the type of labour market actors involved in apprenticeship governance when it comes to identification of occupations or curriculum development. In most countries, such involvement is primarily at the level of higher-level representatives (national or sectoral), who convey the needs of a whole sector or occupation and may have a longer-term perspective in mind. In other cases, the labour market actors involved in these decisions are single employers or small groups. Several papers showed that this approach might prioritise employer-specific needs over broader occupational interests.

The role of trade unions is not always pursued with the same attention given to employer representatives. This is a great opportunity lost, given the proactive

^{(&}lt;sup>136</sup>) Cedefop's report on the EFQEA implementation: a Cedefop analysis and main findings similarly highlights the differences in the mandates of participatory bodies and/or in the role of labour market actors in such bodies.

role trade unions can have in defining and ensuring apprenticeship training quality and in balancing apprenticeship governance, with a view to apprentices' future employability as workers, by different employers or sectors.

25.2. Balanced approaches for stakeholder participation

Participatory approaches are needed for greater transparency, improved trust and increased value but it is important to avoid lengthy and heavy processes.

Extended participation of (numerous) representatives of both the labour market and education in deciding apprenticeship occupations, specialties or programmes and developing or approving curricula has raised concerns. Excessive complexity of governance makes processes heavier and causes delays in carrying out the various steps. Striking a balance between lean processes and ensuring a participatory approach is a key issue.

In some EU countries, less participatory approaches are followed regarding the identification of apprenticeship occupations or development of standards or curricula, using the argument of speeding up processes. In some cases, participating companies have an almost exclusive say on what they can train, as demonstrated by the papers on both apprenticeship governance and in-company training; education providers and higher-level labour market representatives have a much-limited role in designing apprenticeship training. This approach may attract more companies but often comes with concerns about the sufficiency and quality of the training offered, especially at the workplace, limiting comparability or learning outcomes and value of qualifications.

In contrast, extended participation by both labour market and education representatives in deciding apprenticeship occupations, specialties or programmes and developing or approving curricula brings benefits in many levels.

First is that apprenticeship programmes are better targeted (where needs exist) and better designed (their content matches these needs better). Sector representatives contribute labour market expertise, bringing their knowledge of sector needs, of which competences can be easily developed during in-company training, and which ones are difficult or less suitable to be developed that way. Individual companies see their needs reflected in the apprenticeship offer and the content of programmes, and can be better prepared to participate.

Transparency and trust in the process is also significantly enhanced. Centralised, participatory approaches may improve comparability and consistency within qualifications, and consistency in how one relates to another. The fact that companies may know that their representatives had a say in the process can help increase trust and make them more open to participating in apprenticeships.

Participation by labour market representatives helps build a common ground around apprenticeships: what they are, what they are for, and what they entail. Stakeholders from both the labour market and education sit together in more opportunities and exchange ideas. This helps improve understanding of each other's views on apprenticeship and convergence on common interest.

What may be questioned are not the benefits and value of participatory processes, but the level of detail sought when defining apprenticeship occupations, specialties or programmes, so that the processes do not become too slow and rigid. Responsiveness to emerging labour market needs can be a valid pursuit, but without risking the value of the qualifications gained in the long run, or within a broader sector. Greater labour market responsiveness is one of the added values of apprenticeship compared to other training options. Rapid changes in technology and crises such as the recent COVID-19 pandemic push for increasingly faster adaptation of apprenticeship provision. Balance between addressing emerging, pressing labour market needs, and ensuring that apprentices are deeply and sufficiently trained to be useful to their future employers in the long term is needed. How should immediate and longer-term oriented learning outcomes be balanced? Could apprenticeship curricula be built as a combination of a must-have, core block of learning outcomes in an occupation that changes little over time, and add-on ones that are flexibly adjusted to changing technology and market demands? In this way, adjustment to curricula can be faster, as it will be focused mostly on the flexible part. Relevance and swift adjustment to changing needs can be served, at the same time maintaining a core that serves comparability of the learning outcomes and qualifications achieved across the occupation and between cohorts. This way, comparability of learning experiences and qualifications will be less challenging, and apprentices can be valued by a greater pool of future employers.

25.3. Regional and local level cooperation

Participatory processes and structures are also needed at regional and local levels, underpinned by feedback loops with national level ones.

A general direction towards closer collaboration of national authorities and labour market representatives (employers and employees) is evident, as national level bodies have been established or reinforced in several European countries. National, high-level collaboration has become more frequent in the past decade, but cannot always sufficiently ensure effective and quality collaboration.

Extensive and structured collaboration at the national level does not always trickle down to levels of apprenticeship governance. For example, despite

collaboration at selection of occupations or curricula design, VET providers, individual companies (or even learners) are often left alone to bear the burden of many tasks, such as finding an interested counterpart or adapting national curricula to specific company settings. In such cases, the good intentions and benefits introduced at higher level, are weakened by the less participatory approaches followed at lower levels.

There is a need for participatory structures at meso- or local level too, which would give labour market actors a role and an opportunity to step in and support individual companies and apprentices at the implementation level if needed. Their role could be to improve how they collect and convey to higher levels the needs of local labour market and learners, to adapt further the content and objectives of incompany training, to contribute to its delivery, to monitor training provision or assess its outcomes, to support companies and reach out to the right audiences at local level. These labour market representatives could be working closely with VET providers. The more such collaborative structures are set in a clear and permanent/structured way across governance levels, instead of a pilot, project-based one, the higher seem the benefits for such collaboration.

Not all strategic apprenticeship-related decisions are to be taken exclusively at national level, as representatives at this level may lack evidence, field experience and resources to contribute in certain topics. Different labour market representatives can be represented at different levels. Feedback loops from local and regional level labour market actors upwards are essential, so that the needs of companies, sectors and potential apprentices in terms of knowledge and skills are better grasped. Identifying the right mix and level of representation, that enables complementarity among levels, is a key issue.

25.4. Comparable learning experiences for apprentices

In-company training requirements need to ensure comparability of learning experiences for all apprentices.

There is a concern among apprenticeship stakeholders that standardisation of apprenticeship experiences, such as through introduction of requirements for companies or trainers, or closer use of learning agreements, may discourage companies. This concern is perhaps even stronger in countries with less developed apprenticeships, where company participation is less strong.

The papers, however, provide evidence to support the opposite: in the long run, apprenticeships and the stakeholders involved may benefit from standards and regulations, when it comes to regulating training. Examples come both from the design and the implementation levels, and may refer to curricula and training plan development, monitoring processes for in-company training, and accreditation of companies or trainers. Such arrangements are seen as successful, engaging companies and leading to trust and value of apprenticeships.

While flexibility in in-company training design and delivery might be a strong incentive in terms of better alignment to employer needs, absence of a meaningful minimum of standardisation comes with significant challenges. First, it might be a burden, a counterincentive for employers to provide apprenticeship placements due to the significant resources that need to be used for learning to meet certain standards. Often, the greater the room for flexibility and adaptation, the greater the pressure put on trainers to cover the gaps, and the time needed to communicate with VET providers to fine tune what should be taught where and check if it is actually taught. This is more pressing in smaller companies, where staff, limited in numbers, lack the capacity to plan and organise training. In the longer-term, excessive room for adaptation might be perceived as lack of formality and clarity (¹³⁷).

Where different employers or groups of employers within the same sector can develop their own apprenticeship standards, concerns over the comparability and transferability of learning outcomes are frequent. Excessive company-specific training may limit the value of the qualification as perceived by other future employers and the education community. But standardisation favours comparability of learning experiences and therefore increases trust in the qualifications obtained and value of apprenticeships.

Higher standardisation or formality within an apprenticeship scheme seems to be self-reinforcing. Apprenticeship-specific standards and detailed requirements for companies seem to be easily complemented by guidelines and manuals with references to existing structured settings. Where formality of the system is lower, or just a formality, there is greater need for case-by-case cooperation among teachers and company trainers in agreeing and planning the training content, in monitoring apprentice development, in addressing cases where training is not at the desired level etc. This eventually increases the cost of scaling-up apprenticeship schemes to a sustainable size.

It can be argued that having clear standards and regulations when it comes to in-company training design and delivery might be a more effective and efficient approach, especially in the long run. Even more, if they are properly balanced and developed in a participatory way, they may provide a welcome framework for companies and not push them away as various stakeholders fear.

^{(&}lt;sup>137</sup>) This is backed up by Cedefop's experience from the thematic country review of apprenticeship in various EU Member States (TCRs), which showed that in countries with low participation, employers considered the lack of procedures and clear responsibilities as a strong counterincentive for their participation.

Individual companies alone may be inclined to prioritise short-term over longterm benefits from participating in apprenticeships, and so may value any type of interaction with apprentices. It is primarily labour market representatives and the State, having the bigger picture in mind, that need to overcome reservations of raising quality and actively engage in shared development of such standards.

25.5. Quality workplace training

A shift in stakeholder and company attitudes towards quality training at the workplace is necessary.

Apprenticeship is a training option that requires significant investment in time, money, and infrastructure from all actors involved (including apprentice time). It is an investment that needs to be safeguarded not only through standards but also by achieving a shift in company attitudes towards quality training at the workplace.

Introducing clear expectations for learning, even if they are not always met by companies, pushes stakeholders to develop alternatives and put them into action when needed, instead of overlooking or downplaying the fact that companies underdeliver. Such alternatives may include structured apprentice-sharing/rotation schemes or training at social partner centres, or inter-company training schemes. Options may differ depending on company size and motivation to adopt strategies to guarantee training quality.

It is generally claimed that it is easier for bigger companies to participate in apprenticeships and provide quality training, either because of the availability of infrastructure and qualified staff for in-company training, or the overall existence of structured training strategies. For example, rotation schemes across various departments or sites of the same company are an option often used by bigger companies. In contrast, smaller companies may have a more informal approach to working and learning processes and employee development.

This, however, does not necessarily lead to a restrictive learning environment because individuals may have a greater say in what they learn and how they learn it. Apprentices in large companies may be trained on more modern equipment and processes, and could benefit from structured rotation; in small companies they can benefit from being introduced to a wider range of activities, that require both technical and transversal skills, to assist in overall organisational tasks, sales or customer support rather than 'production' alone.

This is also a matter of motivation: there are companies involved in apprenticeships to gain in the short term, by substituting regular employment with cheaper labour, seeing apprentices as another pair of hands to keep operating as usual. There are others that see apprenticeship as an investment in future workforce, that can follow and also lead changes in technology, production processes and business models. The more the motivation of employers is linked to long-term benefits, the greater the chances to provide quality and broader training.

Acronyms

Austria	IBW	Institute for Economic Research in Education
Belgium German-speaking Community	IAWM	Institute for vocational and educational training in small and medium-sized companies
	WSR	Economic and Social Council
Belgium Flanders	AHOVOKS	Governmental Agency for Higher Education, Adult education, Qualifications and Study grants
	SYNTRA	Flemish Agency for Entrepreneurial Training
Belgium French-speaking Community	CEFA	<i>Centres d'Education et de Formation en Alternance</i> – Vocational education providers
	IFAPME	Institut wallon de formation en alternance et des indépendants et PME – Vocational training providers
	OFFA	French-speaking Belgium Office of apprenticeships
	SFMQ	French-speaking service for trades and qualifications
	SFPME	<i>Espace Formation PME</i> – Vocational training providers
Bulgaria	NAVET	National VET Agency
Cyprus	MoECSY	Ministry of Education, Culture, Sport and Youth
	NMA	New modern apprenticeship
Ireland	CSG	Consortium Steering Group
	EGFSN	Expert Group on Future Skills Needs
	QQI	Quality and Qualifications Ireland
	SOLAS	Further education and training authority
Italy	ANPAL	Technical agency for active labour market policies
	ITP	Individual training plan
France	CPC	Professional advisory committee
	OPCO	Skills operator
	RNCP	National register of vocational qualifications
Germany	AEVO	Ordinance on Trainer Aptitude
	BBIB	Federal Institute for Vocational Education and Training
	BBiG	Vocational Training Act
	BMBF	Federal Ministry of Education and Research
	DGB	Trade unions
Greece	EPAL	Vocational school (EPAL apprenticeship: post- secondary year – apprenticeship class)

EPAS	Apprenticeship schools (of public employment service)
IEP	Institute of Educational Policy
OAED	Manpower Employment Organisation
QVETDC	Qualifications and VET Development Centre
MoESS	Ministry of Education, Science and Sport
SPCs	Sectoral professional committees
STRATA	Government Strategic Analysis Centre
BPV	Work placement (beroepspraktijkvorming)
MBO	Upper secondary vocational education (<i>Middelbaar Beroepsonderwijs</i>)
SBB	Foundation for Cooperation in VET and Labour Market
KSZB	Classification of professions for branch schooling
ORE	Centre for Development of Education
SBI	Branch schooling (type of VET offer) (<i>szkoła</i> branżowa pierwszego stopnia)
CNQ	National catalogue of qualifications
IEFP	Institute of Employment and Vocational Training
SNQ	National qualifications system
CITB	Construction Industry Training Board
DfE	Department for Education
ESFA	Education & Skills Funding Agency
II R	Individualised learning record
	IEP OAED QVETDC MoESS SPCs STRATA BPV MBO SBB KSZB ORE SBI CNQ IEFP SNQ CITB DfE

General acronyms

CVET	continuing vocational education and training	
CVTS	continuing vocational training survey	
EAfA	European Alliance for Apprenticeships	
ECVET	European credit system for vocational education and training	
EFQEA	European framework for quality and effective apprenticeships	
EQF	European qualifications framework	
ESF	European Social Fund	
EU	European Union	
ICT	information and communication technologies	
IVET	initial vocational education and training	
NQF	national qualifications framework	
OECD	Organisation for economic cooperation and development	

SMEs	small and medium-size enterprises	
STEM	science, technology, engineering and mathematics	
UK	United Kingdom	
VET	vocational education and training	
WBL	work-based learning	

Annex 1. Methodology

This publication is a compilation of 21 contributions drafted between June 2020 and January 2021 by experts who were members of the Community at the time of writing the papers. In some cases, community experts shared drafting of their contribution with colleagues of their choice, as indicated in the corresponding chapters. In the case of Romania, an external author, Catalin Ghinararu, was proposed by the national expert to submit a contribution on the Romanian scheme.

The papers are based on experts' own and/or other existing research and evidence, on their own expertise and insights, and, in several cases, on interviews with selected apprenticeship stakeholders.

Apprenticeship governance	Apprenticeship in-company training
Belgium – Flemish Community	Austria
Belgium – French-speaking Community	Cyprus
Belgium – German-speaking Community	Denmark
Bulgaria	Germany
France	Greece
Ireland	Italy
Latvia	Poland
Lithuania	Portugal
Luxembourg	UK-England
Netherlands	
Romania	
Sweden	

Table A 1. Topics covered by experts

Source: Cedefop.

Apprenticeship expert for	Scheme explored in the corresponding paper
Austria	Dual apprenticeship
Belgium – Flemish Community	Dual learning scheme
Belgium – French-speaking Community	Dual training
Belgium – German-speaking Community	Apprenticeship
Bulgaria	Work-based learning
Cyprus	New modern apprenticeship
Denmark	Apprenticeship

Apprenticeship expert for	Scheme explored in the corresponding
	paper
France	Apprenticeship contract
Germany	Dual VET
Greece	EPAL Apprenticeship
Ireland	Apprenticeships
Italy	Type 1 apprenticeship
Latvia	Work-based learning
Lithuania	VET in a form of apprenticeship
Luxembourg	Apprenticeship contract
Netherlands	Dual pathway
Poland	Vocational preparation of juvenile workers
Portugal	Apprenticeship programmes
Romania	Apprenticeship at the workplace
Sweden	Apprenticeship in upper secondary school
UK-England	Apprenticeships

Source: Cedefop.

The topics of apprenticeship governance in relation to labour market needs and in-company training delivery were the most preferred among the Community members, as expressed in a dedicated poll. Experts volunteered to develop the scope and objective of each topic through participating in a preparatory working group (one for each topic). Their proposals were presented and discussed in the 2019 Annual meeting of the Community. To assist and guide experts' work further, Cedefop elaborated guidelines upon which the papers were drafted, reviewed the contributions, and organised a voluntary peer-review round among experts.

The aim in terms of apprenticeship governance was to understand its strengths and weaknesses in relation to how apprenticeship demand is met, through a short description and a thorough assessment of what works or what does not work in practice (and why). The research question addressed to interested experts was 'How can governance facilitate an effective link and cooperation between labour market actors and VET actors, to meet apprenticeship demand?'.

The aim in relation to apprenticeship in-company training was to understand the strengths and weaknesses in design and how the organisation of in-company training delivery works (or not), by looking at the role of in-company training staff and pedagogical approaches in the work-place. The research question addressed to interested experts was 'How is in-company training designed and delivered at employer level to ensure comparable learning outcomes leading to the same qualification and parity of opportunities among learners and employers?'

APPRENTICESHIP GOVERNANCE AND IN-COMPANY TRAINING: WHERE LABOUR MARKET AND EDUCATION MEET

Cedefop community of apprenticeship experts: short papers

There is an increasing shift of attention from expanding apprenticeships to improving their quality and effectiveness. This brings into focus how apprenticeship is governed for greater relevance and matching to labour market needs, and how the content of what is taught at the workplace is designed and delivered.

This publication comprises papers drafted by members of Cedefop's community of apprenticeship experts on these two topics. To complement the country-specific angle, Cedefop developed a comparative, cross-scheme and cross-country analysis and shared its reflections.

The publication further documents Cedefop's understanding that approaches to each topic may vary significantly between individual EU Member States. It also highlights that, even in cases of relative convergence, the fine details of how an apprenticeship scheme is designed and governed can make a significant difference to its relevance and quality, at least in stakeholders' perceptions. Policy-making should take note of such details and their interconnections to understand how reforms can be better targeted and more effective and efficient.



European Centre for the Development of Vocational Training

Europe 123, Thessaloniki (Pylea), GREECE Postal: Cedefop service post, 570 01 Thermi, GREECE Tel. +30 2310490111, Fax +30 2310490020 Email: info@cedefop.europa.eu www.cedefop.europa.eu



