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**CULTURE AND EDUCATION**

**DUAL EDUCATION: A BRIDGE OVER  
TROUBLED WATERS?**

**STUDY**

**EXECUTIVE SUMMARY**

**Abstract**

This study examines the strengths and weaknesses of dual education/apprenticeships and explores policy developments in the EU-28 in relation to the introduction and/or improvement of apprenticeship schemes. The study is based on data from a variety of sources, including academic literature and in-depth research in 10 EU countries. It identifies the characteristics of four main forms of VET delivery in relation to the role of work-based learning and suggests ways that countries could promote apprenticeships within the context of their educational, social and economic frameworks. It also provides recommendations to country and European policy makers that may be used to improve the vocational and training offer across Europe.

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## EXECUTIVE SUMMARY

The economic crisis has had a profound impact on young people who face major difficulties in finding employment. As such, 'Dual education'<sup>1</sup> or apprenticeships more precisely are high on the policy agenda. There are a number of important initiatives that promote learning that combines theory and practice within a company. These initiatives include the European Alliance for Apprenticeships, Youth Guarantee Schemes, the ILO work on the quality of apprenticeships and the OECD Skills Strategy. Countries are attentive and many have developed new schemes (CY, DK, EL, ES, FI, HU, IE, IT, LT, PT, SE, SI); upgraded existing ones (AT, DE, DK, EL, FI, FR, IT, NL, PT, PL, UK (ENG)) or introduced reforms to strengthen work-based learning in vocational education and training (VET) (e.g. by improving the quality of guidance; CZ, DE, FR).

The benefits of high **quality** apprenticeships for the individual, employers and society are broad and well documented<sup>2</sup>. The benefits combine skills and competence development (including skills harder to develop in the classroom), the development of a professional identity, greater employment opportunities, school-to-work transition, productivity gains and improved recruitment and retention for employers<sup>3</sup>. Nevertheless, apprenticeships are far from being a core track of VET in most EU countries. Countries where apprenticeships are a popular option with a good reputation amongst young people, their parents and employers are limited to a few (mainly AT, DE and DK). The main aim of this study was thus to understand different forms of 'dual education' and consider why some countries are more likely to develop certain models rather than others.

### State of play and factors influencing the development of alternance pathways

There is at least one pathway offering a systematic combination of work-based and school-based learning in the vast majority of EU countries. Many countries have two pathways where each combines the two venues but in a different manner (e.g. FR, FI, NL). There are however important variations in the popularity of these pathways. In a number of countries apprenticeships exist but only represent a small part of the VET system and are often perceived as second choice.

The study shows that alternance schemes may be more or less open in terms of access. In apprenticeships, students must find an employer willing to take them on for a sustained period of time. This implies certain barriers on entry as employers are more likely to take on young people who demonstrate high potential, at the risk of excluding vulnerable young people, particularly in systems where the number of apprenticeship places is insufficient compared to demand.

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<sup>1</sup> It should be noted that there is no agreed and broadly used definition of the term dual education. Therefore, the study differentiated between a) apprenticeships, where learners have a clear apprentices or employment status underpinned by a contract but at the same time result in formal vocational qualifications with national recognition; b) alternance schemes that integrate in-company training periods into formal vocational education and training through other means than the apprenticeship; and c) work-based learning as a pedagogical approach promoting learning in the context of a company, based on real working tasks.

<sup>2</sup> European Training Foundation (ETF) (2013), *Work-based learning: Benefits and obstacles a literature review for policy makers and social partners in ETF partner countries*.

<sup>3</sup> European Commission (2013j).

## The main models of VET programmes analysed

This study explored the key types of VET systems that can be found across the EU. These include: the 'fully-fledged apprenticeships'/dual system as the main VET model<sup>4</sup>; apprenticeships that exist as a smaller and parallel pathway to other VET tracks<sup>5</sup>; school-based VET with strong elements of work-based learning<sup>6</sup>; and predominantly school-based VET systems<sup>7</sup>.

Analysis indicates that 'fully-fledged apprenticeships' are based on *structural characteristics of the VET system*. As such, the success of these systems in providing graduates with qualifications that lead to high employability prospects rely on these structures. More specifically:

- apprenticeships are the main path towards VET qualifications;
- apprenticeships are offered for a greater number and broad range of qualifications<sup>8</sup> that are highly regarded in the labour market;
- apprenticeships have been shaped in their current form gradually, reflecting economic and sectoral developments in the countries;
- apprenticeships are highly regarded by society, which leads to increased participation rates, especially from high achievers;
- in terms of their quality in both learning venues (school and company), financial and administrative support lies under the responsibility of several actors (National authorities<sup>9</sup>, educational organisations/providers and business associations/Chambers), which closely collaborate through established links and legal regulations;
- key to the success of apprenticeships is the participation of social partners and especially employers together with their close cooperation with relevant authorities and VET schools.

## VET reforms across the EU

In the past five years, most EU countries have undertaken reforms to their VET system. Analysis carried out as part of this study shows that despite significant differences in their VET systems, countries share six common reform drivers (see Table 1). However, these drivers are interpreted differently in each country. Common challenges can however allow countries to develop shared views, develop broad frameworks of action, and benefit from peer learning. Nonetheless, country-specific solutions and implementation processes should be developed.

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<sup>4</sup> Denmark, Germany. The dual system is also in place in Austria, but school-based VET plays an equally significant role in that country.

<sup>5</sup> Greece, Poland, Italy, France, Netherlands and the UK (England).

<sup>6</sup> Finland, France, the Netherlands, Portugal.

<sup>7</sup> Czech Republic, Greece (before the 2013 reform) and Poland.

<sup>8</sup> AT: 206 legally approved qualifications, DE 348 training occupations, DK: 12 foundation courses which are the basis for 109 main programmes comprising different steps and specialisations leading to a total of 309 recognised qualifications.

<sup>9</sup> AT: Federal Ministry of Economy, Family and Youth; DE: Federal Ministry of Education and Research, DK: Ministry of Children and Education.

**Table 1: Six key reform drivers in the 10 selected EU countries**

|   | Key drivers for reforms                                                     | Countries                              |
|---|-----------------------------------------------------------------------------|----------------------------------------|
| 1 | Divergence between VET and labour market/<br>Improvable employer engagement | CZ, FI, IT, PL, PT<br>CZ, DE, UK (ENG) |
| 2 | Quality and efficiency challenges in VET/alternance schemes                 | DE, FI, NL, UK (ENG)                   |
| 3 | High youth unemployment                                                     | EL, FR, IT, PT                         |
| 4 | VET/alternance schemes less attractive than other tracks                    | CZ, FI, NL                             |
| 5 | High rates of early school-leavers and drop-outs                            | FI, PT                                 |
| 6 | Demographic challenge/ageing population                                     | DE, CZ                                 |

**Source:** ICF International research on the selected countries

Regardless of the type of VET/alternance scheme in place, mainly countries face the challenges of:

- finding placements, i.e. engaging employers;
- coping with increased costs due to reforms at a time when state funds are limited;
- ensuring quality of new and existing alternance schemes.

**Employers** may be reluctant to participate in schemes due to the adverse effects of the economic crisis, but also due to sector-specific developments (for example, retirement of baby-boomers that creates gaps in the availability of experienced in-company trainers). Financial incentives to employers are considered as one way of generating more placements, though in practice more incentives do not necessarily lead to more placements. Incentives are more effective when they target specific sectors where employer engagement is low<sup>10</sup>; and when employers are not burdened with high levels of bureaucracy.

The role of employers is also relevant to characteristics of the company, i.e. its size and that economic sector it is active in. The majority of employers in the EU are not only SMEs, but also micro companies<sup>11</sup>. Micro companies, given their size, have limited placements to offer with a limited infrastructure. Moreover, they may not be able to provide apprentices with the training required to obtain a full qualification. This creates challenges especially in the 'fully-fledged apprenticeships', where apprentices usually obtain the full qualification from one employer.

<sup>10</sup> Mühlemann et al. (2005) in Hoeckel K. (2008), *Costs and Benefits in Vocational Education and Training*.

<sup>11</sup> Employ up to 10 people.

The type of jobs a sector offers shapes the content of apprenticeships. For instance, high-tech sectors, such as IT, where the field of work many companies operate within can be highly specialised. In this case, apprentices may be trained in a way that potentially limits their capacity and capability to keep up to date with the ongoing developments in their field.

A further issue is the **quality** of placements and their learning potential. In the absence of a high quality learning experience, the potential of work-based learning cannot be realised (and may actually result in non-learning). To maximise the quality of work-based learning, countries where VET relies strongly on apprenticeships have sophisticated governance and quality assurance mechanisms in place. However, for countries where employers are not already strongly engaged and committed, these quality assurance models are likely to position the bar too high and require too much investment from employers. The quality of the learning experience is a result of many factors that include company culture, company strategic vision as well as the specific conditions of each apprentice (training programme, social interaction, tasks required, etc.).

### **Supporting the development of apprenticeships on an EU level**

The importance attributed to apprenticeships, the provision of peer learning pathways and financial support from the European Commission to Member States facilitate the improvement and introduction of schemes across countries. This augmenting interest in apprenticeships should be coupled with strict quality controls to avoid situations where apprenticeships are used as cheap labour or where companies substitute unskilled employees with apprentices. This adverse behaviour will further reinforce negative perceptions with parents and students, particularly in countries with limited or no experience with apprenticeships, thus hindering the scope for their development and potential success.

At the same time, although financial support from ESF is significant in the development/improvement of apprenticeships/alternance schemes, some schemes may be over-reliant on ESF. Countries should be encouraged to base their schemes on pro-cyclical funding models, and rely on national/regional resources to the extent possible.

### **Points for consideration**

Countries should develop/improve their VET system keeping in mind their policy, labour market, educational and cultural framework. Shifting to a 'fully-fledged apprenticeship system' may not be suitable for all countries. Whilst the German system can be considered successful, it may not be appropriate for implementation in all countries, especially those with different labour market structures and little/no experience in apprenticeships. Research has highlighted that even well-established systems face considerable challenges and that there are areas for improvement. As such, it is legitimate to say that there is in fact no 'one best system', but rather a range of successful structures and practices that can be considered inspirational.

Countries that are currently introducing apprenticeship/alternance schemes should consider apprenticeships as an effective tool for quality training and as a way of increasing the employability prospects of graduates. They should not consider apprenticeships however as a tool to automatically reduce youth unemployment rates or lead to a high-quality VET system. Some key points should be taken into consideration:

- an infrastructure that is equipped with adequate resources that is complemented with a supportive labour market and education structure is essential;
- significant time may be required before the benefits/improvements are obvious or measureable, when developing/improving apprenticeship/alternance schemes;
- new schemes should be selectively implemented in priority sectors<sup>12</sup> rather than across all qualifications and sectors. This gradual implementation can allow countries to take small but firm steps towards the engagement of employers and learners, identifying challenges along the way, and secure appropriate funds and resources;
- introducing apprenticeships will not automatically make VET more attractive or make graduates more employable. The attractiveness of VET is influenced by several factors, mostly related to local culture, economic structure and the education system itself. Country research highlights particular factors (e.g. perceptions, gender and the level of students' awareness of apprenticeships) that can create bottlenecks in popular apprenticeships/qualifications, or on the contrary lead to decreased demand from students. Such issues can be found even in countries where work-based learning is strongly embedded in VET (e.g. FI);
- measures to support SMEs should be broken down further for micro companies, especially if they hold a significant share of employment;
- the key role of social partners, especially employers, as well as their firmly regulated collaboration of national authorities highlights the need to adjust apprenticeships in the country policy, labour market and cultural context. This is particularly relevant to countries that have no or little prior experience in introducing apprenticeships;
- in sectors where professionals require a high degree of specialisation and continuously need to enhance their knowledge and upgrade their skills, apprentices should be trained in several companies and not limited to just one.

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<sup>12</sup> Regarding economic targets and sectors that are already involved in other alternance schemes and/or collaborate with VET schools and authorities.