

WORK-BASED LEARNING

A HANDBOOK FOR POLICY MAKERS AND SOCIAL PARTNERS IN ETF PARTNER COUNTRIES



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1. INTRODUCTION

1.1 PURPOSE OF THE HANDBOOK

All of us learn when we work. We watch our fellow workers and imitate them. We make mistakes and do better the next time. More experienced workers show us how to do things. Much of this learning is not systematic, and it is not formally organised. It often occurs randomly or by chance, and so some workers benefit while others do not. Sometimes it is useful, and sometimes it is not.

This handbook has been written to help policy makers and social partners – organisations that represent employers and employees – to understand some of the ways in which learning in the workplace can be encouraged and how its quality can be improved. It is also intended to help them to understand some of the ways that such learning can be organised in a structured way so that it benefits learners, enterprises and employees, and so that it provides wider benefits for the labour market and the economy as a whole¹.

Policy makers, social partners, and vocational education and training (VET) institutions (schools, colleges and training centres) all sit outside individual enterprises. The handbook tries to show what they can do in a practical way to help enterprises to introduce and improve structured work-based learning².

- It concentrates on work-based learning that is part of VET, but is not limited to this.
- It has a particular focus on the needs and circumstances of middle- and low-income countries.
- It tries to focus on opportunities – on what is possible, not on problems and barriers.
- As far as possible it tries to suggest options rather than provide solutions.

The handbook deals with nine topics:

- why work-based learning matters;
- features of middle- and low-income countries that should be taken into account when thinking about work-based learning programmes;
- the different types of work-based learning programmes, and what should be considered when choosing between them;
- the relationship between work-based learning and learning that takes place in classrooms;
- some of the ways in which work-based learning programmes can be started and expanded;
- how to make sure that work-based learning programmes are of high quality;
- how to assess and recognise work-based learning;
- financing work-based learning;
- governing and managing work-based learning programmes.

1.2 WHAT IS WORK-BASED LEARNING?

Work-based learning refers to learning that occurs when people do real work. This work can be paid or unpaid, but it must be real work that leads to the production of real goods and services.

- Some enterprises, particularly large ones, have their own training classrooms or workshops, and employees take time away from work to attend training sessions in them. This type of training was

¹ It complements other reports on work-based learning that have been published by the European Commission and its agencies, including the ETF, which can be consulted for detailed references to research on the benefits of work-based learning. See details at the end of this handbook.

² A glossary of some of the common terms used in discussion of work-based learning can be found at the end of this handbook.

very common in many countries of the former Soviet Union. This is not work-based learning. It is simply classroom-based learning that happens to take place in an enterprise rather than in an educational institution.

- This handbook concentrates on work-based learning that is part of VET. This type of learning is hardly ever stand-alone, but is usually combined with classroom-based learning.
- Some schools and colleges use virtual firms, practice firms, simulations and the like. These are not a substitute for the real thing, as they cannot create all of the features of a real workplace, but they can be useful when the alternative is difficult to access. Section 4.2 discusses this in more detail.

2. WHY WORK-BASED LEARNING MATTERS

2.1 BENEFITS FOR STAKEHOLDERS

There are a number of reasons for policy makers, individual companies and social partners to be interested in introducing, expanding and improving the quality of work-based learning.

- **From the enterprises' point of view**, workplaces in which employees constantly learn new skills and new ways of doing things tend to be more productive and more profitable. They tend to be more innovative, be better at using employees' knowledge to improve product quality and customer service, and have lower staff turnover.
- **From the learners' point of view**, work-based learning can make their programmes of study more interesting and connect them more directly to the world of work. It can improve their job prospects by giving them more relevant work skills and by connecting them to employers who may offer them jobs after they graduate. This can be an important way of expanding opportunities and increasing social inclusion among groups that are disadvantaged in the labour market.
- **From the employees' point of view**, the chance to learn new things makes work more interesting. It encourages employees to be more interested in improving their career prospects, and increases the chances that they will undertake formal VET.
- **For public policy makers in initial, post-secondary and continuing VET**, work-based learning:
 - produces higher-quality skills that are more relevant to real work situations than does learning that occurs entirely in the classroom; and it produces skills that are likely to be more up to date with current practices in the workplace;
 - helps to strengthen cooperation between education and business, and to create strong links, both for individual students and for the system as a whole, between vocational education and the real demands of the labour market;
 - increases the link between learners and the labour market and so improves their chances of getting a job after they complete their training;
 - involves employers in designing and managing VET, thus increasing their confidence in the system;
 - makes economic sense, with costs shared between employers and government rather than all being met from the public purse; this means that government budgets should go further;
 - makes greater use of plant and equipment on employer premises for training, and so reduces the need to purchase expensive training equipment;
 - can create learning opportunities that many publicly financed VET schools and colleges cannot afford.
- **For those who run schools and colleges**, work-based learning:
 - can be a powerful way to develop generic skills such as team-work and problem solving, and basic work habits such as punctuality;
 - shows students the relevance of their courses to future jobs, and so makes them more interested in studying; this can be important for increasing participation and outcomes for disadvantaged students;
 - can be used in career guidance programmes to teach young people about what is involved in jobs and careers.
 - leads to better school-to-work outcomes: young people who have been involved in work-based learning are more likely to get jobs, as their skills are more relevant to employers' needs, they have better basic work habits, and their contacts with employers are stronger.
- **For policy makers in public employment services**, work-based learning:
 - can re-motivate those who are long-term unemployed and maintain their motivation to seek work;
 - increases unemployed people's contact with employers, and so can increase their chances of getting a job;

- is a way to develop new skills in a more interesting and relevant way than classroom-based training, particularly for people who have low levels of education.

2.2 WHAT ENCOURAGES EMPLOYERS TO TAKE PART?

Employers take part in work-based learning programmes for a number of reasons. One obvious reason, which applies to all types of programme, is that they are aware of the programmes and of their benefits. If they do not know about programmes, they are unlikely to take part. This highlights the importance of awareness raising, marketing and communication, in which employer organisations, trade unions and governments should all be involved. Marketing work-based learning programmes to small and medium-sized enterprises (SMEs), who are the least likely to know about them, is particularly important.

The reasons for taking part can depend on the nature of the programme and its quality. For example, in programmes such as work experience and unpaid work placements, where contact with the workplace is brief and those who participate are unpaid students, employers often take part so that they can screen trainees and check how suitable they would be as future workers, or to show that they are good members of their community or their industry, but expect few other direct business benefits.

Programmes such as apprenticeship, in which extensive training is provided over a long period, can produce more direct business benefits.

- Apprenticeships can meet the specific skill needs of a business more cost-effectively than recruiting skilled workers from the external labour market, as apprentices who have been trained in and understand the specific needs of the business can be more immediately productive than workers recruited from outside.
- They can be cost-neutral, or can even result in a net gain, when the productive contribution of apprentices offsets or exceeds the firm's training costs. For firms to be able to recover their training costs over the period of the training, the following conditions need to be met.
 - Apprentices need to be involved in productive work processes that develop recognised vocational skills as early as possible. This requires careful attention to the recruitment of quality apprentices so that motivation is high and drop-out rates are low (and this is easier where career guidance for potential apprentices is effective). It requires high-quality training in the workplace to quickly develop apprentices' skills. It also requires a high level of investment in training by the firm.
 - Apprentices' wages (or net wage costs if public subsidies are involved) need to be relatively low compared to the wages of skilled workers. However, to avoid apprentices being used simply as cheap workers, it is essential that high-quality training and the future benefit of their skills balance the lower wages that are paid during the training period.
- Such programmes produce a pool of skilled workers who can be promoted into more senior roles in the business in future years, and who can meet the firm's future needs for skilled workers.
- Apprenticeships can reduce labour turnover, as apprentices who are trained by a company are more likely to stay with it.
- They allow apprentices to develop the company's values and ethos, and this is important in cases where apprentices stay with the company after training.

SMEs dominate the labour market in many ETF partner countries. Being able to obtain net financial benefits during the training period can be particularly important for SMEs, as such firms are less likely than large firms to retain graduate apprentices as skilled workers. Training networks may be a way to reduce training costs for small firms, and so increase their willingness to train apprentices. Examples of these are given in Section 5.2.

2.3 KEY POLICY CHALLENGES OF WORK-BASED LEARNING

Companies often have large and well-organised internal work-based learning programmes as part of their human resource management systems. For example, employees can be rotated through different sections of the firm, linked to a mentor, or given challenging new job assignments or projects. These can be purely internal, and of little direct concern for policy makers. However, when these work-based learning programmes are linked to public education and training – for example, if students divide their time between the classroom and the workplace, if they have a curriculum that is common across many enterprises, or if employees receive public certificates as a result of such a programme – then public policy makers and employer and employee organisations become involved.

Similarly, many VET institutions have programmes that take place only in the classroom. However, when these programmes are linked to enterprises – for example, if students divide their time between the classroom and the workplace, and if they have a curriculum that is divided between the classroom and the enterprise – then public policy makers and employer and employee organisations become involved.

Cooperation and coordination: perhaps the most important challenge

Structured work-based learning programmes have a number of distinctive features that policy makers and employer and employee organisations need to take into account. Perhaps the most important is that no single ministry or organisation on its own can implement them. They are not like company internal training programmes or school and college courses, which can be conducted by firms, schools or colleges alone. Ensuring that such programmes are successful requires every key partner to work together. In practice this usually means more than one ministry (for example, education and labour) as well as employer and employee organisations. It means individual schools, colleges and enterprises working together, not just national employer and employee organisations and government ministries. Moreover, things need to be done at more than one level: nationally, regionally and locally. Coordination and cooperation are at the heart of successful structured work-based learning programmes.

Other challenges for work-based learning

Many of the other key challenges for work-based learning are discussed in this handbook, including how to decide the best combination of work- and classroom-based learning; how to start programmes and then sustain and expand them; how to decide which model of work-based learning is the best for a specific purpose; how to finance programmes; and how to make sure that the quality of programmes is high.

BOX 2.1 THE APPRENTICESHIP PROGRAMME AT INTERLINGE, CASABLANCA

Interlinge is a lingerie manufacturer in Casablanca (Morocco) that depends heavily on exports to a number of major European customers. Since 2004 the company has become very involved in apprenticeship training as a response to the need to increase output and quality through higher skill levels, as well as a shortage of appropriately skilled workers, despite high levels of unemployment. With the support of the German aid agency GTZ, Interlinge has created its own training centre to provide the classroom-based elements of its apprenticeship programme, and it now recruits new workers only through apprenticeship. Apprenticeship is the entry route for all categories of workers – for example mechanics and secretaries – not just those involved in clothing production. Apprenticeship is now a key part of the firm's human resource strategy: improving the quality of skills and training is a key element in its business strategy.

The firm has used its apprenticeship programme as a means of introducing, through newly recruited workers, a team-based and multi-skilled form of work organisation. This ensures that all workers acquire a breadth of skills and regularly rotate through a wide range of different tasks. The link between a strategy to increase skill levels through a combination of training and more effective work organisation has helped to change the enterprise culture towards greater responsiveness to the market and increased emphasis on the importance of people. This has resulted in a fall in turnover and absenteeism rates, and a rise in productivity of around 15% over a three-year period.

Extract from Sweet (2009)

FIGURE 2.1 WORK-BASED LEARNING – EVERYONE WINS



3. WORK-BASED LEARNING AND MIDDLE- AND LOW-INCOME COUNTRIES

3.1 SOME EXAMPLES OF WORK-BASED LEARNING IN MIDDLE- AND LOW-INCOME COUNTRIES

Many middle- and low-income countries have work-based learning programmes as part of their VET systems. Many have programmes that have been introduced relatively recently. This includes a number of ETF partner countries. Policy makers and the social partners can learn a great deal from these. The following examples illustrate the diversity of these programmes.

- **Algeria** has a well-developed formal apprenticeship system that sits alongside a strong tradition of informal apprenticeships. Based on legislation that was originally passed in 1975 and 1981, apprenticeship contracts cover occupations at semi-skilled, skilled, highly skilled, technician and advanced technician levels. Apprenticeships can last between 12 and 36 months, and two-thirds of the total time is spent within the enterprise; theoretical instruction takes place at public VET institutions or other training centres. In 2011, 250 000 young people were apprentices, accounting for around 40% of all those enrolled in VET.
- In **Georgia** a collaboration scheme between Tbilisi State University and Georgian enterprises to train company employees within a work-based learning programme is implemented through the EU's CHEMLAB project, supported and advised by the South Caucasus and Georgia Private Sector Development Programmes of GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit, Germany's international aid agency). The university offers theoretical and practical training that is complemented by real workplace learning in two partner companies. It is a good example of a work-based learning programme at tertiary level in which sharing resources and competences offers a solution for SMEs that are unable to offer a full range of training courses to their employees.
- In **Kosovo** a relatively new programme at the International Business College of Mitrovica builds three-month internships into all sub-degree- and degree-level courses in marketing and management, environmental and agricultural management, and public administration. Students must report on what they have learned in their placements against the learning objectives set for the internship. The college supplements internships with other forms of practical and work-based learning, such as field visits, guest lecturers and work-based projects.
- In **Moldova**, internships, which are normally unpaid, are an integral part of all upper secondary VET programmes. All students must complete at least one internship, and internships normally last for two to three months. Contracts between specific vocational schools and specific employers make it easier for students to find places. Students are monitored by teachers from their schools during their placements.
- In **Morocco** formal initial VET is offered in three forms: school-based, apprenticeship and alternance. These sit alongside a long tradition of informal apprenticeships in some industries. Apprenticeships are a relatively recent initiative, and are targeted at school drop-outs. The alternance model, which is seen as having equal status to school-based programmes, is based on principles built into the German dual system of apprenticeship training, and is supported by comprehensive legislation. It is largely concentrated in programmes that lead to the three highest levels of vocational qualifications. Alternance programmes normally last for two, or in some cases three, years, and at least half of the time is spent in the enterprise. All trainees and employers must sign a contract of training. Trainees are paid a subsidy by the employer, but are not legally regarded as employees. Those in the alternance system account for around 14% of all initial VET students.
- In **Turkey** work-based learning, known as traineeship, is compulsory in all upper secondary technical and vocational education: technical and vocational education accounts for around 44% of all secondary education. Traineeships sit alongside a large apprenticeship system, and both are governed by the same 1986 law. Under this law, all companies with 20 or more employees must

provide training places for secondary vocational education students, although the extent to which this actually occurs is not clear. Trainees are paid a wage that must not be less than 30% of the minimum wage; a contract is signed by the student and the employer.

- In **Ukraine** practical training in enterprises is a mandatory part of all secondary level VET courses. These courses account for about 26% of all upper secondary students. Around 20–30% of the total course time should be spent in an enterprise and a contract is drawn up for each placement. Students are paid a salary, part of which the enterprise pays to the school.

All these examples are from countries that are classified by the World Bank as either lower-middle-income or upper-middle-income countries. **TABLE 3.1** shows the ETF's partner countries classified in this way. This suggests that a lower level of gross domestic product (GDP) is not necessarily an impediment to the introduction of work-based learning programmes.

TABLE 3.1 ETF PARTNER COUNTRIES CLASSIFIED BY WORLD BANK INCOME GROUPS

Low income	Lower-middle income	Upper-middle income	High income
Kyrgyzstan Tajikistan	Albania Armenia Egypt Georgia Kosovo Moldova Morocco Syria Ukraine Uzbekistan	Algeria Azerbaijan Belarus Bosnia and Herzegovina Former Yugoslav Republic of Macedonia Jordan Kazakhstan Lebanon Libya Montenegro Serbia Tunisia Turkey Turkmenistan	Iceland Israel Russia

Source: <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD>; 2011 or nearest year

3.2 POLICY LESSONS FROM THESE EXAMPLES

- There is no one model of work-based learning that suits all middle- and low-income countries. Many instances can be found of middle-income countries that have more than one model: Morocco and Turkey are examples.
- Policy makers and social partners in middle- and low-income countries should look closely at models of work-based learning in countries that are similar to theirs: they should not just learn from work-based learning models in high-income economies. They should also be aware that many high-income countries do not have well-developed models of work-based learning (for example, the United States, Japan, Korea), so GDP is not the most important factor to take into account.
- In middle-income countries work-based learning programmes can be found at occupational and qualification levels ranging from semi-skilled to professional and tertiary, and they exist in a very wide range of industries and occupations. Policy makers and social partners should think beyond the traditional skilled manual trades when planning work-based learning programmes.

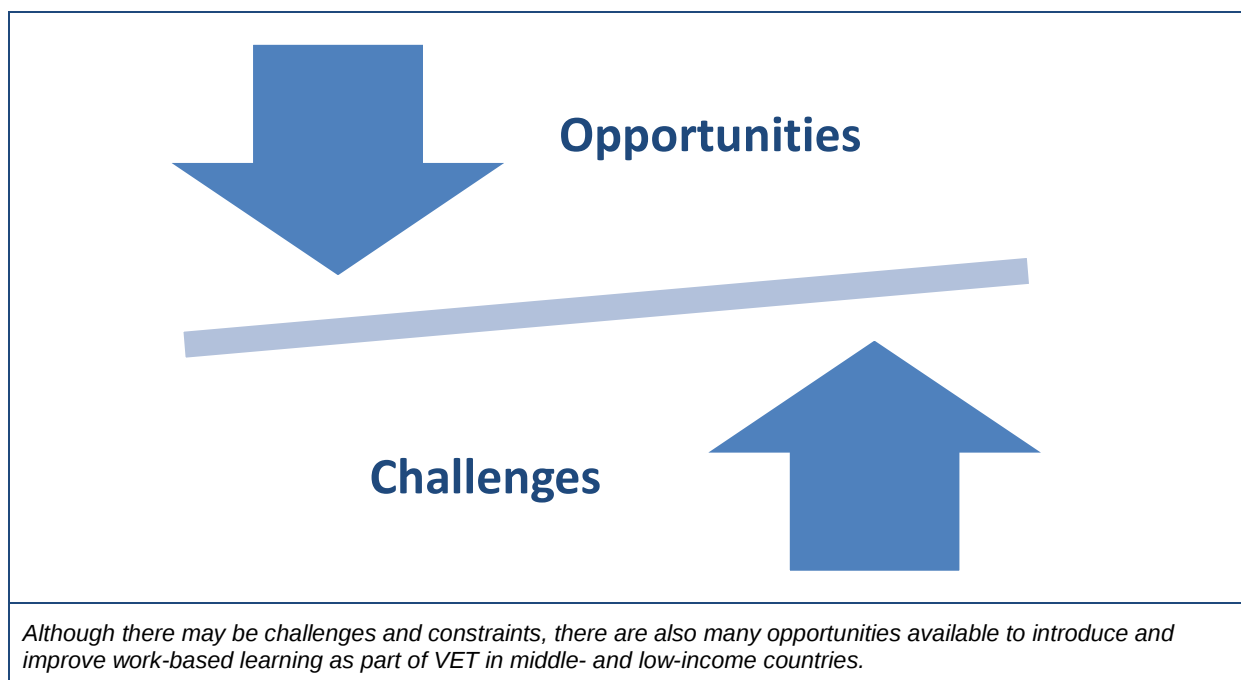
3.3 SOME CHALLENGES IN MIDDLE- AND LOW-INCOME COUNTRIES

- Employer organisations and trade unions may have relatively low membership, and membership may be uneven across sectors.
- The public funds available to support work-based learning might be limited, with a higher priority being given to other types of programmes.
- There may be a large number of very small and micro enterprises, and these are less likely than larger enterprises to provide training.
- Cultural factors such as the low status of blue-collar work or attitudes towards women's employment may limit participation.
- Unemployment may be high, particularly among young people.
- The informal sector of the economy may be large.
- There may be wide gender differences in participation in the labour market, as well as in post-compulsory education and training.
- Significant differences may exist in employment and education opportunities between regions and social groups.
- There may be no tradition of employers seeing training as part of their responsibilities.
- There may be no tradition of schools and employers cooperating.

3.4 QUESTIONS FOR POLICY MAKERS

- Some of these challenges also exist in some high-income countries. What does this mean for your country? Should they be taken as a limitation or an opportunity?
Where the same challenges have existed in high-income countries, there are a number of examples showing that they can be addressed.
 - The United Kingdom has managed to greatly increase apprenticeship numbers in recent years.
 - Sweden is currently trying to reintroduce apprenticeship after abolishing it in 1971.
 - In the mid 1990s Norway created a new apprenticeship system for young people, and numbers expanded rapidly.
 - In recent years Ireland has reformed and expanded its apprenticeship system.
- What lessons can be learned from middle-income countries that have well-established work-based learning programmes or that have introduced impressive reforms recently?
A number of examples exist.
 - Algeria, the Philippines, Fiji and Sri Lanka all have well-established apprenticeship systems.
 - Malaysia began to create a modern dual system of apprenticeship training in the mid 2000s.
 - China is putting substantial effort into improving cooperation between vocational schools and enterprises.
- What other ways can enterprises be contacted and involved if the social partners are not well organised? This might include, for example:
 - working at the local level;
 - working through other bodies to which employers belong, such as regional associations, community organisations and religious organisations.
- If resources are limited, and if there are some groups with greater needs than others, should priorities be set in terms of access to work-based learning programmes (e.g. for unemployed young people, members of disadvantaged minority groups). If so, how?

FIGURE 3.1 WORK-BASED LEARNING IN MIDDLE- AND LOW-INCOME COUNTRIES



4. MAKING A CHOICE BETWEEN DIFFERENT TYPES OF WORK-BASED LEARNING

This chapter outlines the main types of work-based learning programmes, discusses the advantages and disadvantages of each, and suggests some of the policy issues involved in making a choice between the different types.

4.1 POLICY ISSUES

- There are a number of different types of work-based learning programmes.
- These have different advantages and disadvantages: for learners, for employers, for schools and colleges, and for governments.
- Work-based learning can be used to achieve a number of different objectives, such as:
 - to develop vocational skills that contribute to recognised vocational qualifications;
 - to develop general work habits and job-readiness;
 - to help students to understand what is involved in jobs so that they make better career choices;
 - to give disadvantaged people and job seekers access to opportunities to work that they might not otherwise have.

A key issue for policy makers and social partners is how to choose the right type of programme for the right purpose, while best meeting stakeholders' needs.

4.2 THE MAIN TYPES OF WORK-BASED LEARNING PROGRAMMES

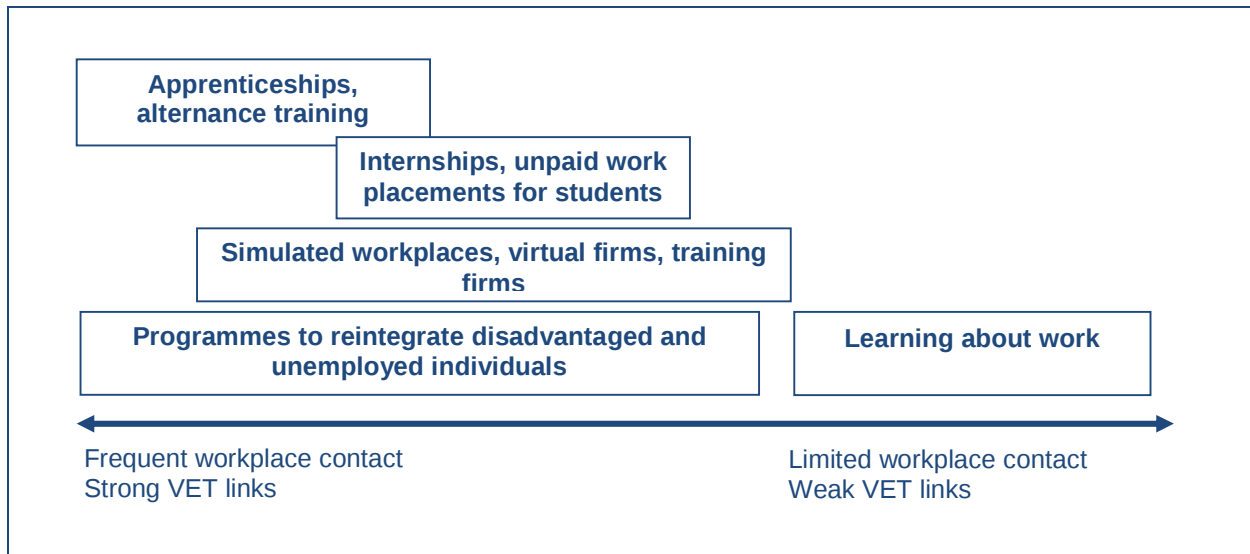
It is helpful to classify work-based learning arrangements into four main types³:

- arrangements in which the learner is legally an employee, such as formal apprenticeships, and in some cases alternance; in some cases informal apprenticeships may come under this heading;
- arrangements in which the learner is legally a student; these can be called by a number of names, including traineeships, internships, work placements and cooperative education;
- borderline cases such as virtual firms, training firms, or 'real' firms that are attached to and part of educational institutions;
- programmes such as work shadowing and work experience, the main aim of which is to teach the learner about work rather than to teach them to do work.

The differences between these are often not clear, as they can be quite similar. It is also important to be aware that wide variation can exist within each type.

³ This is not the only way to classify work-based learning programmes. Other publications give different, though similar, classifications. For example, in lower- and middle-income countries it may be useful for some purposes to think of the difference between well-established programmes with large numbers of participants, long-established programmes that remain quite small, and recent small pilot programmes. Different ways of classifying programmes will suggest different types of policy challenges.

FIGURE 4.1 TYPES OF WORK-BASED LEARNING PROGRAMMES



Source: Adapted from ETF (2013)

Where the learner is an employee: formal apprenticeships

Formal apprenticeships have the following features.

- The learner is legally an employee and is paid a wage. This wage normally reflects the lower productivity of the apprentice compared to a skilled worker, particularly in the early period of the apprenticeship, and the cost to the employer of providing training.
- A contract of employment and training is signed.
 - This is normally signed by the learner and the employer.
 - In many cases other parties such as the off-the-job training provider or parents may also sign it.
 - The contract normally specifies the duration of the employment and training period.
 - It normally specifies what each party to the contract is required to do: for example, to learn, to provide employment, to teach skills, or to attend regularly.
- The period covered by the contract is divided between work carried out in an enterprise and classroom-based education and training.
- The apprenticeship is closely integrated into the normal operations of the enterprise over the full working day, week, month and year.
- These arrangements are supported by legislation or regulations.

Formal apprenticeships commonly, although not always, have the following additional features.

- More time is spent at work than in classroom-based training.
- A recognised qualification is issued. Most commonly this is issued by a government authority responsible for vocational training, but apprenticeship qualifications can also be issued by an education and training provider, or by an employer organisation. Sometimes more than one qualification or certificate is awarded.

TABLE 4.1 ADVANTAGES OF FORMAL APPRENTICESHIPS

Enterprises	Social partners	Educational institutions	Governments	Individuals
• Can have a say in who they employ and train • Can use apprenticeships as a way to recruit skilled workers in the future • Can do this in a cost-neutral way, or even gain a financial benefit, if wages and financing arrangements are well constructed • Can use apprentices for productive work as well as providing them with training	• Have a greater say in the content, quality and ongoing management of VET • Have a say about training both in the workplace, and in the classroom	• Vocational education programmes become much more relevant to the demands of the workplace • Programmes have a better balance of theory and practice, so students' motivation can be higher • Teachers have closer contacts with workers and enterprises • The cost of training equipment is lower	• Better school-to-work outcomes are achieved and youth unemployment can be lower • There is a better balance between the supply of and demand for skills: skill mismatches are less likely to occur • Costs are shared in a more effective way between governments, enterprises and individuals	• Gain skills and qualifications for a recognised skilled occupation • Have a much smoother transition to full-time work • Can develop vocational competence to quite a high level

Formal apprenticeships have a number of advantages for the various parties involved, and these are listed in **TABLE 4.1**. On the other hand:

- Formal apprenticeships require a great deal of cooperation and negotiation between employers, trade unions and governments at the national, local and industry-sector level. In addition, appropriate institutional arrangements, such as legislation and regulations, wage arrangements, governance and quality assurance arrangements, need to be created.
- Such formal apprenticeships require enterprises to commit themselves to train apprentices at work, as well as to use them for productive work. Enterprises need to have the facilities and resources to train apprentices. In particular, they need to have staff who are able and willing to train apprentices on the job, as well as to supervise their work. Enterprises that take on apprentices also need to have a sufficient range of skills so that the apprentice can receive broad training in a complete occupation. Apprenticeships can be difficult to implement, or may not deliver quality outcomes, if enterprises do not do this.
- Apprentices may be provided with limited general education, and pathways to higher education or tertiary study may be limited.

There is no single model of formal apprenticeship. A common feature of apprenticeships is that training is conducted in two places of learning: companies and vocational schools. This applies to all of the main forms of work-based learning programmes covered in this handbook. However, apprenticeship arrangements can differ widely, even within a single country. Such differences can reflect:

- skill levels of particular jobs: for example, more highly skilled occupations will generally require longer training periods than lower-skilled jobs;

- needs and circumstances of different industries: for example, in Germany's dual system apprentices' wages vary widely from one industry to another; another example is that industries in which there are wide seasonal variations in demand, such as agriculture and construction, may be much more likely to favour fairly long periods of block release for classroom-based learning than other industries;
- national economic circumstances: for example, apprenticeships in high-technology occupations and at high qualification levels may be rare in low-income countries;
- national history, traditions and culture: for example, educational institutions may play a stronger role in quality assurance in countries where there is no strong tradition of employer involvement in education and training;
- institutional arrangements, such as the extent to which employers and workers are organised and cooperate in different industry sectors.

The titles of such arrangements can also vary. They are most commonly called apprenticeships, but in many cases almost identical arrangements are referred to as traineeships or alternance. And, sometimes arrangements that are called apprenticeships may not have some of the features outlined above. For example, in some apprenticeships in Morocco's agricultural sector some employers have been reluctant to sign contracts; and in some Australian apprenticeships there is provision for all of the training to be provided in the workplace, with no classroom-based learning.

Apprenticeships can differ in a number of ways: their length; wages and funding arrangements; the balance between work-based and classroom-based learning and how these are sequenced; the ages of apprentices; and the types of occupations that are covered. **TABLE 4.2** gives examples of the different ways in which formal apprenticeships can be arranged.

TABLE 4.2 HOW APPRENTICESHIPS DIFFER

Dimension	Examples
Duration	• Fiji: Apprenticeships can last between three and five years, although most last for four or five years. • Germany: Apprenticeship programmes typically take between two years and three and a half years, depending on the trade (although a very small number take two years). • Ireland: Apprenticeships are organised over a four-year period. • Singapore: Traineeships can last for between one year and two and a half years. • Sri Lanka: Apprenticeships can last between six months (although apprenticeships as short as this are rare in most countries) and four years. • Turkey: Apprenticeships vary from two to four years in length, but the duration can be reduced by half if the apprentice has completed secondary or higher education.
Mix of workplace and classroom-based learning	• Algeria: Apprentices spend a short initial period in full-time vocational training before entering the workforce, and from then on alternate between periods at work and off-the-job training. • Croatia: Over three years apprentices must spend 2 600 hours in practical training. At least 70% of this must be provided in the workplace, and the rest in school workshops. The actual pattern of alternation between school and workplace is decided jointly by vocational schools and trade or craft associations. A pattern in which a week is spent in theoretical studies followed by a week of practical learning in the workplace (or school workshop) is regarded as ideal. • Egypt: Participants in programmes run by the Productivity and Vocational Training Department spend two years in full-time vocational training followed by one year in which they alternate between the workplace and the classroom. • Ireland: Three of the seven phases of a four-year apprenticeship are in the classroom. • Norway: Apprentices spend two years in full-time schooling followed by two years in full-time employment. • Philippines: Apprentices spend 40% of the total time in a classroom and 60% of the time in a company.

	• Switzerland: Common patterns are for apprentices to spend one day per week at the vocational school and four days at the host company, or two days per week at the vocational school and three days at the host company. Alternatively, they alternate between some weeks attending classes at the vocational school and some weeks attending industry courses at an industry training centre.
Eligibility and age limits	• Algeria: Apprenticeships are open to young people aged 15–25, and to women and disabled people up to the age of 30. • Australia: There are no age limits for entry to apprenticeships in Australia, although in practice wage rates may deter many adults from taking part. • France: Apprenticeship contracts are mainly aimed at young people under 26 in initial training. However, these age limits may be brought forward (in particular where the first stage of secondary education has been completed) or put back in certain cases (for example, for disabled workers or creators of companies). • Singapore: Traineeships are limited to school leavers. • Tunisia: 'Traditional' apprenticeships are available to 15–20-year-olds who have not completed the ninth year of basic education. 'Reformed' apprenticeships are available to those of the same age who have completed nine years of basic education. There are no age limits for entry to alternance programmes. • Turkey: Young people aged at least 14 who have completed primary school but who have not been able to continue their education any further can start an apprenticeship.
Who signs the contract	• Algeria: The contract is signed by the apprentice or the apprentice's legal guardian and by the employer; it must be stamped by the local authority and approved by the vocational training establishment. • Fiji: The contract is signed by the apprentice, the employer, and the Director-General of the Training and Productivity Authority of Fiji. • Turkey: The contract is signed by the apprentice (or their guardian) and the employer, and must be approved by the chamber to which the employer is affiliated.
Occupations and qualification levels covered	• Algeria: Three-quarters of all apprenticeships are at the skilled worker level and one-quarter are in highly skilled occupations. Roughly one-third can be found in information technology, management and administration. • Fiji: Trade apprenticeships are offered in 23 traditional blue-collar and technical occupations, and technician apprenticeships in five occupations. • Germany: Apprenticeships are very common in industries such as banking and insurance, but elsewhere such training commonly takes place in classroom-based programmes. • India: India has four categories of apprenticeships: trade apprenticeships, which span 188 categories and can last from six months (although apprenticeships as short as this are rare in most countries) to four years; graduate apprenticeships, which encompass 114 trades and have a one-year training period; technician (vocational) apprenticeships, which encompass 102 trades and have a one-year training period; and technician apprenticeships, which encompass 114 trades and have a one-year training period. • Malaysia: A modernised apprenticeship system includes apprenticeships in areas such as ICT, retail management, mechatronics and industrial automation, as well as many traditional trades. • Philippines: Apprenticeships can be offered in any trade, form of employment or occupation that requires more than three months of practical training on the job supplemented by theoretical instruction. • Sri Lanka: Apprenticeships are offered in 146 occupations, including the service sector and information technology as well as traditional blue-collar trades.

Where the learner is an employee: informal apprenticeships

Informal apprenticeships are training arrangements that are not formally regulated by governments and the social partners, but that follow local traditions and customs. They do not usually include classroom-based learning. They involve a training agreement between an apprentice and a master craftsperson: this is normally an informal social contract, not a written one. In this agreement, which may be written or oral, the master craftsperson commits to training the apprentice in all the skills relevant to his or her trade over a significant period of time, usually between one and four years, while the apprentice commits to contributing productively to the work of the business. Training is integrated into the production process and apprentices learn by working alongside the experienced craftsperson⁴.

Informal apprenticeships are common in many low- and middle-income countries. They can account for the majority of all skill development in African countries such as Ghana, Benin and Senegal. They are very common in countries such as Pakistan, Morocco and Algeria, where they are important in industries such as agriculture, construction, fishing and traditional crafts. This makes them an important source of skills in these countries.

TABLE 4.3 ADVANTAGES, DISADVANTAGES AND POLICY CHALLENGES OF INFORMAL APPRENTICESHIPS

Advantages
• They are a socially accepted type of training that provides relevant skills and increases apprentices' employment chances once they have completed the training. • The cost can be lower than that of formal VET. • Where connections between formal VET institutions and the workplace are weak, employers often say that informal apprenticeships develop higher-quality skills than the formal system. • They can be an important source of innovation and productivity for micro and small enterprises.
Disadvantages
• The skills that are developed can be specific to a particular enterprise, thus reducing apprentices' subsequent labour market mobility, as well as limiting the depth and range of skills available to the economy as a whole. • Hours can be long, wages low, and working conditions poor. • The social partners have very limited or no involvement. • No certificate is issued, which limits the opportunities for further formal education and training.
Policy challenges
• Is it appropriate to upgrade informal apprenticeships, or to introduce formal apprenticeships? Or should both be done at the same time? • How can the quality of informal apprenticeships be upgraded without reducing employers' willingness to offer them? Chapter 7 of this handbook discusses this.

Where the learner is a student: internships, traineeships, work placements, work experience, some alternance programmes, cooperative education and similar schemes

Work-based learning programmes in which the learner is legally a student rather than an employee can have a wide variety of names. Rather than focusing on their titles, it is more helpful to look at their features, at their advantages and disadvantages, and at what is needed to make them work properly. Other parts of this handbook, such as the sections on quality, will look more closely at what is needed to

⁴ This definition and the contents of Table 4.3 are based on ILO (2011).

make them work properly. This section focuses on their features and their advantages and disadvantages.

This type of programme has a number of features.

- It usually involves the majority of the student's time being spent in the classroom, and only a minority of it in the workplace.
- In most cases the major responsibility for the programme rests with the school or college, not with the social partners or individual enterprises.
- The school or college timetable and the timing of school or college holidays will often influence how much time students spend in the workplace and when they are able to spend time there.

In each case this is the opposite of apprenticeship programmes.

One helpful way to look at work-based learning programmes in which the learner is a student rather than an employee is to see them along a continuum, at one end of which are programmes that are only loosely connected to the formal VET system, while at the other end are programmes that are very closely linked to the formal VET system.

An example of the first of these is some cooperative education programmes in Canada and the United States, in which the student receives academic credit for work experience, but in which there may be very little connection between what the student does in the workplace and the curriculum of the school or college⁵, and where no assessment is carried out of what the student has learned at work.

There are several important differences between cooperative education and other forms of school-organised workplace experience on the one hand, and apprenticeship on the other. These include the lack of a contractual relationship between the young person and the employer, a weaker connection between the student's school-based learning and what occurs within the firm [...], a lack of organised involvement in the design and management of the programmes by employer associations and trade unions, and the absence of recognised occupational certification. Unlike apprenticeship, where the basic design and quality control rests with industry bodies, cooperative education and similar programmes are generally initiated by the educational institution and implemented through partnerships with individual enterprises. (OECD, 2000)

However, many work-based learning programmes in which the learner is a student are quite closely connected to the formal VET system. They may involve all or some of a number of features, such as a close link to the formal curriculum; support by legislation or regulation; social partner involvement; a contract; and formal assessment of and credit for what has been learned in the workplace.

It is important to realise that the distinction between programmes with titles such as alternance and apprenticeship can sometimes become quite blurred. In France it is possible to obtain identical vocational qualifications in several ways: through full-time study; through arrangements that involve study combined with work experience; or through alternance training that involves spending time both in a company and in a school, signing a formal contract and being paid a wage. As an example, a learner can enrol for a vocational qualification such as the *brevet de technicien supérieur* (BTS), a tertiary-level qualification, and be regarded as a student, undertaking periods of work experience during the holiday period. However, the same qualification can be earned through alternance training (*BTS en alternance*), where students alternate between work experience and study year-round. In this case they sign an apprenticeship contract and are required to be paid a wage. As another example of how the distinctions can become blurred, at La Rochelle Business School in France, a Masters of Business Administration (MBA) can be undertaken through alternance training in which learners spend three weeks in the company and one week at the school and are paid a wage equal to either 65% or 89% of the French legal minimum wage,

⁵Another example is a case reported in the Singapore press (Ho, 2011) of Chinese hospitality students who were required to do their work placements in an electronics factory where the work had no connection to their course.

depending on their age⁶. This arrangement is similar to an apprenticeship in that a wage is paid and a contract is signed. But it is also similar to work-based learning programmes in which the learner is a student, in that the principal manager of the programme is the educational institution, not the social partners.

TABLE 4.4 EXAMPLES OF WORK-BASED LEARNING PROGRAMMES IN WHICH THE LEARNER IS A STUDENT RATHER THAN AN EMPLOYEE

Morocco	Some 14% of Moroccan secondary VET students take part in alternance training, which has been in existence since 1996. Over a period of two or three years, students spend half their time in an enterprise and the remaining half in a VET school. Alternance programmes are concentrated in the three highest levels of national vocational qualifications: qualification, technician and specialised technician. The system encompasses 97 occupations and 143 specialties, and is supported by national legislation. Educational institutions play a central role in managing the system. In addition to selecting the trainees and providing general and technical instruction, the educational institutional places trainees in enterprises and elaborates the overall training plan. This specifies how the training is divided between the enterprise and the institution, the duration and timing of the work-based learning, and the evaluation methods. It also provides trainees with a portfolio that is used to monitor training in the enterprise. Employers are required to have a tutor to guide the trainee, and tutors must have appropriate qualifications and experience. A contract is signed between the trainee and the company, and this must specify a range of matters including the occupation, the identity of the tutor, the duration of training and the working hours of the trainee. Trainees' learning is assessed in examinations conducted both by schools and by host companies.
Russia	Through its Career Centre, the St Petersburg Graduate School of Management runs a programme of summer internships for its students. It also offers guest lectures by employers, business competitions, career planning, CV preparation and interview preparation. The internship programme takes place in each year of the course, and is compulsory in the second and third years. Each internship lasts from four to six weeks, and is covered by an agreement between the school and the company that identifies the student's duties in the company. Internships are normally not paid.
Spain	Upper secondary vocational programmes consist of a combination of compulsory general education subjects, compulsory vocational content of a general nature, such as the working environment and career guidance, and compulsory vocational content that is specific to each area of specialisation. National regulations require that the curriculum includes a module of workplace training lasting from 10 to 20 weeks. Agreements with companies require a workplace tutor to be appointed and teachers to access the workplace to assess students.
Sweden	In Sweden upper secondary education contains 13 vocationally oriented programmes that are taken by around half of all students. All vocational programmes also offer broad general education through eight core subjects and confer basic eligibility to continue studies at the post-secondary level. Vocational programmes are expected to include 15 weeks of workplace training over the three-year period. Schools are responsible for arranging this, and for supervising its quality. Most municipalities have advisory bodies that include local employers' and employees' representatives. These advise schools on matters such as the provision of workplace training courses, equipment purchase and training of workplace supervisors. However, at the national level there is very little in the way of a formal framework for cooperation between VET providers and the social partners.

⁶ See www.esc-larochelle.fr/eng/Programs/MBA-in-Services-Management/

The advantages and disadvantages of work-based learning programmes in which the learner is legally a student rather than an employee will depend to a large extent on where they sit along the continuum that stretches from limited involvement with the formal VET system to substantial involvement. **TABLE 4.5** describes some of the advantages and disadvantages of programmes at each end of the spectrum. Advantages and disadvantages will partly depend on how closely programmes are linked to the formal VET system.

TABLE 4.5 ADVANTAGES AND DISADVANTAGES OF WORK-BASED LEARNING PROGRAMMES IN WHICH THE LEARNER IS A STUDENT RATHER THAN AN EMPLOYEE

	Link to the formal VET system	
	Loose	Tight
Advantages	• Can be simple for schools and colleges to organise • Can give students an understanding of what is involved in work and help them to develop basic work habits • May take only limited time away from other school or college subjects • Students can increase their chances of securing a job after graduating, and employers can pick future recruits • Students can find applied and real-life experiences, and this can motivate them to continue with their studies	• Can be simpler for schools and colleges to organise than formal apprenticeships • Costs to the employer can be lower than those of apprenticeships • Students can develop both work habits and specific vocational competence • Students find applied and practical learning interesting and motivating, and enjoy contact with adults who can act as mentors • A recognised vocational qualification may be awarded • Students can increase their chances of obtaining a job after graduating, and employers can select future recruits
Disadvantages	• May do little to develop real vocational skills • May give little or no credit towards vocational qualifications • Quality control may be weak, and students may be easily exploited as cheap labour • There may be a lack of employer commitment to training • Lack of social partner involvement can mean wide differences between programmes and the lack of a common approach to content or quality	• Can require significant school resources (e.g. selecting workplaces, supervising students, assessment, governance) • May not be long enough to develop full vocational competence • Students may not become a full part of the work team, or experience all aspects of the weekly, monthly or yearly work cycle • The school timetable and school holidays may reduce workplace involvement

Simulated work-based learning

This refers to fictitious firms created by schools that attempt to provide a realistic simulation of an economic activity. They can require groups of students to undertake activities that replicate the operations and challenges of a real company. They can operate online, or on school or college premises. In some cases no actual goods and services are produced, while others do produce real goods and services,

which are then sold. They can be called practice firms, virtual firms or – more commonly – training firms. Many examples in low- and middle-income countries have been inspired by Austria's long experience with the use of training firms as part of its VET system.

As shown in **TABLE 4.6**, training firms can have a number of advantages, particularly when compared to standard classroom-based teaching and learning; they also have disadvantages and challenges.

TABLE 4.6 ADVANTAGES AND DISADVANTAGES OF SIMULATED WORK-BASED LEARNING

Advantages
• The learning is team-based, applied and practical, and can be much more engaging and interesting than 'chalk and talk' methods of teaching and learning. • Such programmes can be easier to set up than models such as apprenticeship, as schools can do most of the organisation and planning themselves. • They require little in the way of special training equipment: normally a room and a few computers is enough. • In countries where there is little tradition of employer involvement in education and training, this can be a way in which students can develop vocational skills that otherwise they may not be able to acquire.
Disadvantages and challenges
• Some aspects of work may be very hard or impossible to simulate: for example, learning from more experienced workers and from adults; long days; the ways in which the type of work being done changes with the time of day, week or year; and the chance of being sacked for poor performance. • It can be time-consuming for schools to organise, and take a lot of planning, even if it is simpler than other types of work-based learning. • Teachers who are used to traditional ways of teaching may find it difficult to accept. • When real goods and services are produced, local firms may be opposed or hostile if these are sold at less than normal market prices.

BOX 4.2 CAN THE LEARNING EXPERIENCE OF THE WORKPLACE BE SIMULATED?

Most evidence suggests that training in an authentic work environment has particular advantages. One Danish study [...] shows that learning at school and at work are complementary. Students were followed during their last year of school-based training and one period of on-the-job training in clothing shops. It was found that knowledge about the workplace is not developed in artificial situations; it is best acquired and assimilated as part of the real work community. Students saw simulation of the workplace situation (playing the roles of customer and sales assistant) as artificial and useless. One pilot evaluation of the introduction of work placement in Finnish VET (Bridge from Vocational Education to Work) found that work-based learning taught students entrepreneurship and the technical and social skills needed for their future occupation and promoted maturity. According to the students, they learned most in terms of practical occupation-specific skills, initiative, cooperation skills, self-confidence, independent thinking, willingness to change and to develop, independent problem-solving skills and the use of information sources.

[...] In one German state, where the share of students enrolled in school-based VET is higher than usual, shadow 'practice firms' have been created for school-based VET. In a survey of employers' perception of training in practice firms, most employers viewed it as preferable to classroom teaching but less valuable than work placement. [...]

Extract from Kuczera et al. (2008)

There are a number of examples of training firms in ETF partner countries. Through KulturKontakt's ECO NET project, the Austrian Federal Ministry for Education, Arts and Culture supports the development of training firms as part of the VET systems of 10 ETF partner countries. There is a focus on programmes in business studies, trade, insurance and similar areas, but also hotel and restaurant studies, agriculture and tourism. The aim is always to make the training firm an integral part of the curriculum. As part of the project, teachers are trained to be facilitators, and KulturKontakt helps to develop handbooks, standards and computer systems. Support for participation in national and international training-firm fairs helps to strengthen knowledge sharing between countries. Around 1 600 training firms have been established in over 330 schools since 2001.

In Macedonia the transition to a market economy led to the closure of many large employers with internship programmes, and to the growth of a large number of micro enterprises. To help fill the gap, a USAID project that ran between 2003 and 2008 supported 40 VET schools to set up 'real companies' to give students the opportunity to build practical experience through, for example, taking part in financial analysis, marketing planning and business planning.

Examples of practice firms can also be found in Kazakhstan in tourism and hospitality training. Colleges have opened simulated hotel rooms, set up a training tourist company, and opened rooms for hotel training that can accommodate real guests.

Learning about work rather than learning to do work

Although not as important for this handbook as other types of work-based learning, programmes that try to teach students about work are worth mentioning. They can be called work experience, work shadowing, enterprise visits or similar terms. They usually:

- involve quite brief periods in the workplace;
- are only quite small parts of the school or college programme: for example, they may be part of a single subject, or part of a career education programme, rather than being integrated with a complete course of study.

TABLE 4.7 ADVANTAGES AND DISADVANTAGES OF PROGRAMMES THAT TEACH STUDENTS ABOUT WORK

Advantages
• They can help students to make a better choice of career. • They can be used to help students make a better choice of VET programme. • They can be easier to organise and administer than other types of work-based learning programmes. • They help to improve the quality and relevance of career education programmes. • They can help to motivate students and give them direction by showing them where their studies might lead. • They involve little disruption to the school or college timetable and in some cases they can be organised so that they take place in students' own time.
Disadvantages
• They are quite limited in what they are trying to do compared with other types of work-based learning programmes.

Learning about work can help to improve transitions to work. In South Eastern Europe some employers and local communities are involved in the provision of job fairs or similar events. Much of the employer involvement seems to have occurred spontaneously at the local level, as has been reported in, for example, the former Yugoslav Republic of Macedonia. It has also been stimulated by central and local employers' chambers and by craft chambers; this has been a particularly strong impetus in Croatia, but is also noted in Albania. In Serbia the National Employment Service has been active in organising such

events. In the former Yugoslav Republic of Macedonia the role of school vocational guidance consultants places a strong emphasis on community engagement and the creation of networks with employers and parents to assist students. This seems to have been an important reason for what is reported to be strong employer, parent and community involvement in school career guidance services in that country. In Bosnia the pharmaceutical company Bosnalijek, which is a major employer of graduates, sends a team from its human resources department to present the company to students at the university, and provides work experience programmes to some, with the goal of targeting the most promising among them.

In Romania START internships were initiated by a group of business associations, embassies, and multinational companies, and implemented by Junior Achievement Romania. The scheme is targeted at higher education graduates. It aims to facilitate access to the labour market through the exploration of career opportunities, gaining experience working in a company and developing transferable skills. The project commenced as a pilot in 2008. Between 2009 and 2011, 1 400 internship positions were offered by 90 companies. More than 9 500 Romanian students have registered with the programme.

Programmes that give job seekers access to work

Work-based learning of several different types can be used to give job seekers, and others who are at risk in the labour market, access to work and work experience. This can help individuals to develop skills that may have been lost through long periods of unemployment, provide unemployed people with contacts with real employers, and reduce the chances of unemployment among those who may be at risk through low levels of education or other indicators of labour market disadvantage. Each of these can help to improve their job prospects.

In Austria supra-company apprenticeships are part of a 2008 training guarantee, and allow young people who are unable to find a placement at company level to complete a full apprenticeship delivered by an accredited provider. They follow the same principles as traditional apprenticeships, but are typically preceded by additional guidance, and students can receive additional personal support during their studies. They are closely linked with vocational guidance and coaching, and include four phases:

- introduction (group familiarisation, introduction to the purposes of the programme, exploration of vocational goals);
- vocational guidance (introduction to various career paths on offer and requirements for each profile);
- preparation and vocational orientation (closer familiarisation with specific vocational profiles, including employer visits);
- additional modules (these can include specific modules for girls, or additional guidance).

Supra-company apprenticeships provide the same accredited curriculum as a standard apprenticeship. Trainees can complete a supra-company apprenticeship in three years, generally with a final examination, if they are not able to transfer to a company-level apprenticeship in the meantime. As with regular apprenticeships, supra-company apprenticeships combine college-based education with practical work experience, largely delivered in workshops run by the training provider (to simulate an in-company environment). This is supplemented by a 12-week in-company placement each year.

In Flemish Belgium the Individual Training Within the Enterprise programme places unemployed people with an enterprise for between one and six months. Employers select the unemployed candidates and provide them with training that meets the needs of the particular workplace. The scheme is provided on the understanding that the unemployed person is offered a job at the end of the training period. The unemployed person is paid the equivalent of their normal unemployment benefit, as well as a productivity premium that increases during the period of the training.

Morocco uses apprenticeship as a deliberate part of its strategy to tackle youth unemployment. It is aimed at school drop-outs who are not qualified to enter the main forms of initial VET (school-based or alternance programmes). Most of the training (80%) is provided on the job, and the classroom training is provided in centres that differ from the normal vocational schools. Apprenticeships are offered in 128 separate trades, but agriculture, craft production, hotels and catering, and craft services are the

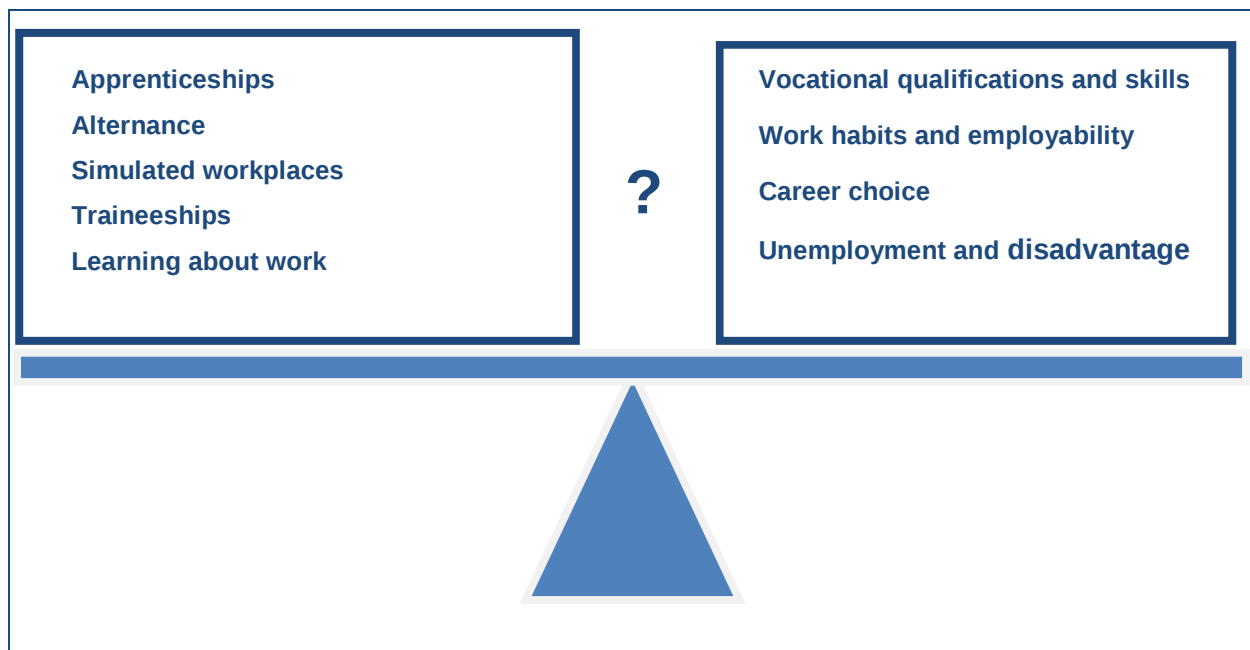
largest sectors. Apprenticeship leads to a qualification at the lowest level of the national qualification system.

Under the European Youth Opportunities Initiative, EUR 1.3 million has been provided in European Social Fund technical assistance to assist Member States to set up new apprenticeship and traineeship schemes or improve existing schemes, with a focus on those who are farthest away from the labour market.

When designing programmes to target unemployment and disadvantage groups, there are a number of questions that policy makers should ask themselves.

- What is the profile of the target group? For example: school drop-outs or graduates; individuals with special needs.
- What is the aim of the programme? For example, catch-up classes; integration into a mainstream vocational pathway; providing a fast track into the labour market; upskilling; retraining.
- What methods can be used to address the specific requirements of the target group? For example: pedagogical methods; flexibility of curricula; individualisation of learning pathways; partnerships with key stakeholders; funding mechanisms; appropriate training environments.
- Are there good practices that can be built on? Have similar programmes in the past or in other geographical regions led to particular successes, or have they had substitution effects between the target group and regular labour?

FIGURE 4.2 WORK-BASED LEARNING: WHICH MODEL FOR WHICH PURPOSE?



5. WORK-BASED LEARNING AND LEARNING IN THE CLASSROOM

5.1 ALTERNATIVES OR COMPLEMENTS?

Work-based learning and classroom-based learning should not be seen as separate activities. They should be treated as part of a complete package: classroom learning complements and adds to learning in the workplace; learning at work complements and adds to learning in the classroom. Plumbers need to learn trade mathematics and about the physics of heat, gas and water; nurses need to understand the practical aspects of patient care, as well as physiology and pharmacology. Furthermore, it is normal for advanced VET systems to make sure that the curriculum considers the whole person and takes a view of the apprentice as a lifelong learner. Learning in the workplace is complemented not only by trade theory, but also by broader general and personal education.

- In **Finland** all 119 upper secondary vocational programmes include: nine compulsory general education subjects that account for around a quarter of the total time; compulsory vocational subjects amounting to 90 credits; and 10 credits of free-choice subjects. All vocational programmes include at least 20 credits of compulsory on-the-job learning.
- In **Germany** apprentices must study general education subjects that can include German, other languages, social studies, and sport in the part-time vocational schools.
- In **Iceland** both apprenticeship – the most common form of upper secondary vocational education – and school-based vocational programmes require: compulsory general education studies; vocational theory; specific vocational content; and workplace training.

Thus, for policy makers and social partners there will always be policy questions that need to be considered about how to integrate and coordinate the learning that occurs at work and the learning that occurs in classrooms as part of work-based learning programmes. These questions will arise both where the learner is an employee, for example, in apprenticeships, and where the learner is a student, as in internships. They will arise when creating new work-based learning arrangements and when trying to improve existing ones.

A key difference between classroom-based and work-based learning programmes is that in work-based programmes, because learning is normally divided between the classroom and the workplace, education ministries, schools and colleges cannot do everything by themselves. They need to cooperate closely with social partners and other ministries at a national level; with industry sectors; with organisations at the local and regional level, such as employers' chambers and trade unions; and with individual enterprises.

5.2 INTEGRATING AND COORDINATING LEARNING AT WORK AND LEARNING IN THE CLASSROOM

A number of practical and administrative questions need to be considered when working out how to coordinate and integrate the two types of learning. Some of these questions, and some ways of answering them, are outlined below.

What should be learned in the workplace, and what should be learned in the classroom?

This is the first and most important question to ask when creating work-based learning programmes. The best general answer is that each location should teach what it is best suited to teach. A first step is to decide what needs to be included in the total package of learning: for example, what will be the balance

between specific vocational skills, vocational theory, general education and personal development? What will be the best combination of time spent at work and time spent in the classroom?

Decisions can then be made about who is best qualified to teach what. This will normally involve experts from the education and training sector and experts from industry – people who know in detail the content of the work involved in specific occupations – sitting down together to discuss it. It may also involve the use of specialised techniques such as DACUM (Developing a Curriculum), as well as surveys and other larger-scale research. But the first step must be for people from education and industry to come together to jointly find an answer.

At the end of the process it is a good idea to describe the content of the entire education and training package in a document that can be easily understood by all of the key stakeholders, namely the social partners, education ministries, and individual employers and learners.

What can be done if a workplace cannot cover the full range of knowledge and skills that need to be learned at work?

This is a particularly important question for work-based learning programmes that aim to develop full recognised competence for a particular industry or occupation. A problem can arise if a firm only has a limited and specialised range of products or processes, or if the work carried out by the firm changes at different times of the year. This is a common problem in training provided by small firms.

The usual answer is to try to make sure that the learner (apprentice, trainee, student) can gain access to supplementary training or supplementary experience. This can be achieved in various ways.

- One solution is to rotate learners through different enterprises over the period of a training programme. To ensure that these types of arrangement work properly, organisations need to be set up at the regional or industry-sector level to manage the rotation between workplaces. This often involves supervising and monitoring the training in each enterprise, not just handling the administrative arrangements. There are examples of such schemes in Australia (group training companies), the Netherlands (regional centres of expertise) and Norway (local training offices). Such arrangements need to be properly funded. The Norwegian centres are funded by pooling the government training subsidies that are provided to SMEs. The Australian examples are funded by a combination of direct government subsidies and fees charged to employers for the help that they are given with training. These types of cooperative arrangements between firms can also arise spontaneously, or they can be assisted by regional employer associations and by employers' chambers.
- Another solution is special interfirm training centres. For example, in Germany the Federal Ministry of Education and Research provides funds for intercompany training centres that offer training programmes to supplement training provided by SMEs whose range of products and services does not allow them to provide the full breadth of training required. These measures, which supplement company training, usually run over a period of four to six weeks within the three-year training period for the skilled trades, or over a period of 26 weeks in the building sector.
- A third solution involves education and training institutions arranging supplementary practical training in their workshops. These types of solution require the existence of good relationships between educational institutions and the firms concerned so that the training institutions are aware of the problem and can schedule supplementary training to solve it.

These solutions may not be easy to organise, but they are a positive way of making sure that those taking part in work-based learning programmes can gain the full range of knowledge and skills required by the curriculum.

How should work-based and classroom-based learning be organised?

The periods of work-based and classroom-based learning can be arranged in many ways. Examples of work-based learning programmes that have already been provided illustrate some of them.

For programmes in which most of the time is spent in the workplace, and for programmes where the learner is an employee rather than a student, options can include:

- a fairly short period of classroom-based training at the beginning of the programme, with the rest of the programme alternating between periods at work and periods in a classroom;
- equal periods in the workplace and the classroom alternating with one another;
- classroom-based learning occurring each week, one or two days at a time;
- classroom-based learning taking place in a smaller number of longer blocks of time, such as a week or a month; this can be used when apprentices, trainees or students have to travel a long way each time they attend off-the-job training;
- the entire classroom-based education and training taking place in one long block at the beginning of the programme, and all of the time in the workplace taking place after that; this is sometimes called the 'train-and-place' model, and is used in Norway and in many of China's upper secondary vocational education programmes.

For programmes in which most of the time is spent in the classroom, and for programmes in which the learner is a student rather than an employee, options include:

- one day a week in the workplace on a regular basis throughout the entire programme;
- a week or more at a time in the workplace at less regular intervals: for example, one week during every school or college term;
- equal periods in the workplace and the classroom alternating with one another.

The choice between these options will depend on a number of factors. Various questions need to be considered, including the following.

- Which combination of work-based and classroom-based learning makes the most pedagogical sense? Will it make it easier or harder for the learner to integrate theory and practice? Will it make it easier or harder for the learner to apply what has been learned in class, or to see how theory learned in the classroom relates to practice?
- What effect will the combination have on student motivation? Will there be enough practical learning at work to maintain the interest of students who are bored?
- What impact will attending classroom-based education and training have on the enterprise? Will it disrupt the ongoing work of the enterprise? Will it be a major inconvenience at peak times, such as stocktaking or harvest time? Will it mean that students will miss out on learning from work that only takes place at certain times of the business cycle or production cycle, such as stocktaking, harvest time, or before religious holidays?
- What impact will attending the workplace have on the educational institution? Will students have to miss other classes in order to attend the workplace, or can the timetable be arranged so that no work is missed? If large numbers of students are absent at the same time, will this have an impact on teachers' working arrangements?
- If the workplace time is scheduled to suit the school timetable, will this mean that the opportunity to experience and learn from important parts of the business or production cycle in the enterprise is missed?
- How should these decisions be made? By enterprises or the social partners alone? By education ministries alone? By education ministries in cooperation with the social partners? By individual schools or colleges alone? By individual enterprises alone? By individual schools and individual enterprises in cooperation?

6. STARTING AND EXPANDING WORK-BASED LEARNING PROGRAMMES

Countries' experiences in introducing work-based learning programmes have been very different. There are countries where:

- large-scale changes have been introduced very quickly;
- pilot programmes have been introduced and then expanded gradually over a period of time;
- pilot programmes have remained very small and had no major impact.

Successful examples can be found in both high- and middle-income countries. Unsuccessful examples can also be found in both high- and middle-income countries. A number of examples include what appears to be both success and a lack of success, in both high- and middle-income countries. Following these examples, it is useful to draw some lessons about what seems to work and what does not seem to work when trying to introduce or expand work-based learning programmes.

6.1 NATIONAL EXAMPLES

Algeria

There is a long tradition of informal apprenticeship in Algeria. Following the country's independence, formal training through apprenticeships was established for the first time in 1975, when legislation was passed giving apprenticeship a legal basis. Vocational training by way of apprenticeship was further institutionalised in law in 1981, through legislation that defined the scope, mission and role of each party involved, their rights and obligations, the entry conditions for apprentices and the conduct of the training. Following this, apprenticeship saw a remarkable expansion and rise in popularity during the 1980s.

Nevertheless, experience has revealed a number of inadequacies and difficulties, including poor human, material and financial resources for the monitoring of apprentices; weaknesses in teaching and training programmes and teaching methods; inadequate regular contact between vocational training providers and employers; and the lack of a mechanism to motivate and stimulate those directly involved in apprenticeships. This experience resulted in a number of legislative and regulatory changes in 1990 and 2000 to address the problems identified. Financing issues relating to employer incentives to take part were addressed in 1997 legislation that established a national apprenticeship tax.

The number of apprentices in Algeria increased from 40 000 in 1981 to 250 000 in 2011, approximately 40% of all vocational trainees in the country.

China

China does not have a formal apprenticeship system. The relatively underdeveloped apprenticeship system that had existed since the late 1950s was abandoned during the Cultural Revolution, and a 1985 decision of the Central Committee of the Communist Party effectively sidelined it by laying down the principle that training should precede employment. Train-and-place programmes, in which a period of institutional training precedes a period of employment, without the two alternating, are now the most common model used in China's upper secondary vocational schools.

Improving cooperation arrangements for schools and enterprises, and extending and improving the quality of the work-based components of vocational education, are currently high priorities for China's VET policy makers. However, the quality is commonly reported to be low, with few formal guidelines in operation at the local level; central policies are reported to be quite vague and general; and there are no

formal mechanisms at the national level. The exploitation of students as cheap labour is reported. Many models are being experimented with at the provincial level and by sector organisations. While the central government has adopted a number of policies to support these goals, practical legal and administrative frameworks to support them, particularly at the regional level, are often lacking, and at the national level a school–enterprise cooperation mechanism has yet to be established.

Croatia

Apprenticeships were an integral part of the education system for the trades and crafts in Croatia as early as the 12th century. Between the mid 1950s and the mid 1990s, apprenticeship did not exist as a form of VET. However, Croatia retained structures and practices from its earlier period, including strong chambers, social partnership, and some self-regulation of trades. Consequently, after the breakup of Yugoslavia there was a stronger infrastructure in place, centred on the chambers, as a basis for business–education collaboration. When the country became independent, apprenticeships were re-established in the 1994 Law on Trades and Crafts. This clearly specified the roles and responsibilities of the stakeholders, including government ministries, vocational schools, the chambers, and companies or other legal entities that deliver the practical training. Relevant by-laws clearly specify how assessment is to take place. The number of young people enrolling in apprenticeships represents around a fifth of primary school graduates each year, a figure that has remained relatively stable over time, as has the number of apprenticeship places on offer from employers.

Egypt

The Ministry of Trade and Industry's Productivity and Vocational Training Department has operated a work-based training programme, commonly referred to as the PVTD programme, since 1956. However it remains very small: its participants represent only around 1% of all upper secondary vocational education students. Only around 500 enterprises are involved, predominantly large public enterprises. The programme sits alongside a number of similar and sometimes competing programmes run by other ministries and agencies, all on a limited scale. There is no unifying national framework for apprenticeship and other forms of work-based learning.

Korea

In the early 1990s Korea tried to imitate the German dual system of apprenticeship, but the experiment failed. An important reason for the failure was that the government tried to control nearly all aspects of the experiment, and allowed only a minimal role for the social partners. Another reason was the lack of a tradition of training within the workplace: training within the *chaebol*, the large enterprises that have dominated Korea's recent economic growth, is largely seen as the responsibility of special training departments. As a consequence, shop-floor supervisors, who are vital in successful apprenticeship systems, focused largely on production problems, and did not see the development of skills in apprentices as part of their normal role.

Malaysia

Malaysia's National Dual Training System, or apprenticeship, was introduced in 2005 following development work with advice from German experts that commenced in 1996. It replaces a National Apprenticeship Scheme that was introduced in the 1980s but which was abandoned owing to lack of employer support, reportedly because too much of the training took place in institutions and was too inflexible. The present system places the enterprise at the centre of the learning process, and contains a great deal of flexibility in delivery arrangements. Much effort has been devoted to developing materials to improve the teaching and coaching within the workplace, developing learning and work assignments for apprentices, and training the staff of vocational education institutions to assist enterprises as moderators, facilitators, coaches and advisers. There is ongoing support for these activities from the German–Malaysian Institute.

The system remains relatively small, but has very strong government support and is seen as a key economic and human resource development initiative. A recent survey has identified a number of factors that are hindering employers from participating. These include limited financial and physical resources, a lack of awareness of the scheme, and a training culture that tends to focus on on-the-job training. The major reason given for not participating was a lack of awareness of the system and a lack of information or publicity materials.

Morocco

The alternance system in Morocco was developed over a number of years following a series of pilot projects and as the result of international cooperation. As part of cooperation between Morocco and Germany, similar projects in the manufacturing, agriculture, trade and tourism sectors took place in the 1970s. During the early and mid 1990s alternance was developed within the Inter-company Institute of Applied Technological Training of Casablanca, with financial support from GTZ (now GIZ), the German international aid agency. From 1998 to 2002, GTZ also supported Morocco's Department of Vocational Training in the expansion of the alternance system. For example, GTZ supported the creation of a dedicated alternance unit within the Department of Vocational Training, helped to train trainers and tutors, and carried out awareness-raising activities among professional associations and employers.

Norway

Prior to the mid 1990s, apprenticeships were largely restricted to adults, and many people gained skilled worker certificates by sitting for practical trade tests on the basis of experience, rather than through an apprenticeship. As part of a major reform of upper secondary education that was introduced in 1994, apprenticeship was introduced as a main education and training pathway for young people. The reforms were the outcome of debate and policy formulation stretching over a number of years and involving all of the social partners. They involved resources being allocated for curriculum renewal, for teachers' professional development, for the support of skills training in enterprises, and for equipment and text books. The social partners actively promoted apprenticeships to their members prior to the introduction of the reforms.

Careful attention was paid to financing to encourage employer participation. The wages of apprentices were reduced from around 80% of those of a qualified worker to 50%. A subsidy roughly equal to the cost of educating a student in upper secondary school for one year was introduced for employers who took on an apprentice, together with a completion bonus if the apprentice passed the final trade test. Together these payments could reduce the direct wage costs to the employer of taking on an apprentice by almost 50%. An arrangement for the pooling of around half of these subsidies at a regional level by SMEs enabled the creation of training offices to assist enterprises with the recruitment of apprentices and with on-the-job training.

Within four years of the reform being introduced, around one in four of those who started upper secondary education enrolled in the apprenticeship track, and apprenticeships appeared to account for slightly more than one in six of those who left upper secondary education.

Sweden

In 1971 Sweden replaced its apprenticeship system with a system of full-time school-based vocational training combined with work placements. The change was made for two reasons: it was felt that apprenticeship was too narrow and did not give a broad enough general education, and that it was inequitable, biased along social class lines and with too few young women enrolling. The system was reformed and standardised in the early 1990s, with common requirements for work placements being introduced to all programmes.

In 1997, as a result of pressure from Swedish employers, pilot apprenticeships were introduced in 20 municipalities. Under this system, a contract was signed between the young person, the school and an

employer; participants were selected for an apprenticeship by the school, not the employer; the schools and the school system appeared to take the view that apprenticeship was for the less academically able students, and this resulted in it being stigmatised; schools were responsible for managing apprenticeships and ensuring their quality, although there was a local programme committee that included employer and trade union representatives. Schools did not trust employers to act in the interests of young people, so the initiative was introduced on condition that participants remain students rather than employees. Schools, rather than industry, were responsible for its management and quality, as well as for assessment and certification. In addition, Sweden lacked any strong ongoing mechanism for employer and trade union involvement in setting the content and delivery of national vocational programmes. The difference between apprenticeships and work placements was not clear to employers: both operated in the same occupations and industries. The system did not survive the pilot projects.

In 2011, following further employer pressure, pilot apprenticeship programmes were again introduced. The new programmes have many features common to the previous pilot programmes: apprentices are selected by the school, not the employer; the school, as well as the young person and the employer, signs the contract; apprentices are generally not employees (although some may earn a wage); and the school, not the social partners, will be responsible for assessment.

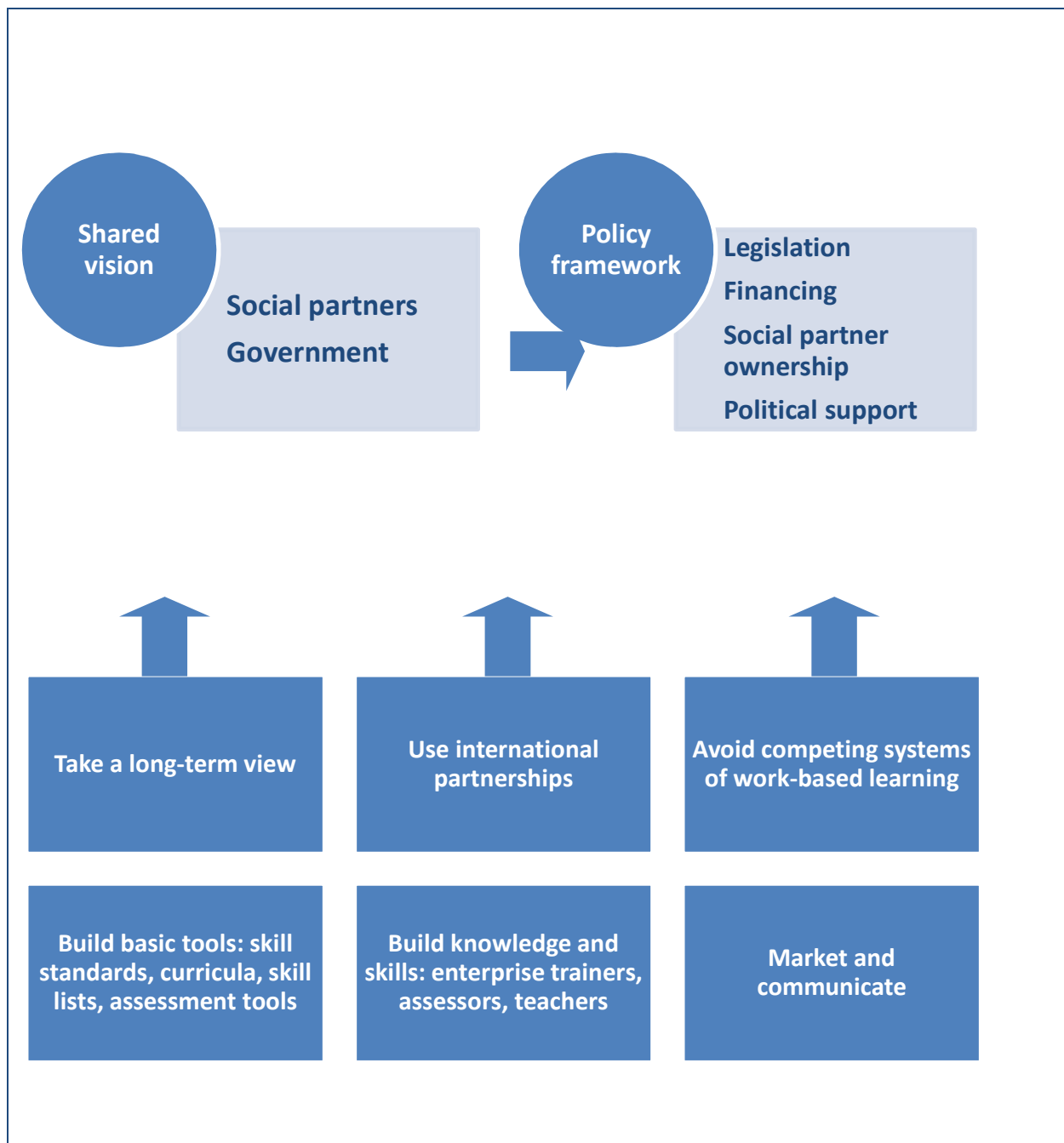
6.2 POLICY LESSONS

These examples point to a number of policy lessons for countries that want to introduce, expand or reform work-based learning systems or programmes.

- Start with a shared vision, involve key stakeholders in developing it, and make sure that all key stakeholders are committed to it. This should include as a minimum all relevant government ministries and agencies, employer organisations, chambers (of commerce, trade, craft, agriculture, etc.), employee organisations and VET providers. Local and regional economic development bodies, parents, community organisations and non-governmental organisations are other stakeholders in many countries.
- Build a policy framework around this shared vision, and ensure that it has strong political support.
- Make sure that the framework gives strong ownership and control to the social partners over key parts of the new system or programme. This could include elements such as policy development, selecting participants, developing skill standards, developing the curriculum, assessment and certification, and quality assurance.
- Make sure that the framework includes proposals for financing (this may include wages, subsidies, taxes, industry levies, social security and insurance, and other similar factors) that will motivate both employers and learners to participate.
- Create a comprehensive legislative and regulatory framework to support the policy framework and vision. Make sure that the legislative and regulatory framework clearly sets out the areas of responsibility of each of the key stakeholders.
- Create channels for institutional coordination and communication to support the framework, such as national VET councils, industry-sector councils and regional councils.
- Make sure that new systems or programmes do not compete (for participants, for employer places, or for the involvement of social partners) with existing systems or programmes of work-based learning. If there is more than one type of work-based learning programme (for example, apprenticeships and internships), make sure that they target different occupations, industries or individuals.
- Take a long-term view. Unless there exists a strong institutional tradition that is likely to support work-based learning programmes and systems, begin with pilot programmes. Evaluate and learn from these, share what has been learned with key stakeholders, and modify and improve what is being done as a result of experience and evaluations.
- Use international partnerships to help build the system if the necessary knowledge and experience is not available nationally.

- Put a great deal of effort into building the tools that are needed to support new programmes and systems, including competency standards, curricula, skill lists for enterprises and students, and assessment tools.
- Put a great deal of effort into developing the knowledge and skills of the people who will need to make the system or programme work at the local level: enterprise tutors or trainers, vocational teachers, curriculum developers and social partners.
- Actively market and communicate the new system or programmes to all key stakeholders. Do this at the local and regional levels, not just at the national level.

FIGURE 6.1 BUILDING SUSTAINABLE WORK-BASED LEARNING SYSTEMS AND PROGRAMMES



7. ENSURING THE QUALITY OF WORK-BASED LEARNING

7.1 A FRAMEWORK

Ensuring that work-based learning is of a high quality requires a broader framework and a different approach than that required for ensuring the quality of classroom-based VET. This is because enterprises, unlike schools and colleges, are not directly under the control of governments. They cannot be compelled to do certain things in the same way that schools and colleges can. For this reason some of the frameworks or guidelines that are applicable to quality in VET do not always apply directly to work-based learning. They often tend to focus very much on what happens in a classroom, college or school, and on how educational institutions relate to governments and the social partners; they have less of a focus on quality in the workplace^{7,8}.

Policies to improve the quality of work-based learning can be thought of in several ways. A fairly common way to look at all quality frameworks is in terms of:

- ensuring that inputs are of a high quality;
- putting in place processes that can result in quality outcomes;
- assessing outcomes to judge whether they are of a high quality.

Examples in this case could include ensuring that enterprises have trained and qualified trainers (inputs); ensuring that the links between enterprises and schools are close ones (processes); and putting in place regulations requiring national practical tests to be held the end of apprenticeships (outcomes). These three dimensions of quality assurance are not exclusive: all can be adopted together, and in many of the best VET systems all are used.

An alternative framework that is somewhat more directly related to work-based learning contains three broad approaches to the quality of work-based learning, the first two of which are closely related:

- working with enterprises to strengthen their capacity to provide and take part in work-based learning programmes;
- developing practical tools that can assist enterprises and students;
- formal approaches that focus on regulations and supervision by external organisations.

These three approaches to quality assurance in work-based learning are not exclusive: all can be adopted together.

In practice, of course, the two ways of looking at quality overlap a great deal. **TABLE 7.1** illustrates this overlap. Whichever approach to policies for improving the quality of work-based learning is adopted, policy makers and social partners need to keep in mind two questions.

- Is there a trade-off between quality and what can be afforded?
- Is there a risk that measures to improve the quality of work-based learning will be seen as burdensome, will interfere with the ongoing business of enterprises, and will discourage participation? This question in particular applies to measures that try to impose legal obligations or requirements on employers.

⁷ See, for example, Danish Ministry of Education (2008).

⁸ An exception is the set of criteria for quality in apprenticeship that were issued by the European Association of Craft, Small and Medium-sized Enterprises in 2000. They are reproduced in the Annex. It should also be noted here that the EU is currently developing a comprehensive quality framework for traineeships and internships.

TABLE 7.1 IMPROVING THE QUALITY OF WORK-BASED LEARNING: SOME EXAMPLES OF POLICIES AND INITIATIVES

	Strengthening enterprises and developing practical tools for enterprises and students	Formal frameworks
Inputs	• Screening of employers by schools before students take part in work shadowing or work experience • Selecting students carefully so that enterprises are not asked to train those who are not interested • Classes to prepare students for work placements • Skill lists that show students what they need to learn • Skill lists that show enterprises what they need to teach	• Regulations that require enterprise trainers to have formal qualifications and experience • Requiring enterprises to be able to teach the full range of skills in the on-the-job curriculum before they take trainees
Processes	• Local steering committees for programmes that bring schools and enterprises together • Regular visits to enterprises by teachers, employers' chambers or similar organisations to help them with training problems • Involving employers in selecting students for work placements	• Requirements for all training occupations or apprenticeships to have a tripartite training committee • Regular inspection of apprentices' working conditions by government representatives • Regulations to accredit only programmes that have formal quality processes in place
Outcomes	• Debriefing enterprises after placements to check whether there were any problems and discuss ways to address these problems • Debriefing students after their work placements to see what they have learned, and to check whether there have been any problems	• Regulations that require practical examinations at the end of an apprenticeship

7.2 STRENGTHENING THE CAPACITY OF ENTERPRISES AND WORKING WITH THEM

Organisations such as employers' chambers, small business associations, government apprenticeship directorates, and schools and colleges can do a great deal to help enterprises to improve the quality of work-based learning. These organisations can be particularly helpful for SMEs that lack formal training expertise. The Australian group training companies, the regional centres of expertise found in the Netherlands, and Norway's local training offices, all of which are referred to in Section 5.2, are other examples of organisations that sit outside enterprises but that are ideally placed to support them with work-based learning. All have been created as the result of government policy initiatives.

- Employers' chambers, small business associations and similar organisations have the advantage of being closer to the daily requirements of running a business than schools and colleges, and so may find it easier to approach firms and offer them advice and assistance with work-based learning.

Governments can introduce policies to provide resources to these organisations to allow them to support work-based learning.

- Government departments that are responsible for apprenticeship and vocational training sometimes employ apprenticeship inspectors. Sometimes their role is simply to inspect and report on working conditions rather than to assist enterprises with training. Policies to ensure that these staff have the knowledge and skills to assist with training matters, and defining their jobs so that this is part of their role, can help to assist enterprises with work-based learning quality.
- Regular visits to enterprises by teachers allow them to check on students' progress, pick up any ongoing problems with training, help workplace supervisors to understand what needs to be learned, help with the formal assessment of students' learning, help enterprises to better understand the requirements of students' or apprentices' training programmes, and build trust and good working relationships between schools or colleges and enterprises.
- However, regular visits may be problematic if time is not allowed for them in teachers' formal working arrangements. Policies for teachers' working conditions need to take this into account and make sure that time spent visiting students on work placements and liaising with employers counts as a recognised part of their work load. Training programmes may also be needed for teachers who visit workplaces.
- Local programme management committees that include enterprises, educational institutions and social partners can help to improve communication between schools or colleges and enterprises about training.
It may also be difficult to maintain regular contact and good relationships between schools or colleges and enterprises if the central policies that govern how schools and colleges are run do not give school leaders and managers (principals, directors, head teachers) the freedom to make decisions about how contacts with enterprises can be initiated or managed. For example, if they need to gain central approval before creating a partnership with an enterprise or establishing a local programme committee, such initiatives are not likely to be encouraged.

7.3 PRACTICAL TOOLS FOR STUDENTS AND ENTERPRISES

There are a number of things that policy makers and the social partners can do, or encourage, to develop practical tools for students and enterprises that can improve the quality of work-based learning programmes. All of them are designed to increase learners' engagement with workplaces, enterprises' engagement with learners, or individual employers' engagement with VET.

- It is essential that learners are carefully selected and properly matched with workplaces if quality is to be ensured. This helps to make sure that learners are motivated and are learning what they want to learn, and that employers feel that they will fit into the workplace and meet their enterprise's expectations.

In programmes where the learner is an employee, such as apprenticeship, the selection is normally carried out by the employer. Because an apprenticeship is a long-term commitment by both the student and the employer, selection is likely to be done quite carefully. If it is not, drop-out rates may be high and the time invested by both the learner and the employer may be wasted. To avoid such problems, organisations such as employers' chambers can assist enterprises with apprenticeship selection. For example, they can screen those applying for an apprenticeship before they are interviewed by the enterprise, or train employers in selection methods. High-quality career guidance can also help to improve the selection of apprentices.

In programmes where the learner is a student, matching is an important way of ensuring that employers do not have to try to teach students who are not interested, not motivated, or lack basic work habits, all of which will reduce their willingness to take part. Involving employers in the selection process can help to avoid this. Careful screening by the school or college is another way of ensuring that learners and enterprises are well matched. Guidelines to ensure this, and the resources to do it, are matters that policy should recognise. Careful matching is important both in programmes where

only a short period is spent in the workplace, such as work shadowing, and in programmes in which work placements occur over a longer period, such as alternance.

In some programmes it may also be important to make sure that parents are fully aware of, and comfortable about, the workplaces where students will be spending time.

- Where workplace learners are students, schools and colleges should make sure that enterprises can meet occupational health and safety requirements, that working conditions are appropriate for students, and that enterprises have the capacity to teach the skills required by the programme. Often local or regional employer organisations and local trade union offices can assist in this.
- It is important to encourage schools and colleges to prepare students before they go to a workplace, and time needs to be set aside for this in school and college programmes.
- Personal learning plans should be developed for those taking part in work-based learning. These set out what the learner is expected to learn in the workplace, and can also show roughly when things are to be learned, who is to do the teaching, and how learning is going to be assessed. They can act as a checklist so that learners can assess their progress. Where programmes also include classroom-based learning, the personal learning plans should set out what is to be learned in the classroom.
- Students can be asked to keep diaries of what they have learned, and to record their experiences and reactions. This may be particularly useful in programmes such as work shadowing that are trying to teach students about work, to assist career choice, and to develop general employability skills.
- Simple skills checklists for employers will help them to be sure about what they are expected to teach in the workplace. However, care needs to be taken with such lists. Employers are busy people, and often do not have the time to deal with long documents that are in complex language. Thus, skill lists should be clear and in plain language. Furthermore, it is important not simply to rely on skills checklists to make sure that employers know what is expected, but to follow them up with personal visits by representatives from organisations such as employers' chambers, small business associations or schools and colleges.
- Debriefing learners after they have been in the workplace is important. This helps them to reflect on what they have learned, and thus helps to reinforce learning. Debriefing sessions can also be a way of assessing progress and identifying any problems. School and college timetables need to allow for these debriefing sessions.

BOX 7.1 QUALITY ASSURANCE FOR WORKPLACE TRAINING IN POSTSECONDARY VET IN DENMARK

Quality assurance mechanisms for workplace training in Denmark have three key features:

- The quality assurance process is built into the work placement arrangements: these are a decisive factor for the accreditation of new programmes by the Danish Evaluation Institute.
- Attention is given to making these placements as useful as possible for both VET programmes and employers, and the analysis of those links forms part of the accreditation process by the Danish Evaluation Institute.
- The work placement arrangements are designed to be closely linked to learning outcomes. Students apply concepts learned in the study programme at the workplace, linking theory to practice. This link is basic to effective learning and its absence can contribute to dropout. After their placement, students report back to their institution and they are assessed to see if they have met their learning objectives. To ensure that the workplace effectively contributes to these objectives, each individual student has a teacher or a supervisor for guidance. Supervisors need to have a solid knowledge of the theoretical content of the student's course and have sufficient time and resources to offer guidance.

In Denmark, the level and quality of employer and trade union engagement was identified as high in a comparative study looking at 13 European countries [...] and this has been attributed to the way in which work placement arrangements can engage employers in postsecondary VET.

Extract from Field et al. (2012)

Some examples of the use of practical tools in work-based learning programmes

- **Egypt:** Enterprises taking part in Egypt's PVTD programme have to demonstrate to the training provider that they have the capability to train, the willingness to do so, and the necessary physical and human resources. These arrangements are quite flexible.
- **Jordan:** Trainees in the Applied Secondary Education programme are required to keep job logs at the workplace, and supervisors fill out reports on trainees' progress and problems. On the basis of the follow-up results and the apprentice log book, the content of any necessary supplementary practical training can be identified and addressed in a training centre.
- **Moldova:** Students are monitored during their internships by the trainers from their school, who visit the companies every two or three days, or once a week, depending on the location of the company.
- **Morocco:** In 1998 Morocco created a special resource centre for training in-firm tutors and trainers in alternance programmes, and to support apprenticeship training. However, although it has been active in offering training, participation in its programmes is not compulsory.
- **Syria:** In Syria's apprenticeship programme all trainers, both those in enterprises and those in educational institutions, follow the same train-the-trainer programme to develop the skills needed to train apprentices. The two groups are deliberately included within the same programme in order to strengthen relationships between them.
- **Turkey:** Coordinators of internship programmes attached to vocational schools visit firms to decide whether their facilities are appropriate, whether they have trades workers with qualifications at master level, and how many apprentices they can train. A formal contract is then signed between the school and the enterprise.
- **Turkey:** Firms are given a folder prepared by the vocational schools' field coordinators. The folder includes the yearly course schedule that covers not only the tasks that the students should be carrying out under the monitoring of the trainers, but also the evaluation procedure to be used. These folders need to be signed regularly by both the student and the person in charge of the trainees in the enterprise. This is verified by the field coordinator during regular visits to the enterprise.

7.4 FORMAL QUALITY ASSURANCE MECHANISMS

This refers to requirements that are imposed on employers, learners, and schools and colleges by legislation, regulations, or administrative directions. Some of these mechanisms are designed to protect learners from exploitation; others are intended to improve the quality of the learning provided by programmes. Examples of these formal mechanisms include the following legal or regulatory requirements.

- Those taking part in work-based learning programmes are covered by insurance arrangements in the event of accidents at work, or included in workers' compensation arrangements in the same way as any other employee. On some occasions governments agree to pay for this insurance in order to reduce the cost to employers and to encourage them to take part in programmes. (This is also referred to in Chapter 9, on financing.)
- Those taking part in work-based learning programmes, whether as an employee or as a student, are covered by the same occupational health and safety requirements and labour regulations applying to hours of work and working conditions that apply to an enterprise's employees. Such requirements may be enforced by a labour department inspectorate rather than by an agency responsible for VET.
- Enterprises are approved or accredited by an external agency or organisation before they can host learners. These organisations could be trade committees, employers' chambers, local craft chambers, schools or colleges, or other organisations such as the centres of expertise in the Netherlands referred to in Section 5.2. Accreditation or approval may require that the enterprise is able to teach the full range of skills and competences required by a programme (or to make other arrangements if there are skills and competences that they cannot teach), that they have appropriate technology and equipment available to teach these skills and competences, and that they have appropriate employees to supervise and teach programme participants.

A stricter legal requirement may be that employers above a certain size must take part in programmes and provide places. Where such requirements exist, experience shows that employers often ignore them.

- Employees who supervise and teach programme participants must have a specified amount of experience, a relevant vocational qualification, and a qualification in on-the-job training. (However, even in countries such as Germany where such requirements are the most formalised, studies show that in practice the majority of the employees who provide training to apprentices are not formal trainers, but normal employees who provide it as part of their normal job: they are 'informal workplace educators'.)
- Practical tests or examinations of what has been learned at the workplace are a condition of learners being awarded a certificate. These practical tests may be standardised national tests or ones developed locally, and may be conducted in the workplace or out of the workplace by educational institutions, local trade committees, employers' chambers or similar organisations.

Some challenges for policy makers and social partners

- Which of these mechanisms are used in the country?
- Which are seen as being the most important for improving the quality of work-based learning programmes?
- Which would be the easiest mechanisms for enterprises to accept?
- What steps could be taken to introduce some of them?

TABLE 7.2 EXAMPLES OF FORMAL MECHANISMS FOR IMPROVING THE QUALITY OF WORK-BASED LEARNING

Inputs	• Morocco: Employers who provide alternance training places must have a tutor to guide trainees, and tutors must have an appropriate vocational qualification and at least two years of relevant experience. • Turkey: Companies with 20 or more employees are legally required to provide training places to secondary VET students. Enterprises must allocate a master trainer for each trainee. Enterprises that provide 10 or more training places to apprentices or trainees must have a training unit for this purpose.
Processes	• Algeria: The Labour Inspectorate is responsible for ensuring that apprenticeship legislation and regulations are applied, that apprentices' rights are observed and that apprentices are protected in terms of health and safety. • Croatia: The law governing apprenticeship gives chambers of trades and crafts responsibility for supervising the practical aspects of training, training trainers and overall quality assurance. • Morocco: Legislation for alternance programmes requires VET schools to define the duration and timing of work-based learning, and the evaluation modes for trainees.
Outcomes	• Croatia: Relevant by-laws set out how apprenticeship assessment is to be conducted, including through regular monitoring, an interim examination in the second half of the second year of the programme, and the final exam on completion of the programme. The by-laws specify that both practical and theoretical examinations must be held.

A note of caution

Policy makers and the social partners need to be aware that legislation, regulations and administrative directions will not by themselves guarantee quality. It is important to make sure that any formal requirements that are imposed on enterprises, learners, or schools and colleges are widely accepted and respected, can be enforced, and are in fact enforced, and that resources to ensure that they are enforced

are provided. Formal requirements that are not generally accepted and that are widely flouted or unsupervised will do little to improve quality. Some examples follow.

- **Algeria:** Regulations require the creation of governance committees for apprenticeship at the local level, but in practice very few of these exist.
- **India:** Both internal and external evaluations of India's apprenticeship system have been quite critical of its relevance and quality. They point to government rather than market control over the number of places that can be offered, outdated regulatory arrangements that hamper enterprise-based training, highly variable training quality, widespread failure to comply with legislative requirements, and substantial employer dissatisfaction with the national training arrangements.
- **Pakistan:** Participation in the apprenticeship system is very low and employer involvement is reported to be feeble. The Government of Pakistan recognises that the system is not operating effectively. In its 2008 National Skills Strategy it reported that the main weakness of the system seemed to be that it is coercive and provides little choice to industry in the selection of apprentices, or to trainees in how the training is structured. There are few incentives for industry to support the system of training apprentices, and many of the legal obligations can in practice be circumvented with ease.
- **Tunisia:** Those taking part in traditional or informal apprenticeship are required by 1993 legislation to sign a contract of training, but it has been estimated that less than half do.
- **Turkey:** The extent to which the legal requirements on traineeships in enterprises are, in practice, implemented by companies is not known, as there is no strict monitoring system. Sanctions for non-compliance are rarely applied, and hence, legal provisions are not effectively enforced.

Formal requirements included in legislation, regulations and administrative requirements need to be underpinned by trust, cooperation between the key actors, shared commitments, and resources if they are to improve the quality of work-based learning programmes.

7.5 RAISING THE QUALITY OF INFORMAL APPRENTICESHIPS

Informal apprenticeships are important in a number of low- and middle-income countries. As indicated in Chapter 2, a key challenge for policy makers is how to raise the quality of apprenticeships, and how to do this without reducing employers' willingness to offer them. The following actions are suggested⁹:

- work with small business associations and other groups that represent the interests of master craftspeople and apprentices, who will often have a sound understanding of local practices, of what motivates master craftspeople and apprentices, and of how they interact with the formal training system;
- try to strengthen the apprenticeship contract by, for example, suggesting that it includes details of working time, the duration of the apprenticeship, how it will be decided that the apprenticeship has been completed, rights and obligations of both the apprentice and the employer, and how any disputes will be resolved;
- upgrade the skills of master craftspeople who employ apprentices; short courses are normally best, and costs should be kept low; links to larger firms that have access to more advanced technologies may be another way to achieve this;
- create opportunities for apprentices to take brief pre-apprenticeship courses covering issues such as occupational health and safety, basic technical skills, and rights and duties at work;
- offer apprentices the chance to take short training courses during their apprenticeship;
- introduce skill tests at the end of the apprenticeship, based on skill standards that have been developed in association with master craftspeople and their associations;
- use these skill standards to create logbooks or checklists that can be used to monitor training progress;

⁹ The suggestions are drawn from ILO (2011, 2012).

- use information campaigns, prizes and awards to raise the status of informal apprenticeships;
- involve community groups in initiatives to broaden access to informal apprenticeship for groups that are often excluded, such as women and girls, and individuals with a disability;
- acknowledge the importance of informal apprenticeship by including it in policy frameworks and legislation that are developed for the national training system.

8. ASSESSING AND RECOGNISING WORK-BASED LEARNING

This chapter is primarily concerned not with technical questions – how to make sure that the assessment of work-based learning is reliable and valid – but with policy issues. Assessment and recognition are policy issues for work-based learning for the following three reasons.

- Assessment is one of the ways in which the quality of work-based learning is assured.
- Whether or not work-based learning is assessed, how it is assessed, who assesses it, and how often it is assessed will have an impact on the cost of work-based learning programmes, and so it becomes a financing issue as well as a quality issue.
- Who has the authority to assess and certify learning is central to the governance of work-based learning programmes.

TABLE 8.1 shows some of the questions and issues that policy makers and the social partners need to consider when thinking about assessing work-based learning. In many cases there may need to be trade-offs in deciding on the answer. For example, quality may need to be balanced against cost; and making sure that the social partners have a sense of ownership may need to be balanced against convenience. In all cases the answers should be the outcome of discussions between governments and the social partners.

TABLE 8.1 QUESTIONS AND ISSUES IN RELATION TO THE ASSESSMENT OF WORK-BASED LEARNING

Question	Issues and options
Should work-based learning be assessed and recognised?	In most cases the answer will be yes. Otherwise it will be very hard to know whether anything has been learned. Assessment is essential if the work-based learning is part of a programme that leads to a vocational qualification. It is essential for assuring stakeholders of the quality of the programme. Formal recognition in the form of certificates or qualifications also helps to ensure the portability of the learning within the labour market However, assessment and formal recognition may not be necessary or appropriate in programmes that are trying to teach participants about work rather than teaching vocational skills. For example, they may not be essential in fairly short work-shadowing or work-experience programmes that are designed to help students to make better career choices. Informal recognition in the form of certificates of participation, for example, may be options in these types of programme.
What is the purpose of assessment?	Assessment can be used to check progress and give feedback to learners, employers and teachers. This can be very helpful in identifying any problems that need to be corrected before the end of a programme, when it may be too late. This type of assessment may or may not be counted towards final grades or final certificates and vocational qualifications. Assessment can be used at the end of a programme to see whether the participant has met the required standards and has learned the skills set out in the learning plan or curriculum. This type of assessment is normally the basis for awarding a vocational qualification.
How often should work-based learning be assessed?	The answer will depend on the length of the programme and the purpose of the assessment. The more frequent the assessment, the greater will be the cost and the potential disruption. This is particularly likely if the assessment is being carried out by employers or on employers' premises. On the other hand, more frequent assessments are likely to lead to improved quality.

Who should assess and certify work-based learning?	This is central to the governance of work-based learning programmes. If individual employers, employers' representatives (e.g. economic chambers), or the social partners are responsible for assessments, they are the ones with the authority to judge and certify quality. The body that has authority to certify that learning has occurred and that standards have been met usually carries the authority to issue certificates and qualifications. If work-based learning is assessed by teachers from schools and colleges rather than by employers or the social partners, employers and social partners may feel that they do not have authority over the programme, may not feel strong ownership, and may be reluctant to take part. On the other hand, individual employers may say that it is too inconvenient and disruptive for them to carry out assessments. Similarly, the social partners may not have the resources or may not be sufficiently well organised to do it, for example if there is not a widespread network of employers' chambers. Under these circumstances it may be decided that having school or college teachers do the assessment is the most practical alternative. It will often be a good idea to have learners themselves assess their progress and decide whether or not they have acquired particular skills or competences. This can be a good way to reinforce the learning that has occurred and to detect any problems. In both cases the quality of the work-based learning will be increased. Work-based learning that leads to portable vocational qualifications or certificates is normally certified by public authorities, such as ministries of education or vocational training authorities. However, certificates or qualifications may also be issued by well-established social partner organisations.
How should work-based learning be assessed?	In nearly all cases the answer will be a practical test in which learners have to demonstrate that they can actually do something (as opposed to write about it). It may not always be easy or convenient to arrange authentic practical tests in real work situations. They may be seen by the employer as too disruptive. Moreover, it may be difficult to arrange for the same test to be conducted in every workplace. For such reasons, it may be most convenient to arrange for practical tests to be carried out in a college or school workshop, or on the premises of an employers' chamber. However, this may not mean that the assessment is carried out by teachers: it could be conducted on school or college premises by employers or social partners. Some types of skill can be assessed fairly easily, for example, being able to make something out of wood or metal. In other cases skills may be very difficult to assess authentically outside of real work situations: examples would be customer service skills or skills in caring for patients. This may become a cost issue, and authenticity may need to be balanced against what is practical.

Some examples of the assessment of work-based learning

Croatia: The Chamber of Trades and Crafts is responsible for apprenticeship assessment. This includes choosing the members of exam boards and supervising exam procedures. Apprenticeship assessment is carried out through both continuous monitoring of achievements (e.g. all work assignments – both those carried out in the workshop and in the school – are assessed and validated), and an interim and final examination. The interim exam takes place in the second half of the second year of the training and the final exam is taken on completion of the programme. Both examinations include a theoretical and practical part. The theoretical part assesses the knowledge acquired during the educational process or through informal learning; and the practical part assesses the professional competences required for the performance of the given occupation.

Denmark: The trade committees that are responsible for each vocational qualification are responsible for the final skilled worker's test for apprentices and for issuing certificates. Employers and employees are represented equally on the trade committees.

Morocco: In the alternance training system the VET school decides, together with the employer, on the modes that will be used to evaluate trainees and on the examination dates. The school also provides the trainee with a portfolio used to monitor the training taking place in the enterprise. The learning of trainees is evaluated through examinations that take place both in schools and at the host company.

Tunisia: At the end of the apprenticeship two types of evaluation are organised. A formative evaluation is planned by the external training adviser from the training centre, in collaboration with the enterprise trainer, while a summative evaluation is held at the training centre, with successful apprentices being awarded the Certificate of Professional Competence (CAP) or the Certificate of Completion of the Apprenticeship (CFA).

Turkey: The final examinations for secondary students taking part in enterprise-based training are held on the same date in all vocational schools and take place over a three-day period, the first devoted to assessing theory and the second and third to practical skills. Enterprise representatives are able to participate in these examinations, and are paid an honorarium if they do, although it is reported to be rare for them to do so.

9. FINANCING WORK-BASED LEARNING

9.1 INTRODUCTION TO FINANCING POLICY ISSUES

This section outlines the types of issue that policy makers and the social partners need to take into account when considering how work-based learning should be financed. It suggests options that can be used to finance these programmes, and provides examples of how a number of countries have addressed financing.

Discussions of financing systems for work-based learning programmes often focus on three issues: the wages paid (or not paid) to participants; ways to fund work-based learning within the enterprise and to compensate employers for the cost of training; and ways to fund the classroom-based training that is part of such programmes. This section includes these, but takes a wider view of the factors that influence the costs of work-based learning programmes, and that need to be taken into account when thinking about financing.

The following three questions are important.

- What needs to be financed?
- What level of resources will be needed?
- Who should pay for what?

In other words, the first thing to do is to work out what needs to be paid for, then how much it will cost, and then how the costs will be distributed.

The distinctive nature of work-based learning, as compared to classroom-based learning, will influence the answers to each question. This is because the costs and benefits of work-based learning are not just a matter for governments and for learners, respectively, but are shared between learners, enterprises and governments. In many low- and middle-income countries the answers may also involve contributions from international agencies and bilateral cooperation partners.

The answers will also be different for different types of work-based learning programmes, for example, formal apprenticeships, programmes in which the learner is primarily a student, and programmes that aim to teach about work but not to provide recognised vocational qualifications. The answers may also differ depending on whether costs are met through direct payments or through the time spent by the people involved.

In practice, many of the decisions that are made about financing – both how much to spend, and who should pay – will be decisions about the quality of work-based learning programmes. In some cases there may be a trade-off between financing and quality.

What needs to be financed, and how?

Some of the elements of work-based learning programmes that will influence both the level of programme costs and the distribution of these costs between key actors are shown in Section 9.2 below, together with questions and options for each. When considering either the level of costs or how costs are shared, it should be noted that not all of these elements will apply in all cases. For example, if the learning that takes place in the workplace is not going to be assessed, the costs will not be as high. This may not matter in a programme that tries to teach basic work habits or to help young people to learn about careers. But it will have implications for the quality of the outcomes in a programme that tries to develop recognised vocational competence and award a vocational qualification. The distribution of costs, and at times also the level of costs, will also vary according to whether assessment is carried out by enterprises, by education and training providers, or by external organisations such as employers' chambers or

tripartite trades committees. Furthermore, the level and distribution of costs will differ according to whether on-the-job learning is assessed only at the end of the programme to decide whether a final certificate is to be awarded, or whether it is assessed regularly throughout the programme in order to give feedback to learners and to help judge programme quality.

In Section 9.2, **TABLE 9.1** explores factors that influence the level and distribution of costs; **TABLE 9.2** sets out the main policy issues associated with each element; and **TABLE 9.3** gives practical examples of ways in which the financing of work-based learning programmes has been addressed in a wide range of countries.

BOX 9.1 SWITZERLAND: THE BENEFITS OF A SOUND TRAINING WAGE STRUCTURE

A number of studies have been carried out asking employers detailed information about the costs and benefits of apprenticeship training to them [...] These studies cover costs such as instructors' time and apprentice wages set against benefits such as productivity benefits. They show that for two thirds of Swiss host companies on average the benefits outweigh the costs by the end of the apprenticeship period – in other words, without taking into account the benefits of apprenticeship as a means of screening potential recruits. Benefits outweigh costs, largely because the wages of apprentices are relatively low compared to what a skilled worker would earn, and because companies make sure their apprentices are productive by the second or third year of their apprenticeships. These benefits mean that employers support the system as being in their interests – though they also refer to their responsibility for developing young people as a reason to train. Reluctance to provide apprenticeship places – evident in some other countries – has not been as serious an issue in Switzerland.

Extract from Hoeckel et al. (2009)

9.2 ISSUES AND EXAMPLES RELATING TO THE FINANCING OF WORK-BASED LEARNING PROGRAMMES

TABLE 9.1 FACTORS THAT INFLUENCE THE LEVEL AND DISTRIBUTION OF COSTS

Element to be financed	Questions	Options
Payment for learners	Will learners be paid?	- No wage is paid if learners are legally students - An allowance is paid, but not a full wage - If learners are employees, a wage is paid that is less than the wage of a qualified worker - A wage is paid plus a wage subsidy paid to the employer
The costs of training in the workplace	Will employers be compensated for the cost of providing work-based training?	- Provide no compensation - Use the discount built into training wages as the basic form of compensation - Provide government subsidies, tax relief, relief from social payments or similar mechanisms to compensate employers - Establish a national or industry training fund, charge a training tax to firms that do not provide training (for example, to apprentices) and exempt firms that do
Deciding which enterprises will take part	Will enterprises be screened to make sure that they are suitable?	- No selection or screening: enterprises volunteer, or educational institutions allow any enterprise that wants to take part - Selection of enterprises by employers' chambers or similar organisations - Selection of enterprises by educational institutions
Mentors, trainers or supervisors of the learners in the enterprise	Will supervisors, mentors or trainers within the enterprise be required to have qualifications and training?	- Allow any employee nominated by the enterprise to train learners in the workplace, and do not require them to have any formal qualifications or training - Require all supervisors, mentors or trainers to have a qualification – for example, a formal vocational qualification in their occupation, or a formal qualification in on-the-job training - Require these employees to take part in a course on how to train in the workplace
	Will voluntary training be offered to these employees?	- Do not provide any additional voluntary training to these employees - Voluntary programmes to upgrade the vocational skills and qualifications of these employees - Voluntary programmes to improve on-the-job training skills of these employees - Voluntary programmes run by education and training institutions - Voluntary programmes run by employers' chambers and similar organisations - Develop handbooks, guides, skill lists and similar materials to help employees to train in the workplace
	Will employees be supported and helped to improve their on-the-job training skills?	- No support or assistance other than that which is provided by the enterprise itself - Visits to the enterprise by representatives of employers' chambers or similar organisations to check on any problems and offer support and encouragement

		• Visits to the enterprise by teaching staff from educational institutions to check on any problems and offer support and encouragement • Handbooks or guidebooks setting out the skills to be taught at work • Handbooks or guidebooks giving advice on how to train in the workplace
Classroom-based education and training that is part of the programme	Is classroom-based education and training part of the programme?	• No classroom-based education and training is provided: all training is on-the-job • Education and training is provided in a college or school, and focuses on general education and vocational theory • Education and training is provided in a college or school, and includes general education, vocational theory and practical vocational training
	Will gaps in skills that cannot be provided by the enterprise be addressed?	• Do not make any special provision for colleges or schools to fill skill gaps • Arrange for supplementary practical training in school or college workshops
Supervising and assuring the quality of the work-based learning	Will employment conditions and the quality of the training be checked?	• Do not visit enterprises to check employment conditions and training quality • Inspect firms (for example, through the department of labour or central apprenticeship inspectorate) to check employment conditions, but not training quality • Visit firms to check training quality and advise on how to improve it
	Will learners be given the chance to fill gaps in skills that cannot be provided by the enterprise?	• Do not make any special provision to fill skill gaps • Arrange for learners to spend time in firms that can fill the skill gaps • Arrange for supplementary practical training in school or college workshops
Assessing the work-based learning	Will what has been learned in the workplace be assessed?	• No assessment takes place • Enterprises assess what has been learned and inform organisations such as schools, colleges or central apprenticeship authorities of the outcome • Employers' chambers or similar bodies conduct tests and examinations of what has been learned in the workplace • Assessment of what has been learned in the workplace forms part of assessments carried out by the classroom-based education and training provider • On-the-job learning is assessed at regular intervals throughout the programme and is used to assess both ongoing progress by the learner and programme quality • On-the-job learning is only assessed at the end of the programme to certify satisfactory completion

TABLE 9.2 POLICY ISSUES IN THE FINANCING OF WORK-BASED LEARNING PROGRAMMES

Cost element	Issues
Payment for learners	If wages paid during training are too high, the incentive for employers to participate may be reduced. If they are too low compared with other available options, young people may not participate or may drop out part-way through a programme. If wages do not increase after training has been completed, there will be an incentive to drop out before completion. If the wages paid after completing training are higher than those paid during training, the incentive to participate and to complete is increased.
The costs of training in the workplace	Workplace training involves a cost to enterprises, namely through the lower productivity of those who are being trained, and through the loss of productive working time by those doing the training. If there is no recognition of these costs, employers may be unwilling to take part in work-based learning programmes that have a wider economic benefit. If compensation for these costs is too high, employers will gain windfall profits and public funds will be wasted. If those who have taken part in work-based learning programmes that result in a portable skills and public vocational qualifications move to other enterprises that do not train, the enterprises to which they move gain the benefit of other firms' training. This may discourage enterprises from participating in these programmes. Public policy may wish to try to prevent 'free loaders' from benefiting from other enterprises' training investments. The costs to enterprises will vary according to the nature of the programme. Costs will be lower in programmes that are shorter and involve less training, such as work shadowing and work experience as part of a school's career education programme. Costs will be higher where programmes have a close link to the formal VET system, where there is a strong expectation that the enterprise will provide extensive training, and where this training is provided over a long period. The costs to the enterprise are also likely to be higher where programmes recruit people with poor work skills, few social skills, or physical disabilities.
Deciding which enterprises will take part	The absence of any limits on which enterprises can participate in work-based learning programmes may encourage larger numbers of enterprises to take part. However, the lack of any process for checking on the suitability of enterprises may result in poor-quality work-based training, and in learners being exploited. If the conditions attached to participation are too time-consuming and restrictive, this may reduce the willingness of enterprises to take part. Requiring schools and colleges to select the enterprises that take part may be difficult if teachers are not given enough time to check enterprises properly. It will take the time of teachers, reduce the time available for teaching, and add to the institutions' overall teaching costs. Checks on the suitability of enterprises, carried out by industry associations, employers' chambers and similar bodies, can increase the commitment of industries and of individual employers to work-based learning programmes. However, they need sufficient resources to do this: sufficient income from membership fees; enough members in an industry or region to make it affordable; and a network of regional offices that is able to ensure that most potential enterprises can be contacted and assessed. Where a widespread network of employers' chambers or similar organisations does not exist, the most practical institutions for checking the suitability of enterprises may be local educational institutions.
Mentors, trainers or supervisors of the learners in the enterprise	If those employees who deliver workplace training as part of work-based learning programmes are required to have specific experience, qualifications or training, the quality of programmes is likely to be higher. However, requiring such experience, qualifications or training represents a cost that may discourage enterprises from taking part. If educational institutions provide either compulsory or voluntary programmes to help these employees to improve their on-the-job training skills, there is likely to be a pay-off in programme quality, but there will be a cost involved.

Classroom-based education and training that is part of the programme	If the majority of the classroom-based education and training that is provided as part of work-based learning programmes is broad trade theory and general education, there is a strong argument for this being publicly financed by governments. However, industries and enterprises, as well as the wider economy, benefit from such general knowledge and skill. Therefore, in some cases there may be an argument for an enterprise or industry contribution to the cost of this classroom-based education and training. An enterprise contribution to the cost of classroom-based education may give firms an interest in ensuring its quality, and encourage closer links between enterprises and educational institutions.
Supervising and assuring the quality of the work-based learning	If no checks are made on the quality of the training provided by enterprises as part of work-based learning programmes, and if no checks are made on working conditions, there is a risk that the training will be of poor quality and that learners will be exploited. Requiring organisations such as schools and colleges, departments of labour and apprenticeship directorates to carry out these checks will involve costs. The more frequent and detailed the checks, the higher the costs.
Assessing the work-based learning	Costs will be minimal if learning and skill development are not assessed as part of work-based learning programmes. This may not matter in programmes that are brief and have weak links to the formal VET system. However, the lack of assessment will be an issue if work-based learning is part of a formal vocational education qualification. The cost of assessment will increase if assessment is frequent. However, leaving the assessment of work-based learning until the end of a programme and using it only to decide if a certificate or qualification can be awarded reduces the chances that problems can be detected and corrected part-way through a programme, and means that any gaps in the skills that should be acquired cannot be filled. Work-based learning can be assessed by enterprises themselves, by bodies such as employers' chambers, industry associations and tripartite trade committees, or by VET schools or colleges. The decision about where the assessment should be carried out will influence who bears the costs.

TABLE 9.3 EXAMPLES OF HOW COUNTRIES HAVE ADDRESSED THE FINANCING OF WORK-BASED LEARNING PROGRAMMES

Cost element	Examples
Payment for learners	• Algeria: Payments to apprentices begin at 15% of the national minimum wage for the first six months, rising to 30% in the second six months, and then increasing in regular steps each month to reach 80% at the end of the training period. • Croatia: In the first year of the apprenticeship the monthly payment for apprentices is at least 10% of the average net salary in Croatia. It is 20% in the second year and 25% in the third year. • Egypt: In some programmes young people are reported to be paid a very small amount, perhaps 15–25% of the wage of an adult worker, to help them with transport and food costs. • Germany: The apprentice earns a salary that increases every year and is on average one-third of the starting wage for a skilled worker. Apprentices' wages are negotiated in industry-wide collective agreements, and can vary widely between industries and regions. For example, in 2008 they ranged from EUR 498 a month for a third-year agriculture apprentice to EUR 1 120 a month for a third-year construction apprentice. • Jordan: Payments to participants in work-based learning programmes are entirely a matter for negotiation between students and individual employers. • Lebanon: Young people taking part in the relatively small number of work-based learning programmes in Lebanon (dual system, internships) generally receive no payments. • Moldova: Students taking part in compulsory internships as part of their studies are not normally paid a salary, although in some cases schools have managed to negotiate with enterprises for a wage to be paid. • Morocco: Trainees taking part in alternance training must be paid a monthly subsidy by the employer. This can be lower than the minimum wage but must be agreed with the trainee or their legal representative. This is not a wage, and so trainees do not pay income tax from their subsidy. In practice it appears that many young people are not paid. • Turkey: Employers pay at least 30% of the minimum wage to apprentices, candidate apprentices and students taking part as trainees in workplace training. They are not required to pay income tax. • Ukraine: Students taking internships as part of upper secondary vocational education are paid a salary during their internship. This represents half of the fee that participating employers are required to pay.
The costs of training in the workplace	• Algeria: For the first six to twelve months of an apprenticeship, when apprentices are at their least productive, the cost of apprentices' wages is met by the state. Social charges are met by the state throughout the full period of the apprenticeship. There is a legal obligation for employers to hire apprentices and an apprenticeship tax is paid by those who do not do so. The number of apprentices that firms must hire depends on their size, ranging from at least one for firms with one to five employees, to at least 3% of total employees for firms with 1 000 or more workers. The apprenticeship tax is equal to 1% of the enterprise's wage bill, and is paid only by those firms that do not recruit apprentices. Firms that recruit some, but less than their minimum obligation, pay a proportion of the tax. The proceeds of the tax are paid into a special fund to support apprenticeship. • Croatia: Apprentices' employers can apply for government grants and some tax relief. • Jordan: Medical insurance for those taking part in relevant programmes is paid by the government, and employers are exempt from social security payments. • Morocco: Trainees in the alternance system are not legally employees, and so employers do not need to make social security contributions. Employers are exempt from social security charges and from the national training tax for both apprentices and those taking part in alternance programmes. Around 30% of the national vocational training tax is allocated to supporting learning in the workplace.

	• Tunisia: A vocational training tax has existed since 1956, set at 1% of the wage bill of industrial firms and 2% for service enterprises. The funds collected through the tax can support vocational training in a variety of ways, which may include work-based learning for young people, but the tax is not specifically targeted at this objective. • Turkey: The government meets the costs of apprentices' and candidate apprentices' social security contributions and the costs of insurance for workplace accidents and occupational health.
Deciding which enterprises will take part	• Algeria: Local apprenticeship commissions are responsible for collecting offers of apprenticeship placements from employers and applications from apprentices. • Denmark: Approving and inspecting enterprises that want to take on trainees, on the basis of defined criteria, is the responsibility of 120 trade committees, on which employers and employees are equally represented. To be approved, an enterprise must have a certain level of technology, and a variety of tasks to be performed that will provide the trainee with a full range of activities and tasks corresponding to the qualification requirements of a skilled worker. • Moldova: Most vocational schools have contracts with specific enterprises to provide internship places, and so enterprises are selected by the school, not the student. • Morocco: VET schools are responsible for placing those taking part in alternance programmes with enterprises and for defining the training that should take part in the enterprise.
Mentors, trainers or supervisors of the learners in the enterprise	• Germany: Companies that train apprentices must register at least one employee who can function as the designated responsible trainer. The requirements are set out in the national VET Act and the Regulation on Trainer Aptitude. These trainers must hold a qualification in the occupation in question, and must have proven knowledge of education theory. (However, in practice many other employees are also involved in apprenticeship training within the company.) • Morocco: Enterprises taking part in alternance training must have a tutor to guide trainees. The tutor must have an appropriate vocational qualification and at least two years of relevant experience. • Turkey: The Vocational Education Law contains a legal obligation for employers to provide traineeships for students. The law specifies that companies employing 20 or more employees must provide training places to secondary VET students, at the level of 5–10% of their total number of employees. In addition, enterprises that provide training to 10 or more apprentices (or students) have to establish a training unit for this purpose.
Classroom-based education and training that is part of the programme	• Algeria: The public vocational training establishments – vocational training and apprenticeship centres (CFPA) and national institutes for specialised vocational training (INSFP) – provide complementary theoretical and technological training to apprentices. • Germany: Practical training in the workplace is complemented by lessons in publicly funded vocational schools where students spend about 12 hours per week, or follow training organised in 'block form'. The education in these schools is split into two parts: one-third of the time is spent on general education and two-thirds on occupation-specific education governed by separate framework curricula. • Moldova: Some, although not all, schools have negotiated for companies to pay a fee to schools for taking students on internships. The fee is equal to the interns' salary, and is used to pay for teaching materials, equipment, and bonuses for teachers. • Turkey: Theoretical training is provided in government vocational training centres, but also in education centres offered by enterprises. Some economic chambers and social partners have begun to develop funds to provide training to apprentices. • Ukraine: Employers who provide internships as part of upper secondary vocational education must pay a fee, half of which is paid to the vocational school (the other half is paid to the student as a salary).

Supervising and assuring the quality of the work-based learning	• Algeria: The Labour Inspectorate is responsible for ensuring that apprenticeship legislation and regulations are applied. It ensures that the rights of apprentices are observed and that apprentices are protected in terms of health and safety. • Germany: The training that apprentices receive in the workplace is based on a training plan following guidelines set out in the national training regulation for each qualification. It regulates the duration of the apprenticeship, describes the profile of the profession, and sets out final exam requirements. Small companies or highly specialised firms are encouraged to form training alliances with other firms in order to be able to provide comprehensive training. • Morocco: The VET institution plays a key role in the alternance system, as in addition to selecting the trainees and providing general and technical training, it also places them in enterprises and elaborates the overall training plan, which specifies the division of tasks with the enterprise. The VET school also defines the duration and timing of work-based learning, the weekly duration of training, the methods used to evaluate trainees, and examination dates (together with the employer). The school provides the trainee with a portfolio that is used to monitor the training taking place in the enterprise.
Assessing the work-based learning	• Algeria: Public vocational training establishments are responsible for periodically evaluating the knowledge acquired by apprentices and for arranging the final examination, with the participation of employers. • Germany: When apprentices are halfway through their training, they have to take an interim examination that is intended to provide them with an assessment of their progress. In principle, students cannot fail this exam, but teachers and in-company trainers will be informed of the results and are expected to respond and provide supporting measures if the results are not satisfactory. At the end of the training, trainees take a final exam, which is regulated and executed by the chambers (of crafts and industry/trade). It is a centralised exam, with all apprentices being trained for one specific trade in Germany undertaking the same assessment. • Turkey: The final examinations for enterprise-based training are held on the same date in all vocational schools and take place over a three-day period, the first devoted to assessing theory and the second and third to practical skills. Enterprise representatives are able to participate in these examinations, and may be paid an honorarium if they do. • Jordan: National examinations that cover both theoretical knowledge and practical skills are held as a requirement for successful programme completion.

10. GOVERNING WORK-BASED LEARNING¹⁰

10.1 WHAT IS GOVERNANCE¹¹?

In order to help readers understand the concept of governance, **TABLE 10.1** sets out some of the questions involved, and gives some of the options for answering them that could apply to work-based learning systems and programmes.

TABLE 10.1 QUESTIONS AND OPTIONS RELATING TO GOVERNANCE

Questions for governance	Some options
Which issues need to be covered by policies, rules, regulations and decisions?	• The content of programmes • Who can take part in them • How and where learning takes place • Financing • Trainers' qualifications • How assessment is to be carried out • Who awards qualifications and certificates • How quality can be improved
Who has the power to make policies, rules, regulations and decisions?	• Central government ministries • Central policy bodies, including governments and social partners • Industry-sector councils • Local and regional training organisations
Who can influence policies, rules, regulations and decisions?	• Government ministries • Central policy bodies, including governments and social partners • Employer and employee organisations • Non-governmental organisations • Individual enterprises • Schools and colleges • Local and regional government bodies
Who can enforce policies, rules, regulations and decisions?	• Government ministries and agencies • Employer and employee organisations • Colleges and schools • Individual enterprises
How are policies, rules, regulations and decisions made?	• Centrally, by government ministries and agencies acting alone • Collectively, by key stakeholders that include the social partners • After consultation • After evaluating evidence about effectiveness

¹⁰ This section draws on ETF (2012).

¹¹ Governance is not the same as management, which is about how policies and decisions are implemented once they have been made.

At what level are policies, rules, regulations and decisions made?	• National level • Regional level • Locally • Industry-sector level
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BOX 10.1 SOCIAL PARTNERSHIP IN KAZAKHSTAN'S VOCATIONAL EDUCATION AND TRAINING SYSTEM

The first piece of legislation to establish an institutional mechanism for social dialogue between the partners was the law of the Republic of Kazakhstan 'Social Partnership in the Republic of Kazakhstan', which was adopted in 2000. It states (clause 4, article 17) that the issues of vocational training and retraining of skilled workers should be included in agreements between the social partners. More recently, the Ministry of Education and Science adopted the Strategic Plan of the Kazakh Ministry of Education and Science for 2011–2015. This document relates to the 'State Programme 2011–2012', outlining measures for the first five years of the programme. It states that 'one of the main tasks of the vocational and technical education system is establishment of partnership with employers, business structures.' Today, social partners are granted equal voting rights on VET policy under joint decision-making procedures. They are involved in aspects of the VET system, such as the training of teachers, the provision of vocational practice for students and of a practical component in the final exam, the interaction between schools and enterprises and through participation on school boards.

For instance the Ministry of Education and Science is currently carrying out joint work with the National Economic Chamber and KazEnergy to develop a vocational standards system. With the support of employers and international organisations, the government is developing modular programmes for specialist fields, state obligatory educational standards, educational programmes and curricula. The 2011–2020 State Programme also provides for contractual relationships between educational institutions and enterprises, on the basis that enterprises offer practical training and internships to VET students.

Social partnership development takes place mostly on a sub-national level. Kazakhstan has national, regional and sector boards for the training of vocational staff. These boards are made up of representatives of employers and trade unions. In addition, regional VET forums on specialist training, seminars and panel discussions, are regularly held with business representatives. In these forums, agreements have been signed between regions and major companies on bilateral cooperation on staff training.

Extract from OECD (2013)

10.2 WHAT IS GOOD GOVERNANCE?

The principles of good governance for work-based learning systems and programmes differ little from those that apply to the VET system more broadly. These include the following.

- There is a need to develop policies and make decisions openly so that different stakeholders communicate with one another and with those who are influenced by policies and decisions. This is easier to do if all key stakeholders are represented on the bodies that are making decisions and developing policies.
- It is important to ensure that key stakeholders take part in developing the policies and in making the decisions that affect them. This may vary depending on the nature of the policy or decision, but should always include the social partners as well as government bodies. Sometimes it will also include industry-sector representatives, local or regional bodies, or non-governmental organisations. In all cases a very strong role in governance should be given to employers.

- When developing policies and making decisions, it is important to be clear about who is responsible for what, and to make sure that they are accountable for the things for which they are responsible. This will involve making sure that those responsible for developing policies and making decisions have the capacity to do so: access to the right information; the authority to develop policies and make decisions; and the right resources.
- Policies should be developed and decisions made at the most appropriate level. Sometimes this could be the national level, but often decisions are best made and policies best developed for particular regions or for particular industry sectors.
- It is important to have clear objectives when developing policies and making decisions, and to monitor and evaluate the impact of policies and decisions using evidence. Sharing the information that underpins policies and decisions can be as important as the information itself when monitoring and evaluating.
- There is a need to coordinate effectively, and to ensure that different policies and decisions do not conflict with one another. This is easier to do if the delivery of work-based learning programmes and the responsibility for developing policies and making decisions are not fragmented among multiple ministries and agencies.

10.3 WHAT DOES THIS MEAN IN PRACTICE?

The types of work-based learning programme covered in this handbook cannot be implemented by governments acting alone. Nor, in nearly all cases, can they be implemented by enterprises acting alone. If they are to work effectively, those who are involved in them must cooperate, and must trust and respect one another. A common shared vision for the future of work-based learning within VET can help to strengthen ownership and improve implementation. These are central challenges for governing both individual work-based learning programmes and work-based learning systems more broadly.

There seem to be some basic building blocks that are needed for good governance of work-based learning systems and programmes:

- a national body that includes both the social partners and government, and that takes responsibility for, or gives advice about, national policies and decisions on work-based learning; in all cases employers should be given a very strong role in such bodies;
- bodies that include the social partners and that can make decisions about, and develop policies for, particular industry sectors.

However, governance arrangements for work-based learning can differ widely. There is no one best model. Hence, the ways in which these basic building blocks are put together, their powers and responsibilities, and how they relate to other parts of the VET system will vary widely. Furthermore, not all of these models will be ideal.

The following examples illustrate the ways in which a number of countries, some of them ETF partner countries, address governance issues and structures.

Algeria

The ministry in charge of vocational training has overall responsibility for developing apprenticeship and defining national and regional objectives, while the Labour Inspectorate is responsible for ensuring that apprenticeship regulations and legislation are applied and that apprentices' rights and occupational health and safety are observed. The National Fund for the Development of Apprenticeship and Continuing Training collects the national apprenticeship tax and develops initiatives with enterprises to promote apprenticeship. While the social partners have a legal role in developing training, in practice this is merely a formal role. Their involvement is uneven, and links to the VET sector are inadequate. The national, regional and provincial chambers of commerce and industry, agriculture, and arts and crafts have a role in promoting apprenticeship. Local apprenticeship commissions are responsible for gathering offers of apprenticeship places from employers and applications for apprenticeships from potential apprentices.

Teachers from vocational schools play a role in ensuring that employers and apprenticeship masters deliver appropriate training. However, the ongoing assessment of apprentices' skills and learning outcomes is generally regarded as an area in which further development work is needed.

Croatia

The 1994 Law on Trades and Crafts sets out who is responsible for implementing which elements of apprenticeships. It divides responsibility between the national education and labour ministries, the Chamber of Trades and Crafts, vocational schools, licensed companies and other legal entities that deliver practical training, and joint working groups of education and industry representatives that develop programme content. Assessment requirements are contained in relevant by-laws. The Chamber of Trades and Crafts has a number of important powers delegated to it by the Law. It supervises the practical part of the training, issues licences to businesses wishing to employ an apprentice, oversees the admission of pupils, trains the trainers, is responsible for examinations (choosing the members of exam boards, supervising the exam procedures), and is responsible for quality assurance. The Chamber has taken an active role in evaluating the system's strengths and weaknesses through surveys and research, and has been active in identifying improvements that are needed, including the need to improve the involvement of stakeholders from the education sector in the system of apprenticeships, and strengthening the role of employers.

Morocco

Overall coordination of alternance training in Morocco is the responsibility of the Department of Vocational Training of the Ministry for Employment and Vocational Training. The National Commission for Vocational Training – chaired by the minister in charge of vocational training and including the relevant ministry departments and professional organisations – is in charge of general orientation of the alternance system and making proposals for improvements. The Commission is assisted by Provincial Committees of Vocational Training, which monitor and evaluate alternance training at the local level and produce annual reports with recommendations.

In turn, Provincial Committees are informed by reports from steering committees for one or several vocational training institutions chaired (usually) by an employer representative. The role of these committees is to motivate enterprises to participate in alternance training, make recommendations on its effectiveness, monitor and evaluate training activities in enterprises, and guarantee adequate conditions for the trainees.

However, the overall efficiency of these arrangements is open to question, and active cooperation with representatives of the world of work is often absent. In some cases, steering committees are not in place or cannot fulfil their roles; national and provincial committees have also achieved limited success in involving social partners in policy developments.

In practice the VET institution plays a key role in the alternance system. In addition to selecting the trainees and providing general and technical training, it places them in enterprises and elaborates the overall training plan that specifies the division of tasks with the enterprise. The VET school also defines the duration and timing of work-based learning, weekly duration of training, the methods used to evaluate trainees, and examination dates (together with the employer).

Sri Lanka

The coordination and regulation of apprenticeships are the responsibility of the National Apprentice and Industrial Training Authority. The Authority is also responsible for trade testing and certification undertaken by licensed assessors, and acts as an advisory body on VET to the National Tertiary and Vocational Education Commission, the body responsible for establishing and maintaining national competence standards in association with industry. In addition to its planning, regulatory and supervisory functions, the Authority runs a number of training institutes. Apprenticeship training is based on training standards that are developed by sector-specific national advisory committees.

Switzerland

At the tertiary level professional organisations (employers, trade associations and trade unions) play a central role in the governance of professional colleges as well as the VET system in general. They work in close cooperation with the federal government and the cantons. At the federal level, the Federal Office for Vocational Education and Technology is in charge of overall development, management, quality and strategic planning. The responsibilities of the main stakeholders are as follows.

- Professional organisations identify needs in terms of qualifications and set the standards for curricula for each type of qualification.
- The federal government approves curricula and types of qualification, and can fund certain types of qualification.
- The cantons monitor developments and fund certain types of qualification.
- Professional colleges implement training and deliver qualifications.
- Enterprises provide training places or internships, participate in dialogue with professional organisations and in some cases provide funding for participants.

For full-time professional college students, in-company training is typically included in the curriculum. The content of work-based learning and the organisation of traineeships are not strictly regulated; for example, the legislation only defines the minimum duration of the entire training period.

Trade unions and the governance of work-based learning

In the EU, and in particular in the 15 original Member States, trade unions play an active role in the governance of work-based learning programmes. They play this role at the level of the enterprise (for example, in works councils), at the industry-sector level, at the regional level, and in national advisory and policy-making bodies. Trade union involvement in governance can take many forms. Through both social dialogue and collective bargaining, trade unions can be involved in activities such as:

- negotiating apprentices' pay rates and working conditions, both of which are vital in providing incentives for employers and young people to participate, and in ensuring that costs do not outweigh benefits;
- helping to frame the regulations and policies that govern work-based learning;
- assisting in the development of standards and qualifications;
- providing recognised vocational training to their members;
- acting as partners in the assessment and certification of learning, and providing guidance services for members.

All of these are, of course, in addition to protecting and advancing the interests of their members, including those who are apprentices or who are learners in other types of work-based learning programmes.

Trade union involvement in the governance of work-based learning faces a number of challenges in many ETF partner countries. Membership may be low; the political environment may not favour trade unions and their active involvement as social partners; and trade unions may have limited resources, a situation that may prevent their active involvement, even if the need for involvement is understood. Nevertheless, a number of positive examples exist in which trade unions play an active role in the governance of work-based learning in ETF partner countries.

- **Croatia** has established a system of VET sector councils responsible for the revision of occupational standards.
- In **Kazakhstan** the social partners are granted equal voting rights on VET policy under joint decision-making procedures. They are involved in aspects of the VET system, such as the training of teachers, the provision of vocational practice for students and of a practical component in the final exam, the interaction between schools and enterprises, and participation on school boards.

- Serbia has established a Council for Vocational Education and Adult Education, a tripartite body with key functions, including links with businesses, and involvement in the national qualification framework and curricula.
- In Turkey the national Vocational Education Board and provincial employment and vocational education boards all have trade union representation.

ANNEX: BENCHMARKING CRITERIA FOR QUALITY IN APPRENTICESHIP OF THE EUROPEAN ASSOCIATION OF CRAFT, SMALL AND MEDIUM-SIZED ENTERPRISES

Extract from Linderholm and Parker (2000)

Training in two places: in the enterprise and at school. What matters for apprenticeship, unlike what happens in 'on/off-the-job' training, is that the training takes place, for the most part, in the enterprise and is complemented with the necessary theory.

The apprenticeship contract is the legal basis for the relationship of training in which social and working conditions are regulated.

Fixed standards for the content of practice and theory, mutually complementary, are recognised at national level and are applied to the enterprises. Elaboration of these standards in cooperation with social partners and any public/private organisations concerned.

Guidance and adaptation of training contents and methods in relation to technological and economic progress.

The chambers, the sectoral organisations and other competent institutions ensure a significant part in the organisation of apprenticeship training, in advising enterprises and apprentices, as well as in the training of trainers (e.g. master craftsmen).

Control of the training part taking place in the enterprise (and control of the standards) by the chambers or any other concerned institutions/control of the training part taking place at school by public authorities.

Involvement of the training enterprises in the financing of the practice part. The financing of the theoretical part is done by public financing.

The training is ensured by qualified staff: for the practice in enterprise by trainers (e.g. master craftsmen) who fulfil national required conditions (qualification, experience, reputation ...); for the theoretical part the staff are recruited following criteria recognised at national level.

Validation of skills at the end of the training by an examination organised with the participation of experts from the economic sector (chambers, professional organisations, etc.).

A range of training which is accessible for people with apprenticeship difficulties as well for very gifted people. The enterprise is solely responsible for recruiting its apprentices.

Integration of apprenticeship in the national systems of training. Apprenticeship training is part of a training pathway, which can open access to continuing training (e.g. training of master craftsmen), and to higher education/university.

ABBREVIATIONS

BTS	Brevet de technicien supérieur (France)
CAP	Certificate of Professional Competence (Tunisia)
CFA	Certificate of Completion of the Apprenticeship (Tunisia)
CFPA	Vocational training and apprenticeship centres (Algeria)
ETF	European Training Foundation
EUR	Euro
GDP	Gross domestic product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (formerly GTZ)
GTZ	(see GIZ)
ICT	Information and communication technology
ILO	International Labour Organisation
INAP	Innovative Apprenticeship
INSFP	National institutes for specialised vocational training (Algeria)
MBA	Masters of Business Administration
NCVER	National Centre for Vocational Education Research
OECD	Organisation for Economic Cooperation and Development
PVTD	Productivity and Vocational Training Department (Egypt)
SMEs	Small and medium-sized enterprises
TVET	Technical and vocational education and training
USAID	United States Agency for International Development
VET	Vocational education and training

GLOSSARY

This glossary of common work-based learning terms draws on two principal sources, namely The New Shorter Oxford English Dictionary and NCVER (National Centre for Vocational Education Research) (2006) Thesaurus of VET Descriptors¹². The glossary is reproduced from an earlier ETF publication on work-based learning (Sweet, 2009).

Alternance training

A term that is commonly used in French-speaking countries to refer to education or vocational training in which periods in the workplace alternate with periods in an education and training institution.

Apprenticeship

A long-established form of VET that includes alternating periods at the workplace and in a school or vocational training centre, in which a **contract of training** exists between the apprentice and the employer, and in which the apprentice is legally an employee, rather than a student, and receives a wage or allowance from the employer.

Assessment

The methods and processes used to evaluate the attainments (knowledge, know-how, skills and competences) of an individual, and typically leading to **certification**.

Certification

The process of awarding a certificate to somebody as proof of satisfactory completion of a course of study.

Classroom-based learning

Education and training which takes place within an educational institution (as opposed to the enterprise or workplace).

Competence or competency

The demonstrated capacity to perform: the possession of knowledge skills and personal characteristics needed to satisfy the special demands or requirements of a particular situation. See also **skill**.

Competence-based assessment

Assessment in which the student's competence is judged against previously determined standards or criteria.

Competence-based training

A system by which the student is trained on the basis of demonstrated ability rather than on the basis of elapsed time.

Contract of training

A verbal or written agreement binding an apprentice and an employer and setting out the obligations of each.

Cooperative education

A term that is commonly used in North America to refer to programmes in which learners spend time in workplaces and receive academic credit for the work experience, but in which there may be little connection between what the student does in the workplace and the curriculum of the school or college.

¹² www.voced.edu.au/thesaurus/complete/thesaurus.pdf.

Curriculum

The content of an organised programme of study in an educational or training institution indicating the subjects taught, the time allotted to each, and their sequence.

Demonstration

The process of teaching by showing somebody how to do something: a practical exhibition or explanation of something.

Dual system

The (German) vocational training system, which takes place both in vocational schools and in enterprises. The term is also used for the apprenticeship systems in Austria, Switzerland and Denmark and in some ETF partner countries such as Egypt and Lebanon.

Experiential learning

Learning through the experience of doing something, rather than being told about it or reading about it.

General education

Education which in its choice of subject-matter does not envisage any kind of specialisation or work preparation for students in a particular industry or occupational sector. It is normally contrasted to vocational education or VET.

Internship

A term that is mainly used in North America to describe a period spent in an enterprise gaining practical experience under supervision

Mentor

A trusted and experienced supervisor or adviser (noun). To serve as a teacher or trusted adviser (verb). Mentoring can be one of the techniques used, either formally or informally, to promote enterprise-based learning or experiential learning.

Off-the-job training

Training which takes place outside of the normal place of work, either off the premises, for example in a vocational school or training centre, or in an area of the enterprise set aside for training.

On-the-job training

Training within the enterprise given at the normal place of work and using normal work tasks for instruction and practice purposes.

Practice

Learning through actually doing something, by rehearsal or by repetition.

Qualification

An education and training award or certificate.

Recognition

Acknowledgment of learning, gained either through formal courses of education and training, or through previous life or work experience, and which may be used to grant status or credit in a subject or module.

Sandwich course

A term commonly used in English-speaking countries to refer to programmes, often at tertiary level, in which learners alternate blocks of time in the classroom with blocks of time in the workplace.

School-based training

Education and training which takes place within an educational institution (as opposed to the enterprise or workplace).

Skill

The ability to perform a particular mental or physical activity which may be developed by training or practice. See also **competence**.

Standards or skill standards

Statements developed by industry specifying the competences required by workers for each sector of the workforce.

Structured work-based learning

Formal learning which occurs in the workplace using an instructional plan, skill list or competence list to organise the knowledge and skills that need to be learned. Normally contrasted to experiential learning or informal learning.

Theory

General principles, methods or conceptual knowledge (as opposed to practice).

Training

The development of skills, knowledge, attitudes or competences through instruction and practice.

Training contract

See **contract of training**.

Training wage

The wage or salary that is paid to somebody in a contract of training. It is normally discounted, or reduced, when compared to the wage of a normal worker, to recognise the time and effort that the employer devotes to training, and the resulting loss of enterprise productivity, as well as to recognise the increased future income that will flow to the employee as a result of gaining skills.

Vocational education, or vocational education and training (VET), or technical and vocational education and training (TVET)

Vocational training, given in primary or secondary schools, in enterprises or in higher educational institutions designed to develop occupational skills.

Work placement

A period of unpaid work undertaken by students as part of their course of education in a school or higher educational institution, and which is characterised by the structured nature of the learning.

Work-based learning

Learning that takes place within the workplace using tasks or jobs for instruction and practical purposes. It may be formal and structured using instructional plans, or informal, occurring incidentally, in the process of normal daily work, for example, through experience, practice, mentoring or demonstration.

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A NOTE ON SOURCES AND SOME FURTHER READING ON WORK-BASED LEARNING

A note on sources used for this handbook

The handbook draws on a wide range of sources for its national examples and policy messages. For ETF partner countries three main sources have been used:

- a compendium of initiatives on work-based learning and a separate mapping of work-based learning practices, predominantly drawn from ETF partner countries, that were prepared by the consulting firm GHK as part of the wider Learning Context Matters project, of which this handbook has been a part;
- a set of national questionnaires on work-based learning in partner countries that were gathered by GHK as part of the wider project;
- Sweet, R., European Training Foundation, (2009) *Work-based Learning Programmes for Young People in the Mediterranean Region*, Office for Official Publications of the European Communities, Luxembourg, 2009.

For examples drawn from the Asia-Pacific region the primary source is:

- Sweet, R., 'Work-based learning: Why? How?', in *Revisiting Global Trends in TVET: Reflections on Theory and Practice*, UNESCO-UNEVOC, Bonn, 2013.

In turn this draws on a set of descriptions of national VET systems prepared in 2011 for Training Recognition Australia, an agency of the Australian government.

Material on EU and OECD countries draws on a number of sources. Two of the principal sources are:

- Cedefop's descriptions of national VET systems: www.cedefop.europa.eu/EN/Information-services/vet-in-europe-country-reports.aspx
- the country studies and national policy reviews that have been prepared as part of the OECD's current VET policy review: www.oecd.org/edu/skills-beyond-school/oecdpolicyreviewsofvocationaleducationandtrainingvet.htm

Further reading

A number of sources, in addition to those cited in this handbook, can be consulted for additional information on work-based learning policy and on good practice in implementing work-based learning programmes. They include:

- European Training Foundation, *Work-based Learning: Benefits and Obstacles. A Literature Review for Policy Makers and Social Partners in ETF Partner Countries*, ETF, Turin, 2013.
- European Commission, *Background paper for the European Seminar: Monitoring and Evaluation of Apprenticeships and Traineeship Schemes*, Brussels, 2014.
- European Commission, *Apprenticeship and Traineeship Schemes in EU27: Key Success Factors. A Guidebook for Policy Planners and Practitioners*, Brussels, 2013.
- European Commission, *Work-based Learning in Europe: Practices and Policy Pointers*, Brussels, 2013
- Material produced for the European Alliance on Apprenticeship: http://ec.europa.eu/education/apprenticeship/index_en.htm
- Material developed for the European Commission's Rethinking Education strategy: http://ec.europa.eu/education/policy/vocational-policy/alliance_en.htm

- An overview of apprenticeship systems and issues produced by the ILO in 2012 as a contribution to the G20 Task Force on Employment: www.skillsforemployment.org/wcmstest4/groups/skills/documents/skpcontent/mwdf/mdi/~edisp/fm11g_022022.pdf
- An OECD note on quality apprenticeships prepared in 2012 as a contribution to the G20 Task Force on Employment: www.oecd.org/els/emp/OECD%20Apprenticeship%20Note%2026%20Sept.pdf
- Material that is available through the International Network on Innovative Apprenticeship (INAP), and in particular papers delivered at its conferences in 2006, 2008, 2009 and 2011: www.inap.uni-bremen.de/
- INAP's 2012 memorandum, *An Architecture for Modern Apprenticeships – Standards for Structure, Organisation and Governance*: www.inap.uni-bremen.de/dl/memorandum_inap_commission_architecture_apprenticeship_2012.pdf
- Deitmer, L., Hauschildt, U., Rauner, F. and Zelloth, H. (eds.), *The Architecture of Innovative Apprenticeship*, Springer, Dordrecht, 2013.

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