



Comparative Analyses



Work-based learning programmes for young people in the Mediterranean region

EDUCATION AND TRAINING FOR EMPLOYMENT (ETE) IS AN EU FUNDED INITIATIVE IMPLEMENTED BY THE EUROPEAN TRAINING FOUNDATION (ETF). ITS OBJECTIVE IS TO SUPPORT THE MEDITERRANEAN PARTNERS IN THE DESIGN AND IMPLEMENTATION OF RELEVANT TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) POLICIES THAT CAN CONTRIBUTE TO THE PROMOTION OF EMPLOYMENT THROUGH A REGIONAL APPROACH.

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Comparative Analyses Work-based learning programmes for young people in the Mediterranean region

Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, the Occupied Palestinian Territory, Syria, Tunisia and Turkey

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EXECUTIVE SUMMARY

Introduction

This report examines programmes for youth that combine learning in classrooms with participation in work in ten Mediterranean countries: Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, the Occupied Palestinian Territory, Syria, Tunisia and Turkey. It is one element, together with the development of a network of policymakers and experts from the ten participants, a study visit to the Netherlands and a peer learning review visit to Turkey, of an ETF project on work-based learning for youth in the Mediterranean region. In turn this is part of a wider project, taking place over several years, on education and training for employment in the region. One of the key objectives of the project is to help the countries of the region learn from one another's experiences as a way of improving both policy and practice. The report is based on ten national reports that used a common analytical framework, on field visits to four of the countries, on a study visit to the Netherlands, and on meetings of national experts and policymakers. Its analytical framework focuses both on ways in which institutional and systemic factors influence the scale and character of work-based learning programmes, and on the impact of incentives and social capital (networks, trust, cooperation). It examines a wide range of programmes, some that are called apprenticeships and many that have other titles but which share some of the same characteristics.

The regional context

The scale and character of work-based learning programmes for young people in the Mediterranean region are influenced by a number of economic, demographic, labour market, educational and cultural factors. High rates of economic growth in recent years have been fuelled by structural reforms including economic liberalisation, by the increasing opening up of economies to international trade, and by foreign investment. These trends are shifting the region's employment base as manufacturing for export markets grows, thus changing the demand for skills and qualifications. Nevertheless manufacturing-driven demand for vocational skills is unevenly distributed in the region: for example industry accounts for around 60% of GDP in Algeria but only around 24% in Lebanon.

Despite recent growth, some of the countries of the region remain quite poor: perhaps half or more of the population of the Occupied Palestinian Territory live in poverty, and even in Morocco, where economic growth has recently been very strong, as many as one in five of the population lives in poverty.

Throughout the region the population is a young one, and it is growing far more rapidly than in Europe. This places considerable pressure on governments to find jobs, education and training for young people. High population growth and the flow into the labour market of large numbers of young people helps to explain one of the paradoxes of

recent economic growth in the region: it has not been able to generate sufficient jobs to meet the needs of all who want work. And so unemployment remains high, in particular among young people. However the formal unemployment rate is an imperfect indicator of the shortage of stable regular jobs in the region, with all countries experiencing significant underemployment and having a large informal sector: this accounts for perhaps half or more of all employment in Egypt and Tunisia. The informal sector is an inadequate basis for structured and regulated employment and training arrangements for youth, and it is a limitation on the expansion of these arrangements. This is because it is unregulated, hard to identify, located in unregistered or unincorporated enterprises, and is not protected by legal frameworks such as social security contributions. Unemployment, and differences among countries in its incidence, is also important in helping to constrain demand for skills, as it reduces the incentive for employers to invest in skills and technology rather than rely on a plentiful supply of cheap labour. The existence of large numbers of small, medium and micro enterprises is another factor with implications for work-based learning programmes in the region. In Jordan, for example, those that employ less than five people account for around 90% of all enterprises and over a quarter of all employment.

In Lebanon, Morocco and the Occupied Palestinian Territory, for example, early school leaving is a significant problem, and in Egypt and Morocco illiteracy is an issue. Both factors place pressure on governments to meet the needs of those young people who have most difficulty in finding work. In most of the region vocational pathways are smaller than is typically the case in European countries, with professional and white-collar work being highly valued. This limits the size of work-based programmes and increases the chance that they will attract the lowest-achieving students. As a result these programmes are likely to be seen as a low-status residual pathway.

While cultural factors such as gender stereotyping and the role of the family help to influence the attractiveness of vocational, including work-based, options in the Mediterranean region, these are not unique to the region and can be found in most European countries, even if their relative scale and importance might (or might not) be greater within the region.

Combining work and learning: Why? How?

For some 30 years the combination of work and learning has been an attractive, if not seductive, idea for policymakers. Influenced in part by evidence from apprenticeships in German-speaking countries, this has been based on four sets of arguments: that it can improve pathways to adulthood; deliver economic and labour market benefits; improve pedagogy; and reduce costs and increase capacity within the vocational education and training system. While there is certainly research evidence in favour of this support for work-based learning programmes for youth, there is also evidence that other types of transition pathways can lead to good outcomes for youth. In the case of apprenticeship and other work-based models, the evidence indicates that they need to be done well if they are to succeed.

Certainly very few European and other Organisation for Economic Cooperation and Development (OECD) countries have large work-based systems for young people. The combination is a difficult one to achieve on a large scale: it requires well-developed institutional support in the labour market and qualification systems as well as effective cooperation between employers and educational institutions, between the public and

private sectors, and between education, labour market, economic and social policies. A number of examples can be found in recent years in which the attempt to develop such systems has not been a success, although these examples can be balanced by cases such as Ireland and Norway in which some success is evident.

Both the examples of failure and the successful cases suggest that a number of factors are important:

- coherence within the various parts of a national vocational education and training system;
- coherent financing and regulation methods;
- attention to the reality of the ways in which enterprises operate and work is organised;
- the involvement of employers and trade unions;
- the ways in which qualification systems relate to the labour market;
- close relationships between enterprises and schools at the local level.

Models of work-based learning in the Mediterranean region

Throughout the region there is a long tradition of skill development through informal or traditional apprenticeships. Although reliable data on their extent are not available, informal apprenticeships still represent the main training route for some sectors and occupations: for example crafts, the construction sector, retail trade, garment-making and repair, and automobile maintenance. Typically informal apprenticeships take place entirely within the workplace and do not involve any complementary classroom-based education or training.

In addition to these informal arrangements, the project has revealed almost 30 formal work-based learning programmes or schemes. They can be classified into three groups.

- Well-established programmes with relatively large numbers of participants, which
 represent a reasonably larger share of the upper secondary initial vocational
 education and training system, and have a sound institutional base. Included here
 are Algeria's apprenticeship programmes, Morocco's alternance and
 apprenticeship programmes, Turkey's apprenticeships and internships, and
 Jordan's applied secondary education.
- Long-established programmes that have become a normal part of the country's vocational education and training system, but have remained very small, particularly in relation to completely institution-based vocational education and training. Included here are the programmes of the Egyptian Ministry of Trade and Industry's Productivity and Vocational Training Department (PVTD) and Ministry of Education, and Israel's apprenticeships and enterprise-based training.
- Relatively recent, small pilot programmes that in many cases still depend on support from donor agencies for their continued existence and viability. Examples include programmes in Lebanon and the Occupied Palestinian Territory, Syria's pilot apprenticeships and perhaps also the Egyptian Mubarak-Kohl Initiative (MKI).

While it is difficult to accurately estimate the absolute and relative size of these programmes, it does seem that in most of the region work-based learning currently offers very few opportunities to young people. Much of the reason for this in some areas — notably Lebanon, the Occupied Palestinian Territory and Syria — is that vocational education and training itself appears to be quite a small component of the education system. However in cases such as Egypt, Israel and Jordan the main reason seems to be the dominance of institution-based programmes within the overall vocational education and training system. Only in Algeria and Turkey, and perhaps also Morocco, have work-based programmes reached a share of either vocational education and training or overall educational participation comparable to that found in some European countries.

In almost all the programmes that came to light in the study, entry is limited to those of the normal age of secondary education, and occurs at the normal age of entry to secondary education. Reflecting this, in almost all cases programmes require completion of basic, primary or compulsory education for entry. This does not guarantee that they are equal in status to other secondary-level programmes. In many cases, such as Jordan's applied secondary education programmes, lower-achieving students are streamed into them, often unwillingly, on the basis of their performance in primary or compulsory education. In many cases this low status of vocational education and training and work-based learning persists even though a clear route has been created from it to tertiary studies and it leads to a normal secondary certificate.

However the problem of low status for work-based forms of vocational education and training is, in some countries, compounded by segmented vocational education and training systems in which work-based programmes lead to lower qualifications than do other programmes: for example in Israel and Morocco apprenticeships have been designed largely for school drop-outs.

Wide variation was discovered in the ways in which programmes are structured, for example in typical duration (from one to four years), in the proportion of time spent in the workplace (from as low as 25% to as high as 80%), and in attendance patterns. In some cases neither the needs of young people nor the needs of industry seem to explain these differences.

Despite limitations in the available information, it seems as if many programmes are focused quite heavily on the traditional manual trades and blue-collar work, and have made little impact on more modern areas of the economy, the service sector and higher-skilled occupations. Nevertheless there are some interesting exceptions. Egypt offers programmes in business, commercial and hotel and catering fields; programmes in telecommunications and nursing can be found in Syria; and in Algeria programmes have made a strong intrusion into white-collar work, the service sector, and the higher levels of the country's vocational qualifications system.

In nearly all cases the off-the-job complementary education and training contains both vocational theory and practical work, but programmes in which this contains only vocational theory exist in Algeria and Tunisia, giving rise to questions of quality and of the appropriate coordination between the workplace and the off-the-job institution. In some countries programmes make use of an initial period of pre-employment training, and this can help to develop basic skills before the young person begins work, as well as improving vocational decision-making.

Assuring the quality of work-based learning

The quality of learning in the workplace can be influenced in a number of ways, and examples of all these can be found among the countries taking part in the project. These methods include:

- Influencing the selection of firms. The involvement in training of employer
 organisations, including helping to screen firms that train young people, is not well
 developed in the region. However craft chambers are involved in selecting firms to
 take part in Morocco's apprenticeship programme, and in Egypt and Turkey
 educational institutions help to play this role.
- Training enterprise staff. Formal programmes to train enterprise staff, who in turn
 train young people at work, can be found in Algeria, Morocco, the Occupied
 Palestinian Territory, Syria and Turkey. However delivering sufficient places in
 such programmes and assuring employer attendance remain problematic.
- Inspection systems can be found in Algeria, Israel, the Occupied Palestinian Territory and Tunisia.
- On-the-job training tools. Examples were found either of tools such as competency lists to indicate the content of in-firm training or of logbooks to record the training undertaken in Jordan, Morocco, Syria and Turkey. However these seem to be of varying effectiveness and thoroughness.
- Networks and relationships. In some parts of the region the staff of educational institutions undertake visits to training firms, although these visits are often inspectorial rather than pedagogical. A Syrian training programme for educational and enterprise staff has attempted to strengthen networks and relationships by training both groups together.
- Assessment and certification. National examinations that cover both theoretical knowledge and practical skills as a requirement for successful programme completion exist for programmes in Egypt, Israel, Jordan, Lebanon, the Occupied Palestinian Territory, Syria and Turkey. In Jordan there is a proposal to establish a Licensing and Accreditation Agency to be responsible for assessment and certification and that would involve a separation of training delivery from assessment.
- Supplementary training to compensate for gaps in enterprise training is difficult to organise effectively, but examples were found in Egypt and Jordan.

While it appeared common during the field visits for many policymakers to criticise the quality of training within enterprises, this view was less apparent among the staff of educational institutions, and was often accompanied by a relative lack of interest by policymakers in ways of judging and improving quality within educational institutions. Resource constraints were a common concern about the quality of institutional training: teacher salaries being too low to attract enough well-qualified staff and too little money being available for facilities, equipment and materials. In addition to problems and constraints, the study has revealed a number of initiatives to measure and improve off-the-job quality. These include institutional standards and monitoring in Israel, pedagogical training for staff in the Occupied Palestinian Territory, and the proposal to establish a Licensing and Accreditation Agency in Jordan.

When considering quality in work-based learning programmes, there appeared to be a stronger concern in the region with inputs than with ways to assess the outcomes of training: for example through drop-out and completion rates, employment rates, the type

of employment achieved and the quality of the skills acquired during training. In some cases this can be attributed to weaknesses in the data and evaluation systems that are used to support programmes. There is a good case for improving skill benchmarking systems in the region, as well as for developing frameworks for judging the quality of work-based learning programmes that better reflect the institutional and resource realities of the region.

While many individual initiatives can be identified to improve and monitor quality, some of the more integrated and coherent are evident in very small pilot programmes, for example in the Occupied Palestinian Territory and Syria. Steps suggested for improving quality include a stronger role for educational institutions in screening enterprises; developing simple tools such as logbooks and competency lists to guide training in the enterprise; improving links between teachers and enterprises; the use of more independent assessments; standards for evaluating and accrediting educational institutions; and improved outcome measures.

Governing work-based learning systems

Work-based learning systems pose unique challenges within the overall governance of vocational education and training systems. Governance can be thought of in terms of goals (for example quality, responsiveness and coordination), dimensions (for example levels, actors and roles), and in terms of the tools of governance. The discussion of governance is organised around the tools used to govern work-based learning in the region.

- Legislation and regulation. Quite detailed legislation to support work-based learning programmes for young people exists in Algeria, Morocco, Tunisia and Turkey, but it is less well developed elsewhere. There seems to be a relationship between how well regulatory and legislative arrangements are developed and the scale of programmes.
- Contracts of employment and training that have a formal legal status appear to
 exist in only a few cases (for example in Turkey and in Morocco's alternance
 programmes). Contracts of a voluntary nature exist in other cases such as
 programmes in Lebanon and Syria. Contracts do not exist at all in Israel and
 Jordan, and are not used by employers in some apprenticeship programmes in
 Morocco.
- Financing systems include not only public payments for institutional training, but also the ways in which employer and youth incentives are influenced by training wages, taxes and levies, and wage subsidies. Financial mechanisms such as training taxes to encourage employer participation in vocational training can be found in Algeria, Jordan, Morocco, Tunisia and Turkey. However, except in the case of Algeria, these are often not well targeted to encourage work-based learning for young people, and they generally do not form part of a coherent overall financing system for such programmes. In some cases (for example Lebanon, often in Morocco) young people taking part in these programmes receive no payment. In others their payments are completely a matter for individual negotiation. Formal and regulated wage arrangements exist in Israel, but they provide weak incentives for participation. The most coherent and rational wage arrangements, offering appropriate incentives to both employers and youth, are in Algeria and Tunisia.

- Data and evidence to support and steer work-based learning programmes in the
 region are generally poorly developed, and where available are often not used as
 effectively as they might be. However some useful examples to the contrary were
 discovered in Algeria, Jordan and Morocco.
- Cooperation and social capital play an important but often unrecognised role in governing work-based learning systems. Formal structures for cooperation among the key actors tend to be relatively weak in the region, partly because employer organisations and trade unions are themselves weakly developed, and partly because of a centralist tradition of government decision-making and programme management. Informal and local cooperation, particularly between educational institutions and employers are important, and intermediary bodies, such as those found in Australia, Egypt, the Netherlands and Norway can play a major role in stimulating this.

In considering ways of improving governance, the analysis suggests that it seems likely that significant benefits will flow from developing more coherent financial, regulatory and legal systems than from the continued development and extension of pilot programmes, particularly given that many of these do not seem to be systematically evaluated or have mechanisms in place for communicating their benefits. Recent attempts to improve governance through a stronger role for employers and trade unions can be observed in Jordan and Tunisia, and a strong place in governance for these organisations appears to have been a long-standing feature in Turkey. The creation, with government support, of a wider range of intermediary bodies could both help to improve governance and strengthen the roles of employers and other actors in the operation and management of programmes.

Looking to the future: Choices, opportunities and constraints

The challenges that face work-based learning for young people in the Mediterranean region differ among the three categories of programme identified in Chapter 4. Among these challenges are balancing growth and quality improvement; reconciling social and economic needs; strengthening links to the labour market; and improving governance systems, including the regulatory environment and financing systems. Achieving a balance between growth and quality is a key challenge, given the size and growth of the youth population in the region and the levels of youth unemployment. The extent to which expansion in programme places can deliver real benefits for young people is a real issue if non-completion rates are high and the priority for places is within economic sectors in decline or unattractive to young people. International experience suggests that there is no ideal size for work-based learning systems, and that good social and economic outcomes for youth can also be achieved by other means. If good outcomes are to be achieved through such programmes, they need to be implemented well, with an emphasis on quality.

In addressing the challenges that face work-based learning programmes it is important to be realistic about both opportunities and constraints. Constraints include the size of national initial vocational education and training systems: increasing this might require higher-quality work-based learning programmes targeted at higher-skilled areas of the economy that lead to attractive work. Labour market constraints exist in the form of

wage fixation systems, but programmes in which the young person is a student rather than an employee might provide an opportunity to circumvent such constraints. Another labour market constraint is the reality of competition from cheap labour arising from unemployment, migration or both.

The development of better systems of financing, regulation and governance, with the involvement of key stakeholders, will be important in both future expansion and future quality improvement. An additional helpful factor would be the development of a clearer and more coherent relationship between work-based learning programmes and other elements of the initial vocational education and training system, and among different types of work-based learning programmes.

The project has demonstrated that there are many excellent examples within the region from which the participants can learn. There are a number of directions that mutual policy learning within the region might take. These include developing more programmes at higher levels of qualifications, and in white-collar and highly skilled jobs, following the example of Algeria; developing frameworks for assessing quality that better reflect regional realities; learning from good examples of regulatory and financing systems within the region; exploring the basis for differences among countries in the structure of programmes within similar occupation or industry sectors; and strengthening the role of intermediary bodies.

1. INTRODUCTION

This chapter sets the context of the report within the wider work of the European Training Foundation (ETF). It briefly describes the structure of the report and the sources of data used for the analysis. It presents an analytical framework that focuses as much on social capital as institutional factors. And it explains why the term 'work-based learning' is used throughout the report in connection with those programmes in which work is combined with learning in classrooms.

1.1 Focus and methodology

This report examines programmes that allow young people to combine classroom learning with work. Such programmes raise special issues for public policy, as they require cooperation between employers and educational institutions, between the public and private sectors, and between education, labour market, economic and social policies. It draws on the experiences of ten Mediterranean countries: Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, the Occupied Palestinian Territory, Syria, Tunisia and Turkey. It is one element – together with the development of a network of policymakers and experts from the ten participants, a study visit to the Netherlands and a peer review visit to Turkey – of an ETF project on work-based learning for youth in the Mediterranean region. In turn this is part of a wider project, taking place over several years, on education and training for employment in the region. The report begins by briefly describing some of the contextual factors that can influence the nature and extent of work-based learning programmes for young people. It then looks at some evidence from the research and policy literature on the potential benefits of combining work with learning. One of the key objectives of the project is to help the countries of the region to learn from one another's experiences as a way of improving both policy and practice¹.

There is a surprisingly wide variety of work-based learning programmes for young people in the region, including but extending well beyond those described as apprenticeships. And so the first substantive task of the report is to describe what has been discovered about them: their scale relative to other parts of the initial education and training system; who takes part in them; how they are structured, managed and delivered. The report then turns to a number of key policy questions. How can the quality of programmes be assured and improved? How can their governance be improved in order to ensure that they achieve their objectives? And what choices, opportunities and constraints exist for countries that are trying to extend opportunities for young people to take part in such programmes and to improve their quality?

The report is based on two main sources of data. The first is a set of ten background reports written by national experts selected by the ETF from the regional participants, using a common analytical framework. The second main source is evidence,

A full description of the wider project of which the review of work-based learning is part can be found on the ETF website (www.meda-ete.net/).

documentation and lessons gathered during field visits to four of the participating countries: Algeria, Egypt, Jordan and Morocco. The report also draws on material presented at two meetings held in Turin in mid 2007: the first by national experts; the second by national policymakers and stakeholders. It has been written by Professor Richard Sweet of Sweet Group Pty Ltd and the Centre for Post-compulsory Education and Lifelong Learning at the University of Melbourne, Australia. Within the ETF responsibility for managing the project has rested with Borhène Chakroun and Helmut Zelloth. Particular thanks are owed to the ten experts from the region who prepared the background reports and have assisted the project in a number of other ways, including the provision of additional information and assistance with the four field visits: Akli Rahmouni (Algeria), Aboubakr Badawi (Egypt), Ben Levinson (Israel), Abdalla Ahmad Mustafa (Jordan), Abdul Majid Ghani (Lebanon), Houriya Chérif Haouat (Morocco), Hisham Kuhail (the Occupied Palestinian Territory), Anton Al Jouni (Syria), Ahmed Gdoura (Tunisia) and Ozlem Unluhisarcikli (Turkey).

1.2 Analytical framework

There is a long tradition in comparative analyses of youth transitions and apprenticeship of seeking to account for countries' outcomes through the operation at national level of institutional, structural and systemic factors: the characteristics of national education systems; education and training pathways; national qualification systems; the operation of national labour markets; the ways in which key actors cooperate at national level and the like (see for example Ryan, 1991; OECD, 1996 and 2000; Raffe, 2003; Resnick and Wirt, 1996; Gitter and Scheuer, 1997; Shavit and Müller, 1998).

There is no doubt that these factors are important in achieving good outcomes for young people and ensuring that programmes are of high quality. For this reason, the guidelines for background reports asked for details of factors such as legislation, funding arrangements, curriculum processes, how employers and employees are organised, and wage rates. But while these might be necessary factors, they are not sufficient. There is a significant body of research to support a case for also focusing analytical attention, when studying work-based learning, on social capital: factors such as the incentives that encourage participation by key actors (such as teachers, employers and young people) at local level, and for looking at how effectively networks, partnership, trust and cooperation at local level can help both to encourage participation and to ensure quality (Granovetter, 1974; Kariya, 1998; Dore and Sako, 1998; Rosenbaum, 1999; Taylor, 2006; Sweet, 2006). Thus the analytical framework for the report seeks to take both sets of factors into account².

1.3 A note on terminology

Work and learning can be combined in many ways. Some of these might not require the involvement of educational institutions or of formally organised training classes. For example there is a substantial literature on learning in the workplace which shows how

Recognition of the importance of such factors was evident during the field visits. For example, during the visit to Jordan an instructor in a vocational training centre in Amman, accounting for the centre's experience in having good cooperation with employers, said: 'They need us, we need them.'

techniques such as job rotation, task variety, mentoring and supervision by experts can help to make work learning-rich (see for example Koike, 1986; Eliasson and Ryan, 1987). Techniques such as these can certainly be important in ensuring the overall quality of the types of programme that this report is concerned with. Yet the focus of the report is programmes in which work, however organised, and whether paid or unpaid, is combined with formal instruction, either in education and training institutions or in special training classrooms within enterprises. These programmes can take many different forms, and even those that have the same title, for example 'apprenticeship', can be quite different one from another. Differences between these programmes in the Mediterranean participants in this project and in OECD countries can be even greater. For such reasons the more general term 'work-based learning' has been used to include all types of programme that are the focus of this report. The importance of an analytical framework broader than simply apprenticeship will become clearer below.

2. THE REGIONAL CONTEXT

This chapter describes some of the key contextual factors that have the potential to influence the scale and character of work-based learning programmes for youth in the Mediterranean region. These include demographic trends, the economy, the labour market, the education system and social and cultural factors.

A striking feature of the region covered by the participants in the project is its rapid economic growth in recent years, despite the political turmoil and uncertainties that continue in Lebanon and the Occupied Palestinian Territory, in particular. The most recently available figures³ show an average annual rate of increase in GDP of 4.6% across the ten participants in the project, reaching as high as 8% in 2006 in Morocco. This growth has been fuelled by a number of factors including rising world energy prices. Also of considerable importance has been the growing wave of structural initiatives that have led to increasing economic liberalisation within the region. This has resulted in a progressive dismantling of government monopolies and state-owned enterprises in countries such as Algeria and Egypt and a corresponding growth of the private sector. Nevertheless governments are finding it difficult to let go of their centralist traditions in some countries. The role of the market in allocating resources is accepted more easily in some countries – for example Jordan where there has not been a long period of state ownership of much of the means of production – than elsewhere in the region.

Closely linked to recent structural reforms has been a growing engagement in world trade. For many of the countries of the region, trade with Europe has been stimulated by the 1995 Barcelona Declaration, in which 27 countries agreed on the establishment of a Euro-Mediterranean Free Trade Area (EMFTA) by 2010⁴. This is to be achieved by means of the Euro-Mediterranean Association Agreements negotiated between the European Union and 9 of the 12 Mediterranean partners, together with free-trade agreements between the partners themselves: Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, the Palestinian Authority, Syria and Tunisia. The Agadir Process, an important sub-regional initiative, was initiated by Egypt, Jordan, Morocco and Tunisia in May 2001. These four partners expressed their intention to set up a free-trade area among themselves. In the case of Turkey a customs union with Europe has been operating since 1996. One consequence of increasing economic liberalisation has been the growth of manufacturing industries with a strong export orientation in some countries. New management methods and technology are being adopted, and there is an outsourcing of production to the region by European firms. These are leading to an increasing demand for skills and qualifications in many countries, with an obvious impact on education and training for youth. However manufacturing-led demand for vocational skills is unevenly distributed among the ten participants, with industry accounting for 62% of GDP in Algeria but only 24% in Lebanon (see Figure 1).

^{3 2006} or nearest year: see Annex 2. The same source has been used for all economic data cited here.

⁴ http://europa.eu/scadplus/leg/en/lvb/r15001.htm

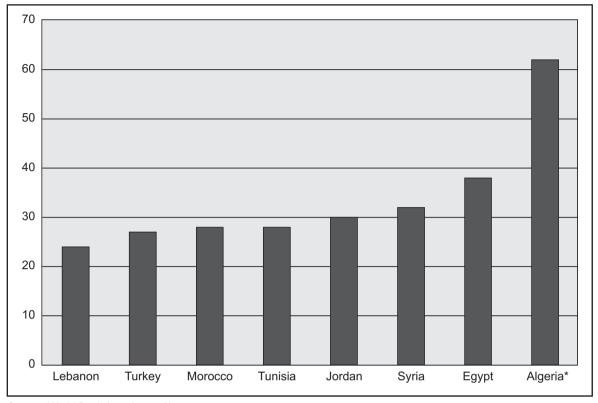


Figure 1: Industry as a percentage of GDP (2006)

Source: World Bank (see Annex 2)

* Year of reference 2005

Despite recent growth, parts of the region remain quite poor. GDP per capita in Israel, the wealthiest country of the ten, is around US\$26,800 (at purchasing power parity) but only around one-third of this in Tunisia and Turkey, the next wealthiest of the ten, and as low as US\$1,500 a head in the Occupied Palestinian Territory. Poverty remains a reality for very many of the region's inhabitants: perhaps half or more of the population of the Occupied Palestinian Territory is estimated to be below the poverty line, and even in Morocco where economic growth has recently been very strong, as many as one in five of the population lives in poverty. Economic change has been accompanied by other dislocations: shifts of population to already crowded urban areas; and a decline in some countries in traditional small-scale agriculture as agri-businesses introduce more efficient means of production.

Throughout the region the population is a young one, particularly when compared with European countries, and it is growing far more rapidly than in Europe. Among the participants around one in three of the population is aged less than 15, and close to half in the Occupied Palestinian Territory. Each year across the region the population growth rate averages 2%. By way of contrast, only 14% of the population in Germany and Italy are under the age of 15, and in these two countries the annual population growth rate is close to zero. This places considerable pressure on governments in all ten countries to find jobs, education and training for young people.

This high population growth and the regular flow into the labour market each year of large numbers of young people help to explain one of the paradoxes of recent economic growth in the region: it has not been able to generate sufficient jobs to meet the needs of all who want work (see for example Bardak et al., 2006). Thus unemployment is much higher than in most European countries, and unemployment among young people is significantly higher than in the labour force as a whole. The formal unemployment rate for

the total labour force averages around 14% across the region, and ranges from 9% in Israel to around 27% in the Occupied Palestinian Territory.

The formal unemployment rate is an imperfect indicator of the shortage of stable regular jobs in the region (normally the types of job that structured training arrangements for youth can be attached to). One reason for this is the phenomenon of underemployment, in which work is irregular, casual and occupies only a few hours per week. And in all countries there is a large informal sector whose definition and size are open to dispute (Bardak et al., 2006, pp. 32–37), but which can be estimated to account for half or more of all employment in Egypt and Tunisia, and to account for about 30% of all GDP in Egypt. For present purposes the importance of the informal labour market is that, being unregulated, invisible, in unregistered or unincorporated enterprises and unprotected by legal frameworks such as social security contributions, it forms both an inadequate foundation to which to attach structured and regulated employment and training arrangements for youth, and a limitation on the expansion of these arrangements.

A closely related feature of the structure of employment within the region, which has significant implications for the present and future character of work-based learning programmes for young people, is the large number of small, medium and micro enterprises. In Jordan, for example, those that employ less than five people account for around 90% of all enterprises and over a quarter of all employment. In Egypt it is estimated that small and medium-sized enterprises, including those in the informal sector, account for around 60% of all employed individuals.

In considering policies for structured training arrangements for young people in the region, it is also important to take account of wage pressures and wage fixation arrangements within national labour markets. First, where unemployment is high, there is pressure to hold wages down. Competition from the unemployed encourages the use of cheap labour, and reduces the incentive for firms to invest in technology and in the upgrading of skills. This issue needs to be seen in a regional context, for there is a significant flow of labour from the poorer areas, and from those with the highest level of unemployment, to those where wages are higher and jobs more plentiful: Palestinians can be found in the Israeli construction industry; Egyptians in the Jordanian. And this readily available source of cheap labour is another factor that reduces the incentive for employers to invest in the upgrading of skills.

Another feature of the labour markets of the region is the relatively low rates of female participation in comparison with European countries. The average across the participants is 33%. Only Israel, where the rate is 59%, approaches the participation rates of 60% or more that are the norm in Europe; and in the Occupied Palestinian Territory only around one in ten adult women participates in the labour market.

Some forms of structured work-based learning programmes for young people depend in part for their success on a regulated wage structure that provides clear incentives for young people to gain skills in the expectation that this will lead to higher incomes; and for employers to invest in the training of young people even though they are relatively unproductive and training is a cost. And so a clear structure of sub-minimum youth wages will encourage investment in training. However not all the countries of the region have central wage fixation systems that encourage such a youth payment structure. This exists in Turkey and Tunisia through sector agreements, but in Jordan youth wages are a matter for individual negotiation with each enterprise.

The role that qualifications play in the labour market is another factor that can encourage or discourage the creation of coherent vocational education and training arrangements for youth. A requirement that applicants have a specified formal training qualification in order to be hired for a particular job (for example to have completed an apprenticeship as a motor mechanic in order to be hired as a mechanic), encourages the creation of structured education and training arrangements, including those that are work-based. Where jobs can be obtained with no qualifications, where qualifications are optional, or where different types of qualifications have equal value, the creation of such arrangements is more difficult. Systematic data on this are not available for the region. However in some countries the strong representation of the informal economy in sectors of the labour market such as automotive repair and construction will hinder the introduction of more structured training arrangements. In Jordan the law was amended in 1999 to introduce a requirement for specified vocational qualifications to be obtained in around 30-40 occupations (mainly those where public safety was an issue, such as electrical work and plumbing). A period of grace of three to five years was allowed for workers to obtain qualifications, but during the national visit it was conceded that the system is still evolving.

The education systems of the region have a number of features that are important in considering the character and size of work-based learning systems, and in considering policies for their future. In some, notably Morocco, the Occupied Palestinian Territory and Turkey, early school leaving⁵ is an issue, with around one in seven dropping out in Morocco, and one in ten in the Occupied Palestinian Territory and Turkey. Illiteracy among young people is a particularly significant problem in Morocco, where around 30% of 15–24 year-olds are not literate, and in Egypt where the figure is around 15%.

Professional and white-collar work is highly valued in almost all countries of the region. This leads to significant pressure for university places, and reduces the attractiveness of vocational education and training pathways, which, as a consequence are generally far smaller than in many European countries.

Figure 2 shows a recent estimate of the size of the vocational pathway in upper secondary programmes⁶ in the ten regional participants. Only in Egypt are more than half of all upper secondary students found in a vocational programme⁷, and in Turkey the figure is close to 40%. In all other countries it is generally less than one-third, and in the Occupied Palestinian Territory and Tunisia only around one young person in 20 is found in a vocational programme. In contrast, in nearly all European countries at least half of all upper secondary places are in vocational programmes. In those countries that have reasonably large work-based learning systems, such as Austria, Denmark, Germany, the Netherlands, Norway, Sweden and Switzerland, the proportion of young people in a vocational programme ranges from around half to close to 80%. The relatively small size of the vocational pathway in the countries of the Mediterranean region increases the chance that they will attract the lowest-achieving students and that as a result they will be seen as a low-status residual pathway. In addition, as in Egypt and Jordan, where many

⁵ Defined here as the rate of primary-school children out of school.

Defined as all programmes at International Standard Classification of Education (ISCED) 3 level, rather than in terms of institutional affiliation.

⁷ This is the result of a deliberate policy of limiting the number of places in upper secondary academic or general education programmes in order to limit competition for university entry.

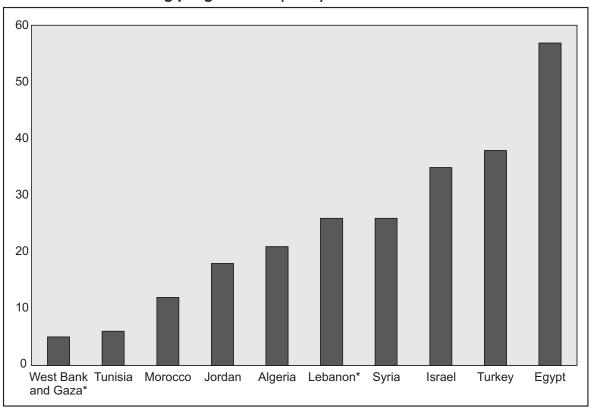


Figure 2: Percentage of all upper secondary students in vocational education and training programmes (2005)

Source: UNESCO Institute for Statistics (see Annex 2)

* Year of reference 2006

of those in vocational programmes take part unwillingly, there is an increased risk of many participants having low levels of interest and motivation.

Cultural values also help to shape the nature of work-based learning systems, even if only through the ways in which they affect attitudes to work, and to participation in training and education for work. For example, in Jordan during the field visit the low status of technical, vocational education and training programmes was referred to as 'the culture of shame'. Sultana and Watts (2007) have recently treated in some detail the ways in which cultural values in the region help to shape career choice, so this is not repeated here. They identify factors such as gender stereotyping and the role of the family as helping to shape the occupational choices that young people make. It is important to point out that such attitudinal and cultural factors are not unique to the Mediterranean region and can be found in most European countries, even if their relative scale and importance might (or might not) be greater within the Mediterranean region.

All the economic, demographic, labour market, educational and cultural factors that have been outlined interact in complex ways to influence the size and character of work-based learning systems. Some help, some hinder, and in any one country those that help can operate alongside and simultaneously with those that hinder.

3. COMBINING WORK AND LEARNING: WHY? HOW?

This chapter outlines the key arguments used by policymakers in recent years for seeking to combine workplace experience with formal classroom-based learning: improved youth pathways, economic and productivity benefits, improved pedagogy, and efficiency of vocational education and training systems. It discusses examples of failure and success in attempts to introduce large-scale work-based learning programmes for youth, and draws lessons from this experience.

3.1 The appeal for policymakers

For some 30 years, in both developed and developing economies, the combination of work and learning, of the classroom and the workplace, has been an attractive if not seductive idea for policymakers concerned with employment, education, vocational training and youth transitions. Among the various ways in which the workplace and the classroom can be combined, apprenticeship has been particularly attractive to policymakers, and among apprenticeship models the German dual system has held, and indeed still holds in some circles, a particular fascination. Four main sets of arguments have been advanced for promoting policies that support the combination of work and learning for youth. These are that it can improve pathways to adulthood, deliver economic and labour market benefits, improve pedagogy, and reduce costs and increase capacity within the vocational education and training system.

When youth unemployment began to rise in developed economies in the mid 1970s, and again in the early 1980s and early 1990s, many policymakers in OECD economies turned their attention to the low youth unemployment rates, both in absolute terms and when compared with rates among adults, that were evident in countries such as Austria, Germany and Switzerland (see for example OECD, 1979, 1981 and 1994; Van Trier, 2007). Many were persuaded that these favourable labour market outcomes for young people in the former group of countries could be attributed to the large apprenticeship systems that existed there. (Little attention was paid in this process to the experience of other countries such as Japan and the Republic of Korea, which also had good labour market outcomes for youth but did not have large apprenticeship systems.) While the balance of evidence favours the advantages of apprenticeship over either full-time vocational schooling or labour market programmes in achieving good labour market outcomes for youth, it needs to be kept in mind that this advantage is by no means universal. Under some circumstances its value can be low; under some circumstances the value of alternatives can be high (Ryan, 1998).

Closely linked to such conclusions was evidence from longitudinal studies of young people's transition from school to work, again based on a limited number of countries, which showed that, when Germany was compared with the United States for example,

young people in Germany experienced fewer changes of direction and a more rapid settling into stable full-time work than was the case in the United States (Gardecki and Neumark, 1997; Gitter and Scheuer, 1997). There, young people's transition from school was longer, and was accompanied by more frequent changes of direction and a higher experience of insecure and marginal employment patterns than was the case in Germany. A common conclusion from such analyses was that the existence of a large apprenticeship system in Germany, and its absence in the United States, accounted for the different patterns of transition outcomes.

Evidence on the benefits of young people combining classroom and workplace also comes from studies of the outcomes experienced by those who take jobs while they are students: after school, during the weekends, or during vacations (Robinson, 1999). Even though these jobs are not connected in a structured manner to learning in the classroom, as is the case with apprenticeship and similar programmes, the evidence shows that young people who undertake such job experience lower unemployment rates and a more successful transition to work after they finish their studies than students who do not work. These superior outcomes are normally explained in terms of the basic working habits and disciplines acquired during such jobs, by the tendency of employers to use evidence of such jobs as a screening device, and by the personal contacts with employers and access to information networks developed by young people.

A further stimulus for many policymakers' enthusiasm for apprenticeship programmes has come from a series of carefully conducted studies of productivity in matched samples of German and British enterprises conducted in the late 1980s by the UK National Institute of Economic and Social Research (Prais, 1989). These studies, conducted in matched samples of enterprises such as hotels, construction firms, furniture-making plants and metal-working plants, concluded that the productivity of the German firms was generally higher than that of the British firms, and that this could in large part be explained not in terms of superior technology being used in Germany, but by the wider range of skills that they had available to them as a result of the German dual system of apprenticeship. This, it was argued, was responsible both for more German workers having a vocational qualification, and for those workers with a qualification having a broader range of skills than was the case with British workers. In turn it was argued that this gave the German firms greater flexibility in the use of labour, reduced down time as the result of maintenance, and resulted in lower breakage and wastage rates.

Support for young people having the opportunity to combine classroom learning with the workplace also comes from educators, who point out that the workplace can be an ideal location for applied and contextual learning. Workplace learning, it is argued, can be a powerful tool for motivating young people and exemplifies some of the best pedagogical principles. It allows learning by doing; combines theory with practice; can put learning into a context and so make it seem more relevant and interesting; involves learning from real life; involves learning from experts; and provides young people with a combination of job skills, general education and personal development (Billett, 2001).

Policymakers from within vocational education and training systems have also been attracted to the notion of making combinations of classroom and workplace more widely available as a mode of skill formation. Here the arguments are in terms of the greater efficiency and effectiveness that can result. Programmes that combine learning in the two locations have a greater imperative to develop a curriculum that more accurately reflects contemporary workplace needs and thus more up-to-date and relevant skills for the

economy. In addition, the assumption by employers of responsibility for developing some elements of the total package of skills and competences required by the curriculum reduces the cost to the public purse⁸, and can reduce the need to buy expensive equipment for students' practical work. And a reduction in the proportion of the total vocational education and training system represented by full-time programmes can increase the overall capacity of the system and therefore increase access.

3.2 How easy is it? Learning from failure and success

However appealing the idea may be to policymakers, combining work and learning to create coherent systems that allow the participation of large numbers of young people has nowhere proven easy. Even harder has been the creation of systems that can deliver measurable benefits for large numbers. Even in developed economies it is the exception rather than the rule to find many young people in structured programmes that combine the workplace and the classroom. Among OECD countries only Germany and Switzerland have a majority of young people of upper secondary age in apprenticeship programmes. In Austria and Denmark the figure is around 40%. In Norway around a quarter of all youth take part in apprenticeships, and perhaps another quarter in programmes that may involve unpaid student work placements. In Sweden around half of all upper secondary students are in vocational programmes that require compulsory unpaid work placements for one day each week (OECD, 2000).

In most other developed economies, however, vocational preparation for young people of upper secondary age takes place predominantly within, and largely under the control of, educational institutions: in classrooms and in special facilities for practical work. This is the case as much in countries such as Belgium and Italy, where systems of initial vocational preparation are large, as it is in countries such as Australia, Canada, Japan, the Republic of Korea and New Zealand, where most young people are found in general education programmes rather than in those intended to prepare them for a defined occupational area.

A number of countries have, in recent years, attempted to introduce or expand structured workplace learning programmes such as apprenticeships and have not succeeded. In the early 1990s the Republic of Korea sought to imitate the German dual system of apprenticeship, but failed to produce the industrial skills that were sought. The reasons partly lay in the largely exclusive role adopted by government and the minimal role allowed for other social partners. Another important reason for the lack of success 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 a responsibility for special training departments. As a consequence shop-floor supervisors, who play a vital role 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 (Jeong, 1995).

During the mid 1990s the Clinton administration, again largely under the influence of the German model of apprenticeship, attempted to develop a system of youth apprenticeship funded from its school-to-work initiative (Bassi et al., 1997). In this instance

⁸ For example a recent Moroccan study (Beringer, 2007) shows that training through apprenticeship can be from one-fifth to one-fourteenth the cost of a full-time programme.

failure can be attributed to the lack of a coherent structure of employer and employee organisations to support the initiative, to competition in a number of areas from well-established adult apprenticeships, and in many areas of the US labour market to the lack of a regulated market for qualifications (OECD, 1999a). Sweden in the late 1990s attempted to reintroduce apprenticeship after abolishing it in the early 1970s, but the attempt failed because employers had an alternative model (mandatory unpaid work placements as part of upper secondary schooling) that they had become used to, and because the new initiative was largely targeted on the weakest students, rather than, as for example in Austria's apprenticeship system, including them as a specially targeted and resourced focus within the mainstream programme (OECD, 1999b).

Attempts in recent years in the United Kingdom to introduce modern apprenticeships and an advanced apprenticeship programme have generally not met their goals due to a top-down approach, a gap between the objectives of central government policymakers and employers (Guile and Okumoto, 2007), and the perception that these have not been mainstream vocational education and training programmes, but rather residual programmes of the last resort for the socially disaffected (Payne, 2002).

On the other hand, these examples of lack of success can be balanced with cases in which the lessons appear to be much more positive. One is Ireland. Here, high quality outcomes from apprenticeship training such as a high completion rate, growing participation since the mid 1990s, stakeholder satisfaction and high-quality training have been attributed to a combination of: the adoption of a standards-based approach; strong social partnership between government, employers and unions; a responsive national training agency; and a responsive system for off-the-job training (Hartkamp and Rutjes, 2001; Field and Dubchair, 2001; O'Connor and Harvey, 2001; O'Connor, 2006).

A second example in which the lessons tend to be more positive than negative is Norway. Here a quite distinctive model of apprenticeship for young people was introduced in the mid 1990s as part of sweeping reforms to upper secondary education. Although not without its problems (Payne, 2002) the reforms resulted in a very rapid growth in both youth and employer participation. While the lack of a sufficiently close connection between the school and the workplace has been criticised (Payne, 2002), the speed with which the reforms were accepted owes much to a number of factors, including effective negotiations between well-organised employers, unions and government; a rational wage structure; and the creation of intermediate organisations at the local level to assist firms in training (OECD, 1998 and 2006).

Ironically, although Sweden's attempts to re-introduce apprenticeship at the end of the 1990s were not a success, their unpaid work placements as part of upper secondary vocational education and training programmes do appear to be quite successful (Sweet, 1995a). The widespread acceptance and use of work placements appears to be largely a result of very close cooperation between individual schools and individual enterprises (much in the way that such close personal links at local level are a significant factor in the success of Japanese transition arrangements (see Dore and Sako, 1998; Kariya, 1998)). This is combined with strong support in Sweden – for example in the form of curriculum and assessment resources – provided to schools and firms by national industry sector associations.

A number of lessons emerge from comparative experience with work-based learning programmes about the factors that can influence success or failure, either in expanding participation, ensuring quality, or both.

- It is common for countries to have more than one model of work-based learning and vocational education and training operating at the same time. However the relationship between these models should be coherent, and they should not compete either in terms of their targeted areas of training or their target groups. For example, in Austria full-time vocational schools generally serve different areas of occupational training than does apprenticeship; and young people with special needs are assisted within mainstream programmes by special measures, not concentrated in separate low-status programmes. This contrasts with experience in Sweden and the United States where different models have been competitive rather than complementary.
- Coherent systems of financing, particularly through sub-minimum youth pay, but also through public subsidies, are important in providing the right incentives for employer and youth participation.
- The ways in which firms operate, their skill demands, costs and competitive pressures, and their internal work organisation, are critical factors influencing outcomes (Steedman, 2005).
- Well-organised employer associations and the active involvement of all social partners appear to be critical, particularly in supporting those arrangements that involve payments to young people such as apprenticeship (OECD, 2006, pp. 138–40).
- The relationship between occupational qualifications and the labour market is central to the success of work-based learning systems. Where the qualifications that they lead to compete with other qualifications, or with cheaper alternative forms of labour, the chances of success seem reduced. Labour markets in which vocational qualifications play a role in regulating access to occupations seem to favour the introduction of work-based learning programmes for youth.
- Close local relationships, particularly between firms and schools, matter as much as effective national structures for cooperation between the social partners (Lior and Wortsman, 2006; Taylor, 2006; Dhillon, 2007).

4. MODELS OF WORK-BASED LEARNING IN THE MEDITERRANEAN REGION

This chapter describes the main types of formal work-based learning programmes for young people that exist in the Mediterranean region: those that are well-established and sustainable; those that are long-established but have remained quite small; and those that are quite new, small, and often experimental. It discusses the number of young people that take part; how the programmes are positioned within national education and training systems; the structure, organisation and duration of the programmes; and their broad content and occupational or industry focus.

4.1 What types of programme exist?

Informal apprenticeship

Throughout the region there is a long tradition of skill development through informal or traditional apprenticeships. In countries such as Egypt these informal apprenticeships still represent the main training route for some sectors and occupations: for example crafts, the construction sector, retail trade, garment-making and repair, and automobile maintenance. Informal apprenticeships typically take place entirely within the workplace and do not involve any complementary classroom-based education or training⁹. They exist without any formal contract, lead to no qualification, and are of unlimited duration without defined stages. In nearly all countries data on the extent of these informal apprenticeships do not exist.

Some limited quality assurance does exist in one or two cases: for example in Syria the Crafts Union checks that standards accord with those of the relevant crafts association and recognises those meeting such standards. In 1993 the Tunisian Ministry of Education and Training developed a series of measures to improve the terms of engagement of traditional apprenticeships, for example by requiring contracts to be signed and off-the-job training to be undertaken¹⁰, but in practice the extent of such upgrading has remained limited (ETF-World Bank, 2005). In other countries – for example Algeria and Morocco – the extension of formal apprenticeships to sectors such as crafts and agriculture that have traditionally used informal apprenticeships has been a notable recent policy initiative.

Formal programmes

The project has revealed many formal work-based learning programmes or schemes, both from the country background reports and from the field visits. In all, nearly 30 separate programmes were revealed among the ten participants¹¹. The broad guidelines for the project distinguished between three types of programme: informal or traditional apprenticeships,

⁹ As such they strictly fall outside of the definition of work-based learning programmes used in this report.

For every apprentice enrolled in a programme that leads to a vocational qualification there are approximately another six enrolled in an apprenticeship that leads to no certification (www.education.tn).

¹¹ Descriptions of individual national programmes may be found in Annex 1.

formal traditional niche apprenticeships, and 'islands' of dual systems and alternance schemes. The methodological guidelines developed for the national experts writing the background reports distinguished between apprenticeships on the one hand, and other forms of enterprise-based learning on the other. 'Apprenticeships' were defined in terms of three criteria: a structure based on alternating periods at the workplace and in a school or vocational training centre; the existence of a contract of training between the apprentice and the employer; and the payment of a wage or allowance to the apprentice by the employer. 'Enterprise-based learning' was defined as a more inclusive term referring to any form of learning or vocational training that occurs within the enterprise or workplace: formal apprenticeship; informal or unregulated apprenticeships; sandwich courses; alternance schemes; or unpaid work placements undertaken by students.

As the project developed, it became clear that neither of these ways of classifying programmes was as helpful as it might be in trying to understand and analyse their nature. For example, some programmes that are referred to as 'apprenticeships' do not share some of the characteristics set out in the methodological guidelines. In Morocco's apprenticeships it appears the exception rather than the rule for young people to be paid; in that country's agricultural apprenticeships employers generally will not agree to sign a contract. In Jordan the programmes that were referred to as apprenticeships in the background report (although some within Jordan dispute that apprenticeship is an appropriate term for them) do not involve any contracts between the young person and the employer. And some programmes that are not referred to as apprenticeships – for example alternance schemes in Morocco and internships in Turkey – are quite similar, using the definition in the methodological guidelines, to those that are called apprenticeships¹². And so in classifying formal programmes a schema that reflects their durability and sustainability seems in the first instance to be more useful.

Using this schema, three types of formal work-based learning programmes for young people appear to exist among the regional participants.

- Well-established programmes that have relatively large numbers of participants, represent a reasonably larger share of the upper secondary initial vocational education and training system, and have a sound institutional base. Included here are Algeria's apprenticeship programmes, Morocco's alternance and apprenticeship programmes, Tunisia's alternance programmes, Turkey's apprenticeships and internships, and Jordan's applied secondary education.
- Long-established programmes that have become a normal part of the country's vocational education and training system, but have remained very small, particularly in relation to completely institution-based vocational education and training. Included here are the Egyptian Ministry of Trade and Industry's PVTD and Ministry of Education programmes, Israel's apprenticeships and enterprise-based training, and perhaps Tunisia's apprenticeship programmes.
- Relatively recent, small pilot programmes that in many cases still depend on support from donor agencies for their continued existence and viability. Examples include programmes in Lebanon and the Occupied Palestinian Territory, Syria's pilot apprenticeships and perhaps also the Egyptian Mubarak-Kohl Initiative (MKI).

¹² In addition, it became clear that many of the programmes with a similar title, such as apprenticeship, differed widely in terms of features such as duration, focus, content and structure. However this is also true of apprenticeships in European and other OECD countries.

Table 1: Estimated work-based learning participation rates (%, most recent year)

	Vocational education and training as a share of all secondary ¹	Main work-based programmes as a share of all vocational education and training	Work-based as a share of all secondary
Algeria	46 (20)	44 ^{2, 3}	20 (9) ³
Egypt	60 (63)	2	1
Israel	38 (35)	9	3
Jordan	30 ² (21)	13	4
Lebanon	7 (27)	3	<1
Morocco	n.a. <i>(12)</i>	19 ⁴	n.a. <i>(3)</i> ⁴
Occupied Palestinian Territory	5 (5)	<1	<1
Syria	20 (32)	<1	<1
Tunisia	10 (6)	67	7
Turkey ^{5, 6}	41 (44)	14-<100 ⁷	<6–35 ⁸

Sources: Estimates calculated from country background reports with the exception of Tunisia, where the source is the Ministry of Education and Training (www.education.tn). The Turkish estimates draw both from the background report and from the profile in Annex 1.

n.a.: not available

^{1.} In nearly all cases secondary refers to post-compulsory secondary, defined in terms of programmes rather than institutions. The main estimates in the column are based on data provided in the country background reports. Also shown (in italics) are estimates provided by Sultana and Watts (2007). In most cases the two figures are similar. However in the case of Algeria the background report's estimate is quite a lot higher, and leads to a significant difference in the estimated size of the work-based pathway as a share of all secondary education. The lower figure based on the Sultana and Watts' estimate is shown in italics.

^{2.} Algerian government documents give the share as 30%. The figure in the table is taken from data in the Algerian background report.

^{3.} These are likely to be overestimates, given that it is possible to enter apprenticeships in Algeria well beyond the typical age of upper secondary education. See Section 4.3.

^{4.} These are likely to be overestimates, given that it is possible to enter apprenticeships in Morocco well beyond the typical age of upper secondary education. See Section 4.3.

^{5.} Intermediate plus secondary.

⁶ Total secondary and total vocational both include formal vocational education and training plus apprenticeship. Apprenticeship represents roughly 14% of all vocational education and training at this level.

^{7.} Work placements are indicated as being mandatory in Turkey's secondary-level vocational education programmes. However it is suggested informally that significant parts of that country's initial vocational education and training system is school-based. The lower-bound estimate includes all apprentices but no interns; the upper-bound estimate includes all apprentices and all interns.

^{8.} As in Note 7, the lower-bound estimate includes all apprentices but no interns; the upper-bound estimate includes all apprentices and all interns.

4.2 How many young people take part?

The lack of accurate data across the region makes it difficult to estimate the number of young people who take part in work-based learning programmes: for example the number of full-time vocational education and training students who undertake work placements is commonly not known. These problems make it difficult to accurately estimate the numerator in a calculation of participation rates. Estimating a denominator that is comparable among countries is even more difficult. Typically, rates of participation in secondary education and in upper secondary education differ widely among countries. entry points to work-based learning programmes from the compulsory education system differ, commencement ages and completion ages are not comparable, and definitions of general and vocational education and training can vary widely. Statistical sources are not sufficiently consistent to allow a reliable single indicator – for example participants as a share of a certain age group, of upper secondary students, or of vocational education and training students – to be constructed. In other cases the definition of what constitutes vocational education and training is not clear 13. As a result of these difficulties 14 the estimates of national rates of participation in work-based learning given in Table 1 need to be treated with some caution. They are based on participation as a share of both estimated secondary vocational education and training, and of all secondary education. Differences among countries in overall secondary education participation rates make these estimates somewhat more reliable than age-based estimates.

4.3 Who takes part?

In almost all the programmes that came to light in the study, entry is limited to those of the normal age of secondary education, and occurs at the normal age of entry to secondary education (in most cases upper or post-compulsory secondary education). Four exceptions were noted.

- In Algeria, apprenticeship programmes are available to men in the 15–25 age range and to women up to the age of 30.
- In Jordan, the National Training and Employment Project, which is relatively small and was designed in effect as a labour market programme for the unemployed, is open to those aged 18–36.
- In Morocco, apprenticeships may be entered up to the age of 30, but 35 in the agricultural industries and 40 for the fishing industry.
- In Turkey, a candidate apprenticeship may be undertaken below the age of 14.

Reflecting the typical entry age for programmes, in almost all cases the programmes that were discovered in the study require completion of basic, primary or compulsory education for entry: for example Grade 9 in the case of the three main Egyptian programmes, or Grade 10 for Jordan's applied secondary education programmes at

For example, in Jordan programmes in nursing and office work have been transferred from the vocational education and training stream to the general education stream in order to enhance their image. Reclassification of these programmes would result in a rise in the estimated size of the vocational education and training stream but a fall in the estimated size of the work-based learning stream.

¹⁴ Combined in some cases with weaknesses in the statistics contained in the country background reports.

skilled level (and Grade 12 for programmes at technician level). And most programmes lead to a normal secondary education certificate or its vocational equivalent, for example a high-school diploma in Egypt.

Whereas most programmes are integrated into the country's secondary education system, there are some exceptions.

- In Israel, apprenticeships are targeted mostly at low-achieving Grade 9 drop-outs who are not pursuing the normal secondary programme to the end of Grade 12, and are offered through the Ministry of Industry, Trade and Labour rather than the Ministry of Education. Graduating apprentices receive a job certificate rather than a standard secondary education qualification, although credits can be granted towards matriculation and higher levels of vocational training.
- In Morocco, apprenticeships are targeted at school drop-outs who are not qualified for entry to the two other modes of vocational education and training (residential and alternance). A certificate of basic literacy is the minimum required entry level, although entry can also be granted to those who have completed six years of primary school or three years of secondary school.

Integration into a country's secondary education system, in terms of entry age, education level required for entry, or output qualification, does not by itself guarantee that these programmes are equal in status to other secondary-level programmes. In many cases, such as Jordan's applied secondary education programmes, lower-achieving students are streamed into them, often unwillingly, on the basis of their performance in primary or compulsory education. And in very many countries in the region the programmes experience the same problems of low status and prestige that are common to other forms of vocational education and training. In Jordan this was referred to, during the field visit, as the 'culture of shame', and reflects a cultural preference for clean, white-collar work rather than manual work, and for work at professional level.

This low status of vocational education and training and work-based learning persists in some countries even though a clear route has been created from it to tertiary studies. For example in Jordan graduates of applied secondary education can continue to higher education studies, and some do, and in Egypt it is not at all uncommon for young people to use the main work-based learning programmes as an easier entry route for higher education because of the more intense competition for grades in the general education track of secondary education. Graduates of the required standard from Syria's pilot apprenticeship programme can enter university, as their programme leads to a standard secondary-school certificate.

The problem of relatively low status for vocational education and training, and by implication for the work-based learning programmes that are part of it, is not by any means unique to the Mediterranean region. It is common in all countries, and may or may not be more severe in the Mediterranean region than elsewhere. The more important issue here is whether the prestige and standing of work-based learning programmes is lower than that of other forms of vocational education and training. In addition to those cultural issues of status and prestige that can limit the access of talented young people to vocational education and training, are there other policy-induced barriers that specifically apply to work-based learning programmes?

Such barriers might exist if there were a hierarchy of vocational education and training programmes. For example such barriers would be created if school-based programmes selected students of higher ability than work-based programmes, or if school-based programmes led to higher levels of qualifications than work-based programmes. On the other hand, in an integrated vocational education and training system one would not expect to find differences in status (arising from the types of student selected or the level of qualifications awarded) as a function of whether the training was work-based or school-based. For example, in Austria's initial vocational education and training system those programmes provided in full-time vocational schools and through apprenticeship in essence have equal standing. And in the Netherlands' competency-based system of vocational education and training, certification is a function of outcomes achieved, not of the method used to deliver programmes. However in a vertically differentiated system, work-based learning programmes might be at a lower level than full-time programmes, or some work-based learning programmes might be at a lower level than others. In a system both vertically and horizontally segmented, work-based learning programmes might not only be at a lower level, but delivered through separate types of institutions and result in different and non-integrated qualifications. Figure 3 illustrates these possible differences.

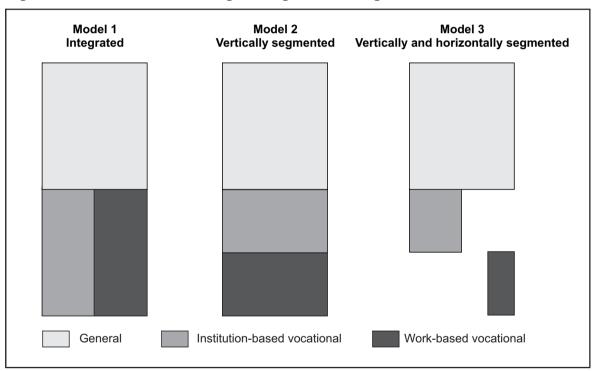


Figure 3: Work-based learning – integrated or segmented?

For many of the countries taking part in the review, no clear evidence emerged to support a case for a segmented system penalising work-based learning programmes. In cases such as Egypt, Jordan, Syria and Turkey, these programmes normally result in the young person gaining a standard secondary certificate (or its vocational equivalent). This reduces the chance of work-based learning programmes being at a lower status level than other vocational qualifications.

However some clear cases of segmentation were evident.

- In Morocco, there is a clear hierarchy within the vocational education and training system. Apprenticeships are located at the lowest levels of the national qualifications system, alternance programmes at the next level, and residential vocational training at the highest levels. It seems ironic here that the lower the level of the programme the higher the level of contact with the workplace, and that those vocational programmes that result in the highest-level qualifications provide young people with the least workplace contact¹⁵.
- In Algeria, the degree of segmentation appears to be less than in Morocco, with apprenticeships being available at relatively high levels of the qualifications system. Nevertheless they tend to be clustered at the lower levels, particularly in comparison with residential programmes.
- In Tunisia, apprenticeships are confined to the lowest level of the national vocational qualifications system (CAP – certificat d'aptitude professionnelle), whereas alternance and residential programmes can lead to qualifications at all levels of the qualifications system.
- In Israel, apprenticeship programmes are segmented both vertically and horizontally from secondary education. They are targeted at school drop-outs, and are provided by a separate ministry within separate institutions and lead to quite separate qualifications. Their segmentation from mainstream options for youth is further emphasised by the lack of any formal contracts of employment and training, with the employment being temporary and residual.

The Moroccan case, in which apprenticeships, unlike alternance programmes, are intended to provide opportunities for drop-outs from the school system, raises special dilemmas for policy. On the one hand it can be argued that such an approach only further marginalises the weakest students. However such an approach can provide these young people with opportunities that would not otherwise be available to them, and can constitute an initial step on an employment and education ladder (OECD, 2005; Grubb, 2006).

4.4 How are programmes structured and organised?

There is wide variation among countries in how programmes are structured. Figure 4 summarises these differences for selected programmes (further details are given in Annex 1) illustrating how programmes differ in terms of their typical duration; the division of time between the classroom and the workplace; and the sequencing of full-time

Algeria shows that work-based learning programmes can be created at the higher levels of qualification systems. European countries such as France and Germany show that this can extend to occupational sectors linked to higher education. Excellent examples of work-based learning have long existed in the training for higher-level professions, such as medicine, in many countries.

periods in the classroom, periods in which work and the classroom alternate, and full-time work uninterrupted by classroom attendance.

While the most typical duration of programmes is two to three years, applied secondary education in Jordan, Morocco's apprenticeships and the Lutheran Training Centre programme in the Occupied Palestinian Territory can be as short as 12 months, and internships in Turkey require 300 hours of practical training for programmes that last for four years or longer. Wide variations exist among programmes in the proportion of total time spent in the workplace, which can be as high as 80% in apprenticeships in Israel, Morocco and Turkey, and as low as 32% in one of Egypt's main programmes.

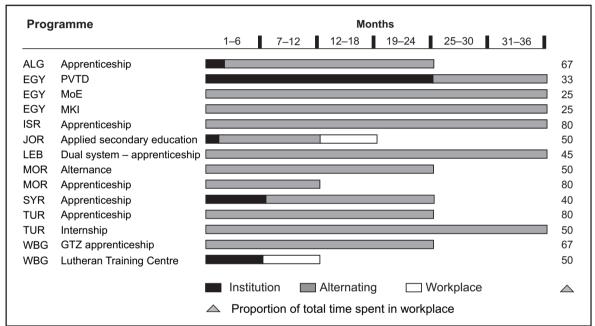


Figure 4: Selected examples of programme duration and structure¹

Three types of attendance patterns are evident.

- The more common pattern is for periods in the workplace and the classroom to alternate from the start of the programme.
- In the Lutheran Training Centre programme in the Occupied Palestinian Territory, alternating periods do not exist: one relatively long period in the classroom is followed back-to-back by a relatively long period in the workplace.
- In some cases for example apprenticeships in Algeria and Syria, the PVTD programme in Egypt, and applied secondary education in Jordan a period of full-time institutional attendance takes place before young people enter the workplace.

It is not clear why these differences exist. Within countries, differences in programme structure are sometimes explained by the level of the qualification that they lead to. For example in Morocco apprenticeships typically lead to a lower level of

^{1.} These selected examples of programme duration and structure in many cases mask considerable internal variation in the typical duration or in the balance of time spent in the workplace and the training institution. For example, in Jordan applied secondary education can last from two to four semesters, with the pattern of attendance varying according to the duration. In most cases such variations are a function of the nature of the occupation or industry sector.

qualification than alternance programmes. The latter have a higher proportion of classroom attendance built in, and it could be argued that this is needed because of the higher level of theoretical knowledge that needs to be mastered. In other cases neither the needs of industry nor those of the young person seem to explain differences in programme structure.

4.5 What do programmes contain?

Occupations and industry sectors

The content of all work-based learning programmes depends heavily on the nature of the occupations or industry sectors around which they are constructed. These shape both the level and the breadth of the knowledge and skills that are to be acquired. Drawing clear conclusions about the occupational or industrial focus of work-based learning programmes in the region is complicated by a lack of detailed information about many of them. For example the Turkish background report contained quite detailed information about the occupational branches included within apprenticeship, but no equivalent information on internships. The fields covered by apprenticeship programmes are included in the Tunisian background report, but not alternance programmes. In Morocco the available statistics are classified by providers of off-the-job training rather than by the occupational or industrial focus of programmes.

Where information is available, it seems as if many programmes are focused quite heavily on the traditional manual trades and blue-collar work, and have made little impact on more modern areas of the economy, the service sector, or higher-skilled occupations. For example:

- In Tunisia half of all apprentices are in textiles and footwear or automotive mechanics programmes.
- In Lebanon's dual system 70% of all participants are in industrial mechanics and car mechanics programmes.
- Turkish apprenticeships are concentrated heavily in the manual trades linked to traditional manufacturing and construction industries: for example shoemaking, casting, ready-made clothing, ceramics and the like.

Programmes in areas such as agriculture, fishing and crafts that have traditionally been the province of informal apprenticeships are also offered in Algeria, Egypt and Morocco. Although the numbers taking part in these programmes do not appear to be large, they are a government priority for expansion in Algeria and Morocco as an attempt to counteract the declining popularity among young people of work in traditional agriculture and crafts.

Nevertheless there are many interesting exceptions. For example while all Egypt's main work-based learning programmes focus on traditional manufacturing industries, programmes are also offered in business, commercial and hotel and catering fields; and in Syria committed technical and vocational education and training (TVET) programmes are offered in telecommunications and nursing, even though the country's pilot apprenticeship programme is available only in ready-made garments and mechanical handling.

Algeria provides a particularly interesting exception. There, apprenticeship has made a strong intrusion into the service sector, ICT occupations, and higher-level occupations. Informatics is the largest branch of apprenticeship training with 17% of all participants, and management and administration is the second largest with 14% of participants. Programmes are also offered in banking and insurance, hotels and tourism, and in audiovisual and communication techniques. One in six apprentices is in programmes at the top two levels of Algeria's five-level vocational qualifications system, and the country background report comments that these programmes are in high demand among young people.

The off-the-job component

The content of programmes is also influenced by the nature of the complementary off-the-job education and training. Again, the information provided about this in the country background reports was not always as detailed as might have been preferred. One question is the extent to which programmes include elements of general education within the off-the-job component, in the tradition of apprenticeship programmes in much of continental Europe, or restrict this to vocational content, as in much of the Anglo-Saxon tradition of apprenticeship (NCVER, 2001a). Relevant information is available for Egypt, Israel, Morocco and Syria, and in each country the off-the-job component does include elements of general education, and not simply vocational theory and practice.

A second question about the off-the-job component of programmes is the extent to which it contains practical work within the vocational content. This is an important issue, as it reflects the ways in which the responsibilities of the state and of the employer for training and skill development within the total programme are conceived, the ways in which costs are distributed, and quality assurance mechanisms. On the one hand there is the model within the German apprenticeship system, in which the employer is regarded as completely responsible for the development of practical skills, and where the state is responsible only for the provision of theoretical instruction and general education. The assumption is that employers have the resources and facilities within the normal place of work to provide the full range of skills and competences within the occupational area. If they do not, they must provide their own special training facilities, make use of special employer-funded inter-enterprise training centres, or they will not be eligible to take part in the apprenticeship system. One of the important roles of employers' chambers within this system is ensuring that individual employers can, one way or another, provide the full range of training required. Such a model places a heavy responsibility on the employer to carefully structure the range of the apprentice's experience to ensure appropriate skill development.

An alternative model is one in which the emphasis within the workplace shifts more heavily towards the apprentice carrying out normal productive work, and the responsibility of the state more heavily towards the development of a proportion of the apprentice's practical skills, as well as the provision of vocational theory and general education. This presumption obviously requires the state to provide a range of technical facilities and equipment for practical training, at a higher cost than in the former model. It also shifts a degree of responsibility for assuring the range and quality of the skills developed from the employer to the state.

In all countries for which information about the broad division of the content of off-the-job training was available, the latter model was the dominant one. In other words,

the basic presumption in the work-based learning programmes of the region seems to be that the state has a role in developing practical skills, and that accordingly it has a role in funding and in quality assurance which, in the German dual system, falls on the employer. The only exceptions found were apprenticeships in Algeria and Tunisia, in which the off-the-job component was limited to vocational theory and general education, and there was no presumption that it would also develop practical skills. This had major implications for the nature of the capital facilities and equipment that the state needed to provide. The implications of this issue are discussed in Chapter 5, on programme quality.

Pre-employment training

In a number of programmes, an initial period is spent in the off-the-job institution before the young person enters the workplace (as shown in Figure 4). In Algeria's apprenticeship programmes and Jordan's applied secondary education this period is quite brief – a month or less – but it lasts for two years in the case of Egypt's PVTD programme. Relatively long pre-employment periods also exist in Israel, with the first two years being off-the-job preparatory classes for graduates from primary schools, and the first year for graduates from junior high schools.

Whatever the duration, this initial period is normally used to develop young people's basic work skills before they commence work in the enterprise, and in some cases – for example Jordan's applied secondary education – it is used for orientation and occupational exploration. This approach to the structure and content of programmes has several advantages: it makes young people more immediately productive when they commence in the workplace, and thus can increase the incentives for the employer to participate in the programme; and by allowing a period of experimentation, it can improve the fit between the young person and the chosen occupation, allowing skills and interests to be tested before a specific occupational decision is made. This can help to reduce drop-out rates and improve overall programme quality.

5. ASSURING THE QUALITY OF WORK-BASED LEARNING

This chapter begins with an examination of the methods used by work-based learning programmes in the Mediterranean region to monitor and improve the quality of the learning that takes place in the workplace. For example: influencing the selection of training firms; training the enterprise staff who supervise and train young people; inspection systems; tools to record skill acquisition; assessment and certification; and supplementary training. It then discusses issues that appear to cause problems in the quality of the complementary education and training that takes place off the job, such as insufficient resources for salaries and equipment, and outlines initiatives that have been taken in some countries to address these. The chapter concludes with a discussion of the ways in which quality might be assessed and improved in work-based learning programmes in the region.

5.1 How is quality assured in the workplace?

Learning in the workplace is distinctly different from learning that occurs within a school. While instruction in a school is normally organised as part of a specific and planned teaching situation, instruction in the workplace is much more loosely organised and takes place as part of normal daily tasks. It occurs best when there is task variety, the opportunity to observe an expert, the chance to reflect upon experience, and the opportunity to practise and rehearse. It takes place not only as part of the interaction between a young person and the formally designated workplace tutor or instructor, but as the result of interactions between the young person and other workers. It does not, unlike classroom instruction, take place according to a fixed timetable (Tangaard, 2005). For these reasons its quality needs to be assessed according to its own rules. Compared to other forms of vocational education and training (institution-based; at a distance), ensuring the quality of learning in the workplace poses particular issues for public policy: of necessity it cannot be done directly by government. This can be approached in a number of ways:

- attempting to influence which firms are able to employ and train young people under formal work-based learning programmes:
- providing either formal training or other forms of assistance to enterprise
 personnel, both to improve the nature of the work experience of young people
 within the enterprise and to improve the training and skill development
 competences of those who supervise the work of the young people;
- developing systems of regulation and of inspection and sanctions, administered either by ministries of labour or other organisations and often regulated under labour laws;

- developing tools that can be used by enterprises and young people to structure and record the skills that have been acquired: for example competency lists or training logbooks;
- developing close pedagogical relationships between firms and the teaching staff of vocational education and training schools, such that each is able to learn from the other to address issues in the training of young people;
- assessment and certification systems that require the competences developed in the workplace to be assessed as well as those developed within vocational education and training institutions;
- supplementary off-the-job training to compensate for gaps in the competences developed in the workplace;
- periods of full-time training before the young person is placed in the enterprise.

Examples of all these methods of influencing the quality of workplace learning can be found within the region.

Influencing the selection of firms

In the apprenticeship systems of the German-speaking countries and in Denmark, employer associations and chambers have a particular responsibility for helping to ensure the quality of training within the enterprise through their capacity to control which enterprises are able to train young people under apprenticeship arrangements. In the Netherlands the same role is performed by regional centres of expertise (see Box 3, p. 60). Within the Mediterranean region, employer associations and chambers are often too poorly developed to allow them to perform this role, and the types of intermediary organisation found in the Netherlands generally do not exist. One exception is found in Morocco, where crafts chambers select the firms that train crafts apprentices, and in other branches professional associations can become involved jointly with apprenticeship training centres in selecting firms.

Even if employer associations and intermediary bodies rarely become involved, however, there are examples within the region of educational institutions screening the firms that take young people. In Turkey this seems to be a quite well-developed system, with coordinators attached to vocational schools visiting firms to decide if their facilities are appropriate, whether they have trades workers with qualifications at master¹⁶ level and how many apprentices they can train. A formal contract is then signed between the school and the enterprise. Similar, although more flexible, arrangements exist in the three main work-based learning programmes in Egypt (MKI, PVTD and MoE), with enterprises having 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.

Training enterprise staff

A number of countries within the region have developed formal programmes to train the enterprise staff responsible for training the young people in work-based learning programmes. In Turkey, as implied above, this is a well-developed system in which enterprise trainers are required to have a qualification at master level, with the course for the qualification including material on workplace pedagogy. In Syria's apprenticeship programme all trainers, both those in enterprises and those in educational institutions,

16 This is the Turkish equivalent of the German *meister* qualification that is required by apprenticeship trainers within enterprises.

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. A special training programme for tutors in industry exists for Israel's apprenticeship and enterprise-based learning programmes, and participation in it appears to be the norm. Special pedagogical training is provided for all in-firm trainers in the Occupied Palestinian Territory apprenticeship programme. In 1998 Morocco created a special resource centre for training in-firm tutors and trainers, principally to support alternance programmes but also apprenticeship training. However although it has been active in offering training, participation in its programmes is not compulsory. In Algeria considerable difficulties are reported both in obtaining the release of in-firm trainers to take part in a comparable programme, and in assuring sufficient resources for it.

Within many countries in the region, the employment structure is dominated by small and medium enterprises. Very few private enterprises therefore will have formal training or human resource departments that can structure and supervise an on-the-job training programme for a young person. The notion of a 'master of apprentices' can have little meaning in a high proportion of firms. In nearly all cases the person who supervises the daily work of the young person will be the owner of the business, and in turn this will be the person who will develop their knowledge and skills in the workplace. This is one of the reasons that formal programmes to train workplace trainers and supervisors often encounter difficulties, as the owners of small businesses are not easily persuaded to take time away from their daily work. For this reason, formal training programmes have a relatively limited role among the techniques that can be used to improve the quality of learning in the workplace. On-the-job training tools and networks and relationships are other options that might be better suited to the realities of small businesses. They are discussed below.

Inspection systems

In Israel there is a formal system for inspecting firms taking part in apprenticeship and enterprise-based learning schemes, supervised by government apprenticeship supervisors and a department for assessment and evaluation located in the Manpower Training and Development Bureau. In the Occupied Palestinian Territory, some of the larger vocational training centres have established special units to monitor and report on trainee performance at the workplace, including visits to each firm at least once per month. Monitoring services also exist in Algeria and Tunisia.

On-the-job training tools

Several examples exist within the region of tools that have been developed either to indicate the content of in-firm training for the benefit of the enterprise or to record the training being undertaken by the young people and the skills acquired. On the basis of both observations during the field visits and comments in the country background reports, these tools seem to be of varying effectiveness and thoroughness.

 In 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 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.
- In Morocco, apprentices are required to have a record book to record not only the training undertaken but also administrative matters such as attendance. This is to be checked by the staff of the apprenticeship training centre during regular visits to the enterprise. In practice these visits seem to be more inspectorial (checking that the apprentice is attending work, not being exploited, and so on) than pedagogical (designed to assist the firm to improve its training), and the list of competences taught in the firm is often either rather superficial or non-existent.
- In Jordan, trainees in the applied secondary education programme are required to keep job logs at the workplace, and supervisors fill out reports on trainee progress and problems. On the basis of the follow-up results and the apprentice logbook, the content of any necessary supplementary practical training can be identified and covered in the training centre as off-the-job training. However in practice employers have observed that trainees in fact are visited infrequently and have suggested greater contact as a means to improve the quality of practical training. During the field visit, teachers in one vocational training centre commented that in practice their visits to enterprises tend to be rather inspectorial.
- In Syria's apprenticeship programme the skills to be acquired in each training classification are set out in a learning standards book which includes the vocational competences required for the graduates as well as the competence elements, the learning standards and the tools used. This forms the basis for the student's logbook, which records both competences acquired in the workplace and the results of regular assessments given by the educational institution.

Networks and relationships

The importance for the quality of work-based learning programmes of strong relationships based on trust, and of networks of contacts between schools and enterprises has been commented upon by a number of researchers (see for example Rosenbaum,1999; and Taylor, 2006). The development of such networks and relationships is not just a matter for individual teachers or employers, but can be stimulated by policy: for example by changing teachers' working conditions to make such visits a requirement of their job, and by providing resources in the form of time and transport to make them possible. A number of examples have already been given of the staff of educational institutions being required to regularly visit the enterprises in which young people are employed and trained. Although in practice these visits can be infrequent, and are at times inspectorial rather than pedagogical, they form an important basis for the development of better-quality systems. The joint participation in training programmes by educational and enterprise staff in Syria is a particularly interesting example of a deliberate attempt to improve networking and contacts between education and enterprises.

Assessment and certification

A requirement for the knowledge and skills acquired in the workplace to be assessed and certified, as well as the knowledge and skills acquired in the classroom, is common in many (although not all) of the work-based learning programmes identified in the region.

In 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 are paid an honorarium if they do, although it is reported to be rare for them to do so. National examinations that cover both theoretical knowledge and practical skills as a requirement for successful programme completion are also reported for programmes in Egypt, Jordan, Lebanon, the Occupied Palestinian Territory and Syria. In Jordan there was a proposal at the time of the field visit to separate programme provision from assessment and certification by establishing a Licensing and Accreditation Agency. In addition to being responsible for assessment and certification, it was proposed that this agency would license private training providers, evaluate the performance of government vocational training centres and private training, ensure the quality of teachers and fair competition between training providers.

Supplementary training

One way of ensuring that the young person acquires the full range of the knowledge and skills specified in the curriculum or competency list of a work-based learning programme is to provide supplementary training to compensate for gaps in what can be provided by the enterprise: for example because of the limited range of its products, services or technology; or because of poor quality training and limited opportunities for learning. Only a few examples were discovered of this being attempted. In Jordan time is allowed in vocational training centres at the end of the applied secondary education programme so that gaps in training can be filled and the young person prepared for the final examination. In Egypt supplementary training is offered in the MKI and MoE programmes during the periods spent in school each week, and in the programme run by the Egyptian Federation of Construction and Building Contractors (see Box 3, p. 60) supplementary training is provided within training centres to compensate for gaps in what has been acquired in the workplace.

In practice, there are a number of prerequisites if compensatory training is to work well. The competences that are the employer's responsibility to develop need to be clearly identified and communicated; the training provided by the employer needs to be regularly monitored and assessed; and training centres need to have the necessary equipment and resources and to be organised in a flexible way that allows gaps to be addressed on an individual basis. In many cases these preconditions are not in place. In the case of Algeria's apprenticeships, compensatory training would be almost impossible to provide within apprenticeship training centres. The curriculum is constructed on the assumption, which in many cases would not be realistic, that all practical training is provided by the employer and that complementary education and training shall provide only general education and vocational theory. Accordingly apprenticeship training centres generally have no facilities or equipment for providing practical skills training.

Pre-employment training

It was pointed out in Chapter 4 that in some cases – for example apprenticeships in Algeria and Syria, the PVTD programme in Egypt, and applied secondary education in Jordan – a period of full-time institutional attendance takes place before young people enter the workplace. This has a number of advantages that can help to improve quality. It can mean that the young person has some basic work skills on starting in the enterprise, and this can improve their productivity, reduce costs for the employer, and shorten their

settling-in period. If it also includes some orientation and guidance and allows young people to sample a number of occupational training areas, it can improve their decision-making and make it less likely that they will arrive at the enterprise with a false expectation about the nature of the work.

5.2 How is quality assured in the classroom?

During the field visits, it was not unusual to find policymakers commenting quite critically on the capacity of firms to train within the workplace¹⁷. (Interestingly, this concern was expressed far less often by teachers and instructors in the institutions providing off-the-job training as part of the programmes.) This relative mistrust of the workplace was much less commonly accompanied by an equally critical scrutiny of or concern for the quality of the education and training in the public vocational education and training colleges or schools that they were responsible for. Similarly there seemed to be far less concern with the development of tools and methods through which the quality of this could be monitored and improved.

Certainly there was awareness among many policymakers, as well as in many of the country background reports, that resource constraints are a significant factor influencing the capacity of the public sector to improve the quality of complementary off-the-job education and training: teacher salaries being too low to attract enough well-qualified staff; and too little money being available for facilities, equipment and materials. Other problems identified in many countries as affecting the quality of the education and training provided in education and training centres included an outdated curriculum, and staff not being sufficiently up to date with current industry practices. In other cases problems were identified in low motivation on the part of young people (for example in Algeria it was pointed out in one of the centres visited that a high proportion of apprentices were not in fact taking part in complementary education and training), and an unwillingness of employers to release young people for the purpose.

However, in addition to problems such as these, the study has revealed a number of examples of initiatives and systems to monitor and improve the quality of complementary education and training.

- In Israel, the government sets standards for the public and private centres that provide complementary education and training. These standards cover the staff, facilities and equipment, and there is a regular and detailed evaluation of training centres by a central evaluation department. The evaluation focuses, from the pupil's standpoint, on the learning environment, access to and use of equipment and materials and the mentor in the workplace. From the teacher's standpoint it focuses on the school climate and discipline, social activities, the curriculum, and in-service and supplementary training.
- In the Occupied Palestinian Territory, a recent initiative has been undertaken to improve the pedagogical skills of vocational education and training teaching staff. About 500 staff members completed 12 modules each of 20–40 hours covering topics that included: introduction to vocational training, models and techniques of instruction, planning for instruction, theories and models of learning, educational

¹⁷ This was often linked to a concern about the willingness of enterprises to train, and a strongly expressed view that training was something that they *ought* to undertake.

- guidance and counselling, measurement and evaluation of performance, educational resources and the technology of education, vocational roles and professional development, sociology of education, communication and class management, workshop layout and management, and developing relations with communities and local industry.
- In Jordan, as indicated above, there is a proposal to establish a Licensing and Accreditation Agency to be responsible for licensing private training providers, evaluating the performance of government vocational training centres and private training, ensuring the quality of teachers and ensuring fair competition between training providers.

5.3 How can quality be judged and improved?

Judging quality

Koch and Reuling (1998) and Blom and Meyers (2003) provide summaries of several countries' approaches to quality issues in vocational education and training. More specific frameworks for judging the quality of apprenticeship and other models of work-based learning within vocational education and training systems have been created for a number of developed economies. Linderholm and Parker (2000) and Schofield (2000) provide examples.

Annex 4 sets out one such framework, developed by the European Association of Craft, Small and Medium-sized Enterprises (UEAPME). It is based on 11 criteria that relate to matters such as the division of training between the workplace and the classroom, the existence of training contracts as legal documents, the existence of national standards for the content of training and its regular update as economic and technological conditions change, the involvement of employer organisations in the process of ensuring the quality of enterprise training, contributions by individual enterprises to the financing of training, external validation of the outcomes of training with the involvement of employer organisations, and national standards for the quality of both enterprise training staff and school training staff.

The framework presumes a level of institutional sophistication and support for work-based learning, as well as a level of public and private resourcing, that goes well beyond the reality of almost all the participants in the project. For example, the role of employer organisations and trade unions in vocational training is normally quite limited, as is their degree of organisation and coverage in the first place; national standards for training staff often do not exist or are quite limited; and in only a few cases do legally binding contracts form the basis of the training programme. For this reason, a simpler analytical framework has been used here, in which the methods used to assure quality in both the workplace and the classroom are treated separately. A useful future initiative might be to develop a regional framework for the evaluation of quality in work-based learning programmes that is better suited to the reality of the region and to the diversity of programmes that exist beyond apprenticeship in the European model.

In treating the issue of quality, the focus of nearly all the country background reports tended to be on the quality of the inputs to work-based learning programmes. The same trend was evident in discussions with officials during the four field visits. For example, quality was commonly judged by matters such as whether the curriculum was recent and

competency-based, the qualifications of the in-firm tutors and trainers, the quality of the equipment used for complementary education and training, or the qualifications of training centre staff.

There seemed to be less concern with the use of outcome measures to assess the quality of programmes: for example drop-out and completion rates, employment rates and the type of employment achieved, or the quality of the skills acquired during training. In some cases this can be attributed to weaknesses in the data and evaluation systems used to support programmes.

The quality of the skills acquired during work-based learning programmes is normally assessed by tests or examinations at completion. Very commonly these are national examinations using a common standard, and in nearly all cases they are conducted by government bodies or by the training providers. There are few cases in which employers or their representatives are involved in setting or conducting these examinations¹⁸.

Few countries attempt to systematically monitor the skills of those who complete vocational education and training programmes, including those that are work-based. During the field visit to Jordan, the National Centre for Human Resource Development recounted a recent experiment in which graduates from five trade courses were tested against international skill standards. Of those who had gained a diploma, only one-third passed the test. This has been one of the factors that have strengthened the case for better quality assurance mechanisms in that country, including the separation of programme delivery from assessment and certification.

Few countries have a means of independently benchmarking the skills acquired against either national or international standards. This will become increasingly important as the economies of the region become more open to international competition and trade in international markets. Participation in the skill competitions organised by WorldSkills¹⁹ is an option that only two countries in the region have taken up. In the WorldSkills competition held in Shizuoka (Japan) in November 2007, Morocco and Tunisia entered competitions in categories such as mechanical engineering, computer-aided drafting, industrial electronics, electrical installation, industrial control refrigeration, mechatronics and automotive technology. They were ranked second-last and last respectively out of 46 participating countries (on the basis of medal points per competitor).

Quality in the workplace depends in large part on the range of work tasks that the apprentice undertakes, as well as the quality of supervision of this work: it has been pointed out above that public policy can try to have some influence over these things. The variety of the young person's experience and thus the chance to reflect upon and learn from it depends on a number of factors, including the nature of the enterprise's products and services and the technology that is used to produce them. These will vary from enterprise to enterprise. However it also depends on the ways in which the work is organised. Work can be organised so that workers constantly carry out the same or a very limited range of tasks, or so that there is considerable task variety. It can be organised so that workers work by themselves, or as part of a team. In each case, the second way of organising work (task variety, teams) leads to greater skill development and greater

- However the option of employer representatives taking part in the examinations exists within the Turkish system.
- 19 www.worldskills.org/

learning (Eliasson and Ryan, 1987; Koike, 1986; Prais, 1989; Billett, 2001). And so even enterprises using relatively simple forms of technology and making fairly simple products can, with an appropriate form of work organisation, provide a learning-rich environment for young people. Box 1 shows an excellent example of this in Morocco, in which a strong link has been established between an apprenticeship programme and a learning-rich form of work organisation.

Box 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 off-the-job 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.

Improving quality

One of the very positive outcomes of the project has been that it has revealed a large number of excellent methods that are being used throughout the region to monitor and improve the quality of work-based learning programmes for young people. However these methods are often not part of a comprehensive approach to quality assurance. If quality is thought of in terms of a jigsaw of methods, all of which need to fit together, in most countries some parts of the jigsaw are missing. Perhaps the most comprehensive approaches to quality can be found in some of the very small pilot programmes such as those in Syria and the Occupied Palestinian Territory, whose background report expresses its approach as follows:

'Although apprenticeship training is implemented on a small scale, yet these programmes have managed to develop certain resources, including training objectives, skill standards, competency lists, curriculum, and teacher/trainer development. All these resources and other human resource development schemes constitute a sound base for supporting apprenticeship and enterprise-based learning schemes and to improve their quality (p. 17).'

The challenge for these smaller schemes will be to maintain this comprehensive approach as participation expands and as they become part of the mainstream of their country's initial vocational education and training system. For larger and better-established schemes, the challenge will be to adopt a more comprehensive approach, both to quality in the workplace and off the job, and to do so in an affordable manner.

Countries can take a number of steps to improve the quality of their work-based learning programmes for young people: not all of these need be costly.

- Given the relative lack of capacity of most employer organisations within the region, strengthening the role of educational institutions in screening the enterprises that take part in programmes.
- Where they do not exist, developing simple user-friendly skill lists or competency schedules to guide those who supervise the work of young people about the types of things that need to be learned.
- Where these do not exist, developing simple training logbooks that allow the skills learned to be recorded so that gaps between this and the skills contained in the programme's curriculum or training schedule can be assessed.
- Working as a regional network to develop a framework for the evaluation of quality in work-based learning programmes for young people.
- Improving the links between teachers and enterprises, so that teachers spend
 more time on visits to enterprises for pedagogical purposes (assisting a firm to
 improve its training; learning about ways in which it feels that the off-the-job
 complementary education and training might be modified). Where at the moment
 teacher visits to enterprises are used largely for inspectorial purposes (checking
 attendance and working conditions, for example), these responsibilities should be
 transferred to ministries of labour.
- Separating the provision and evaluation functions, and making greater use of independent external assessments.
- Developing standards for the accreditation and evaluation of education and training providers, both public and private, and instituting regular programmes of institutional assessment.
- Improving the ways in which programme outcomes are measured and reported, and providing greater feedback on these both to employer organisations and to education and training institutions.

6. GOVERNING WORK-BASED LEARNING SYSTEMS

This chapter sets out a framework to help understand the options that exist in structuring the governance of work-based learning systems in terms of goals, actors, levels, roles and tools. It discusses legislation and regulatory arrangements that cover work-based learning for youth in the region, financing systems including special financial incentives for employers and payments provided to young people, data and evidence, and cooperation and social capital. It concludes with suggestions on how governance arrangements might be improved in the region.

6.1 A framework

Governance of work-based learning programmes for young people is closely linked to, and is normally part of, the governance of vocational education and training systems as a whole. All the participants are facing challenges in how best to govern their vocational education and training systems (ETF-World Bank, 2005). For example, in Egypt many different ministries are direct providers of vocational education and training and operate their own training institutions: achieving coherence and coordination among these is not a simple task. However these wider challenges are not the central concern here; it lies rather with the special challenges involved in governing work-based learning systems. These challenges stem from the need to coordinate and achieve coherence between enterprises and educational institutions, to share responsibility for delivery between the public and private sectors, and to achieve a balance and integration between education, labour market, economic and social policies. In assessing the adequacy or otherwise of governance systems for work-based learning, it is helpful to consider a framework that sets out the goals of governance systems, describes a number of dimensions of governance, and outlines the principal tools available for governance.

Governance systems have three main *goals*.

- Quality. Ensuring that work-based learning programmes develop high-quality skills among young people and provide them with qualifications that will assist them in the labour market.
- Responsiveness and flexibility. Ensuring that enough places are provided to meet economic and social needs, and that systems respond quickly to changing economic and social circumstances.
- Coherence and coordination. Ensuring that programmes complement both one another and other systems for developing skills, and that the most effective use is made of available resources.

Governance systems can also be seen in terms of three main *dimensions*.

The level at which decisions are made: national, sectoral or local.

- The actors who are involved at each of these levels: enterprises, educational institutions, employer associations, trade unions, young people, governments.
- The roles that each of these actors performs at these levels: assessment and certification, developing training content, delivering training, regulation, monitoring and quality assurance, providing resources and so on.

Finally, governance systems should be seen in terms of the principal *tools or methods* of governance that are available, again with a need to consider which methods are appropriate for which purpose, and along which dimension. In brief these methods are: legislation and regulation; financing systems; data and evidence; cooperation and social capital. The discussion that follows is organised around these four tools of governance.

6.2 Legislation and regulation

Formal legislation and regulations are important tools in governing work-based learning systems. They can help to regulate the terms and conditions under which young people are employed, the obligations of employers and other parties, the nature of the education and training pathways, and how programmes are financed and governed. The existence of legislation also serves as a signal to key stakeholders of the value attached by government to work-based learning.

Annex 3 summarises the key legislative and regulatory instruments that apply to apprenticeship and other work-based learning programmes in the region. Quite detailed legislation exists for apprenticeship and related programmes for youth in Algeria, Morocco, Tunisia and Turkey. These are the countries in which, compared with other parts of the region, work-based learning programmes for youth are relatively well developed. A notable feature of legislation in Algeria and Turkey is that it not only sets down in some detail the conditions that regulate work-based learning programmes, but also contains a legal requirement for employers to take part in such programmes and to provide places for young people. Not surprisingly, participation rates appear to be higher in these countries than elsewhere.

In Syria a more recent but fairly detailed ministerial decision encompasses the fledgling apprenticeship programme. Very weak legislative instruments exist in Egypt and Israel. In Jordan, Lebanon and the Occupied Palestinian Territory no specific legislative instruments exist, so it is not surprising that apprenticeship and other forms of formal work-based learning programmes for youth are quite weakly developed.

There seems, then, to be a strong link between the existence of detailed legislation setting out the conditions that apply to and regulate work-based learning programmes and the strength of national programmes. Nevertheless legislation is not always a sufficient tool for the effective steering of work-based learning systems. For example in Tunisia, 1993 legislation required that those taking part in traditional or informal apprenticeships sign a contract of training, but it has been estimated that less than half do so. And in Morocco employers in the agricultural sector rarely sign apprenticeship contracts, despite this being a legal requirement. Algerian regulations specify the creation of governance committees for apprenticeship at regional level, but in practice very few of these exist. For legislation to be effective it needs appropriate funding, administrative support and the consent of key stakeholders.

Contracts of employment and training

The nature of the contractual arrangements between the young person, the employer, and other key parties is a central aspect of the governance of well-organised work-based learning systems. Contracts having the status of legally enforceable documents, clearly setting out the obligations of the parties, and which are applied in virtually all cases, seem to exist for only a few of the programmes revealed by the study. They are the case in apprenticeships in Algeria, Morocco (although not universally in the agricultural sector) and Turkey, and in Morocco's alternance programme. In Egypt contracts with a clear and agreed format seem to be standard in the three main programmes. In the programmes in Lebanon, the Occupied Palestinian Territory and Syria voluntary contracts that have no legal status are used. In the programmes in Israel and Jordan there are no contracts of any sort between the young person and the employer.

Box 2: Financing apprenticeship training in Algeria

A combination of a rational system of training wages, well-targeted public subsidies and an apprenticeship tax that penalises non-trainers has given Algeria a coherent system for financing apprenticeship training. It provides appropriate incentives for participation both to young people and employers.

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 in regular steps each month to reach 80% at the end of the training period. For the first six to twelve months, when the apprentice is the least productive, the cost of these payments is met by the state. Social charges are met by the state throughout the full period of the apprenticeship. This wage structure gives employers an incentive to hire relatively unproductive youth and to provide them with training. It gives young people an incentive to acquire skills in the expectation of receiving higher wages at the end of the training period.

This system of payments to apprentices is combined with a legal obligation for employers to hire apprentices and an apprenticeship tax that 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, and rising to at least 3% of total employees for firms with 1,000 or more workers. Initially set at 0.5% of a firm's wage bill, the apprenticeship tax is now equal to 1% of the total, 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. These arrangements provide more effective incentives to encourage employer participation than general purpose vocational training taxes that apply to all firms, whether or not they train, and that do not differentiate between the training of young people and the continuing training of existing employees.

Apprenticeship numbers in Algeria have increased steadily from 85,283 in 1990 to 204,000 in 2006, and have risen particularly rapidly since 2003 when the apprenticeship tax was increased from 0.5% to 1% of a firm's wage bill. This is despite the fact that, if faced with a choice between paying the tax and hiring the minimum number of apprentices, a firm will always save money by paying the tax (not taking into account the value of the productive work provided by the apprentice). Thus the tax does seem to have provided an effective trigger to encourage employer participation in the training of young people.

6.3 Financing systems

Financing systems are integral to the ways in which work-based learning programmes are governed. This is partly because the level of public financing is an important determinant of the adequacy or otherwise of the resources that can be made available for equipment, teacher salaries, curriculum development and facilities. But financing is not just a question of the level of public resources. The ways in which costs and benefits are distributed between all key parties (employers, governments and young people) can be very important in setting the incentives that will influence both the willingness to participate and quality. These incentives can be influenced by factors such as the existence and level of youth wages and how these are structured over the period of the programme, specially designated taxes or levies, public wage subsidies, exoneration from social security payments and other government charges, and wages paid following successful completion of a programme.

Financial mechanisms can also be used as a way to improve coordination between multiple programme providers, particularly in countries where many ministries (for example agriculture, tourism, military production) offer programmes as well as the principal vocational education and training ministry. In Morocco, for example, the Office for Vocational Training and Labour Promotion (OFPPT – Office de la formation professionnelle et de la promotion du travail) provides the public funding for apprenticeship programmes that it administers as well as for those administered by other ministries such as those of agriculture, fishing and tourism. Annual contracts between the OFPPT and these other ministries specify the number of places to be funded and can help to ensure consistency in the terms and conditions applying to programmes. In other countries of the region where multiple ministries provide vocational education and training, such coordinated financing mechanisms do not appear to be used.

Financial incentives to encourage employer participation

Financial mechanisms to encourage employers to participate in work-based learning for youth, or which directly or indirectly support it through special funds derived from training taxes, exist in several of the ten regional participants. In addition to the arrangements in Algeria described in Box 2, these are as follows:

- In Jordan, medical insurance for those in relevant programmes is met by the government and participating employers are exempt from social security payments. A Fund for Subsidising Vocational and Technical Education and Training was established in 2001. It is supported by 1% of company profits, tax exemption for private donations, and (possibly) additional government donations. However its focus is vocational education and training in general rather than specifically work-based learning programmes for youth, and no information is available on expenditure from the fund.
- In Morocco, employers are exonerated from social charges and vocational training tax in respect of both apprentices and those undertaking alternance programmes. Some 30% of the national vocational training tax is allocated to the support of training within the workplace, although this need not be training for young people. National discussions held in 2006 canvassed the option of either instituting a special apprenticeship tax, or of formally allocating a fixed proportion of the training tax revenues to support apprenticeship.

- In Tunisia, a vocational training tax has existed since 1956, set at 1% of the wage bill of industrial firms and 2% in the case of 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 at the moment are not specifically targeted at this objective.
- In Turkey, an Apprenticeship, Vocational and Technical Education Development and Promotion Fund was established in 1986, to which 1% of employers' income tax was allocated, as well as 20% of the annual training budget of the Turkish Labour Union of Handicrafts and other chambers. Only about 20% of the fund was transferred to the Ministry of Education: the remaining 80% was spent on general budget items. Roughly three-quarters of the funds provided to the Ministry of Education from the fund were spent on equipment and materials for vocational education and training. The remainder was spent on a combination of wage supplements for vocational education and training teachers and honoraria paid to members of apprenticeship governance and advisory bodies. Thus direct support of apprenticeship from the fund was relatively limited. The same 1986 law provided for the government to pay for the workplace insurance of young people taking part in apprenticeship and enterprise-based practical training. In 2001 the law was amended and renamed, and as a result all profits from revolving funds within the ministry, money raised from selling products produced during training programmes and all forms of donations and other forms of generated income are dedicated to supporting vocational education.

Payments to young people

The payments made to young people are another important incentive in work-based learning systems: they should be seen as one mechanism for helping to steer the system. 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 the wages paid after completing training are higher than those paid during training, the incentive to participate and to complete is increased (Chapman, 1993).

A wide variety of payment arrangements exist for young people in work-based learning programmes both among and within the regional participants. In addition wide variation between the formally specified payment arrangements and the reality on the ground can be observed. At one extreme, background reports indicate that young people taking part in such schemes generally receive no payments in Lebanon, and in Morocco it appears that while the option exists of paying an amount that is less than the national minimum wage, in practice many young people receive no payment. Programmes falling into both categories were observed during the field visits. In another category of programme, reported in Egypt and the Occupied Palestinian Territory, young people are paid a very small amount, perhaps 15%–25% of the wage of an adult worker, to help them with transport and food costs.

In Jordan payments to young people are completely a matter for negotiation with individual employers. There is no system and no available information on actual levels of payment. On the other hand, quite formal and regulated payment systems for young people exist in Algeria and Israel. In Israel the specified payments are not likely to act as an effective incentive for employers to participate. Agreed by tripartite negotiation, they cannot be less than the legal minimum wage for youth, set at 75% of minimum adult

wages, and no distinction is made between the wage to be paid to a young person taking part in a work-based training programme and one employed in a job with no associated training.

The most coherent arrangements for paying young people, creating a rational set of incentives for both the employer and the young person, can be found in apprenticeship schemes in Algeria and Tunisia. In both countries there is a similar rational structure for training wage payments, based on sub-minimum wages that begin as a low proportion of the national minimum wage, and rise in regular steps to a higher proportion by the end of training, but nevertheless remain less than the minimum wage to reflect the costs to the employer of providing the training and the less than optimal productivity of the young person. Details of Algeria's arrangements are provided in Box 2. In Tunisia payments begin at 30% of the minimum wage and rise to 60% in the case of apprenticeships of one year or less, and to 80% in the case of those lasting for more than a year.

6.4 Data and evidence

Data and evidence form an important part of effective systems for the governance of work-based learning programmes (as indeed they do for all public policy)²⁰. Good data and evidence become particularly important with the increased emphasis on outcome measures in quality assurance that was advocated in the previous chapter. Three elements are important: the collection and analysis of administrative data, policy evaluation studies, and research. Of the three the first two are the most important, not least because they form the basis of the third.

In many of the countries taking part in the project all three elements were underdeveloped. On some grounds this might not be unexpected, given the relatively weak state of development of work-based learning programmes. However it was somewhat surprising to find that few of the pilot projects that exist in some countries have rigorous evaluation built into them from the start. In other cases relatively well-developed work-based learning systems sat alongside weaknesses in the evidence and data systems that could help to steer the system more effectively. For example, in Morocco, data on participants are readily available classified by the major providers of the off-the-job complementary training (government ministries such as agriculture, fishing, tourism), but less readily available by occupational field and industry sector. This makes it difficult to assess how well programmes are targeted in accordance with economic and labour market needs, and to adjust them as these needs change.

While existing administrative data generally allow the number of programme participants to be identified with a reasonable degree of accuracy, significant gaps exist in other aspects of administrative data important for system governance. For example, data on drop-out and completion rates are often not available. And financial data for the vocational training institutions that provide the complementary off-the-job training in some cases do not separately identify resources devoted to work-based learning programmes, as opposed to other types of programme. And in no country were data provided on the costs to government revenue of income foregone through employer exemptions from paying social contributions and training taxes in respect of young people involved in

A brief introduction to evidence-based policy analysis can be found at the UK Policy Hub website (www.policyhub.gov.uk/evaluating_policy/how_res_eval_evid.asp).

work-based learning programmes. Taken together, this makes evaluation of the cost-effectiveness of programmes very difficult.

Nevertheless some good examples were discovered that the rest of the region can learn from.

- Using existing administrative data, Morocco's main provider of training facilities, the OFPPT, has carried out a detailed analysis²¹ of patterns and trends in drop-outs from apprenticeship training that provides extremely useful policy guidance. For example, it shows that drop-out rates are higher in shorter than in longer apprenticeship programmes, in programmes leading to the lower levels of vocational qualifications, and in industry sectors such as ready-made garments and leather than in hotels or construction.
- In Algeria, the Study and Research Centre on Occupations and Qualifications (Centre d'études et de recherche sur les professions et les qualifications – CERPEQ) is a relatively well-resourced organisation with a charter to conduct research on employment and qualifications issues, as well as other studies of general interest on vocational education and training. While active, however, it seems that at times its findings are not used as widely as they might be.
- In Jordan, the National Centre for Human Resource Development has a significant degree of independence. It has a charter to conduct policy-related studies and evaluations across the full spectrum of human resources policies in education and the labour market, including work-based learning programmes for young people.

6.5 Cooperation and social capital

Formal structures for cooperation

International experience shows that in all strong apprenticeship and work-based learning systems, programmes are supported by well-developed structures for cooperation between governments, employers and employee representatives. Also notable in these countries is the active involvement of employers and trade unions in the management of the system: for example through involvement in or responsibility for matters such as curriculum development and updating, assessment and certification, governance of vocational training establishments, and the quality control of enterprise participation.

Perhaps not surprisingly in light of the variation among Mediterranean countries in the extent to which work-based learning systems for youth are developed, there is also wide variation in the structures for cooperation between employers, employees and governments and for their involvement in the management of the system. The most highly developed and effective structures, on the basis of the country background reports, appear to exist in Turkey. There, the national legislation regulating the vocational education and training system gives a clear role to the social partners in planning, development and evaluation procedures through their tripartite vocational education and training councils. A peak Vocational Training Council exists on which all stakeholders sit, and it reports to the Ministry of National Education. In addition to the national body,

²¹ Presented at a national apprenticeship policy workshop held in November 2007 as part of the MEDA-ETE project.

provincial councils exist, also with tripartite membership. There is a range of other tripartite bodies for special areas of the system: for example occupational standards committees. The Confederation of Turkish Tradesmen and Craftsmen, one of the country's largest civil organisations, is given a special role in promoting apprenticeship, is a provider of training, and plays a key role in quality assurance, both monitoring the training that takes place within enterprises and being central to the apprenticeship examination and certification system.

Reasonably well-defined structures for cooperation also seem to exist, at least on paper, in Algeria, Morocco and Tunisia. In each case, national legislation accords a formal role to employer and employee representatives. In Algeria and Morocco, the reality appears to be that government continues to play a relatively top-down role. In Algeria the role of national employer organisations and trade unions in managing the system appears modest, although they do take part in deliberations of the National Consultative Council for Vocational Training (CNCFP - Conseil national consultatif de la formation professionnelle) as well as in the consultative commission on vocational education and training of the peak body representing the regional governments (wilayas). Consultative bodies at the regional (wilaya) level that are meant to be composed of both employer and regional representatives either do not exist or, if they do, are inactive. In Morocco legislation has established a tripartite national commission for vocational education and training, but it has not met since 1989. Parallel regional bodies are similarly inactive. However the administrative council of the OFPPT, the main but not exclusive delivery arm for apprenticeship programmes, does bring employer and employee representatives together for planning and consultative purposes. Recent government initiatives to expand apprenticeship have involved the signing of accords with a number of industry bodies which have helped to reinforce their skills at negotiating training issues and thus strengthened their role. In Tunisia, reforms to the vocational education and training system since the early 1990s have involved a major change in system steering. Employer and union representatives have been given a stronger central role at the national level in advisory and management bodies, as well as in the management of vocational education and training colleges. Formal conventions have been signed with major employer and industry bodies to help to strengthen their involvement, which appears to remain relatively weak, and to give them a clearer responsibility for matters such as the establishment of training needs, mobilising local employers, and involvement in the management of colleges.

In Jordan, the Amman Chamber of Industry is represented on the governing bodies of the main vocational education and training governance structures such as the Vocational Training Corporation, the major national delivery body, and the Employment and Technical and Vocational Education and Training Council, and unions are also represented on these bodies. At the time of the field visit in 2007, proposals were being developed and debated for a new national structure for human resource governance and advice that would transcend all post-compulsory sectors, and that would give a much stronger voice to industry, allowing its needs to be more clearly articulated.

Elsewhere within the region the slow development of work-based learning systems for youth is generally mirrored in very weak structures for involvement by employers and unions in advising on the system or in helping to manage it²². In Israel, Lebanon and

The involvement of the Egyptian Federation of Construction and Building Contractors (see Box 3, p. 60) and of the Egyptian Investors' Union in the Mubarak-Kohl Initiative are exceptions.

Syria, no structures for cooperation appear to exist at either national or regional levels: a tradition of top-down government-directed steering dominates.

The Egyptian background report comments that the period of strong public-sector ownership of industry has weakened industry bodies, and that this is only slowly changing as the economy becomes more competitive and open to private ownership.

The increasing process of economic liberalisation in the region noted in Chapter 2 should help to increase employer demands for a stronger role in governing and managing work-based learning for youth. Studies elsewhere have shown that an increasingly competitive business environment, associated with increased customer focus, technological change and new forms of work organisation are among the key drivers of enterprise involvement in training (Hayton et al., 1996). Recent Algerian experience, where a series of national consultations and conferences was held to promote apprenticeship, suggests that it is possible to stimulate employer involvement and interest in work-based learning for young people if this is done in association with other steps to improve governance, such as the introduction or modification of coherent financing systems. Israel's experience since the early 1990s points, even if in a negative way, to the importance of appropriate government leadership and support. There, employer interest and involvement in apprenticeship has fallen sharply since the government shifted from support of initial vocational education and training as a significant pathway for youth to a policy of promoting academic upper secondary education, with apprenticeship and enterprise-based learning being consigned to a residual option for school failures.

Informal and local cooperation

Effective local arrangements to improve quality, responsiveness and coordination are important for the governance of work-based learning systems, as well as national arrangements. The importance of effective local personal relationships between enterprises and schools in quality assurance has been discussed in Chapter 5. National policy can take important initiatives to improve local arrangements for cooperation. In particular, as well as industry initiatives, it can help to create a range of intermediary bodies that can operate at local level and at industry sector level to improve quality, responsiveness and coordination. These roles include helping firms to improve their apprenticeship recruitment, supplementing gaps in their capacity to train, either through rotating apprentices among several firms or through special training centres, and providing advice on training methods. Box 3 describes the experience of four countries with different models of such intermediary bodies: Australia, Egypt, the Netherlands and Norway.

A stronger role for the state in the governance and management of the system than would be common in many European countries, and a correspondingly reduced role for employers, can also be seen in one of the key relationships in an apprenticeship system: the recruitment of a young person to a firm. It was noted in all four field visits that it is common for young people to be recruited not by the employers who provide the employment and training during an apprenticeship or other programme, but by an educational institution, or other government organisation, and then allocated to firms. In contrast, the normal relationship between an employer and a young person in an apprenticeship in continental Europe is established when the firm recruits the young person. This can be done with the assistance of external organisations such as intermediary bodies, but the principal recruitment decision is taken by the employer.

Box 3: Intermediary bodies in work-based learning

Intermediary bodies can play an important role in the governance and quality assurance of work-based learning programmes, particularly at the regional and industry sector levels.

In Australia, around one apprentice in seven is employed by an intermediary organisation known as a group scheme. Funded mainly by governments, group schemes operate either within a defined geographical region or focus on a particular industry sector. On behalf of the employers that provide the actual work and training, the schemes manage the administrative and financial aspects of an apprenticeship (for example paying wages and taxes), and can rotate the apprentice through different work placements to ensure a range of experience. They can place the young person in a different firm when seasonal demand falls or at times of economic difficulty. This can be important in industries such as construction and hospitality. They can help to compensate for gaps in the types of training that employers can provide through organising supplementary training, either in other firms or in special training facilities. The schemes play an important role in helping to screen firms where apprentices are placed to ensure that they can provide appropriate quality of work and training. Small and medium-sized enterprises make particular use of group schemes (NCVER, 2001b; Toner et al., 2004).

In Egypt, the Egyptian Federation of Construction and Building Contractors operates employment and training programmes in all 26 country's governorates. The federation acts as the direct employer of young people, and then contracts them out to individual employers. The programmes use the training centres of the Ministry of Housing and Reconstruction to compensate for seasonality in the availability of work, as well as for lack of breadth in the skills that can be learned on some work sites.

In the Netherlands, regional centres of expertise are responsible for finding and accrediting the companies that provide training to young people in apprenticeships. The centres of expertise are also responsible for coaching the in-company mentors who train the apprentices. The centres are party to the apprenticeship contracts or agreements together with the school, company and student (Heida, 2007).

In Norway, the development of a new apprenticeship system for youth in the mid 1990s involved the creation of local training offices, funded by the pooling of around half of government training subsidies to small and medium-sized enterprises. Decentralised and employer-led, these training offices play a significant role in helping firms to recruit apprentices, as well as on-the-job training. They also enable multi-employer arrangements to operate whereby the apprentice can be rotated through more than one firm in order to cover all aspects of the skills needing to be taught during the apprenticeship. The centres involve enterprises, trade unions and local administrations, with support at national level (OECD, 1998; Michelsen and Host, 2002; Payne, 2002).

6.6 Improving governance systems

The above analysis suggests that in the Mediterranean region there is a correlation between the existence of large, or relatively large, systems of work-based learning for youth on the one hand and, on the other hand, coherent and comprehensive regulatory arrangements. Such legislation would normally express the roles and obligations of the young person and the employer, as well as the collective roles and responsibilities of employer representatives, governments and trade unions within coordinated governance structures for advice and monitoring.

Comprehensive regulatory arrangements will, either alone or in conjunction with labour laws, also cover matters such as conditions of work and payments to young people. Coherent financing systems for employers in the form of incentives, taxes and subsidies would also normally be included in effective regulatory and legal arrangements to support apprenticeship and other forms of work-based learning for youth. And so it seems sensible, in seeking to extend and improve these systems, to focus in the first instance on implementing new or improved legislation, and on providing the resources to ensure that it is effectively implemented. Such an approach to improved governance seems more likely to be productive than a strategy of implementing and learning from pilot programmes.

In many of the countries of the region the development of more effective systems for steering work-based learning programmes is hindered by the lack of active involvement by industry associations, employer organisations and trade unions. In many instances this lack of involvement is understandable, as governments have tended to take a top-down, centralised approach to governance, and have given other parties little real role in decision-making. In recent years Tunisia has attempted to change this tradition by giving industry a real voice. Recent proposals in Jordan have also been designed to give industry a stronger role in decision-making. In addition to an advisory role, strong steering systems give industry bodies a role in the operation and management of programmes. Here Turkey, where employer and union groups are involved in many aspects of the operation of work-based learning systems for youth, provides a good example from which other countries of the region could learn.

Stronger systems for data and evidence would also help to improve the governance of work-based learning programmes within the region. An obvious first step is improvements to administrative data systems, and in particular to improve the measurement of outcomes. There is also much to be said for a more systematic approach to the evaluation of pilot programmes if these are to become the basis of future expansion.

There is also considerable scope, within the Mediterranean region, for establishing a range of types of intermediary body to support work-based learning for young people at the regional and industry sector levels. There is at least one effective model of this operating within the region, but other non-Mediterranean countries also have instructive examples. Providing funding to industry associations and employer organisations to manage these intermediary bodies could at the same time help to strengthen the capacity of these bodies to play a constructive role in the operation and management of work-based learning systems for young people.

7. LOOKING TO THE FUTURE: CHOICES, OPPORTUNITIES AND CONSTRAINTS

This chapter looks at some of the broader questions that have been raised by the project, and in particular at some issues that seem to be important in considering the future of work-based learning programmes for young people in the Mediterranean region. In pointing out some of the lessons that the participants are able to learn from one another it focuses on balancing quality and growth, planning future developments in the light of both opportunities and constraints, and achieving more coherent systems of initial vocational education and training. It concludes by suggesting some directions that might be adopted in future mutual learning within the region.

7.1 What can Mediterranean countries learn from one another?

A recent report that is part of the ETF's wider work on education and training for employment in the Mediterranean region comments that the flow of knowledge between developed economies and the Mediterranean region tends to be greater than policy learning between the countries of the region itself (Sultana and Watts, 2007). The present project was designed to help ensure that this trend is reversed, and that participants are able to learn from one another. For example, the establishment of a regional network on work-based learning and the organisation of a peer review visit to one of the participating countries have been central elements. And so it is important to ask, in concluding this report, what the Mediterranean countries can learn from each other, both now and in the future, about work-based learning programmes for youth.

7.2 Balancing growth and quality

Work-based learning for young people is at different stages of development in the various countries of the Mediterranean region and so different types of programme seem to face different challenges.

- Well-established programmes that have relatively large numbers of participants
 face three closely related challenges: balancing growth and quality improvement,
 reconciling social and economic needs, and strengthening their links to the labour
 market.
- Long-established programmes that have not been able to grow face the challenge
 of improving their governance systems, including the regulatory environment that
 they work within and their financing systems.
- Relatively recent, small pilot programmes face the challenge of expanding without reducing their quality, and of developing regulatory and governance systems that

will bring them closer to the centre of their countries' initial vocational education and training systems²³.

Common to many of these challenges is a choice between devoting resources to increased access to work-based learning programmes and using the same resources to improving the quality of programmes. Demographic pressures and high levels of youth unemployment tend to favour the first approach; the need to improve national skill levels in an increasingly globalising economy tends to favour the second.

Some countries in the region have policies that favour strong growth in the number of places on certain types of work-based learning programmes. In Morocco there is an ambitious plan for expanding the number of apprenticeship places (but not in alternance programmes), with a target of achieving 60,000 places (roughly double the present number) by 2015. There, school drop-out rates are high, youth unemployment is a pressing issue, and the number of places available for these young people under other types of scheme falls far short of the needs. And so apprenticeship has been seen as a way of assisting school failures. Alongside this strong social motivation there is a desire to use apprenticeship as a way of rescuing craft trades that are in decline, and of counteracting the drift of young people away from traditional farming in rural areas.

These plans for the future build upon strong growth in numbers in recent years: the number of apprentices increased from around 4,000 in 1999–2000 to more than five times that number seven years later. However growth has been accompanied by quite high non-completion rates. In all, only around half of those who commence an apprenticeship complete it and somewhat fewer graduate. In the shorter apprenticeships and those leading to lower-level qualifications, the completion and graduation rates are even lower. These outcomes raise questions about the place of work-based learning policies within overall national strategies for youth, and whether greater returns for young people might be achieved by a more clearly targeted strategy of raising literacy levels and reducing school failure.

Algeria also has ambitious plans to increase the number of young people in work-based learning programmes and by changing the balance between residential and work-based pathways within the overall initial vocational education and training system, from the current situation where around 30% of total places are in apprenticeship and 70% in residential training to one in which 70% are apprentices. As in Morocco, these proposals include priority for apprenticeships in the craft and agricultural sectors. And, like Morocco, Algeria has seen substantial expansion in apprenticeship numbers in recent years.

7.3 Some lessons from this project

In considering questions of growth and expansion in work-based learning for youth, it is useful to reflect upon the experience of European and OECD countries referred to in Chapter 3 and that of Mediterranean countries. When considered against both social and

'However, as in the case of donors' funded projects, there is no assurance that these initiatives will be sustained without being formally adopted by the system. Furthermore, and in the absence of a clear and sustained policy for sharing these resources across training providers, it is hard to identify standardized resources at the national level' (the Occupied Palestinian Territory background report, p. 20).

7. LOOKING TO THE FUTURE: CHOICES, OPPORTUNITIES AND CONSTRAINTS

economic objectives, the experience of developed economies shows that there is no ideal size for national work-based learning systems. Countries can achieve good outcomes for their young people with both large and small systems; good results can be achieved by methods other than work-based learning; and work-based models tend not to achieve good outcomes when they are not implemented well with a focus on quality (Ryan, 1998).

It is also important, in considering future growth in work-based learning, to be realistic about both the opportunities for and the likely constraints on growth. In all countries, an upper limit to growth in work-based learning as a form of initial vocational education and training will exist in the size of the initial vocational education and training system itself. Where this is very small, as for example in Tunisia and the Occupied Palestinian Territory, the major challenge is to increase the prominence of vocational education and training within the range of upper secondary pathways. Ironically, the best way of doing this might be to strengthen its quality by, among other things, increasing links to the workplace so that the learning becomes more interesting for young people. and targeting more clearly on the types of work that appeal to young people: white-collar jobs, higher-level qualifications, higher-skilled work, and work in expanding areas of the economy. Algeria's experience shows that this can be done and that it is appealing to young people. Economies where a combination of both domestic competition and international openness are leading to a rise in the demand for skills are more likely to find this possible than those where this is not the case. Systems that are targeted at low-skilled and declining areas of the economy are unlikely to be a successful springboard for growth in the longer term.

The realities of the labour market will also impose constraints either on the possibilities for growth in work-based learning or in growth of some types of it. Where, for example, work-based learning models require a rational wage structure that provides clear incentives both to young people and to employers, the absence of appropriate national wage-fixation mechanisms and the absence of the possibility of constructing sub-minimum wages for young people involved in training will limit growth. Such limitations, although in different forms, appear to exist in both Jordan and Israel. Algeria's experience shows that a well-considered and well-targeted system for financing work-based learning programmes will include wages, public wage subsidies, offsets to employer costs such as social security payments, and incentive or taxation systems to penalise enterprises that do not train but not those that do. Where such a coherent financing system cannot easily be constructed, models of work-based learning in which the young person is legally a student will provide a better basis for growth. There are many examples of such programmes in the region, including obligatory summer work in Jordan's vocational schools, higher education internships in Lebanon, and Syria's committed technical and vocational education and training programmes in fields such as nursing.

Other features of the labour market that are common in the Mediterranean region will also limit growth in quality work-based learning systems. One is competition from cheap labour, either as the result of high unemployment, migrant labour or both. This will keep wages low and reduce the pressure for firms to invest in skills, technology and training. Another is the existence of a large informal sector in the economy, in which traditional, low-quality informal apprenticeships are the dominant form of skill formation for young people. This implies that many of the factors that are likely to encourage future growth in quality work-based learning for young people lie outside the province of education and training policies and within the scope of policies for trade, economic growth and labour market reform.

The experience of the countries of the Mediterranean region reinforces that in Europe and other OECD countries: if work-based learning programmes are to expand, it is important to have appropriate regulatory, financing and governance systems in place. Governments that wish to expand the availability of work-based learning programmes for young people are more likely to see benefits from such regulatory and structural initiatives than they are from a series of pilot programmes conducted in the absence of a strategy for linking them to the heart of the vocational education and training system. Turkey and the Maghreb countries (Algeria, Morocco and Tunisia) provide good examples of ways in which this might be done. Experience in European and other OECD countries also places great emphasis on the importance of governance and management structures that involve employers and trade unions in planning work-based learning systems and in their operation. Certainly this is important for achieving high-quality programmes. The involvement of employers in planning and managing work-based learning programmes is more likely when their voice is respected and they can have a real influence on decision-making. Tunisia and Jordan have shown awareness of this and have taken, or are taking, steps to put it into effect. However the experience of some countries of the Mediterranean region shows that, in the absence of such structural involvement by social partners, other models and methods can be found. In particular the role of the educational institutions that provide complementary education and training can be strengthened as a way of helping to ensure quality. Turkey appears to have found ways to do this alongside involvement by its social partners, but other examples exist in Egypt.

The Mediterranean region illustrates the importance of achieving coherent systems of vocational education and training for youth, in which work-based learning programmes complement other types of initial vocational education and training such as full-time programmes, and in which different models of work-based learning complement one another. Where, as discussed in Chapter 4, initial vocational education and training systems such as Israel's and Morocco's are segmented by level, with work-based learning programmes allocated to the lowest levels of qualifications, their attractiveness to young people is likely to limit their growth, and their capacity to meet a wide range of economic needs will be constrained. And while many countries have more than one model of work-based learning for youth, the distinction between these from the perspective of employers and young people is often unclear. It is not clear in the Moroccan case why some programmes are delivered under the alternance model, and some under apprenticeship. Nor is it clear why, in Egypt, there needs to be a distinction between the basic features of programmes delivered by the Ministry of Trade and Industry, the Ministry of Education, and the Mubarak-Kohl Initiative. In Egypt, as in other countries, achieving coherence in the relationship between work-based learning and other forms of initial vocational education and training is made more difficult by the division of responsibility for programmes between many different ministries (25 in the case of Egypt) and the absence of national strategies to plan improved coherence or coordinating mechanisms for these.

7.4 What might be learned in the future?

This chapter began by pointing out that the flow of policy learning is often greater from Europe and the OECD countries to the Mediterranean region than it is within the region itself. The discussion proceeded to demonstrate that there are many excellent lessons that the countries of the region can learn from one another on the basis of their experience to date about work-based learning for young people. Before turning to a

7. LOOKING TO THE FUTURE: CHOICES, OPPORTUNITIES AND CONSTRAINTS

discussion of how these lessons might be built upon in the future, it is worth pointing out that the developed economies could also learn from the countries of the Mediterranean region. One lesson concerns the possibility of greater use of educational institutions in helping to assure the quality of work-based learning programmes. Another is about the ease with which some of the countries of the region have constructed routes from apprenticeship and other work-based learning programmes to tertiary education, given the difficulties that this has caused in some of the traditional European apprenticeship countries that have had such a large impact on comparative policy analysis.

This report concludes with some suggestions for directions that future mutual learning among policymakers, experts and practitioners from within the region might take.

- A key challenge is to develop far more work-based learning programmes at higher levels of qualifications, and in white-collar and highly skilled jobs. This is important in trying to improve the status of vocational education and training, increasing the relevance of work-based learning to future economic needs, and avoiding work-based learning being linked in the minds of young people to residual, low-skilled work. Within the Mediterranean region Algeria's experience with apprenticeship would be very useful here, but lessons can also be learned from other programmes such as alternance in Morocco and Syria's committed technical and vocational education and training.
- There is a strong need to develop frameworks for judging programme quality that better reflect the institutional and resource realities of the Mediterranean region and the diversity of work-based learning programmes within the region than quality frameworks based on traditional European apprenticeships. This seems to be a fruitful possibility for future cooperation.
- The importance of appropriate legal, regulatory and financial frameworks for supporting and expanding work-based learning for young people has been emphasised at more than one point in this report. There are several good examples within the region, and the possibility of other countries learning from these could be explored.
- Reasons for the structural differences between work-based learning programmes in different countries within the same occupational fields (for example motor mechanics, electrical work) are not always clear. Why does it take longer to train somebody in one country rather than another? Why does a young person in one country have to spend less time in the workplace than a young person learning the same trade in another country? How do these differences benefit young people and reflect the needs of industry? There is much that might be done to improve programme quality through the setting up of cross-country working parties of industry representatives and vocational school teachers to explore the advantages and disadvantages of different programme structures.
- The importance for programme quality of close mutual trust and respect at local level has been stressed several times. In Chapter 6 the role that intermediary bodies can play in programme governance and in quality assurance was emphasised. International cooperation could be a very useful method for learning more about possible models of such intermediary bodies, and then implementing them.

ANNEXES

Annex 1: National programme profiles

This annex presents a list of the main work-based learning programmes for young people in the Mediterranean region followed by a summary of their features by country. Each country section concludes with the recommendations of the expert who prepared the background report.

Main work	-based learning programmes for young people		
Algeria	Apprenticeship		
Egypt	Mubarak-Kohl Initiative (MKI)		
	Productivity and Vocational Training Department (PVTD)		
	Ministry of Education – public sector		
	Continuous Apprenticeship Programme		
Israel	Apprenticeship		
	Enterprise-based training		
Jordan	Applied secondary education		
	National Training and Employment Project		
	Obligatory summer work in VET school programmes		
Lebanon	Dual system		
	VET internships		
	Higher education internships		
	Agro-food School Project		
Morocco	Apprenticeship		
	Alternance		
	Residential VET work placements		
Occupied Palestinian	GTZ pilot programme		
Territory	Lutheran Vocational Training Centre		
	Chambers of commerce		
Syria	Pilot apprenticeship scheme		
	Committed TVET		
	Technical education in intermediate institutes		
Tunisia	Formal/traditional apprenticeship		
	Modern apprenticeship		
	Alternance		
Turkey	Formal VET: internship		
	Non-formal VET: apprenticeship		

Algeria

Introduction to apprenticeship

The tradition of apprenticeship in Algeria has a long history, dictated by the need to pass on knowledge acquired by elders, notably in the sectors of agriculture, fishing, traditional crafts and construction. The trade was passed on by way of constant repetition and the training was not structured in the way it is today.

Following the country's independence, Order No 75.31 of 29 April 1975 established formal training through apprenticeships for the first time. Law No 78.12 of 5 August 1978 relative to the General Worker's Code (statut général du travailleur) reinstated apprenticeships by giving them a legislative basis. Vocational training by way of apprenticeship was institutionalised by Law No 81.07 of 27 June 1981, which defines it as a form of training having as its aim the acquisition, in the course of employment, of a recognised initial vocational qualification, enabling a trade to be exercised in the various sectors of economic activity.

This Act defines the scope, missions and role of each party involved, their rights and obligations, the entry conditions for apprentices and the conduct of the training.

Following the implementation of the basic law (No 81.07), apprenticeships saw a remarkable expansion and rise in popularity. The 1980s were marked by a significant increase in the numbers entering training with employers and young candidates signing up to participate.

Nevertheless, the country's various economic and social developments and certain reforms implemented in the 1990s revealed a number of inadequacies and difficulties which slowed down the surge in apprenticeships. These fundamental problems included poor human, material and financial resources for the monitoring of tens of thousands of apprentices, the level of organisation and structure of teaching and the absence of tailored training programmes and teaching methods, as well as inadequate regular contact between vocational training providers and employers. The absence of a mechanism to motivate and stimulate those directly involved in apprenticeships also impeded progress.

The basic law was amended and extended by various legislative and regulatory provisions, including Law No 90.34 of 25 December 1990 and Law No 2000.01 of 18 January 2000, as well as a number of regulations, decrees and ministerial orders intended to adapt the regulatory framework to these developments and provide solutions to the problems encountered.

Law No 97.02 of 31 December 1997 establishing the Finance Act for 1998 created an apprenticeship tax for employers failing to provide training. The rate was set at 0.5% of the total wage bill, and subsequently increased to 1% from 2007. The tax is paid to the National Fund for the Development of Apprenticeship and Continuing Training (FNAC), which is responsible for developing initiatives with enterprises for the promotion of apprenticeship.

These legislative and regulatory provisions adapted and defined, in particular:

- the scope, the employer organisations concerned, the various partners and their missions:
- entry and training conditions for apprentices, the number of apprentices to be trained, the apprenticeship contract, payment of an allowance, and the structure and recognition of the training.

Forms of apprenticeship training

In Algeria, apprenticeships, in-house training courses and continuing training all take place in a vocational environment. However, each is very different in terms of approach, aims, structure and conduct. Apprenticeship is a form of dual training, which is stringently managed and falls within the remit of public institutions.

Regulatory aspects

By law, all employers are required to provide vocational training to young people by means of apprenticeships. An employer is defined as any natural or legal person carrying out a craft, or a unit or business involved in producing, selling or providing services, regardless of size or legal form. The regulatory conditions also apply to public establishments and administrative bodies.

Relations between employer and trainee are governed by an apprenticeship contract, in which an employer undertakes to provide systematic and comprehensive vocational training to an apprentice, who, in return, undertakes to work for the employer for the term of the contract for an allowance fixed by law. A standard apprenticeship contract is provided by the state, and must be signed in triplicate by the employer and the apprentice or his/her legal guardian, stamped by the local authority and approved by the vocational training establishment. It defines the rights and obligations of each party.

The regulations define the apprenticeship partners as employers, vocational training establishments, the Local Apprenticeship Commission (commission communale de l'apprentissage), the Labour Inspectorate, chambers of commerce and professional groups and associations.

In each local area, an apprenticeship commission has been set up with responsibility for assembling offers of training from employers and receiving applications from apprentices, as well as for researching, putting forward and implementing any measures likely to promote and boost apprenticeships in the area.

The Labour Inspectorate is responsible for ensuring that apprenticeship legislation and regulations are applied. It ensures that the rights of the apprentice are observed and that apprentices are protected in terms of health and safety.

The national, regional and provincial (*wilaya*) chambers of commerce and industry, agriculture, arts and crafts, and the professional associations, employer organisations and the groups concerned contribute to apprenticeship initiatives.

The conduct of apprenticeship

The trainee is awarded an apprenticeship with an employer following approval of his contract. Training is essentially conducted with employers as regards the practical aspects (around two-thirds of training time) and at public vocational training establishments for the theoretical and technological aspects (around one-third of training time).

Apprenticeships are open to young people between 15 and 25 years of age (up to 30 for women and disabled persons). The length of training is between 12 and 36 months, in accordance with the five levels of qualification (semi-skilled worker, skilled worker, highly-skilled worker, technician and advanced technician).

A national classification of vocational sectors defines 312 areas of specialisation available for apprenticeship, arranged into 20 professional sectors (2005 edition). This classification is revised periodically in line with the needs and requirements of the employment market.

The apprentice receives a training allowance paid by the state for a period of 6–12 months, and by the employer thereafter, in accordance with a rate indexed to the national minimum wage, fixed at 30% for the second semester, 50% for the third and fourth, 60% for the fifth and 80% for the sixth.

The employer is exempt from social contributions due in respect of an apprentice and from fixed payments relating to tax on the allowance. These costs are borne by the state throughout the apprenticeship contract.

During training, the apprentice is supervised by an apprentice master within the enterprise and by a trainer at the vocational training establishment.

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 and monitor apprentices in the vocational environment. They are responsible for periodically evaluating the knowledge acquired by apprentices and for arranging the final examination with the participation of employers. At the end of the training period, a successful apprentice receives a diploma issued by the state.

Impact of apprenticeship

The number of apprentices has increased from 40,000 in 1981 to 202,579 in 2006 (a fivefold increase), and the number of training places is now estimated at 500,000 within the national economy. Apprenticeships accounted for 43.7% of the total number of trainees in the national vocational training system in 2006.

The levels of qualification most frequently attained are level 2 (skilled worker), at 57.86%, and level 3 (highly skilled worker) at 24.97%. The professional sectors with the highest levels of representation are information technology (17%), administration and management (14%), crafts (14%), hotels and tourism (11%), construction, public works, and the water sector (8%).

Private-sector employers play a significant role in apprenticeship, accounting for 64% of the total number of trainees, while public-sector undertakings account for only 36%. The number of apprentice masters supervising the training of apprentices in a vocational environment is estimated at over 54,000, an average rate of three to four apprentices per master.

The brief overview of these indicators demonstrates the extent to which Algeria's experience of apprenticeships has been positive despite the difficulties relating to the economic and social context, providing an incentive to seek methods and resources to improve the quality of training and to adapt it to the actual needs of enterprises in terms of vocational skills.

The German-Algerian cooperation project

With a view to making the necessary improvements and adapting apprenticeships to current circumstances, the vocational training sector has initiated a technical cooperation project with Germany, whose experience with the dual system is considered very positive.

The project, entitled Promotion of vocational training through apprenticeship, supports the initiatives undertaken by the sector in the process of reforming the national vocational training and education system. Its central objective is to promote and improve the quality and performance of apprenticeships through close collaboration between enterprises and vocational training establishments, focusing on employment. The initiatives undertaken and proposed are based on a strategy and guidelines defined by the sector, drawing inspiration from positive experiences at international level.

Taking as its starting point a diagnostic research study highlighting the strengths and weaknesses of apprenticeship, the project has focused primarily on the following:

- the training and improvement of human resources responsible for apprenticeships (apprentice masters, trainers and supervisors);
- the setting-up of a coordination structure (centres for the local development of apprenticeships and a Centre for the National Development of Apprenticeships) to foster apprenticeships, and to assist and coordinate all partners;
- the development of teaching methods tailored to apprenticeships with appropriate teaching instruments and tools;
- the implementation of efficient teaching, organisational and management methods to improve the quality and performance of apprenticeships;
- the implementation of a strategy of information and communication with all apprenticeship partners.

The achievements of the project have been:

- the training and improvement of the human resources responsible for promulgating the initiatives;
- a methodology for the creation and adaptation of training programmes;
- 14 training programmes for apprentices;
- teaching tools and methods tailored to the new initiative;
- software for the management of information relating to apprenticeships (database).

According to the assessments made and the conclusions of the taskforce monitoring its progress, the project has led to a clear improvement in the quality of training, a reduction in the drop-out rate, an increase in the number of trainers and apprentice masters, and closer interaction between the training establishments themselves and economic operators.

Recommendations

The public authorities have reaffirmed their determination to enforce the measures proposed in the course of the reforms currently under way, and apprenticeship is declared to be priority in the vocational training sector. Additionally, the following recommendations should be put into effect:

- bring together human, material and financial conditions and resources in order to implement the approach initiated by the German-Algerian project in all its aspects;
- adapt the legal framework implied by this new approach;
- update and expand the training programmes for apprentices, linked to technical and technological developments and with the participation of professionals;
- put in place an efficient teaching structure and methods in order to improve the quality of training through apprenticeship;
- improve the skills of the human resources responsible for the supervision of apprenticeships at all levels;
- put in place a system of information and communication available to all apprenticeship partners;
- involve more fully and effectively craftspeople and public and private undertakings in the organisation and management at all stages of the training path of apprentices:
- put in place a mechanism to motivate and provide moral and material support to those directly involved in apprenticeships (particularly apprentice masters and trainers).

Egypt

Apprenticeship and enterprise-based learning are deeply rooted in the history of Egypt, although formal vocational education and training programmes only began in 1836 with the establishment of the first technical school in Cairo. Traditional apprenticeship, with verbal agreements and no structured learning, duration or stages, still prevails in some sectors such as construction, retail trade and some services. Modern formal apprenticeship started in 1956 with a presidential decree establishing a special government department to offer this type of learning (Productivity and Vocational Training Department). Since then several other initiatives have been operating but on a limited scale. Although there are about 2 million secondary technical education students, apprenticeship and enterprise-based learning represent scarcely 2% of that number. A summary of the major Egyptian schemes is presented here, along with the main recommendations of the national study.

Productivity and Vocational Training Department (PVTD) programme

This programme, organised by the Ministry of Trade and Industry's Productivity and Vocational Training Department, whose operations are covered by presidential decrees of 1956 and 1964, has existed since 1956. In Arabic its title is *Talmaza Sina'eyah* but it is commonly referred to, as in this report, by the acronym of the organising department PVTD. With 22,035 participants, who represent only 1.09% of all upper secondary vocational education students, it remains a very small programme in the Egyptian context. Only 507 enterprises are involved and its predominant focus is large public enterprises, whose needs it was largely designed to meet. Its focus is exclusively the industrial sector, and it encompasses trades such as mechanical and electrical maintenance, plumbing, leather, weaving and textiles, plastics, printing and petrochemicals.

The young people who take part in the programme enter it after successfully completing compulsory education, typically at the age of 15. Selection for entry to the programme is managed by the PVTD training centre, which allocates participants to enterprises. The enterprises thus have no role in selection. The programme lasts for three years, of which the first two are spent in a vocational training centre. In the third year the majority of the time is spent in an enterprise with one day a week in a training centre (a slightly different attendance pattern is used in the carpentry and printing trades). The content of the programme is heavily vocational and practical, with roughly one-third of the total time represented by enterprise-based work and training, one-third by practical work in the training centre, one-fifth by vocational theory, and slightly less than 10% being general education. Although the programme is not administered by the Ministry of Education, it leads to a certificate issued by the PVTD that has equivalent legal status to a technical secondary school certificate. Thus it can qualify the most successful graduates for higher education, and it can shorten the duration of military service and lead to defined pay grades in the civil service. Successful completion is assessed on the basis of a national examination that includes both theoretical and practical work. Young people taking part in the programme sign a training contract devised by the PVTD, to which the employer and the training centre are also signatories, and are paid a small allowance, perhaps 15%-25% of the wage of an adult worker, to help them with transport and food costs.

Ministry of Education programme

The Ministry of Education runs a programme which, like the PVTD programme, is largely focused on the public sector. It is even smaller, however, with only around 7,400 participants, or 0.37% of all upper secondary vocational education students. Although largely focused on the industrial sector, including construction, close to one-fifth of participants are in the service sector in areas such as commerce and hotels, and around 1% are in agriculture (and fishing). Its focus, like the PVTD programme, is mainly the larger public-sector enterprises: 35 enterprises affiliated to 25 ministries and public-sector institutions take part.

The programme lasts for three years, and like the PVTD programme entry is after the successful completion of compulsory or basic education. A legal contract is signed at the outset, monitored by the Ministry of Education. Rather than having an initial period in a training centre, the young person spends two days a week in a training centre or secondary technical school throughout the length of the programme, and the remainder in an enterprise. Around 25%–30% of the total time is devoted to a combination of general education and vocational theory, around 10%–15% to practical work in a training centre, and the rest to work and training within an enterprise. Successful completion is assessed on the basis of a national examination that includes both theoretical and practical work. Participants are paid a small allowance, perhaps 15%–25% of the wage of an adult worker, to help them with transport and food costs. Successful graduates receive a technical secondary school certificate, with a chance to enter higher education for the best achievers.

Mubarak-Kohl Initiative (MKI)

Following long negotiations, an agreement to introduce a programme modelled on the German dual system in Egypt was signed in 1993 and named after the then presidents of the two countries. Implementation began in 1995/96 in the 10th of Ramadan city near Cairo, although its legal and regulatory status remains somewhat unclear. The number of participants remains quite small: around 10,500 or 0.52% of all secondary vocational education students. Increased enrolment to around 16,000 is anticipated.

One clear feature of the MKI programme that distinguishes it from those run by the PVTD and the Ministry of Education is its focus on the private sector, with some 1,800 companies owned by members of the Egyptian Investors' Union (EIU) being the major participants. Over 80% of participants are in industrial firms, perhaps one in eight in the service sector, and a handful in agriculture. The EIU and its member associations are partners together with the Ministry of Education and German Technical Cooperation (GTZ).

The programme is entered after successful completion of compulsory or basic education, and selection is managed by the Regional Unit of the Dual System. The selection process involves a written test and an interview in which employers may or may not be involved. In some cases employers allow the selection process to be managed entirely by the Regional Unit of the Dual System.

The Mubarak-Kohl Initiative is a recognised secondary education programme of three-year duration, during which young people spend two days per week in a training centre and the rest within an enterprise. Roughly a quarter of the total time is devoted to a

combination of general education and vocational theory, 15% to practical training in a training centre or technical secondary school, and the remainder to work and training within an enterprise.

This track is part of the secondary technical school options and graduates have to sit the technical high-school diploma examination, leading to a degree awarded by the Ministry of Education. Successful completion is assessed on the basis of a national examination that includes both theoretical and practical work. In addition graduates are awarded a practical experience certificate offered by the EIU and registered by the Arab-German Assistance Chamber of Commerce. About 86% of graduates have so far been offered jobs in the firms where they received training, but only about 56% took up the offer, a good number preferring to pursue the higher education track.

Continuous Apprenticeship Programme

This International Labour Organisation pilot project is a small and quite recent initiative run in cooperation with Egypt's Ministry of Manpower and Migration, but closely involves employers and other key stakeholders. The pilot phase started in 2002 in three governorates, and was later extended to six; so far around 350 young people have taken part. The programme lasts three years, the first two spent in practical instruction in training centres for some 24 hours a week; and for one to two years, young people undergo on-the-job training in an enterprise through a contract signed by their employer, parent or tutor and a public authority. At the end of the apprenticeship, graduates receive a diploma that is equivalent to those of graduates from technical secondary school.

There is a National Steering Committee involving the ministries of Manpower and Migration, Industry, Youth, Social Affairs, Education, Construction, the Federation of Egyptian Industries, some employers, NGOs and international partners. The Local Steering Committee in each participating governorate was formed under the patronage of the governor, in cooperation with the labour directorates, and comprises all concerned social partners, employers and NGOs. The design of the programme seems to have favoured social goals as the choice of governorates was based on factors such as high local rates of poverty, illiteracy and unemployment. Occupations covered include mechanical and electrical maintenance, welding and metal construction, carpentry, garment-making and construction.

Other

Most vocational education institutions, schools and training centres, whether private or public, try to arrange some enterprise-based training for their students during the summer vacation or sometimes during the school year. In most cases such enterprise-based learning is a part of the study plan, but its implementation is not enforced because it is almost impossible to find enough workplace training opportunities for the huge number of trainees in the vocational education system. These are not apprenticeship programmes but rather a 'shop-floor' experience for the students. They are neither contracted by the enterprise nor paid for the time they spend in the companies. In addition, activities mitigating unemployment include some reorientation programmes, organised by several ministries and other government bodies for university or general education graduates; they comprise similar practical training in these institutions' workplaces. Again this is not apprenticeship but 'tasting' the actual work.

Recommendations

With a variety of schemes successfully running, but on a limited scale, the scene is ready for development. The recommendations of the Egyptian background report address government, employer organisations, schools and training centres, students and their families and the media. The core recommendation is to endorse a national framework for apprenticeship and enterprise-based learning that is flexible, well connected to the education system, enabling lifelong learning, demand-driven, actively involving more enterprises including small ones, and offering participating enterprises some attractive incentives. Arrangements for a partnership that would encourage further participation of enterprises and the expansion of apprenticeship and enterprise-based learning should be carefully studied and outlined.

Israel

There are two main education and training systems in Israel: one under the auspices of the Ministry of Education and the other under the responsibility of the Ministry of Industry, Trade and Labour. The Ministry of Education programme includes conventional high-school courses at matriculation level, as well as more practical school-based courses for lower achievers. Apprenticeship and enterprise-based training programmes, which are targeted at low-achieving Grade 9 students and drop-outs, are the responsibility of the Ministry of Industry, Trade and Labour. They were established by the 1953 Apprenticeship Law and the 1953 Youth Labour Law (and its 1971 revision). This tracking at a relatively young age is under debate in Israel.

Apprenticeship and enterprise-based training are quite similar. Both last from three to four years and in each there is an initial preparatory year and the rest of the programme consists of three days of general education and three days of practical work per week. The main difference is that while apprentices are working in an enterprise and studying at an educational institution, in the enterprise-based programme all elements are conducted within the enterprise.

Apprenticeship

The apprenticeship programme is non-selective: all who apply are accepted without screening, within the limit of the available budget. There are 70 different vocations available for training. Most of the students are in need of scholastic reinforcement in order to achieve the level of prerequisite knowledge required for the training. They work in different enterprises, but learn in the same classrooms off the job. Those who take part in the programme enter it after completing primary school at the age of 14, or after completing junior high school at the age of 15. Apprenticeship is four years in duration from primary school, and three years from junior high school. Graduates from regular primary school (eight years) attend the apprenticeship programme for two years of preparatory classes that include 33% general education, 33% job theory and 33% practical training in workshops. Graduates from junior high school (nine years) attend one year of preparatory classes.

The remaining two years are structured around three days a week of general education and three days practical work, on the job in an enterprise. The total number of pupils in the apprenticeship programme is 1,840 (15% of all pupils in apprenticeship and enterprise-based training, or 0.6% of the total number in secondary education). There are 22 students per class, and classes are organised by employment branch (woodwork, metalwork, auto mechanics, electricity, and so on). Young people are allocated to classes as an outcome of vocational guidance and the decisions of a school educational committee. A parallel programme for Arab students exists with an appropriate curriculum; examinations are in Arabic.

The major providers for off-the-job training are public vocational education and training networks, religious organisations, and an Arab educational network. The off-the-job curriculum consists of job theory, mathematics, literature and foreign languages. There is also a practical curriculum and the employer is obliged to train the apprentice according to its syllabus. Apprentices are examined in both theoretical studies and practical work. Graduates who successfully complete the theoretical and practical work examinations receive a job certificate and an educational qualifications certificate.

The tuition is free of charge. No contractual arrangements exist between the trainee and the employer. Apprentices are protected under the Collective Agreement Law of 1957.

Enterprise-based learning

Enterprise-based learning schools are operated in cooperation with large enterprises or industries, for example hotels and large automotive service garages, and are based on the framework of the 1953 Apprenticeship Law. Located within the enterprise, the schools include classrooms, workshops and laboratories for off-the-job training. Practical work is conducted within the enterprise itself. Some of the vocational teachers and instructors are from the enterprises: for example technicians and engineering staff. The programme is based on a contract between the government, the enterprise and the major educational networks.

The pupils who take part in the programme enter after completing primary school at the age of 14, or after completing junior high school at the age of 15. The first school year is a general preparatory class, updating the prerequisite qualification level. The training content includes theoretical subjects, vocational theory and practical work. Theoretical subjects include Hebrew, literature, Bible studies, history, civics, English and mathematics. Vocational theory includes technology and drawing. Practical work takes place for 22–30 hours per week, on the job in the physical plan. The amount of time allocated to each of these three elements varies according to the school grade. The delivery of practical training in the workplace is based on the integration of normal daily tasks which are part of the regular production line, guided by teaching instructors.

The quality of training is evaluated and supervised by the government supervisors and by the department for assessment and evaluation in the Manpower Training and Development Bureau of the Ministry of Industry, Trade and Labour.

The enterprise-based learning schools include tutorial staff that act as a bridge between enterprise and school, and are provided with a special programme for tutors in industry. The tutor is central to the training and assists the young people in their integration at the workplace.

The total number of pupils in the enterprise-based programme is 9,992 (79% of the total in apprenticeship and enterprise-based training, or 3% of the total number in secondary education).

Successful graduates after completing the final examinations (theoretical and practical learning), receive a government job declaration and an educational qualification certificate. Graduates of the enterprise-based scheme are able to continue and upgrade towards higher technological education in the National Institute of Technology, up to the level of technician or practical engineer, if they complete 14 credit points of matriculation.

The job declaration and certification is based on both the Employment Service Law of 1959 and the Apprenticeship Law of 1953. The committees responsible include representatives of the government, employers and workers' unions.

The majority of apprenticeship and enterprise-based learning students (54%) are concentrated in technological vocations, and the remainder are found in fields such as

administration, printing and hotel jobs. As in the apprenticeship programme, students are allocated to places according to the outcome of vocational guidance and the decisions of a school educational committee. There is a parallel programme for Arab pupils, with appropriate curriculum, and examinations in Arabic.

Funding apprenticeship and enterprise-based learning

Apprentices and participants in enterprise-based learning schemes are paid a wage by the employer, according to the minimum wages law, and for youth under 18 this must be 75% of the relevant adult wages. The wage level is set by negotiation between the government, employers and trade unions, but it cannot be less than the minimum wage declared by the government.

There are no financial contributions by employers to the costs of apprenticeship and enterprise-based learning schemes other than wage costs. The government does not provide any financial incentives for employers that take part in such schemes.

Recommendations

It is recommended that the relevant legislation (Apprenticeship Law of 1953, Youth Law of 1953, Employment Service Law of 1959) be revised and updated.

The main obstacle to extending and improving apprenticeship and enterprise-based learning schemes is disagreement within the Ministry of Education about the concept and form of vocational education and training for young people. This situation requires better coordination, based on educational and labour market needs, between it and the Ministry of Industry, Trade and Labour rather than ad hoc discussions.

The involvement of employer associations in promoting and supporting apprenticeship and enterprise-based learning also should be strengthened and improved, and a process developed to increase their involvement in the vocational education and training system.

Jordan

The roots of apprenticeship and enterprise-based learning lie deep in the history of Jordan, although formal vocational education and training programmes only started in 1921. Traditional apprenticeship, with verbal agreements and no structured learning, duration or stages, still prevails in some sectors such as construction, retail trade and some services. Modern formal apprenticeship started in 1974 as a pilot project within the Ministry of Education, resulting in the establishment in 1976 of the Vocational Training Corporation (VTC) as a semi-autonomous public body to manage, and as the main provider of, apprenticeship and enterprise-based learning in which training is conducted in both training centres and workplaces. The VTC is administered by a tripartite Board of Directors that is chaired by the Minister of Labour and which includes members representing the government, employers, labour unions and professional associations.

According to the Law No 11 of 1986 and its amendments, the VTC is responsible for:

- providing enterprise-based vocational training for preparing Jordanian workforce at the three basic occupational levels (limited skills, skilled worker, craftsman), and for developing and upgrading employed workers' technical skills and knowledge through close cooperation with employers;
- classifying workplaces according to regulations of the Occupational Work Organisation Law;
- providing industrial extension services for developing small and medium-sized enterprises.

The VTC has established more than 45 training centres throughout Jordan.

Applied secondary education

Young people who take part in applied secondary education, which is administered by the VTC, enter after successfully completing ten years of compulsory education, typically at the age of 16. Selection for entry to the programme is managed by the VTC training centres, and participants are allocated to enterprises by the centres. The enterprises thus have no role in selection. The programme, which lasts between three and four semesters, adopts an alternating training pattern in which the trainee spends some time in the training centre, either day release or block release depending on the occupation, and some time in the workplace. The content of the programme is heavily vocational and practical, and leads to a skill level certificate issued by the VTC that has equivalent legal status to a vocational secondary school certificate. This certificate can qualify successful graduates for higher education entry. The total number of participants is close to 7,300, which represents 30% of the total number in vocational education and training in JSCED²⁴ levels 3 and 4. The participation rate is steadily increasing due to expansion in new geographical areas, as the VTC has opened 12 small-scale training centres in areas where the programme did not previously exist. The proportion of female participants is increasing: from 6% in 2001 to 27% in 2006. This is attributed to the expansion of female vocational training centres and the offer of new programmes that are attractive to female students, such as information technology, personal services and secretarial work.

²⁴ Jordan Standard Classification of Education

No obligatory contractual arrangements exist as the majority of employers taking part in the programme are micro enterprises with one to four workers. In these, unlike enterprises employing five or more workers, the application of the social security law is not compulsory. Some micro enterprises have taken the view that if contracts were to be signed it would result in a trainee being considered a regular worker, thus in some cases taking the total number of employees over the limit at which obligatory social security payments would apply. In some large-scale industries (phosphate mines, potash, cement factory and refinery) there are formal training contracts but not binding contracts of employment: the contracts indicate the responsibilities and rights of the employer and the apprentice regarding the implementation of the training programme and wages. The majority are informal agreements between individual employers and apprentices under the supervision of the vocational training centres. Medical insurance for young people is covered by the government, and social security regulations are not applied in the case of programme participants.

Between the mid 1970s and the mid 1990s formal wage scales existed, and the training duration was three years. In the first year the trainee received 30% of the wage of a skilled worker, 50% in the second year and 80% in the third year, considered a year of supervised employment. After reducing the training period to three to four semesters in the late 1990s, wages have been left to informal agreement between employer and trainee. In some cases young people receive more than the above-mentioned rates whereas in others they receive less, depending on their progress in training.

National Training and Employment Project

The country launched a major National Training Programme in 2002 with the purpose of providing adult training for the unemployed for available jobs and to replace foreign workers. The target group is unemployed people between the ages of 17 and 30. The VTC manages the programme through a separate office. It is organised as follows: three months of basic training in citizenship and physical training run by the armed forces (men only); and vocational training lasting from 6 to 12 months, depending on the specialisation. Trainees are paid a stipend of JOD 50 per month as an incentive for the basic training and JOD 80 for participation in the vocational training, plus the possibility of assistance for transport to and from the training site. Recruitment is through advertisements in newspapers and TV, market centres and VTC registration centres. Each applicant has to undergo health tests and a security clearance. Each training programme has its own prior educational requirements.

This project was restructured at the beginning of 2006 to avail training and employment opportunities for Jordanian job-seekers (17–35 years of age) through real partnership between public and private sectors in the form of cooperation agreements signed by the project managers and the cooperating enterprises. The project is managed by a tripartite steering committee and financed by the national Training and Employment Fund.

Basic training is offered in training institutions for a period of three to six months. Trainees are paid during the basic training programme. The project pays 50% of training allowances and the cooperating enterprises make up the difference. At the end of basic training the enterprises sign an employment contract with the trainees for one year against wages similar to their peers. Since 2006 total enrolment has been 6,611 and the total

number of graduates 2,211, out of which 1,425 trainees have been employed in the same enterprise in which they received training.

Vocational secondary education (Ministry of Education)

The Ministry of Education is responsible for providing school-based vocational education within the comprehensive secondary education stream. It has about 180 schools, either secondary comprehensive with vocational branches or vocational schools throughout the country. Secondary schools (Grades 11–12) enrol students in five vocational streams: industrial, nursing, agriculture, hotels and home economics. The dual objectives of vocational education are to prepare students for employment in the labour market and also for continuing education in higher education institutions.

It is possible for students in the vocational comprehensive secondary education stream, after passing the General Secondary Education Certificate examination, to continue their education in community colleges or university. According to the education law, students enrolled in the vocational streams wishing to continue to university studies must take an additional two academic subjects in school in order to compete with students in other streams; however additional subjects are not necessary for students who wish to enrol in the community colleges system.

The total number of vocational education students was 17,291 in 2006: this number represents around 70% of all participants in vocational education and training at JSCED levels 3 and 4.

The students enrolled in vocational education have to spend 24 training days during the summer vacation between the first and second year in workplaces (enterprises) to practise the acquired skills and to gain experience of the work environment.

Recommendations

To improve the quality, relevance and effectiveness of the vocational training system, and to develop a national qualification framework, the following are recommended.

- An overarching vision for technical and vocational education and training (TVET) in Jordan, including apprenticeship and enterprise-based learning, should be created, with consensus among stakeholders on a clear and articulated mandate for the system and agreement on a policy framework within which to undertake conceptual, structural and operational reforms. The existing system should be examined and recognised in the most effective way to achieve this. Policies should be drawn up to guide the development of the system in a way that provides coherence among delivery systems, transferability and effective use of resources. The Employment and TVET Council is the most appropriate body to develop this unified vision and strategy.
- National vocational qualifications (NVQs) should be developed. The productive sector should play an effective role in their development on the basis of occupational standards (capacity-building is required). NVQs should form the criteria for the assessment and evaluation of TVET outcomes, and for the TVET curriculum development.

- Training providers should concentrate on the improvement of training delivery with close cooperation and functional linkages with the productive sector (alternance training model).
- An external testing and accreditation system (outside the training providers) should be developed and implemented. Revision of policies, practices and methodologies to support external evaluation system is needed, replacing the academic models with more flexible, industry-relevant competence-based systems. The National Centre for Human Resource Development could play a positive role in this respect.

Lebanon

Apprenticeship and work-based learning is not a common concept in Lebanon. In a social and cultural context in which families prefer their children to obtain higher education certificates, apprenticeship has been traditionally considered a residual and alternative route mainly for young people from socially deprived families or for poor performers at school. The most widespread skills acquisition within enterprises takes place for those who dropped out of school between the ages of 12 and 15. These young people are usually sent to small businesses – often in the informal sector – to acquire a profession, spending a minimum of five years of work-based training or 'informal apprenticeship' as *Sabi*, which means a 'minor trainee'. The next step is to gain the title *Moalem*, which confirms that a young person has mastered the profession and is capable of establishing their own business.

The production sector, however, has never taken apprenticeship seriously or considered it as an initiative that could increase productivity or provide an opportunity for youth to develop their skills and find better jobs. Other limiting factors for apprenticeship and work-based learning have been identified by the country report.

- As the vocational education and training system is largely school-based with similarities to the general education stream, there is less scope for apprenticeship
 95% of practical training in the vocational education and training system takes place in school workshops and laboratories with no specific national framework.
- Links between the education and training system and the labour market are not well developed and there is little partnership between the employer community and the education sector.
- The labour market in Lebanon has a substantial share of foreign labour, in particular regarding 'lower-ranked' jobs. For example, almost 80% of jobs available in agriculture are occupied by foreign labour, particularly Syrian workers who are also highly represented in the construction sector. Other occupations such as housekeeping and household jobs, garbage collection and treatment, municipal services, restaurant occupations or gas station service workers, also involve foreign labour (mainly from Egypt, the Philippines, Sri Lanka, Ethiopia and Bangladesh).

Despite this non-favourable environment for apprenticeship, a number of fragmented initiatives and 'islands' of apprenticeship and work-based learning have been identified in Lebanon, and a summary of the four major schemes is presented here along with the main recommendations of the country report.

Dual system

The dual system was introduced to the vocational education and training system in 1996, as a technical assistance project from the German government implemented through GTZ and the Lebanese Directorate General of Vocational and Technical Education. It is applied in 16 public vocational schools in Lebanon and covers five major specialisations (four industrial disciplines and one service discipline). More than 1,200 apprentices graduated since 1996, the largest share (56%) in the car mechanics field. The dual system has a focus on practical applications at the workplace (40%–45% of curriculum hours), followed by school-based workshop training (20%–30%) and the rest is made up by learning in the classroom. In addition, students are placed during the summer

for about ten consecutive weeks training in an enterprise. Agreements (mostly verbal) with more than 500 workplaces to train apprentices were established over the last decade.

Students join the programmes at the age of 15 and after finishing Grade 9 of the general education track or the intermediate level of vocational education and training (brevet professionnel). A large proportion of those who come from the general education track would have failed to pass the national *brevet* examination. Students join a programme of their choice from five on offer without going through any particular selection process. The only criterion is the availability of this programme in the local vocational school. The duration of studies is three consecutive years after which graduates obtain the vocational degree of the dual system. Students sit examinations at school and in the training place at the end of the first and second years, and sit a national examination at the end of the third year, to obtain an official degree. Enterprise participation does not appear on the final certificate. However, a training certificate is sometimes issued by enterprises, its value yet to be determined. Graduates finish training at the age of 18–19 and those who want to advance to the higher technical education track have to study an additional year before applying.

Vocational internships

Another form of work-based learning exists in the public vocational education and training system in which students are given the opportunity to take up internships at workplaces in some sectors. It is estimated that about 2,000 young people benefit from this type of training every year and usually it takes the form of an internship during the third year of the post-secondary higher technical education programme. The period of work-based learning varies but does not exceed a three-month period in an enterprise or hospital. Professions that benefit most from this system are nursing, hospitality, hostelry, banking and finance. The vocational education and training system assigns supervisors to monitor student training but there is no defined mechanism for placement or evaluation. Each school works within the neighbouring community to arrange training for students when possible. The only mandatory work-based learning is for the nursing profession in the frame of the three-year post-secondary higher technical level.

Higher education internships

This type of work-based learning is based on individual initiatives and cooperation between universities and some enterprises, which also takes the form of internships. University students in specialities such as nutrition, pharmacy, medicine, hotel management, laboratories, dentistry, tourism, banking and finance train in relevant enterprises for set periods depending on the speciality and university curriculum. The number of trainees in such workplaces is estimated to be low, not exceeding a few hundred per year, as placement opportunities in enterprises are limited throughout the country. A national framework and regulation for structured cooperation between industry and schools on these issues is lacking and industry is not pro-active with initiatives to encourage schools and universities to participate in such programmes.

Agro-Food School Project

A joint initiative by the Syndicate of Lebanese Food Industries (SLFI), the Ministry of Education and the European Union resulted in an agreement and cooperation framework in 2005, to establish a special vocational school that offers work-based learning. The

initiative was based on an earlier needs analysis on labour force requirements at intermediate level, carried out by the SLFI. A presidential decree endorsed the creation of a vocational agro-food school at Qab-Elias in the Bekaa region and the EU allocated €5 million to support the implementation of the project with technical assistance and equipment. The cooperation framework identifies the roles of different partners with the Lebanese government providing the building, some basic equipment and financing the teaching and administrative staff. The SLFI provides the practical training for students at both secondary level (technical baccalaureate) and post-secondary level (higher technical level) in their establishments. The project was launched in 2007 and is expected to be fully functional within three years. The estimated capacity of the school is around 500 students and more than 15 major enterprises in the agro-food sector are expected to participate and offer an apprenticeship programme.

Recommendations

Apprenticeship and work-based learning in Lebanon is very limited and fragmented and lacks a clear policy and legal framework. The government has made concerted efforts over the last few years to develop the national training system and standards, and to involve the employer community in creating a real partnership between the various stakeholders. However, little success has been achieved in accommodating the various types of education and training and convincing employers to enjoy a partnership with the national vocational education and training system. There is still much to do in order to ensure that training becomes a shared responsibility between the community and government. Developing a national vocational education and training strategy that guarantees an effective partnership between employers and government and creates cooperation mechanisms for apprenticeship and work-based learning is one possible step ahead. To develop a sound mechanism for funding apprenticeships, schemes to encourage employers to participate and to make training available for a wider range of occupations, are other ways forward. Finally, a few more pioneering projects such as the Agro-Food School could accelerate the process of developing the training system in Lebanon.

Morocco

Introduction

In Morocco, traditional apprenticeship is an age-old way of handing down skills that fit perfectly into the country's cultural, social and economic context. A young learner becomes a *mat'aallem* (apprentice) and is assigned to a *maallam* (master) to learn a trade. The apprentice-craftsman relationship was organised in corporate bodies known as *Oumana* and training lasted several years. An initial form of regulated apprenticeship was established by the 1940 *Dahir* (royal decree) to provide skilled labour for colonial industry. However, it eventually fell into disuse because it was confined to the modern industrial sector and was restrictive in nature. Not only was the enterprise required to pay apprentices a wage and to cover their social security contributions, but also young workers had to undergo theoretical training during non-working hours, as well as being compelled to work for the enterprise to which they had been assigned on completion of training.

Although vocational training in Morocco underwent considerable expansion as a result of a 1984 reform, it still retained the character of residential training undertaken within establishments with their own workshops where the practical aspects of training were conducted. In 1996, after a pilot phase run in partnership with German assistance, Morocco set up a system of alternance training governed by Law No 36-96. At least half of this training takes place in an enterprise so that it is linked to the realities of the workplace and the enterprise itself becomes a training environment. Despite the interest shown by both students and enterprises, development of this kind of training has remained limited, not involving more than 10% of those it could potentially reach. Furthermore, it was shown to be ill-adapted to certain sectors, such as the craft industries, and to low-skill levels, which led the authorities to experiment with other forms of learning, notably apprenticeship-based training.

Apprenticeship

In response to the high social demand, exacerbated by educational wastage (with the loss of over 450,000 students each year) coupled with the limited scale of the regulated vocational training system (less than 130,000 trainees per year), the government introduced an apprenticeship-based training system under the National Education and Training Charter adopted in 1999. In this connection, Law No 12-00 of June 2000 provided for the establishment and organisation of apprenticeships, which it defined as a form of training undertaken primarily in the workplace (the on-the-job component accounting for not less than 80% of the total time), with not less than 10% of the total time being occupied by complementary general and technological training at an apprenticeship-based training centre. Apprenticeship is open to those who do not necessarily satisfy the educational and age requirements for access to other forms of vocational education and training, and can lead either to a diploma or to a simple skill qualification. A number of training bodies are currently involved in the organisation of apprenticeship:

public-sector bodies: Office for Vocational Training and Labour Promotion (OFPPT

 Office de la formation professionnelle et de la promotion du travail), departments
 of Agriculture, Craft Industries, Tourism and Marine Fisheries, Entraide nationale
 (national mutual aid organisation), and regional education and training academies;

- private training institutions;
- craft trades associations;
- enterprises, through the establishment of intra-enterprise centres.

The number of apprentices increased from 15,225 in 2002/03 to 20,177 in 2006/07, in a total of 128 trades. A nationwide network of 234 training institutions and 9,400 enterprises contributed to the training of these apprentices. The main sector concerned is agriculture, which accounts for 29% of the total number of trainees, followed by craft production (17.3%), hotels and catering (14%) and craft-based services (11%). A substantial untapped potential remains in the industrial and service sectors. Some 29% of trainees in 2006/07 were female. Women are less well represented in apprenticeship than in the residential field because it does not extend sufficiently, or does not yet extend, to the sectors most likely to attract them, such as administration and management or the textile and clothing trade. Even so, the proportion of women trainees in 2006/07 increased by 17% compared with 2005/06.

Training leading to a skill qualification, which is intended for young people without six years of primary schooling, accounted for 20% of the numbers registered in 2006/07. Training at this level is provided mainly by the Department of Agriculture. The lowest vocational-skill level in the national qualifications system (*spécialisation*) represented just under half (49%) of the total number of apprentices, with 28% of apprentices at the skill-qualification level. The recently introduced technician level brought up the rear with just 3% of the numbers registered. Most of those concerned were nursery schoolteachers trained by the regional education and training academies.

Note that although the *spécialisation* vocational-skill level is attracting fewer applicants in the residential field, it is proving to be highly coveted in the form of apprenticeship, suggesting that this training system is more appropriate for low-skill levels. Young people at this level are more likely to be attracted by the opportunity to actually practise their trade. This form of training has also proved to be an appropriate response to the specific needs of some sectors of the economy, in particular agriculture, which targeted training at farmers' children so that they could be adequately prepared to take over from the current ageing generation; the craft trades sector, where training in dying trades has been made possible by placing young people alongside artisans still practising these trades; and the clothing trade, which has turned to apprenticeship to solve recruitment problems in the basic workforce and heavy turnover.

Apprenticeship is funded by the overall state budget; enterprises, in the form of allowances paid to apprentices or direct payment of certain expenses (fares, food, lodging, etc.) and supervisory staff time; or families and the apprentices themselves, by meeting their personal expenses and through the fruits of their productive work.

Alternance

Vocational training in Morocco is dominated by the residential system, which has absorbed on average 80% of trainees during the last three years. Nevertheless the proportion of workplace-based training schemes has expanded considerably, exceeding 10% in 1999/2000 and reaching 19% in 2006/07. In the last three years the number of people undertaking alternance training was 9% whereas 11% were in apprenticeships.

A 2001 study by the German Development Institute evaluating apprenticeship-based training highlighted the significance of this form of training as a response to the needs of enterprises for qualified workers and the insertion of graduates into the world of work. At the same time it also emphasised a number of pitfalls, linked in particular to the failure to respect regulatory provisions (contracts not always signed, allowances rarely granted, etc.), to the practical capacity of enterprises to supervise and train apprentices as well as to the problem of coordination between the enterprise to which an apprentice has been assigned and the training institution as regards the selection of applicants, the dividing up of programmes, the way the periods of alternation are organised and the monitoring of trainees.

Adoption of alternance training has enabled training providers to increase their ability to provide training places, which, notwithstanding the optimisation of resources, has meant that they are in a better position to respond to the high social and economic demand for training. There are nevertheless aspects that still call for improvement despite the relatively high rates of success in finding first employment for graduates (80%); these include wastage, the low level of preparation on the part of enterprises with regard to the provision of supervisory staff, and the lack of suitable educational tools.

With regard to alternance training, the general state budget is paid directly to the training providers along with that for residential training, whereas for apprenticeships the Department of Training collects the budget, then reassigns funds to the training providers, public- and private-sector training centres and associations or enterprises with which it has concluded agreements.

Residential training

In Morocco the vocational training system is built around the residential system, in which a trainee completes virtually all training within a training establishment and then goes on to work experience in a working environment. This form of training has grown on average by almost 11% a year over the last four years.

Work experience in enterprises lasting one to two months is organised at the end of each year to introduce trainees to the world of work. The grades they receive in their work experience reports count towards their overall total. Nevertheless, problems in placing trainees, in tracking them and in the quality of supervision within the enterprises mean that the utility of this kind of work experience remains very limited.

Residential training undertaken in public- or private-sector vocational training establishments is the most widely available form of training, catering for 81% of trainees. This system has various limitations and has been the target of criticism by professionals in the field, for example:

- The system does not permit enterprises to be involved in the training process.
- The system does not encourage young people to assimilate themselves into the working environment.
- The system does not make it easy for graduates to find employment.
- The graduates' profiles do not match the needs of enterprises for qualified human resources.

Thus, since 1987, various forms of contractual training have appeared, promoting the creation of sectoral establishments by the OFPPT, the main provider of vocational training in the textile, leather and graphic arts fields, together with vocational training professionals. These have been developed to include electronics, the automobile industry, and off-shoring.

Conclusions and recommendations

According to the evaluations carried out, enterprises view the vocational training system favourably and do not on any account call it into question in spite of the difficulties experienced. On the other hand, they want improvements on a number of levels. The same applies to training institutions, which, while acknowledging the relevance of this form of training, regret the lack of human and material resources, the rigidity of its management and the dearth of supervisory staff. Action therefore needs to be taken at various levels.

Strategic vision

A major requirement is agreement on a clear strategic vision, together with the relevant organisations, trade associations and training bodies, of the development of forms of in-house, alternating and apprenticeship-based training, as well as better links and harmonisation between the two forms of training on the one hand, and between these and residential training on the other. The aim of this vision should be to establish conditions to facilitate the harmonisation of the social function of apprenticeship, which is to provide young people with skills, with its economic function of supplying the skilled workforce required by enterprises.

Promotion, communication and information

- Espousal of a more active policy in relation to the provision of information to young people and their parents, creation of awareness among training enterprises, and promotion of these forms of training among enterprises.
- Organisation of a publicity campaign aimed at populations at risk of marginalisation and exclusion from the education system and subject to youth unemployment, as well as at small and micro-enterprises.
- Re-establishment of a traditional form of training: learning a trade.
- Introduction of mechanisms for the guidance and selection of young people.
- Introduction of a permanent system of collection, analysis and supply of relevant information on training provision and labour-market demand at both national and regional levels.
- Improvement of access for young people with disadvantaged backgrounds or from rural areas by the introduction of residential courses and scholarships to combat high wastage levels due to transport and accommodation problems.

Partnership and coordination

Consolidation and development of sectoral partnerships (e.g. in textiles and clothing, tourism or craft trades) and partnerships with enterprises; establishment of joint bodies linking the many stakeholders and partners in workplace training, with a view to achieving a united approach and synergy of action and optimising resources; and involvement of partners other than enterprises – for example, civil society, to facilitate the integration of young people in their urban and rural areas and to stimulate development in these areas.

Strengthening the role of enterprises

Authorisation and guidance of receiving enterprises in relation to the acceptance of apprentices and trainees, to help these enterprises to perform their assigned function; training of tutors, master craftsmen for training apprentices and other training staff; and contemplation of a possible qualification to provide incentives and raise the status of tutors and master craftsmen who train apprentices.

Management

Establishment of mechanisms for tracking, evaluation and monitoring of workplace training, and clarification of each actor's responsibilities at local, provincial and national levels; and granting training establishments more freedom to adapt to enterprise requirements.

Human resources

Provision of additional human resources for vocational training institutions, both as regards numbers and in continuing training (vocational education, communication, etc.), as well as expertise in relation to the economic and industrial environment. A feasibility study is required on the establishment of competence centres for training the personnel and master craftsmen who train apprentices.

Educational resources

Simplification of the methodological framework of the competence-based approach and its adaptation to apprenticeship-based training for trades with low basic qualifications requirements; preparation of basic instruments and guides to assist trainers and tutors in the compilation of new reference documentation for training.

Financial resources

Finding new funding sources – in particular, allocation of a fraction of the vocational training tax reserved for initial and continuing training to apprenticeship; as well as examining the desirability of cost-sharing between the state, enterprises and parents.

Evaluation

Establishment of appropriate mechanisms for regular evaluation of the vocational training system, applicable not only to policies and their implementation but also to the impact of decisions taken.

Occupied Palestinian Territory

The Occupied Palestinian Territory has recently developed a national strategy on vocational education and training. The strategy aims at developing a unified, efficient, effective and responsive system. Although apprenticeship is clearly embedded in the strategy as one model of vocational education and training, no formal adoption has taken place and no legislation has been developed to provide a framework for it. Until now there has been no formal implementation of apprenticeship or enterprise-based training at government level. What can be witnessed are a few fragmented, unstructured, unorganised approaches to apprenticeship training. A summary of the major schemes is presented here, along with the main recommendations of the national study.

Cooperative apprenticeship training (GTZ)

Launched in 2005/06, the project was piloted in two fields (car mechatronics and tourism) in the Occupied Palestinian Territory and targeted 200 students who were Grade 10 graduates. It was implemented in cooperation with the Ministry of Labour and that of Education and Higher Education and in coordination with the Ministry of Tourism and Antiquities and the private sector. The programme came under the non-formal education (NFE) scheme implemented by the German Association for Technical Cooperation (GTZ) that aimed at improving individual employment opportunities for young people and contributing to the provision of qualified specialists who also serve the needs of the labour market.

Curriculum guidelines were developed by international experts, while content was developed by local experts: academics, vocational trainers and members of the private sector. The theoretical training took place in existing vocational institutions such as industrial secondary schools, where trainees learn the theoretical background of the occupation (science, technical mathematics and technical drawing). Training workshops at these vocational training schools and centres in the Occupied Palestinian Territory were sometimes used to offer practical experience as it was not always possible for trainees to gain practical experience of the entire spectrum of their intended occupation in an enterprise.

Students spent two years of extensive training; two days at school, and four days in the enterprise. Additional training was organised for a period of between six and nine months during which the apprentices had the chance to study additional theoretical and practical content at a third-party institution, such as a community college.

Apprentices signed training contracts with the enterprise under which they were paid pocket money to cover transport expenses. Special regulations, standards and procedures to better manage and administer the programme were also developed. In addition, the programme catered for a capacity-building component, targeting trainers at the enterprises participating in the apprenticeship scheme.

On completion of the training schemes, apprentices were awarded a certificate accredited by the Ministry of Education and Higher Education as equivalent to the newly introduced Applied Vocational Certificate. The quality of the training programme is assured through the active cooperation between programme management and enterprises. Good cooperation and joint responsibilities were the basis behind the successful planning, execution and further development of the training programme. This

cooperation spread at all levels including ministries, representatives of employers (chambers, federations), training providers and trade unions.

Lutheran Vocational Training Centre

The Vocational Training Centre in Ramallah (VTCR) offers a cooperative form of training bringing together training centre, marketplace and community. This approach aims at providing guidance, training and access to the labour market for youth. The concept of VTCR was developed in mid 2004. Since then, a location has been chosen and a workshop in the Ramallah industrial zone selected, prepared and equipped. Numerous links with the local chambers of commerce, trade unions, youth groups and grass-roots organisations have been established. Trainees were recruited and training started in October 2004. One of the main elements of this programme is its mutually beneficial relationship with the local labour market. Trainees receive much of their training in local workshops, and in return local businesses can send employees to VTCR for updating courses that keep workers abreast of new technologies and skills. During the last two years, the VTCR has collaborated with more than 120 companies and workshops, which provided practical training for students participating in the apprenticeship programme.

The programme provides apprenticeship training that lasts for 11 months and uses a practical and hands-on approach: 50% of training is carried out in the workplace under the supervision of the centre. Training is offered in car mechanics, carpentry, electronics and aluminium processing. Trainees complete an initial period of 270 hours of classroom studies in addition to 210 hours of theoretical classes relating to their trade at the VTCR, 120 hours of practical training at the enterprise, and then move to their placements in the community. The VTCR collaborates with 60 workplaces where trainees spend an extra 600 hours (50% of their entire training programme) in the workshops. In addition, the programme offers entrepreneurial training along with basic job skills. To date some 138 male and female semi-skilled workers have graduated from the VTCR with employment rates of 84% within six months of graduation.

There is no contractual agreement between the young person and the enterprise. The only form of contract is between the VTCR and the enterprise, by which the VTCR covers trainees' insurance. Students pay tuition fees of US\$600 to cover their training programme, which they consider affordable because of the income that they get during the practical training period at the workplace. During their training in the enterprise, students are paid according to the nature of the occupation: for example trainees in carpentry receive around US\$18 per day compared with US\$40 per week for car mechanics. The management of the training programmes and quality assurance is the responsibility of the VTCR through continuous follow-up of trainees at the workplace. Certification of VTCR graduates is accredited by the Ministry of Labour. To date no progress has been made in negotiations with the Ministry of Education and Higher Education to award VTCR graduates an Applied Vocational Certificate.

Chambers of commerce

The most active of these chambers are those in Hebron and Ramallah in the West Bank. Chambers provide two different forms of vocational training. The first focuses on building the capacity of members, through training needs assessments of local businesses and industries to identify where in-service training courses can be delivered in

the workplace. Examples of such training courses include management, accounting skills, PLC and car mechanics courses. These tailored training courses are short in duration and designed to keep local businesses abreast of new technologies and skills. They are highly regarded by the local market and are part of the ongoing cooperation between chambers of commerce and local businesses.

The second type of training programme targets youth and adults. These vary in type and duration. Trainees spend 120–200 theoretical hours at the chamber of commerce or sometimes at vocational schools or training centres. Two to three months of practical training are provided in the workplace through a voluntary contract with members of the chamber. Under this contract, members are provided with certain incentives such as exemption from the tuition fees of the capacity-building programme, and through giving priority to attending regional and international seminars and field visits. The contract does not specify payment modalities to apprentices and it is left to the enterprise to decide whether to provide payment or not. The cost of these training schemes is covered by trainees.

There is no mechanism to follow up trainees to assure the quality of training programmes. On completion of their training, students are certified by the chamber of commerce.

Recommendations

Apprenticeship and enterprise-based training in the Occupied Palestinian Territory, although not institutionalised, and implemented on a small scale, has proven to be a good step towards successful implementation of the national vocational education and training strategy. The fact that a large percentage of graduates of the apprenticeship scheme find work immediately after finishing their training is proof of the success of such a scheme in the Occupied Palestinian Territory. However, in order to improve and extend such programmes, there is a need for a genuine formal adoption of apprenticeship and enterprise-based learning as an integral pathway within the vocational stream. Legislation should also be drafted and enacted to govern, regulate and promote apprenticeship training nationwide. Such legislation should identify areas such as apprenticeship contracts, wage structures and incentives that could include material and non-material benefits. In addition, training workshop and training offices should be established to offer supplementary training independently of current company requirements, in order to improve the logical sequence of technical operations. A coherent and integrated business support network, focused on working with enterprises, is required to meet their capacity-building needs to support apprenticeship training schemes.

Syria

Introduction

Enterprise-based learning (workplace learning) is one of the main features of traditional Syrian businesses, represented by the traditional or informal apprenticeship.

The formal vocational education system was introduced in the 1940s, but only as school-based education, and is little changed. Formal apprenticeship was first introduced in 1975 as the result of a decision by the Minister of Industry: it was applied by those educational institutions that were under the control of the ministry. This scheme came to an end in 1980 and was revived in 2000 with the implementation of the Pilot Apprenticeship Scheme initiated by the Ministry of Education and the Damascus Chamber of Industry and supported through the ETF. It is the first demand-driven TVET scheme, based on a partnership between the business sector and government: its role is to provide competent graduates (occupational and technical) to meet the needs of the labour market in general. The scheme is governed by the National Apprenticeship Committee according to an apprenticeship by-law issued by the Minister of Education. The scheme is still very small-scale: it comprised about 0.25% of the total TVET system in 2005.

The other forms of enterprise-based learning systems are committed TVET and technical education in intermediate institutes. Committed TVET was developed from traditional TVET to fulfil the needs of ministries and government bodies by providing competent graduates to meet their standards, and the system is governed by the relevant ministries or establishments. This scheme is also very small: it comprised about 0.2% of the total TVET system in 2006. The role of technical education is to provide technical graduates and covers all economic sectors in the labour market. It started in 1958 to provide graduates in the construction field then expanded to other sectors. This system has been governed since 1978 by the Higher Committee of Intermediate/Technical Institutes. The size of this programme was about 34% of the total TVET system in 2005.

Pilot Apprenticeship Scheme

This is the first demand-driven TVET scheme and is a partnership between the business sector (chambers of industry) and the government (Ministry of Education), at both secondary school and intermediate institute levels. It encompasses two occupations at secondary level (ready-made garments and mechanical handling) relating to the textile and engineering sectors, while at intermediate level (technical education) there are two specialisations (mould-making and automatic control). The scheme operates in five governorates out of a total of 14, with the involvement of four chambers of industry.

The normal entry age is 15 for secondary school, after the successful completion of compulsory basic education, and 18 at intermediate institute level after the successful completion of secondary school. Duration is three years at secondary level and two years at intermediate level. The balance for both levels is two training days at an enterprise and three training days at a TVET institution. The share of training at the enterprise varies between 33% and 54%. The number of participants is 250–450 annually at secondary level, and 30–40 at institute level. Participants must sign a training contract with the employer to be accepted in the scheme. The employer has to pay an allowance to the apprentice, which varies according to the grade: from US\$10 to US\$20 per month. At the completion of secondary level, apprentices are awarded a vocational secondary school

certificate (apprenticeship scheme) and recognised as skilled workers, while the institute level graduates are awarded a technician certificate (apprenticeship scheme) and recognised as technicians. Both groups are also awarded a certificate of completion of apprenticeship training from the relevant chamber of industry. The pathway for secondary school graduates is the labour market, intermediate institutes or university, while for intermediate institute graduates it is the labour market or university.

The main role of employers is to provide training in the enterprise, whereas that of employer organisations is to collaborate with the Ministry of Education to manage and fund the scheme as partners. The main funding is provided by the Ministry of Education while additional funds for institutions and trainers come from the chambers of industry and employers. Based on the partnership principle, quality assurance is a responsibility of both chambers of industry and the Ministry of Education through managerial bodies that monitor and supervise all training activities in enterprises and institutions.

The aim is to raise the Pilot Apprenticeship Scheme to international standards, which encompasses many challenges such as strategy, financing, legislation and system effectiveness.

Committed TVET

This system is demand-driven, at both secondary school and intermediate institute levels, and committed to employ graduates according to the needs of ministries and government bodies. Most ministries are involved. When it began it encompassed most occupations and specialisations required by ministries, then due to overemployment of most sectors in ministries it transferred to normal TVET (i.e. without a commitment to employment). In the scholastic year 2007/08 this system was limited to four specialisations and two trades for four ministries (communication, transport, oil and health).

The normal entry age is 15 for secondary school, after the successful completion of compulsory basic education, and 18 at intermediate institute level after the successful completion of secondary school. Duration is three years at secondary level and two years at intermediate level (three years for nursing schools after secondary school). The training balance for both levels is approximately 80% school-based and 20% enterprise-based, while for nursing it is 41% practical training at hospital. The number of participants is about 200 annually at secondary level and about 800 at institute level. Participants have to sign a training and commitment document with the relevant ministry to be accepted in the system. Establishments pay an allowance to the trainee, which varies according to the level, of about US\$12 to US\$14 per month. At completion of secondary level, graduates are awarded a vocational secondary school certificate and recognised as skilled workers; institute level graduates are awarded a technician certificate and nursing graduates a nursing certificate. The pathway for both groups is then the same as in the Pilot Apprenticeship Scheme.

The main role of employers (ministries) is to provide training in TVET institutions and related establishments, and there is no role for employer organisations. Funding is provided from the relevant ministry or establishment. Quality assurance is the responsibility of the ministry or establishment through managerial bodies that monitor and supervise all training activities.

The main challenge is the sustainability of this system, involving many aspects of strategy, partnership with the private sector, and questions of efficiency.

Technical education in intermediate institutes

The intermediate institute system is supply-driven, and 17 ministries are involved. In the scholastic year 2006/07 it encompassed 193 intermediate institutes with many specialisations in all economic sectors.

The normal entry age is 18 years, after the successful completion of secondary school. Duration is two years. The training balance is 80% institute-based training and 20% enterprise-based training. The enterprise training is only one month per year. The number of participants is about 33,000 annually and establishments pay a student allowance which is about US\$1 for each day of practical training at the enterprise. After successful completion of two years of training, graduates are awarded a technician certificate. The pathway for graduates is the labour market or university.

Funding is provided from the relevant ministry. Quality assurance is a responsibility of the ministry and the Higher Committee of Intermediate/Technical Institutes through managerial bodies that monitor and supervise all training activities.

The main aim is to shift from a supply-driven to a demand-driven system, which poses many challenges such as strategy, partnership with the private sector, system responsiveness, effectiveness and efficiency.

Recommendations

The TVET schemes that may be considered as enterprise-based learning are fragmented and inconsistent. Being linked with school-based vocational education restricts their effectiveness and responsiveness. Recommendations for improving apprenticeship and enterprise-based learning should follow a three-pronged approach in the context of a national framework, implemented in a coordinated way. The three approaches may be summarised as follows:

- the general approach of creating an enabling environment to join vocational education in general and vocational apprenticeship in particular:
- the approach of reforming vocational education and training to fulfil its mission by responding to the labour market efficiently and effectively;
- the different systems convergence approach, bringing them into one vocational enterprise-based learning system that meets international standards, under an independent authority.

Tunisia

Basic vocational training in Tunisia is provided in full-time training establishments (residential), by means of apprenticeships in work settings or by means of alternance involving the training institution and an enterprise, also known as enterprise-based learning.

Legal provisions governing apprenticeship

The first legal texts governing apprenticeship date from 1957, in particular the Labour Code, one chapter of which specifies the formalities and conditions regulating apprenticeship. Thus it legally establishes the apprenticeship contract 'by which the manager of an undertaking, in his capacity as an apprentice master, must provide or ensure the provision of methodical, comprehensive vocational training to another person, and by which the latter, the apprentice, must in return comply with the instructions given and must perform the work entrusted to him or her with a view to his or her vocational training'.

The contract is signed by the apprentice master, the young person or his/her legal guardian, and the training centre.

The Labour Code was supplemented by the 1993 law on vocational guidance and training and later laws amending it, which further regulated this type of training. A new law has recently been approved (Law No 2008-10 of 11 February 2008) replacing the 1993 law and confirming Tunisia's decision to focus on enterprise-based training, while maintaining the special features of apprenticeship and alternance training.

Under these laws, the admission age for an apprenticeship was set at between 15 and 20, instead of 14 to 18 as in the previous law. Under the 1993 law, apprenticeships vary in duration from one to three years, depending on the vocational sector and type of trade. Under the new law, the duration no longer depends on the type of training, but on the period established by the training programme for acquiring all the skills needed for a given trade.

Types of apprenticeship

There are three types of training involving enterprises.

'Reformed' apprenticeship

This type of apprenticeship is reserved for young people who have completed the nine years of compulsory basic education. Three parties are involved: the apprentice, the employer and a training adviser from the training centre.

The most widespread form of this type of apprenticeship involves five days per week in an enterprise, with complementary courses in training and apprenticeship centres on at least one day a week. Four or five weeks' training in the enterprise and one week in the centre may also be offered. In either case, this training is given within the framework of an apprenticeship contract and ends with examinations, with a Certificate of Professional Competence (CAP – certificat d'aptitude professionnelle) being awarded to successful graduates.

Traditional apprenticeship

This type of apprenticeship involves a contract with the same conditions as the previous one, but does not systematically comprise complementary courses or regular monitoring by a training adviser. Unlike the reformed (or standardised) apprenticeship scheme, which requires prior attendance at school for nine years, this type of apprenticeship is accessible to young people between the ages of 15 and 20 who have not completed the ninth year of basic education. A Certificate of Completion of Apprenticeship is awarded at the end of the training.

Alternance

Alternance or dual training is a type of training given in both enterprise and training centre. Promoted by German development cooperation at the beginning of the 1990s, alternance is now very widespread. According to the Tunisian Vocational Training Agency statistics for December 2007, over 87% of learners follow enterprise-based training, of whom 4,444 are in alternance training. Decree No 2004-512 of March 2004, which established the system in Tunisian Vocational Training Agency training centres, specifies that training must be provided where possible on the basis of alternance and apprenticeship.

The following are the main differences between alternance and apprenticeship.

- Access: unlike apprenticeship, access to alternance is not based on a contract signed by the young person and the enterprise. Young people start their training courses in centres and are then given placements. It might even be said that apprenticeship training is more demand-driven than alternance.
- Level: because of the condition concerning age of admission, apprenticeship mainly concerns the first level of qualification (CAP), while alternance concerns the levels of technician and advanced technician.
- Training content: in traditional apprenticeship, the training given in the centres is regarded as complementing that given in the enterprise, and concerns in particular theory courses. In alternance and reformed apprenticeship, the part of the training programme provided by the enterprise is the result of negotiation between it and the training centre.
- Age: while apprenticeship is open to young people aged between 15 and 20, there
 is no age limit for alternance.
- Contract: unlike apprenticeship, there is no contract linking the young person to the enterprise in the alternance system.
- Lastly, while apprenticeship involves a single enterprise, a young person may engage in alternance with several enterprises.

It is worth noting that the provisions in the new laws (No 2008-09 and No 2008-10) of 11 February 2008²⁵ provide for access to alternance for secondary-school students (Law 2008-09, Art. 27) and diversify the concept of alternance, which formerly was 'external' (involving actors outside the education and vocational training sector), introducing 'internal' alternance between vocational training establishments and schools (Law 2008-10, Art. 14).

Law 2008-09 of 11 February 2008 amending and supplementing Framework Law 2002-80 of 23 July 2002 on education and Law 2008-10 of 11 February 2008 on vocational training.

Organisation of apprenticeship

Training advisers play a pivotal role in organising apprenticeship in Tunisia, dealing with the following matters:

- induction of young candidates, informing them of available apprenticeships and of the conditions and organisation of training;
- placement of the apprentice in an enterprise;
- monitoring the apprentice by means of at least one visit per month, during which
 the training adviser evaluates the progress made and the learning abilities of the
 apprentice. In this respect, the apprenticeship record book which contains the
 training programme and monitoring sheets relating to training in the centre and the
 enterprise is a valuable tool for the technical monitoring and evaluation of the
 apprentice;
- additional courses: under the mechanism in place, training centres provide apprentices with additional courses of from 4 to 16 hours per week, planned and organised in line with the slots available;
- evaluation at the end of the apprenticeship: two types of evaluation are organised

 a formative evaluation is planned by the training adviser in collaboration with the trainer, while a summative evaluation is held at the training centre and leads, for successful apprentices, to the awarding of the Certificate of Professional Competence (CAP) or to the Certificate of Completion of the Apprenticeship (CFA).

Numbers involved

Alternance and apprenticeship comprise respectively over three-quarters and over one-tenth of trainees undergoing vocational training: in 2007, out of a total of 61,012 trainees, 45,562 were registered in alternance and 6,930 in apprenticeship (the remaining 8,520 were on residential training courses). According to the statistics of the Tunisian Vocational Training Agency, the main training body, a sectoral breakdown of the numbers of young people registered in apprenticeship shows a predominance in the textile and shoe sectors, followed by car mechanics, transport, food products and chemicals. In addition, up to 25% of all apprentices are given placements in public enterprises.

During their apprenticeship, trainees receive an allowance paid by the enterprise to which they are assigned. This is fixed by law and based on a percentage, varying between 30% and 80%, of the minimum guaranteed wage applied in that enterprise. Enterprises may obtain a reimbursement of part of the vocational training tax (1% of the wage bill in the manufacturing sector, 2% in other undertakings: export businesses and farms are exempt from this tax) by offsetting it against the costs arising from supervising the trainees, in both alternance and apprenticeship systems.

Challenges and prospects

The main shortcomings of apprenticeship can be attributed to the way it is organised, the practices pursued by the training enterprise and, lastly, the general apprenticeship and training environment.

Inadequacies in the way apprenticeship is organised

- Up to 50% of the specialisations on offer do not have available training programmes or record books that would enable progress in training to be monitored.
- Apprentices are monitored at lengthy intervals and at short notice for reasons that have more to do with administrative constraints than technical or pedagogical ones.
- Only 24% of apprentices take complementary courses, for various reasons. Not all the centres can provide such courses.

Inadequacies in the enterprise as a training environment

- Enterprises taking part in apprenticeship are not all equipped to deal with it. They lack managers and workers qualified to act as trainers. Moreover, a number of them make use of apprenticeship as a source of cheap labour.
- There are cases in which the regulations governing apprenticeship have not been respected, for example in relation to the allowances paid to apprentices, additional courses and leave.
- Limited transfer of skills because of the predominance of traditional technologies that are sometimes obsolete and not relevant to the young apprentice's career.

Inadequacies in the apprenticeship environment

- The parents of young apprentices are not given information about the trades, future prospects or the organisation of apprenticeship and its progression.
- In addition to the rather unrewarding image of vocational training, apprenticeship is still not recognised as a basic training method.

Generally, it should be emphasised that the word 'apprenticeship' means non-reformed apprenticeship. But even this type of apprenticeship is one way to achieve the employment of the largest number of young people. A lot of enterprises, including small crafts firms, use it to solve their problem of training workers to suit their own needs.

And finally, if there is indeed a will to group together all the training methods involving enterprises into a single system, to achieve this will take some time given the current situation and perceptions on the ground.

Turkey

The 1924 Law on Unification of Education, after the establishment of the Turkish Republic (1923), brought all the country's schools under the management of the Ministry of National Education, including vocational schools. In 1927, the vocational education schools directed by the municipalities were tied to the ministry. In 1934, new schools for girls and boys were established. Curricular changes were made in 1927, 1931 and 1935. In 1931 a fund was generated to finance vocational school expenditures. In 1933 Law No 2287 established directorates of vocational and technical education. In the 1960s, vocational high schools were set up to offer five years of training, later extended to six years, after the completion of five years of primary education. Four-year technical high schools were included in the system in the 1970s. The National Education Basic Law No 1739 restructured the system in 1973, and the Eight-Year Compulsory, Uninterrupted Education Law No 4306 was issued in 1997.

The first opportunity to acquire a profession through apprenticeship training within the Turkish national education system was through the Law of Apprenticeship, Journeymanship and Mastership No 2089 in 1977. This defined the status of apprentices, journeymen and masters; regulations for working hours and working conditions; and social security arrangements and payments. However after much discussion about the inclusion of this training within the national education system, new legislation was issued in 1986 as the Apprenticeship and Vocational Training Law No 3308 (amended in 2001 as Law No 4702), which organised apprenticeship, formal and non-formal vocational and technical education in an integrated system.

Formal vocational and technical secondary education

Vocational and technical secondary schools are grouped under two main categories: vocational high schools and technical high schools. Technical high schools accept students from among those who have successfully completed their first year at vocational high schools. Vocational and technical high schools with preparatory classes are called 'Anatolian vocational high schools', and 'Anatolian technical high schools'. These schools are run under four different directorates general: the Directorate General of Technical Education for Boys, the Directorate General of Technical Education for Girls, the Directorate General of Commerce and Tourism Education, and the Directorate General of Religious Education. In total around 1,245,000 students attend vocational and technical secondary schools – about 37% of all secondary-school students in Turkey.

Vocational education programmes cover 42 areas and 197 branches at secondary vocational and technical education schools. The courses offered may be divided into two main groups: core courses and field courses. In addition, students are offered a limited number of elective courses.

Enterprise-based practical training is a formal requirement for all students in all types of school (vocational, technical, Anatolian technical and Anatolian vocational)²⁶. It is organised on the basis of three days of practical skills training (24 hours per week) in the enterprises and two days of theoretical courses in the classroom in the last year of secondary education. The students who attend practical skills training are called 'interns'

However in practice it seems that many students do not have the opportunity to undertake such practical training.

or 'trainees'. The structure of practical training in the enterprises is prepared according to Vocational Training Law No 3308. Practical training of students is monitored by coordinator teachers assigned by schools, in coordination with master trainers or training personnel within the enterprise, and the assessment procedure is regulated by law. Successful graduates are awarded a diploma allowing them either to start work at an enterprise or move on to higher education institutes.

Non-formal vocational training through apprenticeship

Apprenticeship training as a concept covers different levels of education and training: candidate apprenticeship, apprenticeship, journeymanship and mastership.

Apprenticeship training covers the theoretical and practical training of primary education graduates who work at enterprises in order to learn a vocation. It is carried out in provinces and occupational fields determined by the Ministry of National Education within the scope of Vocational Education Law No 3308. Apprenticeship training coordinated by professional organisations in occupations where the ministry does not offer apprenticeship training is carried out under the Tradesmen and Craftsmen Law No 507.

At present there are 36 occupational fields and 131 branches offered in apprenticeship training within the scope of Law No 3308. These occupational fields range from electrical and electronics technology (with branches such as computer technical services, office machinery technical services, electrical installations and monitoring) to food and beverages services (with branches such as cooking, bakery, meat and meat products preparation).

Theoretical and practical training for candidate apprentices and apprentices is provided by a number of different types of organisation: vocational training centres, enterprises, training units established at enterprises, and supra-enterprise training centres. Apprenticeship training centres were established in 1979 and renamed vocational training centres in 2001 to provide vocational education to candidate apprentices, apprentices, journeymen and master trainers already working in the sector. These centres are the major providers of such training and more than 200,000 participants attend each year. Training units are provided at enterprises that provide training for ten or more students or have more than 200 employees. Master trainers who hold a Master Trainer Certificate are appointed to these units. Supra-enterprise training centres, run by the Turkish Confederation of Tradesmen and Craftsmen (TESK), function in a similar way to vocational training centres, providing theoretical and further practical training to candidate apprentices, and to apprentices who are working at enterprises to acquire practical vocational skills.

Primary-school graduates who work in one of the occupational branches mentioned in Law No 3308 but who are below the age of 14 may be trained as candidate apprentices until they reach apprenticeship age. Candidates receive theoretical training at vocational training centres one day a week (for a minimum of eight hours) which includes courses in general and vocational knowledge. If above the age of 14 and below the age of 19 candidates may receive training as apprentices, consisting of one day per week at vocational training centres (or training units of workplaces approved by the Ministry of National Education), and for the rest of the week they receive practical training at workplaces where they have signed an agreement, carried out under the supervision of master trainers. The duration of apprenticeship training varies from two to four years

depending on the nature of the occupation. On completion of this training, an apprenticeship certificate is given to those who pass the relevant examination. The 2001 amendments to the law allow those who hold a secondary-school diploma and are over the age of 19 to enter apprenticeship training also. On completion of the training period, apprentices may apply to sit the journeymanship examination, both theoretical and practical success in which leads to a journeymanship certificate.

Journeymanship training lasts three years, during which time journeymen attend courses given by vocational training centres while working in an enterprise. On completion of the training, the journeymen earn the right to enter mastership examinations which lead to a mastership certificate. Mastership certificate holders may then attend 40 hours of pedagogical training to gain a master trainer certificate, which certifies competency to undertake the training of candidate apprentices and apprentices in the workplace.

Apprenticeship training in unrecognised occupations

According to Vocational Education Law No 3308, training and certification in unrecognised occupations is under the responsibility of TESK. There are about 500 unrecognised occupations which generally relate to the production of goods, food production, construction, personal hygiene and beauty, transport, services in communication, and accommodation and entertainment. Testing and assessment in the unrecognised trades and crafts is coordinated by TESK.

Other

The Foundation for the Promotion of Vocational Training and Small Industry (MEKSA) has 23 training centres in 14 provinces of Turkey and vocational and technical training is provided in these centres in over 20 skills. Since its establishment in 1985, vocational and technical training has been provided for nearly 50,000 children, youth and adults including special groups such as street children, women, disabled people and ex-convicts.

Supra-enterprise training centres established by the MEKSA Foundation with German technical support after 1983 were initially named Turkish-German Apprenticeship Training (TAÇE – *Türk-Alman Çıraklık Eğitimi*) Centres, later renamed Turkish-German Vocational Education Centres (TAMEM – *Türk-Alman Meslek Eğitim Merkezi*) under the Dual Vocational Education Project signed between the Turkish government and the Federal German government to provide training for apprentices working at larger enterprises. Although the dual vocational education model is very similar to the existing system in accordance with Law No 3308, there are some differences: the apprentices spend two days for theoretical training in TAMEMs and three days for practical training at workplaces, and the duration of apprenticeship training is three years in this model regardless of the type of occupation. There are about 14 TAMEMs still running.

Financing

Employers and enterprises have to pay not less than 30% of the minimum wage determined by the government to apprentices and interns of vocational schools. Other than their financial contribution, some enterprises provide for the transport and catering expenses of the apprentices and interns of vocational schools, but there are no regulations on this type of contribution.

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Recommendations

Although close cooperation exists between schools, larger enterprises (particularly the more professional ones) and public institutions and social partners, due to the limited financial, technical and staff capacities of the great majority of enterprises that accept apprentices and interns, they cannot provide practical training at a desirable level. The challenges are to offer better-quality theoretical and practical training to make the apprenticeship and internship training more attractive, and to introduce incentives to urge enterprises and their representative organisations to participate more fully in apprenticeship and internship training. Another challenge is to formalise the informal economy by attracting non-registered apprentices into the recognised training system to ensure their certification.

Annex 2: Comparative statistics

	Indicator	Algeria	Egypt	Israel	Jordan	Jordan Lebanon Morocco	Morocco	Syria	Tunisia	Turkey	Occupied Palestinian Territory	pied inian tory
											West Bank	Gaza Strip
1	Population (000,000)	33.3	74.1	7.0	5.5	4.1	30.5	19.4	10.1	72.9	3.8	1.5
2	Population <15 years (%)	28.9	33.0	27.9	36.5	28.2	29.7	36.0	25.4	27.9	45.6	47.6
3	Annual population growth rate (%)	1.5	1.8	1.8	2.3	1.1	1.2	2.7	1.0	1.3	4.0	3.7
4	GDP per capita (US\$ at PPP)	6,347	4,953	24,096	4,628	9,741	3,915	4,225	6,859	8,417		3,604
2	Annual rate of increase in GDP (%)	3.0	6.8	5.1	5.7	0.0	8.0	5.1	5.2	6.1		1.4
9	Industry as % of GDP	61.51	38.4	n.a.	29.5	23.7	27.8	32.2	28.4	26.8		n.a.
7	Population below poverty line $(\%)^2$	22.6	16.7	n.a.	14.2	n.a.	19.0	n.a.	7.6	27.0	n.a.	63.1
œ	Unemployment rate persons aged 15+³	15.3	10.7	9.0	12.4	n.a.	9.7	n.a.	14.2	10.3		26.8
6	Female labour force participation rate	38.9	21.6	59.1	29.5	36.8	28.7	40.5	31.9	28.8		10.9
10	10 Early school leavers ⁵	2.0	4.0	3.0	10.0	18.0	12.0	n.a.	4.0	8.0		24.0
11	11 Youth literacy rate ⁶	90.1	84.9	n.a.	99.0	n.a.	70.5	92.5	94.3	92.6		99.0
12	12 VET enrolments in ISCED 37	21.3	57.1	35.0	17.5	25.5	12.0	25.5	6.4	38.2		4.8

Sources: Indicators 1 to 9: World Bank, World Development Indicators 2007, usual year of reference 2006 (http://go.worldbank.org/3JU2HA60D0); Indicators 10 to 12: UNESCO Institute for Statistics (www.uis.unesco.org)

n.a.: not available ¹ Year of reference: 2005.

^{2.} This indicator shows the percentage of the population living below the national poverty line. Years of reference: 1995 for Algeria and Tunisia, 1999 for Morocco, 2000 for Egypt and 2002 for Jordan and Turkey.

^{3.} Formal unemployment only: does not take into account underemployment or hidden unemployment. Years of reference: 2004 for the Occupied Palestinian Territory, 2005 for Algeria, Israel, Tunisia and Turkey, and 2006 for Morocco.

Percentage of female population aged 15-64.

Percentage of primary school-age children out of school. Year of reference: 2006, except for Egypt (2007, based on UIS estimations).
 Year of reference: 2005, except for Algeria (2002), Morocco, the Occupied Palestinian Territory, Syria and Tunisia (2004).
 As a percentage of total enrolments in ISCED 3, or upper secondary level. Year of reference: 2005, except for Lebanon and the Occupied Palestinian Territory (2006).

Annex 3: Summary of key legislation covering work-based learning for youth

Country	Legislation
Algeria	In 1981 Law No 81.07 institutionalised apprenticeship and established an apprenticeship tax. It was subsequently modified in 1991 and 2000. The laws cover working conditions, numbers of apprentices to be employed, financial arrangements, and roles of social partners.
Egypt	1956 and 1964 presidential decrees cover the operation of the Productivity and Vocational Training department, which runs one of the principal programmes. 2003 Labour Law No 12 refers to apprenticeship, and the relationship between apprentice and employer, with the intent of organising informal apprenticeship. Detailed rules and regulations foreshadowed by the Act have yet to be issued.
Israel	1953 Apprenticeship Law refers to the training of youth aged under 18 who work in order to acquire a trade.
Jordan	No specific legislation exists other than that which applies to vocational education and training in general. 1976 law established the Vocational Training Corporation (VTC), modified in 1985 and 2001. The legislation refers to apprenticeship and enterprise-based training as one of the VTC's roles.
Lebanon	No separate legislation for work-based learning, only for vocational education and training.
Morocco	1996 Law No 36.96 established alternance training, setting out in detail its objectives, duration, qualification, structure, access arrangements, remuneration arrangements, etc. 2000 Law No 12.00 established and formalised apprenticeship, encompassing a similar set of factors to those included in the 1996 legislation. In addition a 1974 law established the vocational training tax, one of the uses of which is to finance training in the workplace.
Occupied Palestinian Territory	No specific national legislation or regulations refer to apprenticeship or enterprise-based learning schemes. They are not referred to in either the key labour or education laws.

Syria	2003 Decision No 2538/443 of the Minister of Education contains a by-law that covers the current Pilot Apprenticeship Scheme, encompassing matters such as admission, attendance and holidays, firms' capability to train, assessment and study plans. 2006 and 2007 by-laws and ministerial decisions refer to committed TVET programmes in areas such as nursing which involve periods of enterprise-based training.
Tunisia	1993 Labour Law contains 18 articles that set out the formal conditions under which apprenticeship operates, including matters such as the apprenticeship contract, entry age, probation period, requirement for participating enterprises, and the obligations of apprentice and employer. 2001 Law on Guidance updates and modifies the 1993 legislation.
Turkey	1977 Law of Apprenticeship, Journeymanship and Mastership No 2089 covers the status of apprentices, journeymen and masters, contractual arrangements, work hours and conditions, social security and payments. 1986 Apprenticeship and Vocational Training Law No 3308 integrates apprenticeship with formal and non-formal vocational education and training.
	2001 Law on Vocational Education and Training regulates vocational training in enterprises and sets out governance arrangements for the vocational education and training system, including work-based training.

Annex 4: Benchmarking criteria for quality in apprenticeship of the European Association of Craft, Small and Medium-sized Enterprises (UEAPME)

- 1. 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 completed with the necessary theory.
- 2. 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.
- 4. 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).
- 6. 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.
- 7. Involvement of the training enterprises in the financing of the practice part. The financing of the theoretical part is done by public financing.
- 8. 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 is recruited following criteria recognised at national level.
- 9. Validation of skills at the end of the training by an exam organised with the participation of experts from the economic sector (chambers, professional organisations, etc.).
- 10. A range of training which is accessible for people with apprenticeship difficulties as well as for very gifted people. The enterprise is solely responsible for recruiting its apprentices.
- 11. 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.

Source: Linderholm and Parker, 2000 (p. 5)

ACRONYMS

CAP Certificate of Professional Competence (certificat d'aptitude

professionnelle)

EIU Egyptian Investors' Union

ETF European Training Foundation

EU European Union

GDP gross domestic product

GTZ Deutsche Gesellschaft für Technische Zusammenarbeit (German

Association for Technical Cooperation)

ICT information and communication technology

ISCED International Standard Classification of Education

JOD Jordanian dinar

JSCED Jordan Standard Classification of Education

MKI Mubarak-Kohl Initiative

MoE Ministry of Education

NGO non-governmental organisation

OECD Organisation for Economic Cooperation and Development

OFPPT Office for Vocational Training and Labour Promotion (Office de la formation

professionnelle et de la promotion du travail)

PPP purchasing power parity

PVTD Productivity and Vocational Training Department

SLFI Syndicate of Lebanese Food Industries

TVET technical and vocational education and training

VET vocational education and training

VTC Vocational Training Corporation

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