

Achieving the Lisbon goal: The contribution of VET

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Section 1

Context

Chapter 1

Introduction

This report focuses on the contribution of vocational education and training (VET) to achieving the aims set out at the Lisbon Conference (referred to in this report as the 'Lisbon goal'). The consortium conducting the research has prepared the report specifically for the Maastricht conference, working between April and October 2004. The report aims to provide a basis for assessing VET systems in Europe in terms of contributing to the achievement of the Lisbon goal and to stimulate policy debate at national and European level.

The Lisbon strategy aims to create a drive towards a more dynamic and competitive knowledge-based economy in Europe that will deliver sustainable growth, generate more and better jobs and create greater social cohesion. The drive to create knowledge-based economies and learning societies in the EU should create an integrated approach to policy formation within and across countries to deliver the Lisbon goal. The development of knowledge economies follows from the rapid advance of ICT and other new technologies and from the intensification of global economic competition. The term knowledge economy reflects the shift in the advanced economies from low and medium skills areas of cost-competitive manufacturing towards high-value added production and services sectors. The development is uneven across different sectors of the economy, and low-skilled areas of employment by no means disappear.

The agreement reached at the Lisbon Conference gives lifelong learning an important role in achieving the economic, employment and social goals for Europe. The subsequent development of the Lisbon strategy both confirms the importance of well-developed lifelong learning strategies in member states – this includes the effective implementation of the strategies for achieving the agreed goals – and places a clear emphasis on the role of VET, alongside general and higher education in this strategy. Thus the connections between education and training, between formal and informal learning and between higher education and VET are emphasised as well the vitality of the contributions of social partners and other stakeholders at the European, national, regional, local and sector levels.

We have adopted the broad definition of VET that the European Training Foundation (ETF) and the European Centre for the Development of Vocational Training (Cedefop) uses:

Education and training that aims to equip people with skills and competences that can be used in the labour market.

This broad definition, however, does not convey the functions that VET is often expected to fulfil in different circumstances. For the individual VET is a means of optimising performance and progression in work so that personal identity, participation in communities and the quality of life more generally are enhanced. VET can provide second chances for those with a career break or a weak record of achievement on leaving school. For enterprises VET is seen as a means of up-skilling the workforce, changing work practices and as a motor of innovation. Governments see VET as a means of increasing competitiveness, employment and growth by securing the supply of skills to the economy. Governments also see VET as a means of raising levels of education and social participation more generally. However VET is not simply a tool to be used to hone knowledge and skills in people and communities, it has a dynamic nature and is shaped itself by many factors including the health of economies and businesses, providers and by social and technological change.

So whilst the report necessarily focuses on VET, the reader should keep in mind that the approach of the European policy is that VET should be joined seamlessly to the other aspects

of identifying and meeting European learning needs for the future through lifelong learning and implementation strategies.

1.1 Key questions for the report

To analyse the specific contribution that VET is making and how this contribution can be strengthened, the research develops three main themes, which are reported on in Sections 2, Section 3 and Section 4 respectively, these are:

- Theme 1 - to identify progress of the national VET systems towards the Lisbon objectives and priority benchmarks;
- Theme 2 - to report on innovation in teaching and learning;
- Theme 3 - to provide a clear view of progress towards building 'competences' for a European labour market.

The analysis that follows relies strongly on information gained from three main sources. These are: (i) European and international research and data, together with European reports on different aspects of the Lisbon and Copenhagen processes; (ii) the results of a self-assessment questionnaire that the Directors General for Vocational Training (DGVTS) completed for the study for each of the 31 countries involved; and (iii) evidence from the 31 countries derived from completion of a writing template to provide additional information on specific themes. Table 1.1 gives more detail of these main sources of information. In addition, the Commission's DG Education and Culture, Cedefop, ETF and the social partners at the European level have made available extensive resources and have contributed ideas to many discussions.

The development, research and writing of the report was a thoroughly co-operative effort on the part of the whole consortium. QCA has taken the main responsibility for the research and writing of Section 1, parts of Section 2 and Section 5 of the report: Tom Leney was the lead researcher, with the participation of Mike Coles, Betty Feenstra and Tom May. Andy Green contributed to Chapter 4. In Section 2, Friederike Behringer (BIBB) researched and wrote Chapter 5, Anneke Westerhuis and Jittie Brandsma (CINOP) Chapters 6 and 7. Philipp Grollmann (ITB) took responsibility for Section 3, with contributions from colleagues at ITB and from Cathy Stasz and Philip Ammerman. Hanne Shapiro and her colleagues (DTI) took responsibility for researching and writing Section 4.

It is widely accepted that statistical data for VET across countries needs improvement¹. It is no less true that the past few years have seen a huge growth in the quantity of information and research available to the policy maker and practitioner. These resources, which include the wide range of reporting associated with the Lisbon process including some aspects of VET, provide insight into innovations that are taking place in particular countries, regions or sectors. Using these various resources the report goes beyond a scorecard approach and uses the information gathered to provide an analysis of development, innovation and of issues and problems that should be tackled.

¹ Chapter 5 highlights the main problems with statistical data on Vet in Europe, see also the annex.

Table 1.1: The main sources of information for the study

Sources of information	Indication of extent of resource	Key characteristics	Distinctive contribution
Key European and international publications ²	Approximately 220 documents, reports, communications and policy papers mainly from: the Directorate Generals for Economic and Financial Affairs; Education and Culture; Employment and Social Affairs; Enterprise, ETF; Cedefop; OECD; the Lisbon Working Groups; The European social partners	Wide ranging research and policy papers, and coverage of initiatives being taken, such as Leonardo da Vinci programmes and the social partners' framework of actions. Almost all published since 2000. Includes some important international references	Background, general trends in VET, issues for policy makers. Detailed coverage of the field
	EUROSTAT	Direct access to datasets	Wide ranging quantitative data
The DGVT reports	31 reports: Euro 25 plus (Bulgaria, Liechtenstein, Iceland, Norway, Romania, Turkey). All DGVTs responded. See Annex 1.2 and 1.3.	Assessment by senior government officials for VET (DGVT) to compare the Lisbon themes to VET priorities at European and National level. The self-evaluation was made possible through completion of a questionnaire that required details of strengths, reforms and challenges for the National VET systems and with particular reference to Lisbon and Copenhagen priorities.	The DGVT self-analysis is a primary resource and the questionnaire was developed to a format that provides an up-to-date gauge of national priorities and developments in VET. Given the character and the origin of the self-assessment, this tool could be developed for a follow up.
The country evidence (derived from writing templates)	30 reports: Euro 25 and (Bulgaria, Liechtenstein, Norway, Romania, Turkey). Format derived from the 3 writing themes for the report, in particular to gain information that writers consider might be lacking from other sources and to synthesise information. See footnote 1.	Reports offer a degree of independence from country perceptions as members of the project team were involved in developing the reports	Provides national examples of VET policy and practice consistent with the Lisbon process. They are a new source of case studies for illustrating the report.
Information from officials	Meetings in Brussels and a Cedefop hosted seminar	Formal meetings to support the research and reporting.	European level perspectives on the Lisbon strategies.

1.2 Structure of the report

The report is divided into five sections, each containing several chapters.

Section 1 sets out the context for the development of VET in Europe. Chapter 1 provides an overview of the Lisbon goal and the challenges for VET in different settings. Chapter 2 links the policies for VET established in the Lisbon strategy and Copenhagen Declaration to the set of wider strategies that are being developed. Chapter 3 indicates the impact of the enlargement of the EU in May 2004 to 25 member states on European VET structures and

² The collection of references can be found on this website: http://www.refernet.org.uk/index_copenhagen.asp

reform³. Chapter 4 considers the wider drivers of demographic change, technological advance and economic and social aspects of globalisation in as far as they both create uncertainty and generate the need for change in approaches to lifelong learning, and in particular to VET. Comparisons are made with countries such as USA and Japan.

Section 2 reports on the particular contribution that VET is making to achievement of the Lisbon goal, taking into account the priority benchmarks agreed for education and training and specific aspects of the Copenhagen process. Chapter 5 provides a statistical appraisal of the effectiveness and efficiency of VET through considering expenditure and outcomes of initial VET (IVET) and continuing VET (CVT). It also highlights statistical issues in monitoring these aspects of VET. Chapters 6 and 7 concentrate respectively on the attractiveness and flexibility of VET. Chapter 8 introduces the concept of competences in the acquisition of knowledge and skills in different vocational learning situations. Chapters 9 and 10 explore broader social aspects on which VET has a strong bearing; the impact of an ageing population and the role of VET in progressing social inclusion.

Section 3 of the report examines reform and innovation in the field of teaching and learning in different European VET systems. Under the title the changing mission of VET in Europe, Chapter 11 discusses changes in learning environments covering work and organisations. Chapter 12 takes up the theme of purposes and approaches to content and curriculum in VET. Chapter 13 emphasises innovation in methods of learning, such as self-directed learning and e-learning. Chapter 14 deals with assessment, testing and validation of learning. Chapter 15 covers issues relating to the needs of and for teachers and trainers. Chapter 16 concludes this section by looking at innovation in quality development and assurance for VET.

Section 4 explores more broadly the links between the Lisbon and Copenhagen processes, the objectives established for VET and the strategic drive to encourage the development of a more open and flexible labour market in Europe. It shows the need for a labour market that allows people to train and to work by moving freely across borders, between jobs and sectors. Chapter 17 and 18 build on earlier parts of the report and set out some of the key challenges that VET faces if it is to play a successful role of the achievement of the Lisbon goal. Chapter 19 analyses how VET can reposition in order to better meet the changing and uncertain needs of the labour market. Chapter 20 explores the roles of social partners in generating change. Chapter 21 examines the extent to which the priorities and concrete actions resulting from the Copenhagen Declaration can contribute to a more open and flexible labour market in Europe

Section 5 completes the analysis, sets out conclusions and discusses emerging messages.

1.3 The Lisbon agenda – the broad picture of progress

To assess the chances of reaching the Lisbon goal the European Commission has reported recently on several key areas. The Commission's interim progress report is due in 2005. However, the picture of progress is now becoming clear. While most of the Lisbon-related benchmarking work indicates that some countries will achieve Lisbon targets in specific areas, many of the economic and employment targets are not likely to be reached by the target date of 2010.

This report would serve little constructive purpose if it simply documented progress in VET. Therefore, as well as providing elements of a scorecard for VET the report places strong emphasis on innovation and the efforts that the countries and other actors are making to modernise and reform their systems in ways consistent with the Lisbon objectives. In spite of the gloomy and problematic overall prognosis, some targets are certainly within reach and

³ The report takes into account as far as possible the 25 member states, and Iceland, Liechtenstein Norway, as well as the three candidate countries, Bulgaria, Romania and Turkey.

some countries have made outstanding progress along specific lines. For the EU as a whole for example, the target for qualification rates in upper secondary education is likely to be reached before 2010. Good performance within countries, regions and sectors in the EU exist, for example:

- **Economic development:** Most of the new member states have witnessed rapid economic development over the past decade. Ireland and Spain are enjoying faster than average economic growth;
- **High performance on economic, inclusion and education indicators:** Some Nordic states are comparable to the USA or Japan on many Lisbon indicators. Portugal has low levels of long-term unemployment;
- **Productivity per hour:** Austria, Belgium, Denmark, France, Germany, Ireland, Luxembourg, the Netherlands and Norway perform better than the USA;
- **Knowledge society:** In respect of embracing ICT, Estonia is overtaking many of the older members of the EU;
- **Older workers in the labour market:** Cyprus, Greece, Portugal and Sweden all buck the trend by retaining older workers in the labour market and keeping high levels of economic activity among 55-64 year olds;
- **Innovative regions:** Germany, Finland, Netherlands, Sweden, and the UK have the leading regions in Europe for innovation;
- **Employment levels:** By 2002, Denmark, the Netherlands, Sweden and the UK had reached the 70% employment target set for 2010, and Germany, Greece, Ireland, Luxembourg and Finland are likely to do so on current trends by 2010.

1.4 Global comparisons for VET

As this report will indicate, it is often difficult to make reliable comparisons at a European and international level on the basis of available data for VET. Nevertheless, some broadly drawn comparisons about VET in Europe and competitor regions can form a helpful point of reference.

Table 1.2 Some global comparisons for VET

With provisos about the available and comparability of data, we can say that:

The proportion of students in lower secondary education who are in vocational programmes in Europe is lower than in the USA but similar to the mean for a selection of Asian countries.

The proportion of students enrolled in vocational programmes (vocational or pre-vocational) at upper secondary level for European countries is considerably higher than the proportion for USA and slightly higher than the mean for Asian Countries.

The proportions of upper secondary students who are following (ISCED type C) vocational courses in European countries is considerably higher than the mean for Asian countries and far higher than the mean of the proportions for North American countries

The proportions of upper secondary students who are following (ISCED type B) pre-vocational programmes in European countries is higher than mean for North American countries and far higher than the mean for the proportion in a selection of Asian countries

The proportions of relevant age groups who enter vocational (ISCED Type B) tertiary education for EU25 countries is considerably lower than for Japan, Korea and New Zealand.

The proportions of tertiary students (at ISCED 5 and 6) who are enrolled in vocational tertiary education in a selection of 12 European countries is lower than the mean for Asian countries and considerably lower than for North American countries. The proportions of relevant age groups who enrol in vocational tertiary education for EU25 countries is considerably lower than for Japan, Korea and New Zealand.

The proportion of the adult population in EU25 countries who have attained at least upper secondary education is lower by comparison with Canada, Japan, Korea, New Zealand and USA but higher than Australia.

Source: OECD EAG, UNESCO GED data and UIS

1.5 In summary

The report sets out evidence and conclusions concerning the performance and development of VET systems and processes in line with the Lisbon strategy, in particular:

- The contribution that VET is making towards achieving the Lisbon goal; how governments and social partners assess their role in optimising this contribution; and how progress can be strengthened if Europe is to move towards a more open, inclusive, transparent and EU-based labour market;
- Emerging good practice and innovation, particularly in the field of teaching and learning;
- Ways in which developments in VET can be reflected better in actions towards achieving the Lisbon goal;
- Steps needed to improve the available quantitative and qualitative information on VET to help assess progress and barriers to achieving the Lisbon goal.

Chapter 2

Lisbon goal: strategies and indicators

The strategic goal of economic growth, high employment and social cohesion sets an ambitious programme for development across Europe by 2010. Country policies should be seen in this broader strategic context. In this chapter we use the main priorities for progress towards the Lisbon goal to show how VET can support policies for growth, employment, social cohesion etc. A strategic approach is also about implementation. We therefore also identify the players and the policy instruments available at the European level, and which of these can be used effectively for developing education and training. We conclude this chapter by linking the Lisbon and Copenhagen processes to the forthcoming Maastricht communiqué.

2.1 The Lisbon strategy: a multi-focal project

A search through the reports on the extent to which the European goals of 2000 are being achieved⁴ shows a complex and sometimes disparate picture of policies, priorities, benchmarks, experts and players. Priorities and measures are identified at the European level for areas such as innovation and research, employment, social cohesion and inclusion, objectives for education and training and, more recently, proposed indicators for quality assurance in VET. At times the European processes for reporting progress and sharing best practices do not appear to be well integrated. Recently Directorate General Education and Culture commissioned work on reference qualification levels for VET. At the same time, the Directorate General for Internal Market was in the final stages of establishing levels for professional qualifications.

The stated objective is very much that of an integrated and mutually reinforcing approach to policies across the priority policy areas:

'The Lisbon strategy's potential lies in both its integrated and targeted approach as regards the policies and reforms to be implemented, with each element reinforcing the others. It is only by adopting this integrated, coordinated and synchronised approach to reform that the results can be optimised.'

(European Commission, 2004a, p. 18)

The Commission's report to the European Council on annual progress towards the Lisbon objectives concentrates on reporting on a small number of agreed structural indicators across the EU. These are shown in Table 2.1. Youth education and training is included under the area of innovation and research. We take these as being the key areas for implementation of the Lisbon strategy.

⁴ The website of the European Union (<http://www.europa.eu.int/>) is a good starting point.

Table 2.1: The structural indicators for the Lisbon strategy

Policy area	Indicator
Economic background	GDP per capita
	Labour productivity per person employed
Employment	Total employment rate (15-65 age group)
	Total employment rate of older workers (55-64)
Innovation and research	Gross domestic expenditure on R&D (as % of GDP)
	Youth education attainment level (% of 20-24 year olds completing at least upper sec education)
Economic reform	Comparative price levels
	Business investment (by private sector as a % of GDP)
Social cohesion	At-risk-of-poverty rate after social transfers (below 60% of national median disposable income)
	Dispersion of employment rates across regions, within countries
	Total long-term unemployment rate
Environment	Total greenhouse gas emissions
	Energy intensity of the economy
	Transport – volume of freight transport (relative to GDP)

Source: European Commission (2004a), (adapted from Annex 1)

Lifelong learning, and education and training performance more generally, influence several of the structural indicators. Equally, many of the indicators impact strongly on the development and performance of education and training systems. The 'youth education attainment level' indicator reports directly on the education and training systems. Lifelong learning, including VET, has a specific and important role to play if Europe is to achieve its ambitions in the longer term. The Lisbon strategy recognises that the supply and take-up of lifelong learning and VET will not of itself generate benefits capable of achieving the Lisbon goal. The European Commissioner for Education and Culture describes the importance of lifelong learning in these terms:

'By focusing on knowledge, education and training, we deliver what concerns our citizens most – prosperity, more and better jobs, greater social cohesion and a cleaner environment.' (Viviane Reding, 2003)⁵

The Kok report into ways of increasing employment levels and improving productivity in Europe shows the interconnections between a range of policies and recommends four main areas for action to help Europe achieve the objectives for employment. These are:

- Increasing the adaptability of workers and enterprises;
- Attracting more people into the labour market for longer;
- Investing more intensively and effectively in human capital, particularly through lifelong learning;
- Improving governance to ensure better implementation.

Effective and efficient VET has a role to play in all of these recommendations.

⁵ Retrieved on 04 April 2004 from: <http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/03/620&format=HTML&aged=0&language=EN&guiLanguage=fr>

2.2 Key players

The Lisbon strategy focuses on a range of key players. It is clear that both the European and member states' policy communities are major players. The European policy process is relying increasingly on policy makers who are not part of government, most notably employers and employee organisations. Their intervention can be seen for example in sector developments, some of which are quite independent of the state, and on emphasis placed on social issues (see Sections 2 and 4). Regions, multi-national companies and a range of stakeholder organisations are also becoming more involved in policy making. Research commissioned into virtually all aspects of the Lisbon process shows that the research community also has a greater role in informing and shaping policy.

To succeed, VET policy development and its implementation through collaborative European initiatives calls for the involvement of policy makers, researchers and practitioners. Finding the right combinations of objectives, means of communication and types of activity that involve most stakeholders (including practitioners) in their own settings is a challenge for the next stages of the development of the Lisbon goal for education and training. The process cannot remain a secret garden.

2.3 Policy instruments at the European level

The European Commission and its institutions, working closely with the member states, have a remit for the development of some policies. In such cases, member states have transferred responsibility to the EU and the Union can use 'hard' methods of co-ordination. For other policy areas such as employment, social inclusion, and lifelong learning, including education and training, subsidiarity prevails. This means that whatever can be discussed, agreed and implemented by individual member states is taken forward at that level. In areas such as VET therefore, the EU has to find 'softer' policy tools (Leney, 2003) and operates an open method of coordination (OMC). This limits the policy instruments (in particular, the funding and regulatory mechanisms) available to impact on an area such as VET at the European level. The range of policy levers that may be used are shown in Table 2.2.

Table 2.2: Policy levers and OMC⁶

Policy instrument	Policy assumptions and expected effects	Lever for EU under the rule of subsidiarity?
<i>Mandates</i> Rules intended to produce compliance	Capacity to demand compliance. Most will comply but maybe not all	No
<i>Inducements</i> Transfer of money in return for certain actions	Sufficient funding provided to generate results; funding drives change, also with unintended outcomes	No
<i>Capacity building</i> Transfer of money for purposes of longer-term investments	Some funding to initiate change: Expect/hope that best practice models produce cascade or 'pump-priming' innovation	To a limited extent - e.g. through ESF
<i>Systems changing</i> Transfer of authority to alter system of delivery	New entrants to old institutions that are not producing results generate change or reform	Indirectly – e.g. in sector reforms through encouraging social partner activity or Leonardo programmes
<i>Hortation</i> Use of proclamations, speeches, public relations campaigns to exhort people to take action needed	Assumes players are motivated by images, symbols or values	Yes. The Lisbon process and OMC
<i>Deliberative change</i> Voluntary and collaborative change processes – bottom-up reform, usually encouraged from higher up	Relies on collaboration in experimental activity and the identification and voluntary exchange of good practice, etc	Yes. The Lisbon process and OMC

In the case of lifelong learning (including VET) subsidiarity means mandates and inducements have limited use. The EU can create leverage in some circumstances through capacity building and systems changing, as the use of ESF and regional funds demonstrates. The reform of VET and further education in Ireland is a case of EU capacity building, in that EU consolidation funding made a significant contribution to reforms. This certainly played an important part in Ireland's transition 'from a poor, backward, agricultural economy with a long history of unemployment and emigration into the EU's success story' (Meth-Con, 2003).

However, 'hortation' and 'deliberative change' are the main policy instruments used to drive education and training policy at the European level. They are examples of 'soft' methods of coordination under OMC. OMC is intended as a decentralised and voluntary means of spreading best practice and encouraging greater convergence towards the main EU goals. The four key stages agreed for the open method of co-ordination, as it is applied to education and training, are:

1. Identifying priorities and benchmarks;
2. Conducting benchmarking exercises to gauge the progress of the EU member states towards the identified benchmarks;
3. Identifying instances of good practice and best practice;
4. Through peer review, finding effective and practical ways to share best practice.

OMC is still a 'young' policy instrument for education and training in the European Union. As a 'bottom up' method for sharing and developing best practice it can generate innovation. This

⁶ This table is adapted and from the scheme developed by McDonnell and Grubb (1991) and used recently in a project for the Learning and Skills Research Centre on 'Modelling a Vocational Learning System for the 21st Century' (Stasz and Wright, in press).

depends on the willingness of the stakeholders to make progress, rather than 'top down' mandates and inducements. By way of comparison, it is worth examining how VET policy is driven in countries with heterogeneity of populations or federated states, such as the USA and Switzerland.

Coordination of VET policies in USA and Switzerland

In the United States vocational education has traditionally been the domain of states and local communities, with the federal government playing a lesser role. Traditionally, only a small proportion of total state expenditures in vocational education flows from the federal purse. Within this system, federal policy has primarily relied on inducements and capacity building strategies to encourage states and local school agencies to shape vocational education in ways that it believes will lead to improved outcomes. Federal legislation provides guidance on programme improvements, requires states to address these in their state plans, and permits use of federal funds to develop them. The most recent legislation⁷ incorporated stronger accountability mechanisms in order to encourage greater compliance. States are required to develop and track four core performance indicators and negotiate with the federal government to establish benchmarks and targets for each. States exceeding targets are eligible for incentive bonuses, while those failing to reach targets may lose federal funds. A recent analysis by Stasz and Bodilly (2003) indicates that in the absence of mandates or strong regulation federal policy has a relatively weak influence on vocational education delivery in the states. Federal policy is enacted consistent with state structures, policies and interests, which emphasize improvements in general education; vocational education is marginalised. The overall result has been to strengthen somewhat the academic rigour in vocational programmes, but at the expense of specific vocational and technical learning.

In Switzerland, where the cantons and social partners have a great deal of autonomy for VET, federal legislation on VET was recently reformed⁸. The legislation declares that VET is the joint responsibility of the Confederation, the cantons, social partners and other organisations of 'working life', working collaboratively. The purposes of VET are identified in law: to enable individuals to find a place in society and at work, and to equip them with the flexibility to remain active; to contribute to the competitiveness of enterprises; to provide equal opportunities in access to training; to develop links between different pathways in education and training; and, to establish a system that is transparent. The Confederation will take more responsibility for funding VET. These funds are to be provided to Cantons and 'working life' organisations - which hold major responsibilities - using mechanisms intended primarily to encourage initiatives and reform. The Confederation hopes to incentivise employers to be more active in initial and continuing VET and to encourage incremental reforms to both the school-based and dual systems. In each case, the Confederation intends to assume a more strategic lead.

The USA and Swiss cases raise a key question for EU policy: how to encourage or generate innovation as effectively as possible, without actually having the power of regulation or of major funding disbursement. OECD research on the role of qualifications systems in promoting lifelong learning (2004)⁹ confirms that effective instruments for policy reform are harder to develop in countries with high levels of regional independence such as federated states than in countries with a single and uniform system. This is all the more so in the EU, with its heterogeneity of VET systems and labour markets across a wide range of member states and where the principle of subsidiarity applies.

⁷ Public Law 105-332, Carl D. Perkins Vocational and Applied Technology Amendments of 1998.

⁸ Loi fédérale du 13 décembre 2002 sur la formation professionnelle

⁹ International synthesis report is to be published in March 2005, details of the activity are available on http://www.oecd.org/document/16/0,2340,en_2649_34509_32165840_1_1_1_37455,00.html

2.4 Progress

Based on some of the structural indicators and the Commission's verdict on them for 2002 and 2004, there is strong evidence that – no matter what the performance of education and training is – the scorecard reads that in some key respects Europe is unlikely to achieve the Lisbon goals in 2010. Table 2.3 summarises some of the conclusions.

Table 2.3: Progress on some of the structural indicators		
Indicator	Verdict in 2002*	Verdict in 2004**
Labour productivity	'Gap in GDP per capita between the European Union and the US has remained unchanged.'	Growth rate in productivity has slowed down. Efforts to catch up with USA are at a standstill.
Employment rate	[Economic slowdown has] 'interrupted the sustained period of falling unemployment and job creation.'	2005 target of 67% employment rate will not be reached – with economic growth the 2010 target of 70% is reachable.
Employment rate of older workers	'Remains very low... this segment of the population is increasing which may make the necessary adjustments more difficult'	The target is for a 50% employment rate among 55-64 year olds by 2010. However, 'The trend ... is indeed worrying'
Expenditure on R&D	'Governments and business ... still invest less than the US and Japan. This investment gap is essentially due to lower investment by business.'	Research investment has been fragmented and sluggish. Annual growth rate for investment is wholly insufficient to meet the 3% target (2010).
Youth education attainment level	'...almost 18% of school leavers do not acquire additional qualifications'	Likely to be met, particularly with new member states having high levels of attainment at level 3
Business investment	'...new capital raised on stock markets in the ... [EU] increased markedly between 1997 and 2000 ...nevertheless total stock market capitalisation relative to GDP ...remains only two thirds of the level in the United States.'	Investment in businesses fell between 2000 and 2002; public investment is also down, and also lower than in USA
At-risk-of-poverty rate	'The risk of falling into poverty still represents a significant challenge'	'There is a real risk of poverty increasing in several member states'
Long-term unemployment	'down from over 5% in 1995 to 3.6% in 2000, even though it is estimated to rise slightly in 2001.'	Significantly down – but some groups and regions will be difficult to progress
Volume of freight transport	'trends are moving the European Union away from a transport system that is efficient, effective and sustainable.'	The linkage between growth in GDP and growth in road usage is proving difficult to break

* Source: Commission Staff Working Paper SEC (2002) 29/2 (http://europa.eu.int/comm/barcelona_council/index_en.html). **Source: Report from the Commission to the Spring European Council. Delivering Lisbon; reforms for the enlarged union. 21 January 2004. Brussels. COM (2004) 29.

The evidence in Table 2.3 underlines the imperative to re-examine the potential of VET to contribute to wider economic, personal and social goals. This report makes clear where VET can support progress, where static situations can be advanced and whether any unexplored areas exist where VET can make a contribution, and how these might be exploited. The report also highlights where gains can be made through coordinated approaches to policies and practices both within country systems and across borders.

2.5 Priorities and strategies for education and training in Europe

The most important concept in education and training policy in Europe is lifelong (and life-wide) learning. The idea that learning should be undertaken throughout life to improve knowledge, skills and competencies for personal, civic, social and employment-related purposes is fundamental. Lifelong learning includes formal, non-formal and informal learning as well as active citizenship, personal fulfilment, social inclusion and professional, vocational and employment related aspects. Lifelong learning policy in the EU is the guide for how education and training, including VET, should develop. By contrast, in the USA lifelong learning is not prominent in policy positions or public discourse, although OECD has influenced policy debate in this direction across many parts of the world.

The contribution of education and training to achieving the Lisbon goal is conceived as a unified endeavour. Education, training, higher education, formal and informal learning are defined as a single, lifelong and life-wide process. This process is split into component parts for the purposes of analysis and policy development. But it is intended to provide a clear, consistent focus on the learner. The European Employment Strategy reports (European Commission, 2004) provide recent evidence of this integrated approach. The reports make frequent reference to the importance – not yet achieved by and large – for countries to develop coherent and comprehensive lifelong learning policies. For example:

'Significant progress has been achieved with respect to the development of lifelong learning strategies in the past few years. However much remains to be done. This is a key requirement for improved quality at work and productivity, and as a factor promoting labour force participation and social inclusion.'
(European Commission. (2003a).

The focus on lifelong learning is clear in the dialogue between the European Commission and the member states, which also involves the key stakeholders at the European level¹⁰. This dialogue identifies a series of 'concrete objectives' for education and training, organised under three strategic objectives. These are shown in Table 2.4.

Table 2.4: General objectives for education and training

Policy objective	Concrete objectives
1. Improving the quality and effectiveness of education and training in the EU, in the light of new requirements of the knowledge society and the changing patterns of teaching and learning	1.1 Improve education and training for teachers and trainers 1.2 Developing skills for the knowledge society 1.3 Ensuring access to ICT for everyone 1.4 Increasing recruitment to scientific and technical studies 1.5 Making the best use of resources
2. Facilitating the access of all to education and training systems, in the light of the guiding principle of lifelong learning, fostering employability and career development as well as active citizenship, equal opportunities and social cohesion	2.1 Creating an open learning environment 2.2 making learning more attractive 2.3 Supporting active citizenship, equal opportunities and social cohesion
3. Opening up education and training systems to the wider world, in the light of the fundamental need to foster relevance to work and society, and to meet challenges resulting from globalisation	3.1 Strengthening the links with working life and research, and society at large 3.2 Developing the spirit of enterprise 3.3 Improving foreign language learning 3.4 Increasing mobility and exchange 3.5 Strengthening European cooperation

Source: Council of the European Union (2001).

¹⁰ This has been achieved through the co-ordinating agency of a series of conferences held under EU presidencies in different countries.

From these policy objectives, 28 more detailed indicators for education and training are identified. Subsequently, the European Council agreed five priority benchmarks in 2003, as follows.

- Basic skills: By 2010, the percentage of low-achieving 15 year olds in reading literacy in the EU should have decreased by 20% compared to 2000;
- Early school leavers: By 2010, an average EU rate of no more than 10% early school leavers should be achieved;
- Attainment in upper secondary education: By 2010, at least 85% of 22 year olds in the EU should have completed upper secondary education;
- Higher education participation in maths, sciences and technology: By 2010, the total number of graduates in these areas should increase by 15%, while at the same time the gender imbalance should decrease;
- Participation in lifelong learning: By 2010, the average EU level of participation should be at least 12.5% of adults ages 25-64.

Improving and making better use of resources is considered as a sixth, albeit implicit, objective that is not benchmarked.

2.6 VET: from Lisbon to Copenhagen to Maastricht

The Copenhagen Declaration¹¹ defines the contribution of VET to achieving the Lisbon goal. The Declaration identifies several concrete actions associated with four priorities for enhanced cooperation in VET across Europe:

- Strengthening the European dimension: Each of the identified concrete actions are intended to contribute to this priority;
- Improving transparency, information and guidance systems: The associated actions are implementing Europass and strengthening policies, systems and practice for lifelong guidance;
- Recognition of competences and qualifications: The associated actions are to develop common principles for validation of non-formal and informal learning, a European system of credit transfer for VET and the development of qualifications and competences at a sectoral level. Developing a European Qualifications Framework is now added as a concrete action;
- Promoting quality assurance: The action here is to develop common criteria and principles for quality in VET. The Copenhagen Declaration identifies a second action in this respect: to give attention to the learning needs of teachers and trainers within all forms of VET; there is at present no concrete action following this through.

These key priorities for VET are linked to the broader policy objectives of improving the quality of education and training, facilitating access for all, and opening up education and training to the wider world. Table 2.5 gives an overview of current concrete actions.

¹¹ Declaration of the European Ministers of Vocational Education and Training, and the European Commission, convened in Copenhagen on 29 and 30 November 2002, on enhanced European cooperation in vocational education and training. 'The Copenhagen Declaration'. Subsequent and decisions of councils have elaborated the Copenhagen declaration.http://europa.eu.int/comm/education/copenhagen/copenhagen_declaration_en.pdf.

These actions were proposed by the European Commission and agreed by the member states. The actions can encourage and develop trans-national approaches to labour market recognition, and allocate an important role to stakeholders. Implementation is 'bottom up' and a twin track approach is being adopted: the emphasis is placed on greater cooperation while at the same time respecting the diversity of systems, values and developments across the member states. The European Commission's Stocktaking report of the Copenhagen Coordination group (European Commission, DGE&C, 2003) expresses the need for this balance well:

'A more coherent approach to policy development is needed at the European levelin order to ensure the maximum contribution of education and training policies to the Lisbon goals. On the other hand it is also clear that the organisation of policy processes at European level in view of these goals, must be able to accommodate the specificity and diversity of VET in Europe.'

Table 2.5: Concrete outputs for VET under development			
Concrete outputs	Aim	Stage of development at European level	Intended contribution to improving LLL
Europass	To provide individuals across Europe with a common tool that carries details of their competencies and qualifications	Adopted by the European Parliament and Council, 2004. Entry into force early 2005	To improve transparency and develop currency for workers and learners at national and European level. To be implemented so it will be possible to measure impact
Lifelong guidance, strengthening policies, systems and practice	To support the occupational and geographical mobility of European citizens	Resolution adopted by the European Council 2004. Aims and principles developed; country practices reported on (with OECD). Joint publication with OECD of a career guidance manual	Aims to optimise participation in relevant VET for the individual
Common principles for validation of non-formal and informal learning	To encourage comparability of approaches in different countries and at different levels	Resolution adopted by the European Council in 2004 on the identification and validation of non-formal and informal learning. Technical work undertaken.	Recognition of knowledge skills and competences is considered key feature of lifelong learning strategies
European system of credit transfer for VET (ECVT)	To enhance recognition, comparability and transferability of competences and qualifications between different countries and at different levels	A draft model and set of principles produced for converting units of competences, skills knowledge between national systems. A draft reference levels framework proposed for linking VET and HE qualifications	By developing transparency and greater coherence between national qualifications structures, recognition and valuing of 'mobility experience' will be easier
Development of qualifications and competences at sectoral level	To reinforce cooperation and co-ordination among sectoral social partners for the development of competences and qualifications	The European social partners (ACVT) now playing an active role as a platform for communication and cooperation. Cedefop is mapping sectoral initiatives. Leonardo budget to target sectoral initiatives	Learning enhanced as a result of autonomous initiatives of social partner sectoral organisations that widens the field of initiatives and innovation
A European Qualifications Framework	To develop a coherent framework encompassing both reference levels for VET qualifications and the qualifications framework for higher education	Emerged as an important action from the 2004 Joint Interim Report and the Irish Presidency conference (March 2004). A key step is to bring the respective developments in VET and higher education into one frame of reference	A common reference for the recognition of qualifications and recognising competences developed through experience (as well as formal qualifications) encourages a lifelong learning perspective
Common criteria and principles for quality in VET	To promote cooperation in quality assurance in VET between member states	A model based on four steps (planning, implementation, evaluation, review) has been produced, a monitoring system proposed, and a set of indicators put forward as a measurement tool	By providing a guarantee for quality assurance in VET member states will be encouraged to exchange models and methods.

Sources: Adapted from the Copenhagen Declaration (29/30 Nov 2002); European Commission DGE&C, Oct 2003, Stocktaking Report of the Copenhagen Coordination Group; and, European Commission DGE&C, 2004, Discussion Paper: Status Report on the Implementation of the Copenhagen Priorities

It appears from the DGVT responses to the questionnaire that the national agendas for VET chime in quite closely with the Lisbon objectives for lifelong learning and the Copenhagen process for VET. Table 2.6 summarises the DGVT responses to the question asking how far national priorities are consistent with EU priorities for VET (question 4 in the DGVT questionnaire, Annex 1.3). Broadly, the DGVTs indicate that there is coherence or compatibility between national and European priorities. The more detailed responses show that not each of the Copenhagen concrete actions is necessarily among the major current domestic policy priorities.

Table 2.6: The relationship between national and EU policies for VET

	EU 15	EU 10	Acceding countries	EEA
Coherence exists between the EU and national policies for VET.	Belgium - WA Denmark Finland France Germany Ireland Italy Luxembourg Netherlands Portugal Spain Sweden United Kingdom	Czech republic Estonia Hungary Latvia Lithuania Slovenia	Bulgaria Romania	Iceland
The Copenhagen or Lisbon processes do not directly influence national policies. But they are, nevertheless, broadly compatible.	Austria: Belgium - FL Greece	Cyprus Malta Poland Slovakia	Turkey	Norway Liechtenstein
National priorities and policies and the Lisbon and Copenhagen priorities are divergent.	(NIL)	(NIL)	(NIL)	(NIL)

Source: DGVT Report

The purpose of the (forthcoming) Maastricht conference and communiqué is to take stock of progress and set out new priorities and strategies for enhanced cooperation in VET in Europe. A test of effectiveness of these strategies will be their impact on Europeans in their national, sector and local settings, as well as at the European and wider international level.

2.7 Summary

The Lisbon strategy brings together a range of different policies, among which lifelong learning has a key place in achieving both the economic and social objectives. This sets an ambitious agenda and makes it a matter of importance and urgency to examine and take forward aspects of VET reforms in Europe.

Progress against strategic indicators is generally weak and there are indications that actions contributing towards the Lisbon goal need to be better coordinated. VET can support the fulfilment of almost all strategic indicators. It impacts on many of the published objectives, priorities and benchmarks for education and training, and a number of specific actions are being followed through in initial and continuing VET, in the fields of both formal and informal learning. Therefore, VET is in a strong position to help achieve the identified goals.

Subsidiarity limits direct action at the European level. On the other hand, the use of the Open Method of Coordination reinforces the importance of other types of policy instruments. It places reliance on voluntary, 'bottom up' collaboration and co-ordination. The key policy levers are intended to motivate stakeholders and involve voluntary collaboration in innovation and the identification and exchange of good practice. While it may be possible to learn lessons from other parts of the world countries where policy making for VET is devolved, it is certainly the case that effective instruments for reform are difficult to develop where the main stakeholders have a great deal of independence.

Several specific actions are already under development for VET, involving the European Commission and its agencies, the member states, the social partners and other stakeholders. Progress in developing VET across Europe needs to manifest itself in enhanced lifelong learning.

Chapter 3

Enlargement – the new European map for VET

Enlargement of the European Union increased the EU population by 20% to over 450 million people. Europe is now the world's largest single geo-political formation with, in principle, free movement of capital, goods, services and people between member states. The EU is one of the few supranational organisations that is expanding in terms of both membership and responsibilities, at a time when the legitimacy of many major international organisations is in question. Accession of the current candidate countries would mean a bigger population increase, with Turkey having the second highest EU population after Germany. It would also bring other economic and geo-cultural changes.

In geo-cultural terms some patterns can be observed:

- Eight of the EU10 developed from former systems characterised more-or-less by a planned economy and centralised state control into variants of a democratic political system, market economies and civil society;
- The Baltic states have strong cultural links with the Nordic countries, for example Estonia/ Finland and Latvia/ Sweden;
- Central European states have strong cultural, economic and historical ties with countries such as Austria and Germany;
- Cyprus and Malta, as Mediterranean islands, have followed a different cultural, historical and economic pathway, with links with the UK and, in the case of the accession of Cyprus, with Greece.

3.1 The opportunity enlargement brings

Though starting from a lower base, the new member states (EU10) now have on average faster economic growth rates than the EU15. In the thirteen or so years between the fall of the Berlin wall and EU accession in May 2004 they went through a continuing process of rapid economic, social and educational reform. To accede to the EU, these countries had to reform their government and governance. They had to meet the *acquis communitaires* required for EU membership. At the same time, they were subject to other drivers for change both internal and external. In becoming independent they developed a sense of national pride and a determination to reform. Like other countries, they too had to adjust in the wake of globalisation and technological change. Having gained full membership of the EU, the EU10 may rethink their economic, labour market and education and training policies. Malta and Cyprus are in a different position historically and geographically.

The pace of change and the expectations of reform the EU10 countries bring with enlargement is a strong opportunity for stimulating development in the EU as a whole, not least in terms of lifelong learning.

For these countries the opportunities include a bigger labour market for an already well-educated workforce, greater possibilities to develop their service sectors and production, new

inward investment in both high and low technology industries, expanding markets to west and east, and increased mobility in terms of labour market, goods and services. They will also aim to put to best use the inherited strengths of their education and training systems, such as high levels of general education, and adapt to new opportunities in fields such as enhanced continuing VET.

Enlargement brings opportunities for the wider EU. One advantage the DGVTs see in the period leading up to 2010 is a labour market that on balance is opening up more to the European dimension rather than continuing to protect national interest.

3.2 The EU10 face major challenges

For most of the new member states the transitional period has been tough and has brought some unwanted consequences.

The Lisbon target for employment rates is 70% in 2010. Average levels in the EU in 2000 were 64% and under 57% in the EU10. Only the Czech Republic and Estonia reached the EU average. The average level of unemployment in some of the EU10 is close to twice that of the OECD defined European area of 8.9%. In 2003, unemployment in the Czech Republic and in Hungary stood at 7.8% and 5.8% respectively while in Poland it was 19.2% and in Slovakia 17.1%. Compared with similar data for 2000, unemployment in Poland has increased by 2.8% whereas the other three countries have seen reductions by up to 0.9%. Unemployment for the European area has increased by 0.4%¹² between 2000 and 2003.

In spite of faster average economic growth, average GDP per capita in the EU10 is approximately half the average for the EU15. According to the analysis of the Economist, Oracle and Ernst & Young (Meth-Con, 2003) comparing the performance and likely future trends for the new member states and the 'consolidation' states (Greece, Ireland, Portugal and Spain) it is likely to take about 15 years for average wage levels in the EU10 to catch up with Spain's. Although the disparity between the consolidation countries' GDP and the then EU average was less than the disparity between the EU10 and the EU15, it took 15 years of EU membership before significant convergence began to occur in Ireland. Furthermore, after an initial burst of growth, little if any convergence in levels of GDP is evident for Greece and Portugal. The Economist analysis concludes that:

'Central Europe could follow aspects of the Irish model.... But Ireland shows that it is consistently high growth over decades that brings convergence – not just a boom of several years.' (Meth-Con, 2003, p. 5)

A theme common to all the policy issues and challenges mentioned above is that if Europe is eventually to reach the Lisbon targets, education and training has a major role to play. Nevertheless, the EU10 face some strong barriers in developing initial and continuing VET effectively:

- Industrial restructuring has removed the main source of employment in some regions, and regeneration is not easily achieved;
- The structure of economies has changed substantially as a consequence of the decline of traditional industries such as textiles, shoe making, mining, steel production and heavy engineering. Emerging opportunities are mainly in the financial sector, business services, tourism and small business start-ups, which were limited before. The structure of professions has also changed quickly;
- New investment, especially from foreign companies, has brought in new technologies. Qualification needs have changed rapidly. Curricular reform and restructuring of VET was necessary;

¹² Figures from 'Annex Table 14 Standardised unemployment rates', OECD Employment Outlook No. 75. (2004b). Statistical Annex.

- Liberalisation was a factor in widening the offer of educational programmes. However this change was not based at first on a conceptual framework and as a result there are problems with comparability and quality of educational outputs;
- In the earlier phases of reconstruction and reform, higher education and general education have received higher priority than VET;
- The collapse of planning and the traditional relationship between the state, firms and vocational schools has not yet been replaced by a satisfactory model in a number of countries, not least in terms of funding;
- In some cases the social partners are generally not interested in VET participation. Wage and social security bargaining are the priority;
- The pressures on the EU10 to curb debt and restrain national spending will make it difficult to give full priority to developing initial and continuing VET;
- EU funds, while useful, will be limited.

3.3 Mapping the big picture

Economic and social indicators are helpful in comparing progress, trajectories and challenges for different countries. Chapter 4 analyses aspects of productivity and wealth in the countries in this study. A broader, and interesting, set of comparisons is provided by the United Nations Human Development Index (HDI). The HDI brings together social and economical indicators and provides a composite picture of social and economic aspects of development. The HDI is a useful therefore when considering the Lisbon goal which has both economic and social components. As Table 3.1 shows, the Nordic countries score highly on the HDI. The Anglo-Saxon countries are spread but also score quite highly. The 'core' European countries follow, with the southern European members states in the following group. The EU10 and the candidate countries are lower performers on this composite indicator. For comparison, the rankings of other competitor countries are: USA (7), Japan (9), Switzerland (10), South Korea (30). Annex 1.8 provides more country information for particular indicators.

Norway (1) Iceland (2) Sweden (3)	Australia (4)	[Netherlands (5)] [Belgium (6)]			
	United States (7) Canada (8)				
Denmark (11)	Ireland (12) UK (13)				
Finland (14)		[Luxembourg (15)] [Austria (16)] France (17) Germany (18)			
	New Zealand (20)		Spain (19)		
			Italy (21) Portugal (23) Greece (24)		
				Cyprus (25) Slovenia (29) Czech Republic (32) Malta (33) Poland (35) Hungary (38) Slovakia (39) Estonia (41) Lithuania (45) Latvia (50)	
					Bulgaria (57) Romania (72) Turkey (96)
Nordic	Anglo Saxon	Core European	Mediterranean	New Member States	Accession States

Source: UN Human Development Reports Indicators 2004. Figure in brackets denotes World ranking reference. The full HDI is listed in Annex 1.8

3.4 Basic comparisons for VET

Here we map some of the basic differences found in the VET provision of EU states.

Table 3.2 shows levels of participation in initial VET against participation in continuing VET for the countries in this study. The vertical axis shows the proportion of young people (high, medium, low) in a vocational pathway¹³ at upper secondary level, compared to those following a general education pathway. This is mapped against the extent of participation in CVT in enterprises. On the one hand, Denmark, Finland, Netherlands, Norway, Sweden and the UK show a high proportion of participation in both IVET and CVT while, on the other hand, Cyprus, Lithuania and Portugal show a low level of dependence on IVET and low participation in CVT.

It is striking how low the levels of participation are in most countries of the EU in continuing VET, in both the EU 10 and the EU 15.

Table 3.2: Levels of participation in IVET and CVT compared for European countries

Students in Vocational and Pre-vocational Education as a share of all students in Isced 3, 2002.	HIGH (≥50%)	Italy Poland Romania	Austria Belgium Czech Republic France* Germany Slovakia** Slovenia Luxembourg	Denmark Finland Netherlands Norway UK
	MEDIUM (30<50%)	Bulgaria Greece Hungary Malta	Spain Latvia Estonia	Iceland Sweden
	LOW (<30%)	Cyprus Lithuania Portugal	Ireland	
		LOW (0% < 5%)	MEDIUM (5% < 12,5%)	HIGH (≥12,%)
Life-long Learning (adult participation in education and training), 2002				

Sources:

For Students in Vocational and Pre-vocational Education as a share of all students in Isced 3: Own calculations relying on data from Eurostat New Cronos Database, theme3-educ-educat-enroll1a_t-isc3, isced3pv, isced3voc, 30.07.2004;

For Life-long Learning: Eurostat, Structural indicators, Employment I.5.1, 22.07.2004. Lifelong Learning: Percentage of the population aged 25 to 64 participating in education and training over the four weeks prior to the survey.

* 2003 value for France (adjustment of reference period)

** 2003 value for Slovakia due to restriction in self-learning activities (harmonisation of definition of education and training)

¹³ Broadly defined to include vocational and pre-vocational routes.

In terms of the structure of initial VET, some countries (notably Germany) have a predominantly apprenticeship or dual system, while the majority of European countries have a system of initial VET that is predominantly school-based. Some countries have a mix of school-based and apprenticeship pathways. For IVET, the international classification system (ISCED) distinguishes between vocational pathways that lead to a qualification recognised in the labour market (Finland and most of the EU10 have vocational school-based pathways) and pre-vocational pathways that do not actually lead to a recognised labour market qualification (as is the case in Italy). Some countries have a mix of both school-based and dual-system IVET. These approaches are shown schematically in Table 3.3.

Table 3.3: Structures of IVET in Europe

Predominantly dual system/apprenticeship routes <i>Examples: Germany</i>	Mix of school-based and apprenticeship routes <i>Examples: UK</i>
School-based (mainly vocational) <i>Examples: Most EU10, Finland</i>	School-based (mainly pre-vocational) <i>Examples: Ireland, Italy</i>

3.5 Emerging patterns in the EU10

We have not found a convincing analysis of the emerging economic and social models in the EU10. What we can say with certainty is that each of the EU10 is adopting a system of school-based IVET. Most face a disadvantageous position in CVT, even though a strong tradition of adult education may persist.

It is not yet clear how a range of policy drivers will impact on the long-term economic, labour market and education and training systems of EU10 countries. These drivers, which we discuss in more detail in Chapter 4, include population change and migration, inward investment, the growth of the service sector, and the impact of global economic change on the development of both high and low technology employment. New markets to the east as well as to the west can be expected to be important for several of these countries.

The Lisbon goal and indicators did not change after enlargement. In some respects – not least in terms of the contribution of continuing VET to making continuing lifelong learning accessible to all European citizens - this makes the achievement of some of the priority indicators set for education and training all the more difficult to achieve. In the later sections of this report we analyse the progress made and the challenges faced by the EU countries in reforming their education and training systems to achieve the goal. ETF's analysis of 13 years of reform in the EU10 recognises the advances made and the challenges that lie ahead in the light of conflicting policy priorities. It rightly sums up the policy dilemma as follows:

'The economic developments in progress will continue to affect the pace and scope of vocational training reforms. Thus the problems in some sectors may well hamper the necessary changes, but it is now the task of a modernised vocational training system to help anticipate these changes'. (ETF, 2003, p. 25)

In any case, the recent history of EU enlargement and the diversity of the EU25 suggest that a single-track development towards achieving the objectives for VET is unlikely to be a plausible outcome until considerably later than 2010.

Chapter 4

Contexts and trends affecting VET: the challenge of demographic trends, globalisation and technological change

The EU heads of state recognised the importance of lifelong learning in achieving the broad and long-term aims set out in Lisbon. They implicitly affirmed therefore that VET plays a key role in responding to the immediate needs of individuals and employers. VET is equally important in meeting a range of longer-term needs. The demographic trends (which can be predicted with a degree of certainty) and socio-economic developments (much more difficult to predict) pose increasing challenges for all developed countries.

The demand for skills and qualifications from employers and individuals is changing, as are individual preferences for how, when and where learning is accessed. Demands for learning are also increasing. This affects the ability and incentives of the various stakeholders – individuals, employers and the state – to pay for education and training.

This chapter considers these changing contexts and their implications for VET. We begin by discussing the impact of demographic change, globalisation and economic restructuring on skills demands, shifts in employment by sectors and occupation and work organisation. We then look at the implications of these changes for inequality and social cohesion. After comparing Europe with major international competitors on various indicators of economic competitiveness and social cohesion, we suggest that several different models of the 'knowledge society/economy' may be emerging in different regions of Europe.

These are the somewhat unpredictable contexts in which VET and its reform are likely to develop in Europe.

4.1 Demographic change

4.1.1 An ageing population

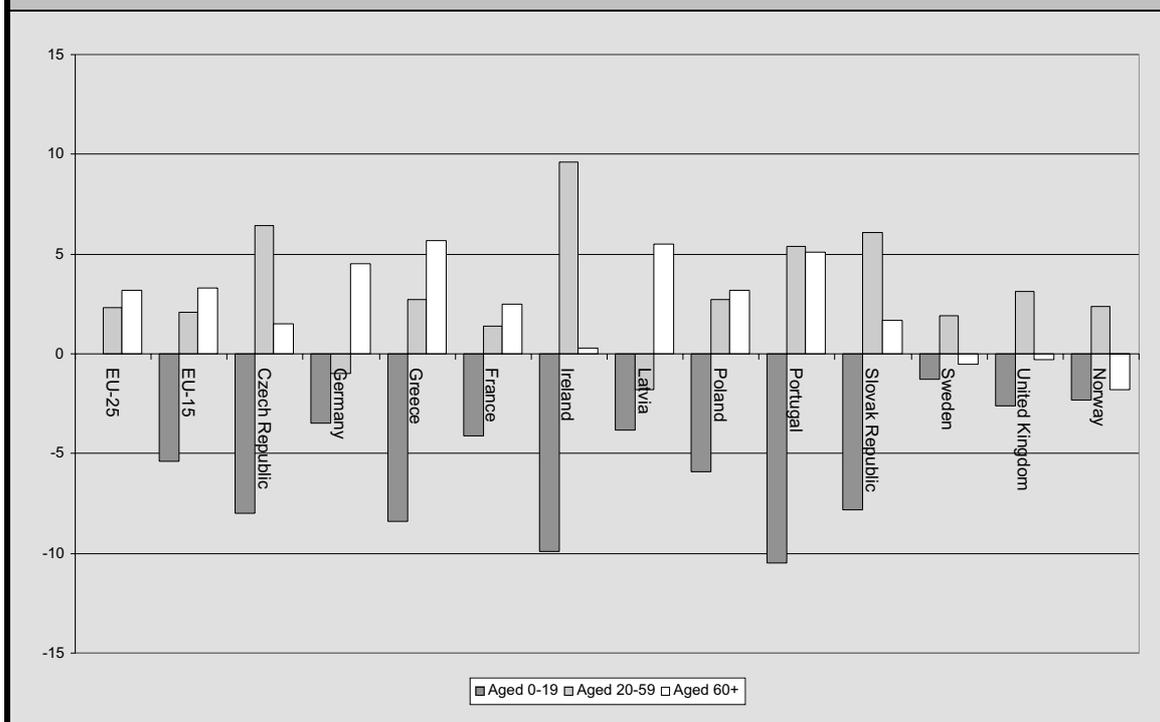
Population ageing is a process affecting almost all developed countries. It is due to increased longevity and the ageing of the baby boomer generations resulting in an increased number of older people. At the same time many countries experienced declining birth rates in the latter part of the twentieth century leading to a decrease in the relative size of the younger age groups.

Although population ageing started at different times in different countries and developed at different rates, the trend is common to all the countries of the EU and most other the developed countries. Turkey is the exception. In most countries, the proportion of 45 – 64 year olds began to rise at different points between 1980 and 2000. By 2020, for example, 45-64 year olds will make up over 30% of the population in Spain and Switzerland and over 26% in Canada, Denmark, Finland, Norway, Portugal, Sweden and the United Kingdom. These trends mean that for most European countries the old-age dependency ratio¹⁴ will more or less double over the next 30 years. The recent report of the Dutch Planning Bureau points up how great a shift this is:

'Whereas for every pensioner there are roughly four workers in 2000, there are only two workers in 2035.' (de Mooij & Tang, 2004)

Across the EU member states the increasing proportion of older people in the population is accompanied by a decline in the proportion of individuals in the younger age groups. Figure 4.1 shows that the proportion of 0 – 19 year olds fell in all of the EU10 between 1985 and 2003. The proportion of 24 –59 and 60+ year olds increased in all except Norway, the UK and Sweden. Projecting these figures forward, it is clear that each country will have a progressively ageing population.

Figure 4.1: Demographic variation between 1985 and 2003 for the age groups 0-19, 20-59 and 60+, in percentages.



Source: Eurostat population statistics 2004 edition Tables: C3, C4, C5.

Ageing populations in European states create increasing pressures on government spending. As populations age, the old age dependency ratio rises. A dwindling number of employees pay taxes and a growing number of retired people draw pensions and use publicly funded services such as health and nursing care.

Migration

Although demographic trends will also be affected by population flows between states, migration is unlikely to counteract population ageing to any great extent. As a result of

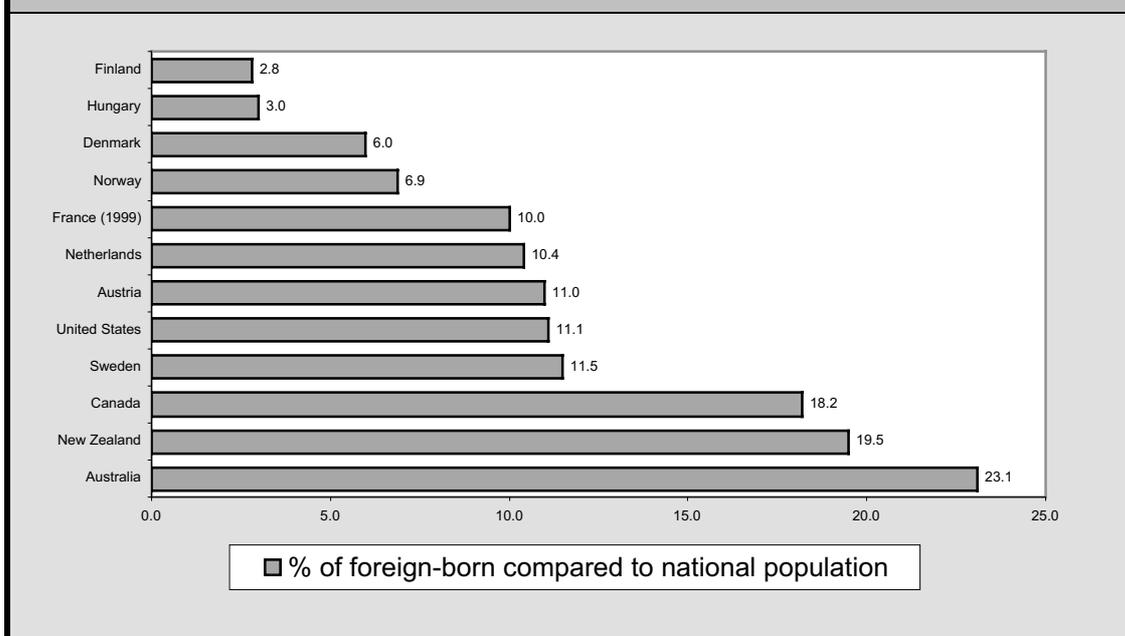
¹⁴ The ratio of the population aged 65+ to the population aged 20-64

increased inflows the immigrant population in the EU15 states has risen gradually in recent decades, proportionally to the total populations. Notably, both Greece and Ireland have changed from a position of net emigration to become hosts of migration. However, Europe is not a region of large-scale immigration, at least compared with the major recipient regions of Australasia and Canada (see Figure 4.2). In spite of the obvious benefits of population rejuvenation, most of the EU15 took up the option of limiting immigration from the EU10 on accession.

Nevertheless, there is likely to be a net outflow of economic migrants from the EU10 within the EU. This has been estimated in various studies at between 1 and 4 million over the coming 15 years (de Mooij and Tang, 2004, p.58), although predictions here are uncertain. The age profile of these will be younger than that for their host populations which will, at least initially, retard ageing effects in the host countries somewhat, but only at the cost of accelerating ageing in the member states of origin.

What may occur is a greater extent of short-term migration, particularly if people cross national boundaries for work on a daily or weekly basis as the European labour market opens up.

Figure 4.2: Stocks of foreign-born population in selected OECD countries, 2001



Source: OECD, *Trends in International Migration, SOPEMI 2003. Statistical Annex, Table A.1.4.* Note: 1999 figure for France.

These demographic trends have direct implications for VET:

- The number of older workers with obsolete skills will increase, as technological and work process changes in both manufacturing and service industries. Ways will have to be found to up-skill older workers, and to recognise and make full use of the range of skills that they have acquired through their working and wider experience.
- Ways will need to be found for older people to remain active in the workforce for longer than is currently the trend;
- The effects of ageing will have a major impact on public sector finances. In many respects this towers over the other implications, as a driver impacting on policy alternatives.

The biggest financial effect of population ageing will be the increasing costs of pensions and health care. The expected increase in expenditures on old-age pensions in a number of countries between 2000 and 2035 falls for many advanced countries in the range of 3 to 5%

of GDP. On current trends, this will have most impact in countries with high levels of social spend, for example through generous pension arrangements. Expenditures increase particularly fast in Denmark, Finland and the Netherlands for example, whereas in Japan and Poland, where pensions are not indexed to wages, they actually decline as a share of GDP. The UK and USA start from a low-spending threshold on pensions, while France, Germany and Italy all start from a high-spending threshold.

Rising pensions and health and nursing costs, resulting from population ageing, are putting increasing demands on government budgets. At the same time, the increasing economic competition in global markets raises the pressure on governments to keep taxation levels down in order to remain competitive in the global economy. This creates policy conflicts for public sector spending, including education and training. The current widespread policy debates about who should pay for increased levels of education and training are a result of this. So long as demands for skills and learning opportunities continue to rise, which they are certain to do, and as long as pressures remain on government budgets, policy discussion will continue to focus on how to curb VET costs through greater efficiency and how to spread those costs between the state, individual learners and employers.

This poses three wider challenges for VET:

- How to encourage individuals and employers to invest more in learning, proportionate with the economic advantages they derive from improved skills;
- How to shift the balance between public and private spending;
- How to achieve this without at the same time increasing inequality. This is increasingly important when, as we suggest later, income and skill inequalities are likely to rise in the coming decades.

4.2 Globalisation

Globalisation has been with us for a long time. In its most recent phase, it is driven by three factors: technological advance, bringing with it faster and cheaper transport and communications; de-regulation of trade and capital movements; and the rapid growth of trans-national business. Trans-national corporations have made use of the more liberal economic climate to rapidly expand cross-border investment and trade to levels not known before. They have also made use of technological advance, cheaper and more efficient transport and communications technologies, and production and service provision to relocate different parts of their operations to areas which best suit their needs for labour skills and costs, infrastructures and access to markets. The process has created new global networks where time and space are compressed in a form unconceivable in previous eras. Not so long ago internationalisation only referred to the increasing cross-border movements of labour, capital and goods. It now equally applies to knowledge, cultures and tradable services.

So much has been written recently about globalisation that it is probably sufficient if we point out some of its most important features with a bearing on training needs:

- Globalisation has increased the number of countries able to compete in the global market for both manufactured goods and some service provisions. It thereby raised raising economic competition throughout the world economy;
- Since 1990 exports have been increasing even faster than GDP across the world economy. However, globalisation has been uneven across the world. The different regions in Europe and internationally have not shared its benefits equally;
- With the global proliferation of email and internet services during the 1990s, a new world of communications has emerged, with vastly greater capacity for information transfer and where time and distance are now of no object;

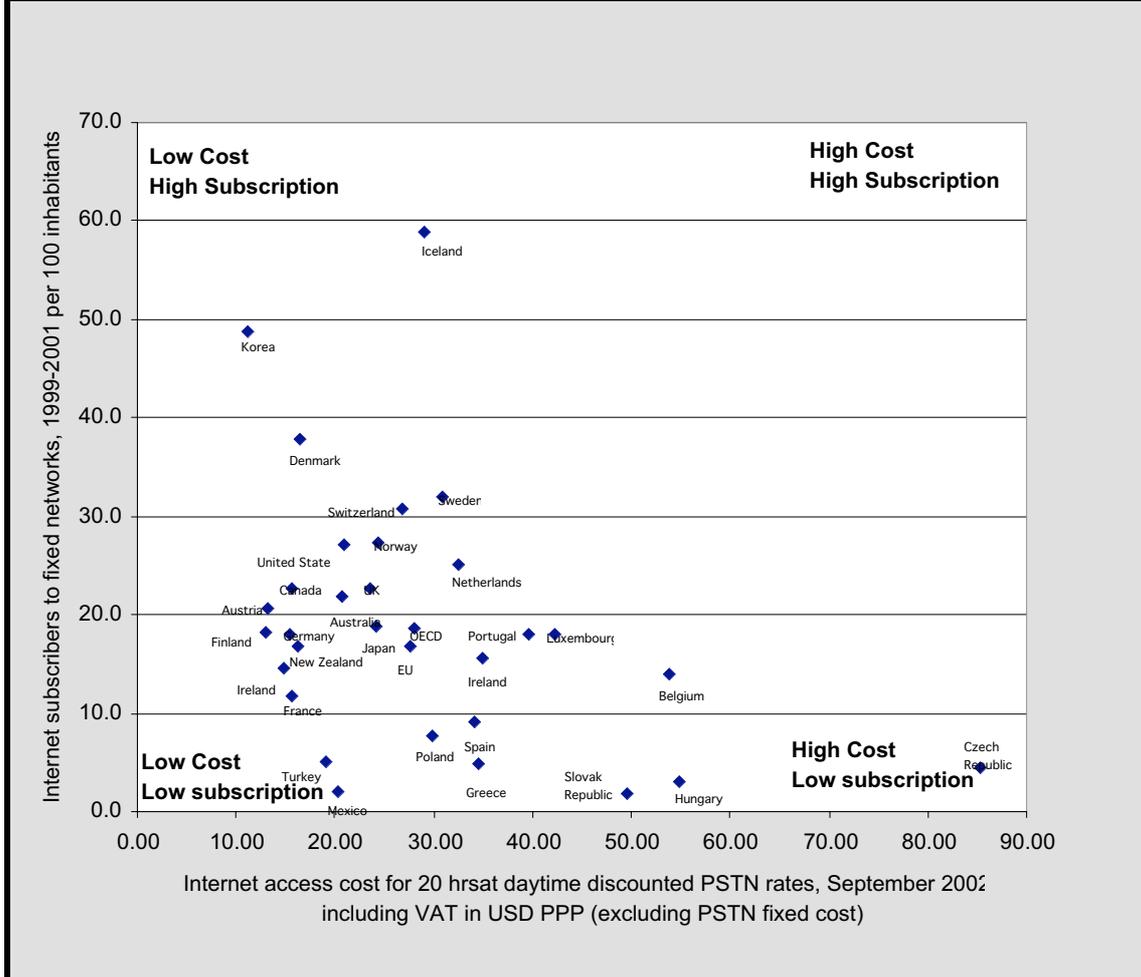
- Modern communications allow rapid access to information and technology. Developing countries with a sufficient base of human skills and with attractive conditions for investment can be the beneficiaries of rapid technology transfer. They enter new markets and provide increasing competition for the existing market players;
- The possibilities for geographical disaggregation of production and service process mean that the most important production factors are now globally mobile. Competitive advantages are no longer rooted in geography and the natural resources of countries, which represent a dwindling proportion of the value in goods;
- Globalisation also has major impacts in the social sphere.

This has implications for the richer states, including many of the EU15. They can no longer compete with new entrants to the global markets on cost and can only maintain their high living standards by progressively moving their production and services into the high-value-added high-skills sectors. It also presents opportunities and dilemmas for new member states and accession countries, as they decide how to plan their development in a global economy whose outcomes cannot be anticipated with certainty.

The development of the so-called knowledge economy follows from the rapid advance of ICT and other new technologies and from the intensification of global economic competition. The term 'knowledge economy' reflects the shift in the advanced economies from low and medium skills areas of cost-competitive manufacturing towards high-value added production and services sectors. The development is uneven across different sectors of the economy, and low-skilled areas of employment by no means disappear. The high-skills sectors are knowledge and skills intensive and yield higher returns on the world markets. Raw materials and low-skills inputs represent diminishing proportions of the value of the products and services in these sectors. High skills inputs, including research, design, marketing and business strategy represent increasing shares. Information and communications technologies are at the heart of the knowledge economy.

A measure of the advance towards the knowledge economy/society in different countries therefore is in the level of connectivity across society. Figure 4.3 shows that degree of access to the Internet in the different countries is highly correlated with costs of usage. Korea has the cheapest and the most extensive access. For the European countries, some Nordic countries (in particular Denmark, Iceland, Norway, Sweden) have relatively low costs and high usage, whereas costs tend to be higher and usage lower in many countries in southern and Eastern Europe.

Figure 4.3: Countries with low access costs have a greater diffusion of the Internet

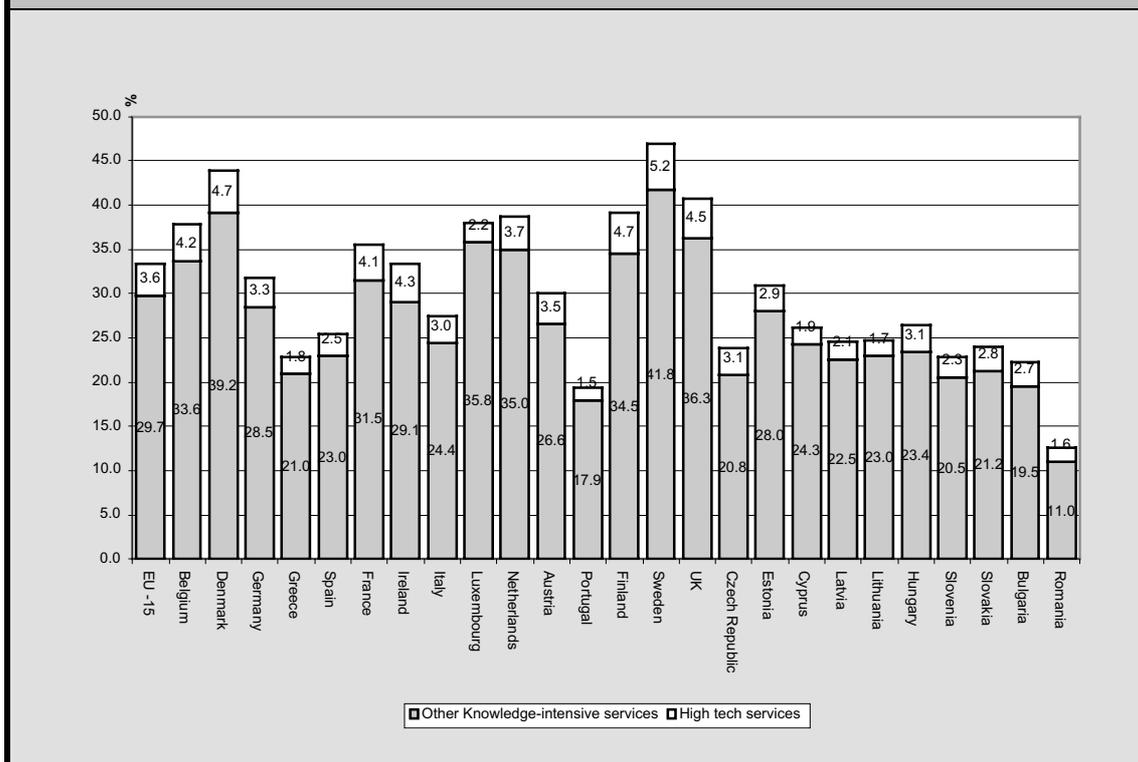


Source: OECD Communications Outlook (2003c) tables 5.1 and 6.2.

A further measure of progress towards the knowledge economy is the proportion of employment in ICT intensive occupations, as shown by Figure 4.4. The pattern is a similar in the previous figure, with the highest percentages from the Nordic and Western European countries and somewhat lower percentages for Mediterranean, central and eastern European countries, Estonia being the notable exception. If high tech manufacturing is taken as an indicator rather than knowledge intensive services, then 12 out of the 15 leading European regions are to be found in Germany¹⁵. Broadband growth is shown in Annex 1.9.

¹⁵ Eurostat, Statistics on Science and Technology in Europe 2003. Table 6.7
<http://europa.eu.int/comm/eurostat/Public/dashop/printcatalogue/EN?catalogue=Eurostat&product=KS-57-03-104-N-EN>

Figure 4.4: Percentage of employment in knowledge-intensive and high tech services 2002



Source: Eurostat, Figure 6.3 Statistics on Science and Technology in Europe 2003.

4.2.1 Changes in industrial and occupational structures

Long-term changes in the industrial structures of European states reflect both these global economic shifts and the differential rises in productivity in the manufacturing and service sectors. Employment in traditional industries in the primary and manufacturing sectors has contracted rapidly in most EU countries, while employment in the service industries and public and social services has grown. Nevertheless, large differences remain between European countries in the relative distribution of employment between sectors.

Economic restructuring in European states has also entailed fundamental changes in the labour process, in both manufacturing and service industries. To be able to respond rapidly to fast changing markets and to increased global competitiveness, companies have sought to increase productivity through flexible use of labour and maximum deployment of new technologies. Both of these have involved widespread organisational and labour process change. For many enterprises this has meant achieving efficiency gains through downsizing, delayering and greater contractual flexibility in the deployment of staff. Companies make greater use of part-time and temporary workers. They outsource more routine work and require employees to accept more fluid job roles. This has not necessarily meant they hired workers with more high-level skills, except for core workers. But they do need new skills and greater flexibility in attitudes. In some organisations, and typically those which operate at the high-skills, high value-added end of production and services, labour process change has been much more dramatic. Typically this has involved adopting flatter hierarchies and requiring much greater functional flexibility from all staff.

Economic restructuring faces all countries in Europe. This poses major new challenges for education and training for both young people and adult employees. Changes in technologies, industrial structures and work organisation create new demands for skills not previously available or not distributed in the proportions needed. These new demands vary greatly between different members of the EU and between regions and sectors.

However, the general direction of change is clear and VET systems have to respond to these demands, albeit at different rates. There are broadly several ways in which skills requirements are changing:

- Employees are generally now required to be more flexible: This means that they need to have acquired the attitudes and dispositions that allow them to embrace change, or at least to cope with it positively. Young people need to have developed the basic skills and tools for learning, the motivation to learn, and the ability to learn both from others and by themselves;
- Occupational pathways have altered radically: It is becoming more common for people to be occupied with varying combinations of paid jobs (portfolio working), jobs and family responsibilities, and jobs and study. Many will have to make frequent, and often unpredictable, transitions between these states, or at least between different types of jobs, adaptable and to be more proactive and creative in inventing their own 'careers', with less clearly defined career ladders;
- The changing patterns require new types of knowledge and skill and a greater dispersal of these new skills: The shift to service industries and the development of flexible organisation and 'just-in-time' practices in manufacturing have created demands for people who respond rapidly, manage time effectively, and who have good communications and inter-personal skills. ICT and integrated manufacturing have also placed greater stress on workers' analytical and conceptual skills. In all these skilled occupational areas there is a growing demand for people who can transfer skills between different contexts;
- The focus of attention is as much on the team and the organization as on the individual and the individual's skills: This implies that learning to learn and to work creatively in groups may be one of the key skills required by modern organisations. The emphasis has shifted to competences, including social competences.

These new skills demands suggest the importance of young people gaining a good foundation of broad general education and generic vocational training. They also stress the need at later stages for highly specialised knowledge to be coupled with general transferable and inter-disciplinary knowledge.

The challenge for VET planners and providers is whether the existing VET systems can produce this profile of perceived skill needs, and what reforms are needed to do so. These challenges have a clear resonance with the key themes of Lisbon and Copenhagen for learning: flexibility, access and openness. The DGVTs have provided an evaluation of the strengths of their existing national VET systems and reform programmes that are planned or in progress, and these assessments are used throughout the report. This report will make a first assessment of the extent to which these may shape up to the challenge of meeting future skills needs.

4.3 The social consequences of globalisation.

4.3.1 Growing inequality

Globalisation is an economic process. It also has driven a number of social trends. While globalisation has substantially increased the affluence of societies most centrally involved in the process, it has also strengthened a trend towards the individualisation of society. Increasing economic inequality accompanies the growth in individualism, consumerism and social diversity. This can be problematic for social cohesion.

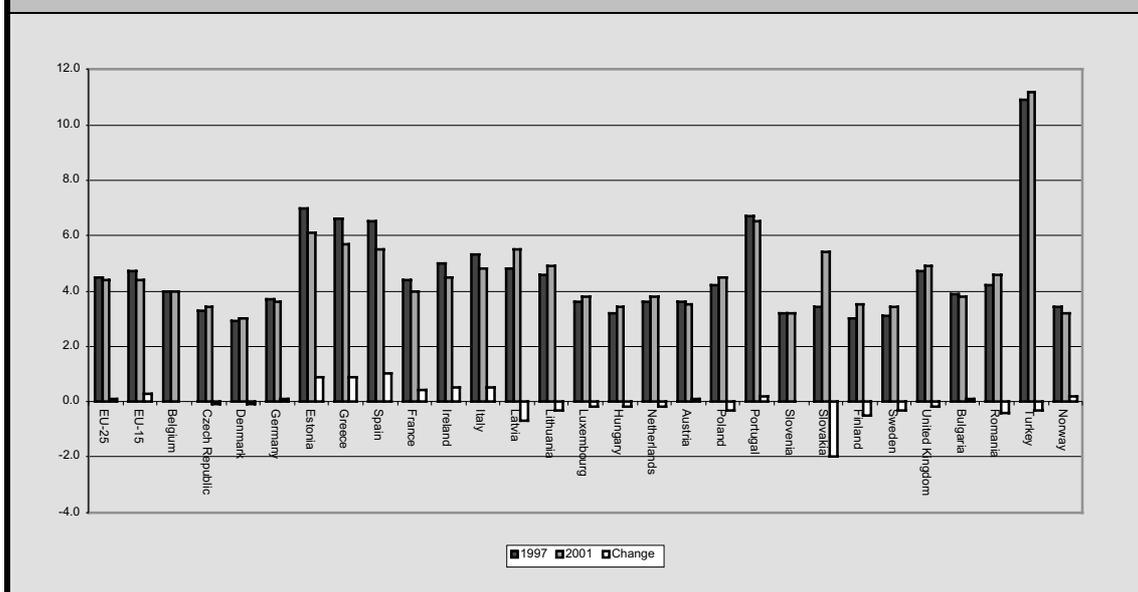
Inequality has increased in the past two decades, both between and within most states. Between-country inequality has risen partly because of the widening gap between those

increasingly affluent countries that have engaged in the globalisation process and the poorer countries that have not. Countries that are not engaging tend to show extreme differences between rich and poor.

Even though average disposable incomes have risen in many European countries, so has the inequality of income distribution. Figure 4.5 shows the level of incomes inequality between the top and bottom quintiles. Where the share of the high-income earners grows faster than the share of the low-income earners, inequality increases. Of the countries shown, inequality in income distribution has increased in most countries except Austria, Belgium, Estonia, France, Greece, Ireland, Italy, Norway, Portugal and Spain. The countries that have relatively the lowest levels of income inequality are Denmark, Finland, Hungary, Norway, Slovenia and Sweden.

The same theme is true of the increased use of ICT. For those on-line and skilled, new opportunities have opened up. For those without basic skills and access to ICT, a new kind of closure and exclusion has developed.

Figure 4.5: Inequality of income distribution (income quintile share ratio)



Notes: The ratio of total income received by the 20% of the population with the highest income (top quintile) to that received by the 20% of the population with the lowest income (lowest quintile). Income must be understood as equivalised disposable income. EU-25 1999-2001 estimates: EU-15 estimates: Czech Republic 1996-2001: Cyprus only data for 1997 available: Latvia 1997-2002: Hungary 2000-2001: Malta only data for 1997 available: Poland 1999-2001: Slovenia 1997-2000: Finland 1996-2003: Bulgaria 1998-2001: Romania 1998-2001: Turkey 1994-2002.

Source: Eurostat structural indicators. New Cronos.

Intra-country increases in inequality have a number of causes, which are not necessarily interdependent. Several major causes may be connected with structural changes in the economy and nature of employment. These are the shift to service sector employment, technological change, increasing employment rates and demographic change.

The shift to service sector employment seems likely to increase wage inequality since service industries are more skills polarised on the whole than manufacturing industries (see Brown, Green and Lauder, 2001). Manufacturing sectors usually contain a high proportion of skilled manual employees who have middle level incomes, whereas the service industries create a high number of high skills jobs at the same time as substantial numbers of jobs in personal services and retailing which are generally low skilled and low paid, although this is truer in some countries than others. The gradual movement from manufacturing to service sector employment can thus be seen as a gradual hollowing out of skills in the centre of the labour market, which leads to a growing polarisation between higher and lower income occupations. The relatively higher levels of inequality in countries such as the UK and the USA, with declining manufacture and large service sectors, by comparison with the rather flatter income structures in countries like Germany and Japan which have maintained more of their manufacturing industries seems to bear this out.

Skills-based technological change also tends to increase income inequality. Technological deepening rapidly increases the demand for high skills and, in the absence of an equivalently rapid increase in supply of these skills, will increase the wage premium to those highly qualified persons who have them.

Increasing employment rates will be achieved mainly through increases in employment rates amongst groups which are on average less skilled or qualified such as those currently unemployed or outside the labour market) and who are likely therefore to augment the lower paid section of the labour force.

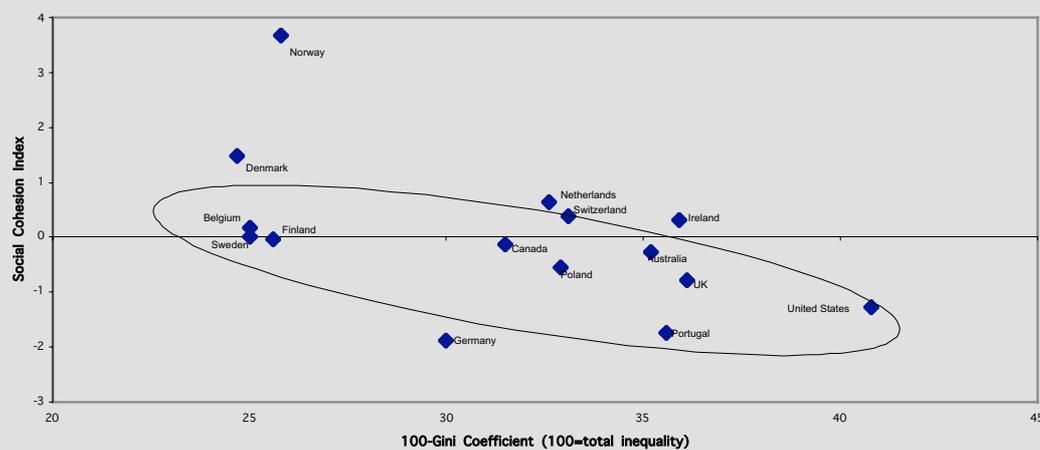
Demographic trends will add to inequality as a dwindling number 20-25 year olds reduces numbers of graduates in many countries, even where there are increasing rates of HE participation, thus expanding the skills gap at the top end of the skills market.

4.3.2 Income inequality and social cohesion.

Income inequality has been linked in cross-country studies with various indicators of social cohesion, including crime, health and well being, and trust. For example, Wilkinson (1996) has shown that in cross-country analysis that aggregate levels of health are strongly related to income inequality, providing a more powerful explanation of differences between developed countries than levels of GDP.

Exploring the connections between inequality and social cohesion, Green and Preston (2001) have shown that income equality correlates strongly across countries with social cohesion¹⁶. As Figure 4.6 shows, the countries with lower levels of income inequality (including Denmark, Norway, Finland and Sweden) have higher measures on the social cohesion indicator than countries like Australia the UK and the USA, with higher levels of income inequality.

Fig 4.6: Relationship between Social Cohesion and Income Inequality



Source: Green & Preston, 2001.

It is widely recognized that the social trends, in a context of rising inequality, certainly create a challenge for social and community cohesion in many countries. This creates a further challenge for education and training: one that is, in many ways, more demanding than the challenges arising from economic globalisation and increasing skills demands. With the declining influence of church and a less certain role for the family as primary socialisers of the

¹⁶ The research uses data on skills inequality from the International Adult Literacy Survey (IALS) and a combined aggregated measure for social cohesion (based on levels of violent crime and measures of trust and civic cooperation from the world Values survey) to measure social cohesion. The 100-Gini Coefficient indicates income inequality.

young, education and training systems remain one of the sets of public institutions that are relied on to promote the positive social attitudes and behaviours to vouchsafe communities and the social cohesion of societies in the future. Yet, how VET should include an element of citizenship education and the extent to which schools and colleges should promote socialisation is unresolved.

Despite the general trend towards income inequality across the developed world, there are marked differences between countries. These differences may be at least partly independent of the drivers discussed above.

Income inequalities are certainly linked to the balance of supply and demand for skills at various levels in the labour market. However, they are also strongly linked with labour market institutions that affect the price of labour. Minimum wage legislation, high union density, centralised wage bargaining, and social partner agreement on wages and qualifications across sectors can all work to reduce overall income inequality. There is a high correlation across countries between levels of wage inequality and the prevalence of such institutional arrangements, and such factors at least partially explain the marked differences in levels of inequality. Figure 4.5 shows, for example, that Nordic countries (including Finland, Norway, Denmark, and Sweden) have relatively low levels of income inequality and the English-speaking countries (particularly the USA, the UK and Australia) have rather high and growing levels relative levels of income inequality.

4.3.3 Labour market participation and income inequality

It is often argued that high levels of employment in a modern labour market require a liberal or loosely regulated framework, even though this means higher levels of income inequality. There is certainly some correlation between high rates of employment and higher levels of inequality. For example, the UK and the USA have both high rates of participation in employment, inequality and a deregulated labour market. On the other hand, three large European countries - France, Italy and Germany - combine relatively low participation in employment and a regulated labour market with a relatively high degree of inequality. By contrast, Denmark, Finland and Sweden have both high participation in employment, low levels of inequality and considerable labour market regulation.

4.4 Dynamic models of the knowledge economy/society

4.4.1 Economic competitiveness and social cohesion

Education and training policies function in a context of global restructuring. This context, as suggested above, involves emphasis at the national and regional levels on the promoting economic competitiveness. It also involves increasing pressures on social structures, and this may threaten social cohesion. How to promote simultaneously economic efficiency, competitiveness and social cohesion is therefore a major challenge. In practice, the twin objectives are often in conflict, and some consider them to be irreconcilable. The Lisbon agenda, however, seeks to make Europe both more competitive and to maintain and enhance social cohesion. How can this be achieved and what role can VET play in this? How can we achieve a dynamic knowledge economy that is also an equitable knowledge society?

A contrast is often made between the 'shareholder' model of market capitalism (typified by the UK and the USA) and a stakeholder model, usually equated with the 'social market economies' of continental Europe (typified by France and Germany). In fact the patterns across Europe and the USA are rather more complex than this.

It is certainly true that national wealth, measured in GDP per capita at purchasing power parity rates, is higher in the USA than in any of the European states (except Luxembourg), and that social expenditure is lower in USA than in the wealthier northern European states.

However, Europe itself exhibits very different patterns in different regions. GDP per capita is rather high, although lower than the Netherlands, in Switzerland, the USA and the Nordic states (particularly Denmark, Iceland and Norway). It tends to be somewhat lower in the 'core' European states, including in Austria, Belgium, France and Germany, and considerably lower in most of the southern European member states. And, as Chapter 3 showed, lower still in the EU10.

In terms of social expenditure¹⁷ as a percentage of GDP, Europe can be broadly divided into four groups.

- In the Nordic countries social expenditure is high and has been rising during the last 25 years;
- In the core countries (including Austria, Belgium, France, Germany, Luxembourg and the Netherlands) it is also high, but has grown more slowly than in the Nordic countries, thus starting in the period below and ending up further below;
- The Anglo-Saxon countries (including the United Kingdom and, in this respect, Ireland) started with considerably lower levels and have diverged from the first two groups by showing lower rates of growth on social spending;
- The group of southern European countries (Greece, Italy, Portugal, Spain) started off with much lower expenditures but these increased quite rapidly, overtaking those in the Anglo-Saxon countries by the end of the period.

Comparing the figures for GDP and social expenditure rates across a wide range of countries makes the rather obvious point that the two are often correlated in the sense that only the wealthier countries can afford higher rates of social expenditure, even if not all of these chose to spend their wealth this way. However, it also suggests a rather more interesting point, that even amongst the wealthier countries in the northwest of Europe, there is no obvious dichotomy between social spending and GDP. The Scandinavian and core countries generally combine quite high levels of both. Trend figures on economic growth also fail to suggest any neat dichotomy between shareholder and stakeholder models of the economy. From the period 1980 to 1999 we can divide countries into those with increasing social expenditure and those where growth declined or stagnated. The growth rate improved in a number of countries that started with low growth base lines (such as Greece and Spain) but also in some of the Anglo-Saxon countries, including Australia, Canada and the USA. However, it also declined in two Anglo-Saxon countries (New Zealand and the UK) and also France and Germany. Most of the more affluent northern European states showed declining growth rates, but several grew faster, including the Netherlands and Norway. Ireland stands out as the country where the growth rate improved fastest over the two decades¹⁸.

Productivity and innovation are often seen as the best underlying measures of competitiveness and the best guide to future growth. Innovation often goes hand in hand with productivity growth. As we pointed out in Chapter 2, the USA ranks high on both these measures, as do the Nordic countries (along with Australia, Canada and Ireland). The UK and 'core Europe' countries are rather lower.

A simple dichotomy between a shareholder model and a stakeholder model is, thus, not well supported by current trends.

4.4.2 The components of productivity

European countries differ markedly, even within northern Europe, on indices of competitiveness both on measures of innovation and on the various different measures of

¹⁷ OECD Social Expenditure Database (SOCX) comparable statistics on public and mandatory private social expenditure in the main areas of social policy

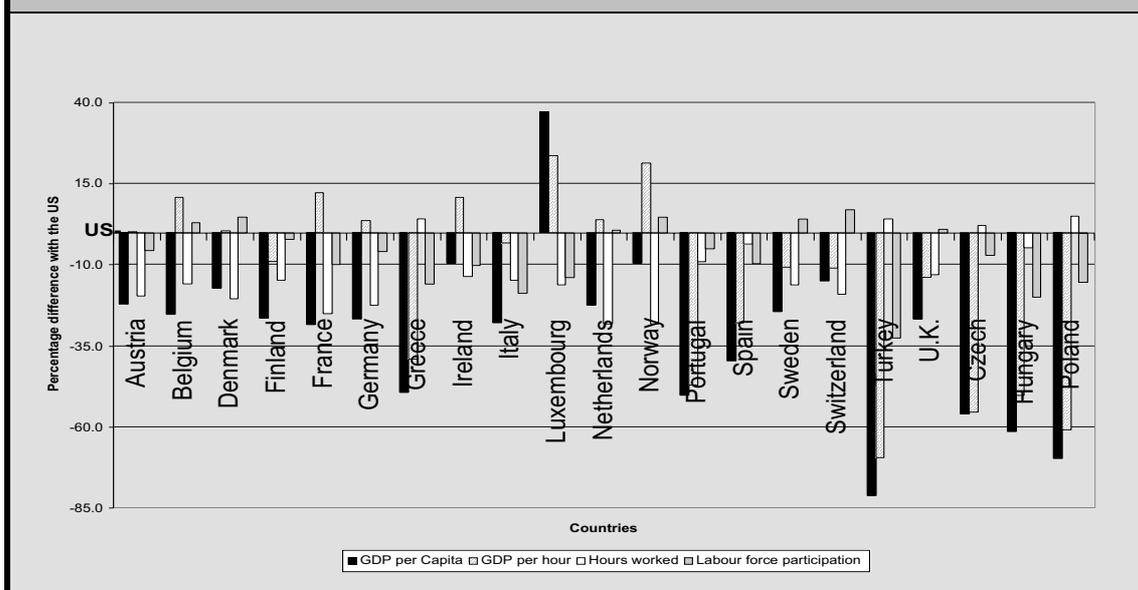
¹⁸ i.e. OECD Economic outlook No 68, See Scarpetta et al (2000) for details.

productivity, casting doubt on the idea that one can identify any single characteristic model of the knowledge economy even in the more affluent parts of Europe. This can be shown more precisely by disaggregating the various components of per capita output. De Mooij and Tang (2004) do this in terms of the size of the gap for various European states with respect to the USA. What their analysis shows is that whilst the USA still has a commanding lead in terms of GDP per capita over all the European states except Luxembourg, the size of the gap varies substantially for different states, and reflects different combinations of strengths and weaknesses as regards the different components of productivity. In Figure 4.7 we adopt a similar approach but include where possible figures for all European states for the later year of 2003.

European countries with higher GDP per hour in 2003 than the USA included Austria, Belgium, Denmark, France, Germany, Ireland, Luxembourg, the Netherlands and Norway.

However, European countries still lag behind the USA in terms of GDP per capita (with the exception in 2003 of Luxembourg). Figure 4.7 shows that rates in 2003 were substantially lower for our selection of countries in the southern European states (particularly in Greece, Portugal and Spain, and in the Turkey, The Czech Republic, Hungary and Poland, where the gap was between 35 and 85%). In these countries low productivity was a major contributor to lower overall wealth.

Figure 4.7: GDP/capita, GDP/hour, hours worked and labour force participation for selected European countries as a percentage difference with the United States 2003



Source: GDP per capita, GDP per hour and hours worked from the Groningen Growth and Development Centre and The Conference Board, Total Economy Database, August 2004, <http://www.ggdc.net>. Labour force participation from the OECD Employment Outlook Statistical Annex for 2004 (2004b)

However, GDP per capita was also lower than in the USA in a substantial number of countries with higher or near equal GDP per hour. Of the countries with higher labour productivity only Luxembourg has a higher GDP per capita than the USA while Austria, Belgium, Denmark, France, Germany, Ireland, the Netherlands and Norway are all between 10% (Norway) and 27% (France) lower on this measure. For the countries with GDP per hour less than 12% behind the USA (Italy, Sweden, Switzerland and the UK), GDP per capita lags behind by between 15% (Switzerland) and 27% (Italy).

To understand the large wealth gap between the European countries and the USA we have to look at hourly output alongside the other elements of productivity that contribute to the overall result (see Figure 4.7). The key other elements here are rates of employment and average working hours.

Average hours worked are more than 10% lower than in the USA in all EU states except in the Czech Republic, Greece and Poland, where they are higher, and in Portugal and Spain

where they are within 10%. Labour force participation rates are lower than in the USA in 14 of the selected European countries with the exceptions being Belgium, Denmark, Netherlands, Sweden, Switzerland and the UK.

Overall wealth deficits with the USA are therefore due to different combinations of reasons in different countries. There is a group of mostly southern European states (including Greece, Portugal and Spain) where output per capita is relatively low because they have low productivity per hour and, in the case of Greece and Spain, also low labour force participation rates. There is another group of countries in core Europe (France, Italy and Germany) where GDP per capita is considerably higher because output per hour is high but which are below the USA in wealth principally because employment rates and average hours worked are considerably lower. There is a further group of countries which outpace the USA on output per hour (Belgium, Denmark, Ireland the Netherlands and Norway) but which still lag the USA in wealth because they have lower average hours of work. They have higher GDP per capita than the UK, despite the latter's high employment rates and average working hours, because the UK has lower output per hour.

The complex country patterns in terms of the various components of overall productivity and wealth suggest that the dichotomous models of shareholder/Anglo-Saxon and stakeholder/social Europe capitalism are rather over-simplified. In fact three different models of the competitive economy would seem more appropriate. The Anglo-Saxon model still holds to some extent for two of the English-speaking countries in the sample here. Both the UK and the USA are characterised by high rates of employment and long work hours. However, Ireland does not fit that pattern and the UK is still some way from the US version of the model, because it has substantially lower productivity per hour. In continental Europe, however, there are two dominant models of 'social Europe', not one; and one of these is rather more competitive currently than the other. The 'core Europe' countries of France and Germany achieve moderately high GDP per capita because they have high productivity per hour but are held back by low employment rates. The Nordic group, which includes Denmark, Norway and Sweden perform amongst the best overall because they combine relatively high productivity per hour and have higher labour force participation rates. Belgium, the Netherlands and Ireland also perform well.

To distinguish two distinctive models of 'social Europe' is instructive also in terms of the other important 'social cohesion' measures of the knowledge society. We have seen that the Nordic countries and the Netherlands generally perform higher than the countries in core Europe and the Anglo-Saxon countries on indicators of social cohesion such as trust and civic cooperation. This may be partly because they tend to have higher levels of social spending, which funds public goods and welfare regimes that support cohesive social relationships. The Nordic countries, Belgium and the Netherlands also have amongst the lowest levels of income inequality in any of the developed states, and this may also make an important contribution to the higher levels of social cohesion. The fact that this group of countries fare relatively well both on the competitiveness measures and the social cohesion measures, again challenges the common belief that you cannot have highly levels of competitiveness and social cohesion.

4.4.3 European models for a competitive economy

Several different models of the competitive economy would seem more appropriate.

- The 'core Europe' countries of France and Germany achieve moderately high GDP per capita because they have high productivity per hour but are held back by low employment rates. Associated with high social spending and a social partnership approach to the labour market;
- The 'Nordic' group, which includes Denmark, Norway and, though to a lesser extent, Finland and Sweden, perform amongst the best overall in terms of economic performance because they combine relatively high productivity per hour and have high participation rates. Associated with high social spending, high levels of participation in education and training, and a social partnership approach to the

labour market. They rank highly on the UN Human Development Index. (See Chapter 3);

- The Anglo – Saxon model still holds to some extent for two of the English-speaking countries in the sample here. Both the UK and the USA are characterised by high rates of employment and long work hours. However, the UK is still some way short of the US version of the model (by having substantially lower productivity per hour). Associated with low social spending;
- Ireland, whose productivity growth was slow during its first years of EU membership stands out as the country that has now shown steadiest and sustained growth over a long period, with per labour market participation, hours worked per capita productivity now not far short of US levels.

4.5 Implications for VET

Implications for the Lisbon agenda: competitiveness and social cohesion policies

Demographic, economic and social trends are drivers that place increasing demands on education and training systems. Rather different economic and social models are emerging in different regions of Europe. All of these may struggle to balance the claims of increasing efficiency and cohesion, but some may carry more potential for achieving the Lisbon goal than others.

Globalisation, technological change and changes in industrial organisation mean that training is expected to meet the demands of a rapidly changing situation in which:

- Employees are generally required to be more flexible;
- Occupational pathways are changing;
- Higher levels and new types of knowledge and skills are needed;
- Changing patterns require a greater dispersal across the whole of society of these new skills;
- The focus of attention is as much on the team and the organization as on the individual and the individual's skills.

Which VET strategies are most likely to succeed hinges on the choices governments and other stakeholders make about their lifelong learning strategy, against a backdrop of some uncertainty. High and sustainable levels of growth require high levels of capital investment. They also call for sufficient investment in people to achieve a higher skills equilibrium, and to ensure that greater numbers of people have the competencies, skills and knowledge to participate fully and effectively in the labour market.

Demographic change also has a strong impact. In particular, growing demand exists for valuing the skills that older people have, as well as for upgrading the skills of an ageing workforce. Meeting the needs of an ageing population and balancing other demands will have a major impact on public sector finances.

Two wider challenges in relation to VET can be identified: How to encourage greater investment in learning from individuals and employers, in proportion to the economic advantages that accrue to them from improved skills; and, how to achieve this without at the same time increasing inequality. This dilemma is likely to become increasingly acute if, as we have suggested, inequalities of income are likely to continue to rise.

The Lisbon goal embraces the concept of the knowledge economy, the knowledge society and a high-skills strategy. Reality is complex. Policy makers at the European and national level have to take this into account as they prepare for the long-term. Is there a single best solution for Europe through a high skills strategy? If not, which choices will different countries make in response to local values and priorities as they move to one variant or another of the knowledge economy or the knowledge society? Which companies, sectors and even countries are likely to find that the high-skills strategy has only a limited role to play? If tension exists between economic and social policies, will increasing the role of the market in VET put social inclusion policies at risk? How can policy makers and stakeholders make sure that VET is of high quality and gives more equal access to currently under-represented groups? Concerning the Lisbon process and the role of VET, how can realistic ambitions be identified and adhered to?

The research contained in this report provides an analysis of the current contribution of VET to achieving the Lisbon goal, and an account of innovation that is taking place in VET teaching and learning. It also explores some of the wider questions suggested above.

Section 2

Progress of VET systems towards achieving the Lisbon goal

Chapter 5

Effectiveness and efficiency of VET

5.1 Introduction

This chapter opens by considering expenditure on VET and then moves on to cover the outcomes and the question of effectiveness of VET. Initial VET (IVET) is included in the analysis as well as continuing VET (CVT). The chapter concludes with some considerations on the relation between expenditure and outcomes, that is on the question of efficiency. The analysis produced in this chapter has faced a severe problem: the marked lack of adequate data on input as well as on outcomes of VET.¹⁹ Nevertheless sources of data have been used to generate a quantitative overview of the extent to which VET is contributing to the Lisbon goal.

5.2 Expenditure on education

The Lisbon European Summit called for ‘a substantial annual increase in the per capita investment in human resources’²⁰. In 2000, public expenditure on education as a percentage of GDP²¹ is estimated at 5.0% in the European Union (both in EU15 and in EU25) and 4.74% in the EU10. Between 1995 and 2000 public expenditure on education as a share of GDP decreased in most of the member states, the exceptions being Denmark, Greece, Portugal, Sweden, Cyprus and Lithuania. According to Eurostat’s estimations there has been an increase in 2001 (last data available), especially in the EU10. In 2001, EU15 and new members were spending 5.1% of GDP on education. Figure 5.1 shows that public expenditure on education varies greatly between countries, with the Nordic countries spending the highest shares of GDP on education. The EU stands at parity with the US regarding public expenditure on education (5.1%), and spends a considerably larger share of GDP than Japan (3.6%).

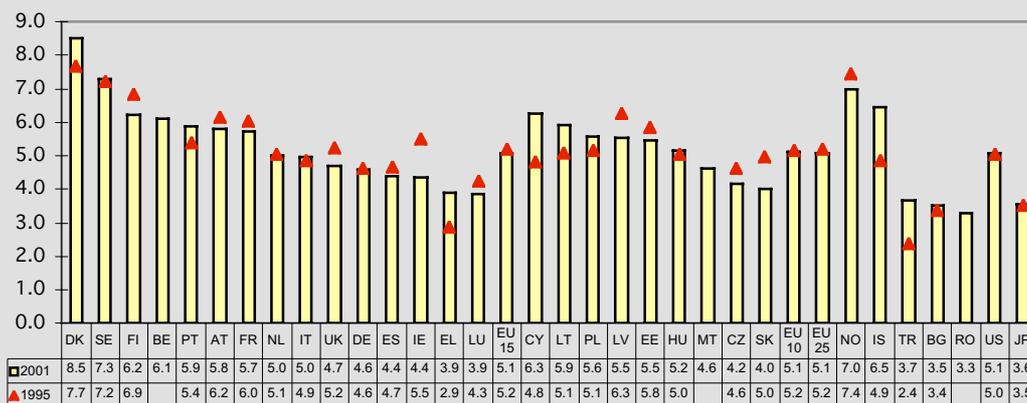
¹⁹ As indicated in chapter 1 main sources of information are documents, reports and papers of EC, data provided by Eurostat, OECD and ETF, and DGVT reports and country reports prepared for this report. CEDEFOP provided useful synthesis on research. For data available at Eurostat, data retrievals were run in June - October 2004; date of retrieval and name of indicators is indicated in tables/ graphs. Due to technical reasons and revision of data there are some differences to information provided earlier by Eurostat. For more information on data and indicators see Annex 1.4.

²⁰ Ideally the indicator “Total expenditure on education per pupil/student by level of education relative to GDP per capita” would be used. For this indicator time series is not yet available. Cf. *Progress Towards the Common Objectives in Education and Training - Indicators and benchmarks*, European Commission, 2004, p. 47f.

²¹ GDP = Gross Domestic Product

For some countries more recent data are available, but there is not yet a clear picture as to increasing or decreasing public educational expenditure in relation to GDP from 2001 onwards. For most of the countries there has been an increase of public educational expenditure as a share of total public expenditure from 1995 to 2001, with the exceptions of Ireland, Latvia and Slovakia (Eurostat New Cronos Data Base, 2004, Indic_ed fp04_1). Unfortunately, data on public expenditure on education is not available differentiated for general and vocational programmes, with the exception of data collected by ETF for acceding and candidate countries (ETF, 2003, p. 85). According to this source, public expenditure on VET varied between 6.9% (Lithuania, 1997) and 20.7% (Czech Republic, 1997) of all public expenditure on education.

Figure 5.1: Public expenditure on education as percentage of GDP (2001, 1995)



Source: Eurostat, New Cronos, Indicator fp01_1, 19.7.2004; Changes in coverage since 1995 in the following countries: DK, LV, LT, SK, RO.

Private expenditure on educational institutions (after transfers from public sources²²) was estimated at 0.6% of GDP (2001, EU15 and EU10), varying between 0.1% (Finland, Slovakia, Portugal) and 1.3% (Cyprus) (Eurostat New Cronos Data Base, 2004, Indic_ed fp05_1, extracted 05.10.2004). This includes expenditure of households and other private entities like companies for educational institutions (IVET). In comparison to EU, investments of the private sector are much higher in the United States and in Japan²³.

Companies' expenditure on CVT is excluded from private expenditure on educational institutions. At European level, the Continuing Vocational Training Surveys (CVTS), referring to 1993 and 1999 respectively, provide data concerning this gap (Eurostat, 2002; continuing training in enterprises: Facts and figures, 1999)²⁴. Total cost of company provided courses²⁵ as a proportion of total labour costs are shown in Figure 5.2. In 1999 companies' costs of CVT varied greatly between countries, ranging from 0.3% in Romania to 3.6% in the United Kingdom²⁶. Public expenditure on education and companies' cost of CVT do not follow the same pattern across countries. Again, Nordic countries are well above average, but in Belgium, Portugal, and Lithuania, having high public expenditure on education, companies

²² Transfers from public sources include scholarships and similar public grants for tuition fees and living costs of students, family allowances contingent on student status, and special public subsidies in cash and kind contingent upon the recipient being a student, e.g. for transport, medical expenses, study abroad, books and supplies.

²³ For this indicator Eurostat does not provide data for US or JP. According to the draft joint interim report (European Commission, 2003b) private expenditure on educational institutions was 2.2% of GDP in US and 1.2% in JP.

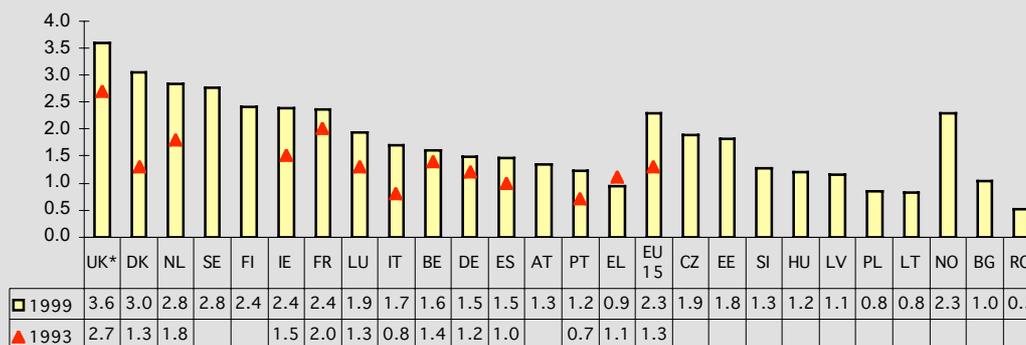
²⁴ Costs including direct costs, personnel absence costs and the balance of contributions to and receipts from national or other financial settlements

²⁵ CVTS shows information on companies' expenditure on internal/external courses for continuing vocational training (CVT), and only some information on other forms of CVT. Cf. annex "Indicators and data" for further details.

²⁶ Data for UK are not fully comparable (different recording of personnel absence costs).

spend a comparatively small percentage of labour cost on continuing training of their staff. It is estimated that companies' expenditure on CVT courses represents about 1% of GDP²⁷. For those countries that already participated in the first CVTS an increase in the percentage of labour costs spent on CVT since 1993 is recorded, with Greece being the only exception. This increase was very pronounced in Denmark, Italy, Ireland, the Netherlands and the United Kingdom.

Figure 5.2: Total cost of CVT courses as a percentage of total labour costs (all enterprises)



*Data for UK are not comparable (different recording of personnel absence costs)

Source: Continuing Vocational Training Survey in Enterprises: Results 1994 (CVTS), Eurostat Luxembourg, Office for Official Publications of the European Communities, 1997, p. 98-99; European social statistics - Continuing vocational training survey (CVTS2). Data 1999, Eurostat Luxembourg, Office for Official Publications of the European Communities, 2002, p.90-91, 149. Comparable data not available for US and JP..

There is very little information on expenditure for initial vocational education and training at European level, and improving the information about expenditure on IVET needs to be addressed urgently. The country reports prepared for this report contain some assessments of expenditure on education at national level. In particular the EU10 point out that under-investment in education causes restrictions on effectiveness and efficiency, due to for example, outdated technical facilities or qualified teachers leaving their jobs because of inappropriate salaries in schools. Another point raised is that the method of distribution of educational expenditure is not sufficiently responsive to rising or falling numbers of students in levels and strands of IVET (e.g. the Czech Republic).

Both the country reports and the DGVT questionnaires mostly point out private contributions to educational expenditure and ways of enhancing investments of enterprises and individuals. This is not only regarded as a way to enlarge the available budgets for education but also seen as exerting a positive impact on effectiveness and efficiency.

Information about financial input is one prerequisite to assess efficiency of VET. The next section sheds light on the other prerequisite - information on outcomes of VET. Analysing both input and output measures are beset with issues about the extent and comparability of data.

²⁷ Cf. Implementation of "education & training 2010" work programme, Progress Report: Making the best use of resources, 2003.

5.3 Outcomes of VET

There are no international studies allowing assessment of the specific outcomes of VET programmes, as it is the case for the outcomes of educational systems (PISA, TIMMS²⁸). Assessment of the performance of the adult population (IALS, ALL) does not specify the contribution of VET in relation to general education and work and life experience; at least we have not been able to find any comparative analysis. However, the country report of the Czech Republic delivered for this study states:

'Analysis of the results [IALS, FB] in terms of the level of educational attainment shows that people with vocational qualifications without "maturita" have an insufficient level of functional literacy. In this respect they do not differ much from those who only have basic education. This is evidence of the low effectiveness of this educational route in terms of the development of capacities facilitating participation in the world of information.' (Country report of the Czech Republic, 6: Effectiveness and Efficiency of VET).

As a matter of course this is not a general finding about outcomes of VET, across countries and time, but rather a snapshot based on the current situation, and even missing for most of EU. In the absence of specific outcome measures for VET other indicators of outcomes will be discussed, for different levels of society (individual, enterprises, society) and of different kinds. Examples are employment and unemployment of population according to level of educational attainment, monetary returns, and economic growth.

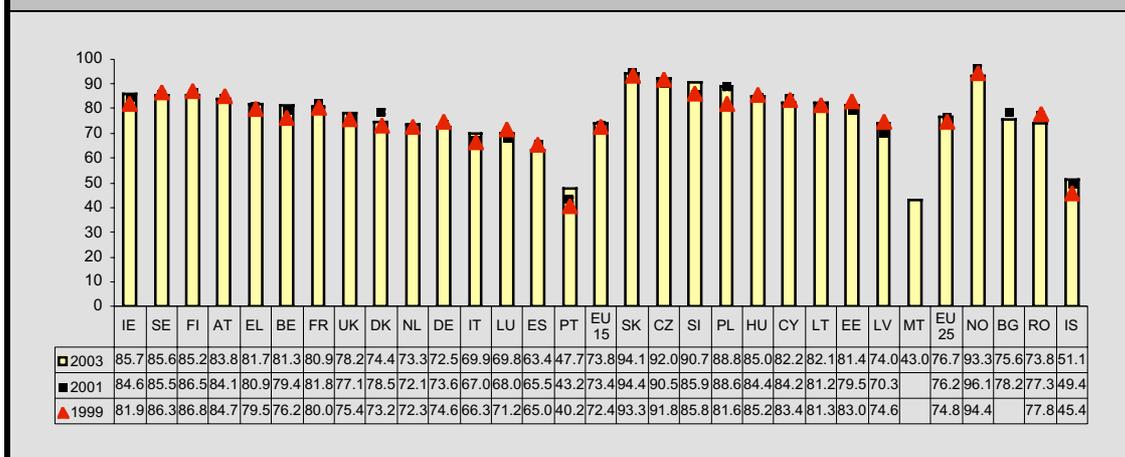
5.3.1 Youth education attainment level

If present trends continue, the EU benchmark for the completion of upper secondary education can be reached by 2010. The EU10 with their higher level of youth education attainment further improve this positive outlook (cf. Figure 5.3 and Table A 5.1 in Annex 2.1). In most of the countries the share of the population aged 20 to 24 having completed at least upper secondary education has increased between 1999 and 2003, with Portugal and Poland displaying remarkable improvements.

In the past in most countries educational attainment of women was lower than that of men, today the opposite holds true in most of the countries. In EU25, youth education attainment level of females is around 5 percentage points higher than that of males (cf. Table A 5.1 in Annex 2.1). Only in three countries (Luxembourg, Austria and Czech Republic) males aged 20 to 24 successfully complete upper secondary education more often than females, and only in Luxemburg the difference is substantial. In two countries males and females are at parity regarding completion of upper secondary (UK, Slovakia). In all other European countries where data are available females perform better regarding this indicator than males. In the four countries with the lowest rates of youth educational attainment - Spain, Portugal, Malta and Island - it is especially males that leave school before completing upper secondary. In these four countries less than 60 % of males complete upper secondary education. Except in Malta differences of 13 percentage points and more between males and females occur. Dropping out of school might be related with the current situation of the labour markets, still absorbing low levels of qualifications, especially in sectors with predominantly male workforce. In line with this argument in Portugal and Spain the employment rate of 20-24 aged population with low level of educational attainment is rather high for males (46%), and in Spain (Portugal no data available) unemployment rate of this group is about the same as for males with medium level of education.

²⁸ Acronyms: PISA (Programme for International Student Assessment), TIMSS (Trends in Mathematics and Science Study), IALS (International Adult Literacy Survey), ALL (Adult Literacy and Life-skills Survey).

Figure 5.3: Youth education attainment level (2003, 2001, 1999)



Source: Eurostat New Cronos, Structural Indicators, Innovation and Research, ir091, extracted on 29.09.2004. Provisional data for EU25, EU15, UK (all years), for LU, NL, IS (2003). Breaks in series for BE, LV, LU (1999), for LT, FI (2000), for LV, SE, BG (2001), for LV, LT (2002) and for DK and HU (2003). Youth education attainment level: Percentage of the population aged 20 to 24 having completed at least upper secondary education. According to Eurostat comparable data not available for US and JP.

Although completion of upper secondary education does not provide evidence on the quality of education, it is one indication of the extent to which education systems provide the qualifications that are mostly regarded as necessary prerequisites for a successful entry into the labour market. For the assessment of the contribution of VET to this favourable result one has to rely on assumptions, as the educational attainment level of age cohorts is not differentiated according to general or vocational strands.

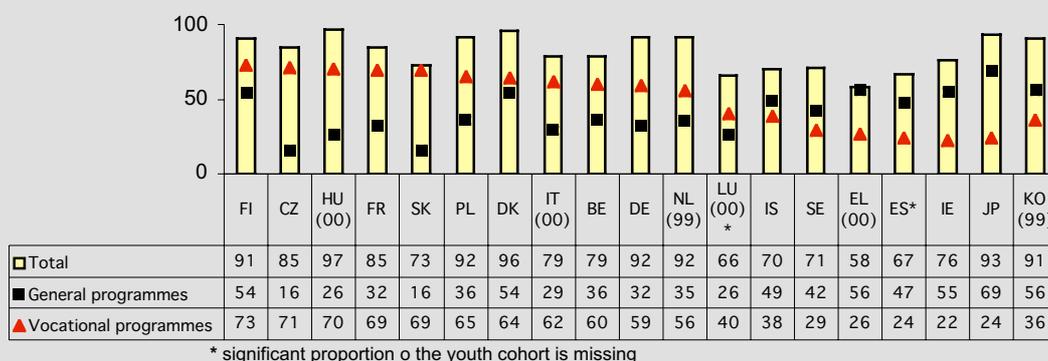
Upper secondary graduation rates of total population at typical age are published regularly by OECD. As a result of differing definitions and methodology, there is no real comparability between this indicator and youth education attainment level based on the Labour Force Survey²⁹. The advantage of using the OECD indicator is that it offers differentiation by programme orientation (general programmes vs. vocational and pre-vocational programmes).

In Figure 5.4 upper secondary graduation rates of population at typical age is depicted, with European countries sorted by graduation from vocational programmes in descending order; Japan and Korea are added for comparison. In the majority of European countries graduation from vocational programmes is more frequent than graduation from general programmes. European countries with high total upper secondary graduation rates have high rates of graduation from vocational programmes, and no corresponding pattern regarding graduation from general programmes. European countries with lower rates of total upper secondary graduation mostly have above average rates of graduation from general programmes³⁰. This suggests that in European countries it is likely that participation in vocational programmes is closely related to graduation from upper secondary programmes and thus has the potential to contribute to one of the fundamental objectives within the Lisbon process.

²⁹ See Annex 1.4: paper on "Indicators and data" for further details.

³⁰ Graduation from vocational and general programmes are both part of the total graduation, though (because of multiple graduation) the sum of the earlier two is not equal to the latter. Therefore a correlation between total graduation rates (TGR) and graduation from vocational (VGR) respective general programmes (GGR) is expected. For European countries the correlation of TGR with VGR is strong ($R_{\text{EU}}=0.56$, excluding Japan and Korea). Contrary to expectations, no such correlation exists with GGR ($R_{\text{EU}}=0.03$).

Figure 5.4: Upper secondary graduation rates (2001, % of total population at typical age)



Source: *Education at a Glance 2003*, OECD, 2003, p. 40; *Education at a Glance 2002*, OECD, 2002, p. 36; *Education at a Glance 2001*, OECD, 2001, p. 146.

For 13 European countries this indicator is available for several years. (Cf. Table A 5.2 in Annex 2.1). In recent years the correlation between completion of upper secondary education and vocational programmes has become stronger, while, on the contrary, the correlation between total graduation rate and graduation from general programmes has weakened³¹. This can be interpreted as a growing importance of the contribution of vocational programmes to the completion of upper secondary education. For most of the countries included in the analysis a change in total upper secondary graduation rates at typical age is accompanied by a similar change in graduation from vocational programmes. This is the case in the Czech Republic, Denmark, Finland, France (increase) and in Iceland, Spain and Sweden (decrease). For Germany no change was recorded. For Hungary, Italy and Luxembourg an improvement of upper secondary graduation rates is observed, accompanied by a slight decrease of graduation from vocational programmes. However for the previous years OECD has reported double counting and overestimations. In the case of Greece and Ireland a pronounced decrease of upper secondary graduation rates as reported by OECD is accompanied by an increase of graduation from vocational/prevocational programmes. In both countries – according to the structural indicator on youth education attainment level – completion of upper secondary education improved in the period considered, and passed the average level for the EU15³². This brings into question the adequacy of OECD's indicator, at least for previous years when data quality was less reliable, and the calculation of the graduation rates as percentage of population 'at typical age', regardless of the age of the graduates.

To sum up, the findings suggest that developed vocational programmes at upper secondary level help to reach the Lisbon goal. Some unanswered questions remain, however, due to lack of adequate data. The next sub-section attempts to consolidate these findings.

5.3.2 Early school leavers

In 2002, the average rate of early school leavers in EU15 was estimated at 18.5%, while acceding countries performed much better on this indicator (8.4%)³³. According to the

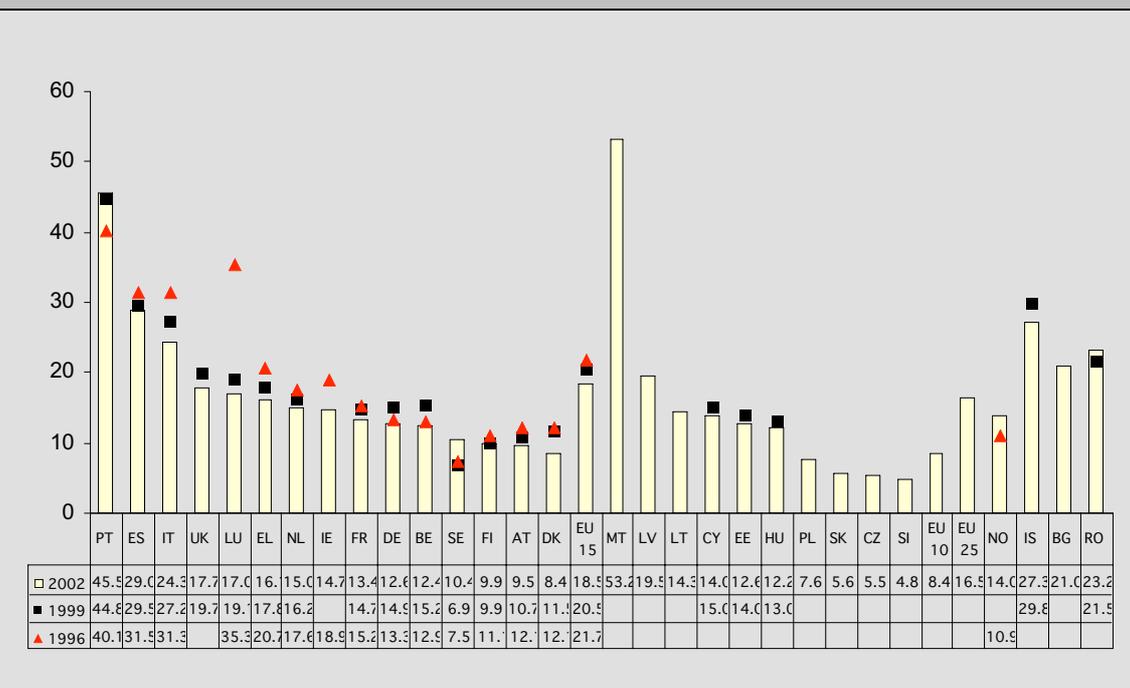
³¹ Included in this analysis are CZ, DK, FI, FR, DE, IS, IE, IT, ES, SE (1999-2001) and EL, HU, LU (1998-2000 because of missing data for 2001). The correlation of VGR with TGR has been calculated as $R_{1999}=0.10$ and $R_{2001}=0.69$ respectively. For GGR the correlations with TGR are $R_{1999}=0.29$ and $R_{2001}=0.06$ respectively.

³² Cf. Table A 5.1 in the Annex 2.1.

³³ Share of population aged 18-24 with only lower secondary education and not in education and training. Eurostat, Structural indicators, Social cohesion IV.5.2/5.3, 30.07.2004. Data referring to 2003 are available; in the annex it is

European Commission, achieving the benchmark of 10% by 2010 'will require substantial political action and sustained commitment' (European Commission, 2004c, p. 57). Compared with 1999 and 1996, in most countries the proportion of early school leavers has decreased (cf. Figure 5.5). In some countries, for example Italy, the improvement in completion rate is pronounced. There are, however, countries with increasing rates of youth not completing upper secondary education: Portugal, Sweden, Norway and Romania. Across Europe, a higher proportion of males leave school early, with Luxembourg, Germany, Austria and the Czech Republic being the exception to this rule (cf. Table A 5.3 in Annex 2.1)

Figure 5.5: Early school leavers - total (2002, 1999, 1996)



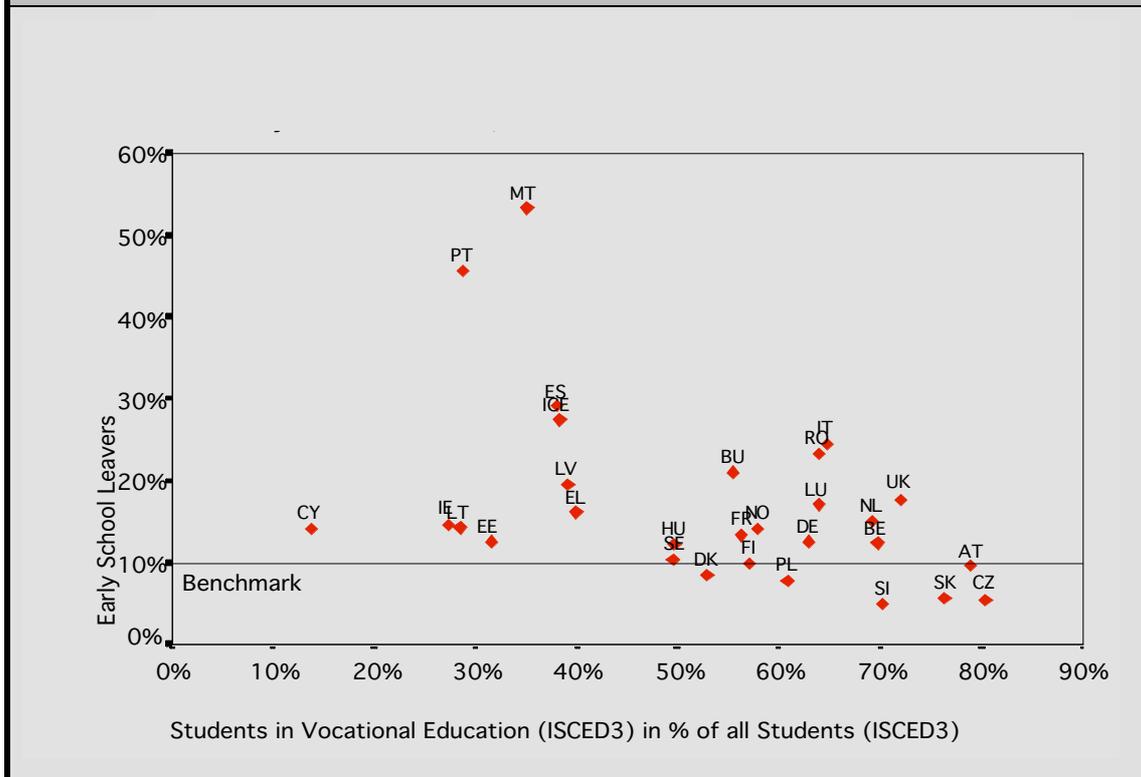
Source: Eurostat, Structural indicators, Social cohesion IV.5.1, 30.07.2004; Unreliable or uncertain data for Slovenia 2002, estimated value for EU15 1996, provisional value for United Kingdom (1999/2002), EU15 (1999/2002), EU25 2002. For BE in 1999, for LU in 1999, for NL in 1999, for PT in 1998 and 2000, for FI in 2000 and for SE in 2001 break in series. Eurostat issues warning due to low sample size for DK, LU, IS, NO, EE, LV, LT, CY, MT, SI. For FR (all years), NL (until 1999) and PT (until 2000), the reference period is only one week. Early school-leavers: Percentage of the population aged 18-24 with at most lower secondary education and not in further education or training. According to Eurostat comparable data for US and JP are not available.

At ISCED level 2, 3 and 4 educational programmes are classified according to their programme orientation, which is the degree to which a programme is specifically oriented towards occupations or trades and leads to qualifications relevant in the labour market. However, pre-vocational and vocational programmes seem to be of higher relevance in ISCED levels 3 and 4. It was not possible to find any publication at European level indicating dropout from general vs. vocational programmes. If the suggestion elaborated above (supply of vocational programmes at ISCED level 3 is an effective measure to foster graduation from upper secondary programmes) holds true, then there should be an inverse relation between participation in vocational programmes (measured as students in pre-vocational and vocational programmes in % of students, ISCED 3) and early school leaving. Figure 5.6 shows that data are in line with this supposition ($R_{-} = 0.20$).³⁴ When analysing separately for EU15 and EU10, the correlations are 0.25 (EU-15) and 0.22 (new members), respectively.

discussed in detail why these data lack comparability across time and across countries. We use data referring to 2002 instead.

³⁴ Included in this analysis are EU-25, Iceland, Norway, Bulgaria and Romania. For Early School Leavers unreliable or uncertain data for Slovenia, provisional value for United Kingdom.

Figure 5.6: Students in vocational and pre-vocational training (upper secondary) and early school leavers, 2002



Source: Eurostat, New Cronos Data Bank, 30.07.2004. For Early school leavers: Structural indicators, Social cohesion IV.5.2/5.3. Unreliable or uncertain data for Slovenia, provisional value for United Kingdom. Early school-leavers: Percentage of the population aged 18-24 with at most lower secondary education and not in further education or training. Eurostat issues warning due to low sample size for DK, LU, IS, NO, EE, LV, LT, CY, MT, SI. For Students in Voc. Education: Own calculations relying on data from theme3-educ-educat-enrol1a_t-isced3, isced3pv, isced3voc. Included in this analysis are EU-25, Iceland, Norway, Bulgaria and Romania. Students in Voc. Education: Students enrolled in Vocational or Prevocational Programmes as share of total students in ISCED3.

Inspection of the graph shows that 16 countries with 50% or more of students in ISCED 3 in vocational programmes have low values of early school leavers. Italy, Bulgaria and Romania are outliers (majority of upper secondary students in vocational programmes, but 20% or more early leavers). Countries with less than 40% of upper secondary students in vocational programmes differ much more regarding dropouts. For some countries - not consistent with the supposition - low participation in VET at upper secondary level is associated with low share of early leavers (10-20%). In this cluster are the Baltic States, Cyprus, Greece and Ireland. Other countries - Malta, Portugal, Spain, and Iceland - have low participation in VET and high levels of early leavers, quite in line with the supposition. For those countries where comparable data are available for several years (EU15, without UK and Ireland) the analysis suggests that the correlation between students in VET and not dropping out before completing upper secondary education has grown stronger (cf. Table A 5.4 in the Annex 2.1)³⁵.

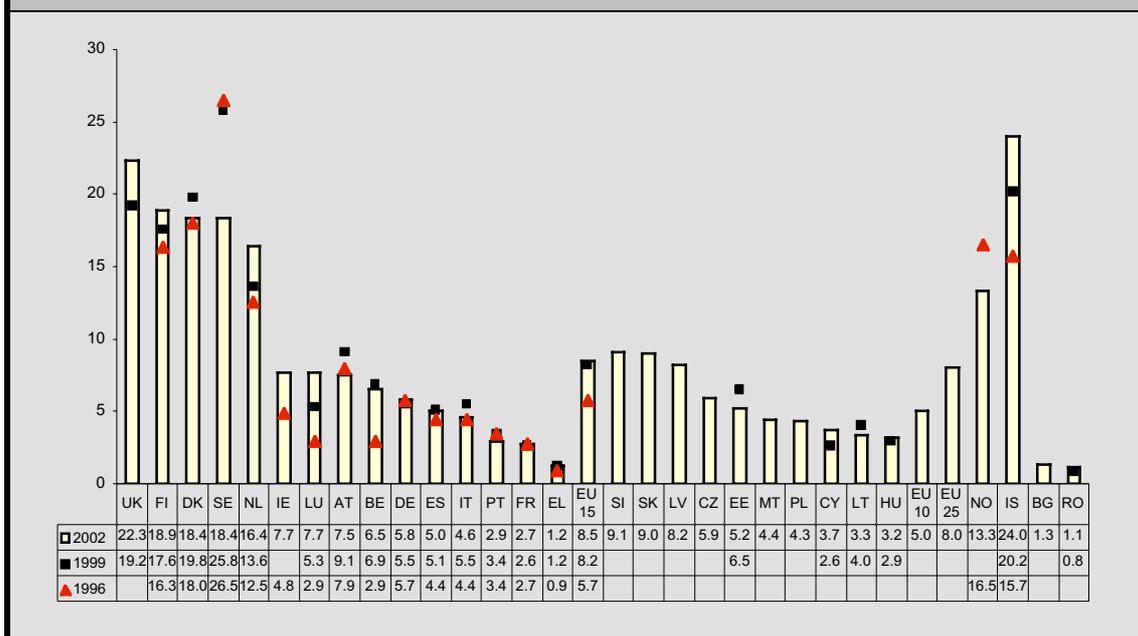
5.3.3 Participation in lifelong learning

Participation in lifelong learning is considered to be one of the main means to ensure the continuous adaptation of skills to the requirements of the economy. The Council in May 2003 set the benchmark of an average level of 12.5% of the adult working age population

³⁵ The correlations are 0.42 (2002), 0.29 (1999) and 0.13 (1996) respectively. The level of the correlation is higher than the one reported for EU 15 (2002), due to missing data for UK and IE, but the conclusion drawn is based on trends over time, not on levels. Figures for 1996 are to be interpreted with caution due to some changes in methodology.

participating in lifelong learning in a period of four weeks prior to the survey. Reaching the benchmark by 2010 'poses a significant challenge for many European countries' (Progress towards the common objectives in education and training, Indicators and Benchmarks, p. 6). In 2002, the EU15 average was 8.5%, while the acceding countries were performing somewhat lower with only 5.0% on average (cf. Figure 5.7)³⁶. Five EU member states have participation rates well above the benchmark: United Kingdom, Finland, Denmark, Sweden, and the Netherlands. All other countries of the European Union are performing between 1.2% (Greece) and 9.1% (Slovenia). In most of the member states women have a higher participation rate than men. These differences are pronounced in the Scandinavian and Baltic states, in Ireland and in the United Kingdom (cf. Table A 5.5 in the Annex 2.1). Contrary to the finding for EU in general, in some countries males have participated more often than females, with the biggest differences in Luxemburg and in the Netherlands.

Figure 5.7: Life-long learning - total (2002, 1999, 1996)



Source: Eurostat, Structural indicators, Employment I.5.1, 22.07.2004; estimated value for EU15 (1996/1999). For BE in 1999, for LT in 2002, for LU in 1998, for NL in 1999, for PT in 1998 and 2000, for FI in 2000 and for SE in 2001 break in series. For FR (all years), NL (until 1999) and PT (until 2000), the reference period is only one week. Lifelong Learning: Percentage of the population aged 25 to 64 participating in education and training over the four weeks prior to the survey. According to Eurostat comparable data are not available for US and JP.

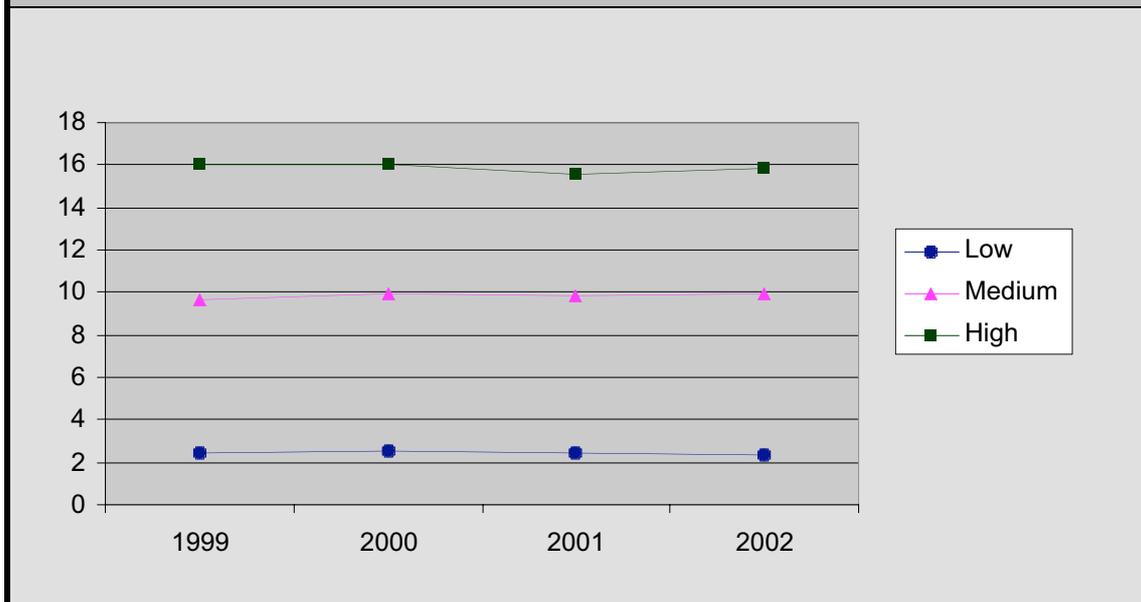
Regarding the period 1999-2002, those EU15 countries with low rates of participation have not improved much, with the exception of Luxembourg, and decreasing participation rates were reported for Austria, Belgium, Denmark, Estonia, Italy, Lithuania, Spain, Sweden and Portugal (cf. Figure 5.7)³⁷. In all, in EU15 the participation rate has risen by 0.3 percentage points between 1999 and 2002. For 2003, data provided by Eurostat indicate a steep increase in participation, with 9.7% of the working age population participating in lifelong learning during the four weeks prior to the survey. However, due to methodological changes the results are greatly overestimating the real improvements and lack comparability with previous years (cf. Annex 1.4 for details). Improvement of participation in lifelong learning is still at a snail's pace.

³⁶ Data referring to 2003 are available; in the annex it is discussed in detail why these data lack comparability across time and across countries. We use data referring to 2002 instead. No comparable data available for US and JP, cf. annex paper on "Indicators and data for VET" for further details. Data for France are not fully comparable due to shorter reference period.

³⁷ In Portugal participation rates decreased despite extension of the reference period (from one week to four weeks, like in most of the other countries).

Clearly, the indicator chosen is not an ideal measure due to the short reference period of only 4 weeks. It underestimates the absolute level of participation in adult learning (see below), but due to the fact that it is surveyed every year it is suitable for displaying trends. The indicator has been chosen for the area of 'open learning environment', and it sheds light on the extent to which learning is accessible for all. Unfortunately, adult learning tends to reinforce skill differences resulting from unequal participation in initial education (the "Matthew-effect" in education and training, cf. chapter 17.1.5). Those with lower level of educational attainment³⁸ have a very low rate of participation in continued education and training; for EU15 those rates were only 2.3% in 2002 and 2.4 % in 1999³⁹. For those with high education level the participation rate in 2002 is more than 6 times as high (15.8%). These results indicate a clear gap in participation rates in lifelong learning, and as can be seen in Figure 5.8, disparities according to educational attainment have been stable since 1999.

Figure 5.8: Life-long learning in EU15 by level of educational attainment



Source: Eurostat Data Sheet, 22.06.2004; Estimated value for EU15 (1999). For LT in 2002, for PT in 2000, for FI in 2000 and for SE in 2001 break in series. Lifelong Learning: Percentage of the population aged 25-64 participating in education and training over the four weeks prior to the survey. Level of educational attainment: Low: ISCED 0,1,2; Medium: ISCED 3,4; High: ISCED 5,6.

Results for 2003 indicate that introduction of methodological changes (widening of definition of lifelong learning) is not closing, but instead widening the gap: Participation of low educated population aged 25-64 in lifelong learning has slightly increased (+0.3 percentage points), but for adults with high educational level an increase of 2.0 percentage points is recorded. Hence, as shown in the detailed analysis in the annex, implementing the new variables of LLL is not only exerting influence on the level of the indicator, but also on its structure.

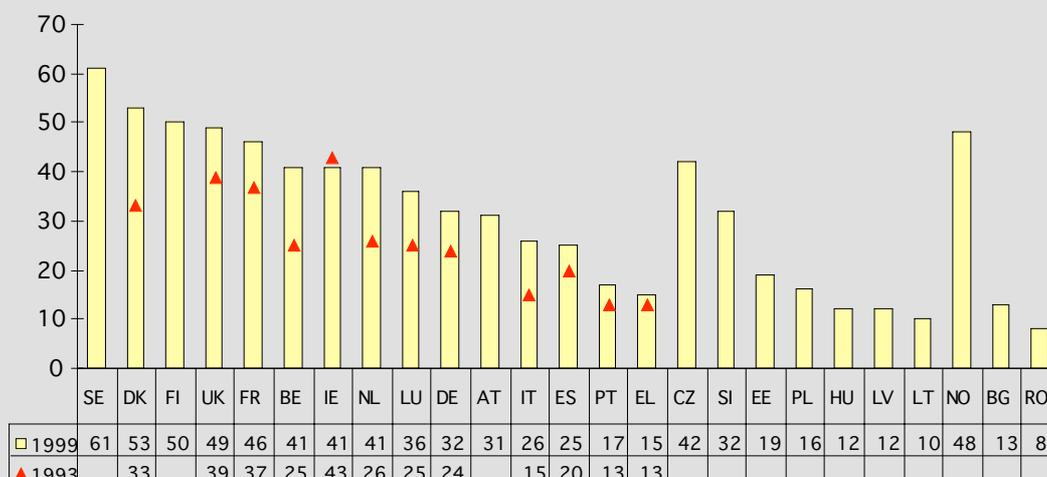
As mentioned above, this indicator of lifelong learning underestimates the extent of participation of the adult population. CVTS makes information on company-provided CVT available. CVTS covers a whole year, but is restricted in the scope of coverage (company provided, excluding employees in enterprises of some branches and in very small enterprises). According to CVTS (Eurostat, 2002, p. 58) in EU15 40% of all employees participated in CVT courses provided by their employer in 1999, a value more than four times higher than the participation rate reported by the Labour Force Survey for population aged 25-64. The differences in the results are mainly to be attributed to the longer reference period (increasing effect), compensating differences related to company provision as opposed to all

³⁸ The levels are defined as: completion of ISCED 0-2 (Low), ISCED 3-4 (Medium), and ISCED 5-6 (High).

³⁹ Data for 1999 - 2002 were provided by Eurostat, based on Labour Force Survey. See annex for further discussion of the indicator and its possible misestimation of differences in participation in LLL according to educational attainment.

continuing education and training (reducing effect), and to sampling differences (employees/population, branches, size of enterprise). The incidence of participation varies greatly between countries, with the Scandinavian countries, UK and France being the best performing countries (participation rates above 45%, cf. Figure 5.9). Among the EU15, Greece and Portugal are low performing (participation rates less than 20%). Most of the EU10 had low values of participation in company provided CVT, with the exception of Czech Republic and Slovenia. For most of the countries where data are available for 1993, an increase in participation rates since 1993 is reported. It is interesting to note differences between participation rates based on the two indicators: Whereas the Nordic countries and UK are ranking high in both, Ireland and Belgium are examples with high participation in company provided CVT, but rather low participation of working age population⁴⁰.

Figure 5.9: Participants in CVT courses as a percentage of employees in all enterprises



Source: Continuing Vocational Training Survey in Enterprises: Results 1994 (CVTS), Eurostat Luxembourg, Office for Official Publications of the European Communities, 1997, p. 72 – 73; European social statistics - Continuing vocational training survey (CVTS2) Data 1999, Eurostat Luxembourg, Office for Official Publications of the European Communities, 2002, p.58-59. Comparable data not available for US and JP.

5.3.4 Labour market outcomes of VET

Across Europe, employment rates rise with the level of educational attainment, and the increases tend to be higher when comparing medium to low skilled, rather than high to medium skilled (cf. Table A 5.6 in Annex 2.1). Similarly, in most European countries the unemployment rates of the low skilled are higher than those of the other two groups, with Greece and Romania being the exception to the rule (cf. Table A 5.7 in Annex 2.1). There are numerous studies confirming that higher levels of education and training increase labour force participation, result in higher entry wages, increase job opportunities and access to further training and reduce the probability of unemployment⁴¹. At European level, labour market outcomes are mostly not treated separately for VET. The majority of microeconomic studies at national and cross-national levels uses years of formal education or level of educational attainment as an indicator, mainly because measurement is easy.

However, there are some studies taking VET and CVT as explanatory variables⁴². Some studies find a positive correlation between initial and continuing education and training and

⁴⁰ France would be another example – but partially the low participation rate of France in Lifelong learning is due to an even shorter reference period in the Labour Force Survey up to 2002. Cf. Annex 1.4 for details.

⁴¹ Cf. a review of the literature in Descy & Tessaring, 2004; OECD in its Employment Outlook 2004 provides relevant analysis based on cross-country comparative aggregate data on training and longitudinal surveys; Bassanini, 2004

⁴² Cf. a review of empirical studies in Heise & Meyer (to be published in 2004)

higher wages throughout the working life (Brunello & Comi, 2004; Tessaring, 2004). Others find that *'employee training has a clear impact on wage growth only in the case of young or highly educated employees'* (Bassanini 2004, p. 5). This indicates that returns on education and training as measured by wage growth may not be constant over the life cycle. However, given the finding that training appears to have a strong impact on employment security, especially for older and low-educated workers, the avoidance of lost earnings due to unemployment spells can be regarded as having a positive effect of training on earnings. However, this positive effect of training on employment security of those receiving training does not translate in positive effects on aggregate unemployment. One reason for this could be 'crowding-out'.

Youth unemployment is an issue of special concern across Europe. The ratio of unemployed young people (15-24 years) as a proportion of total population of the same age in the EU15 is reported at 7.2% (males 7.6, females 6.8) in 2002 (Indicators for monitoring the 2003 Employment Guidelines, 2003). For females the ratio has steadily declined since 1998 (1998: 8.7%), for males a marked decline is recorded until 2001, (1998: 13.3%), but followed by a slight increase in 2002. Countries differ significantly, with Austria, Germany, Ireland, Luxemburg and the Netherlands having the lowest youth unemployment ratio (< 5%), and Finland, Greece, Italy, and Spain showing high youth unemployment ratios (> 8%). Analysis relating youth unemployment ratio to upper secondary graduation rates, to upper secondary graduation from vocational programmes (as rates of population at typical age or as a share of total graduation), or to the share of upper secondary students enrolled in vocational programmes results in only weak correlations of a high proportion of vocational programmes (or graduates) with low youth unemployment.

When leaving school, education clearly matters for labour market attainment, but the way it does so varies between countries. The transition from school to work is embedded in specific institutional contexts. Based on Labour Force Survey data 1992-1997, three distinct patterns of early labour market experience emerge from analysis of the data⁴³. First, for those continental European countries with extensive vocational training systems and occupational labour markets (Austria, Denmark, Germany, Netherlands) unemployment is not concentrated on market entrants, but on the lowest qualified. Second, for Northern European countries with experience based allocation patterns and internal labour market systems (Belgium, France, Ireland, UK) unemployment is concentrated on labour market entrants. And finally, against theoretical expectations, a particular pattern among the group of Southern European countries emerges, with high unemployment risks at the outset of careers and rather little volatility once initial employment has been secured.

While this analysis was restricted to cross-sectional design due to the data available, recent analysis makes use of the EU LFS ad hoc module data on school to work transitions in Europe (2000) relating labour market outcomes to the time individuals have already spent in the labour market.⁴⁴ Recent school-leavers experience serious difficulties finding employment, but their employment situation improves with the passage of time. In countries with a dual system of IVET (such as Austria)⁴⁵, but also in Denmark, Ireland, the Netherlands, Portugal, Sweden and the UK the unemployment rate is low right after entering the labour market, and it remains more or less constant with not much change recorded irrespective of the time since leaving education. In France, Greece, Italy, Lithuania, Romania, Spain and especially in Slovakia more recent school-leavers seem to experience particular difficulties in finding employment.

In general, higher education is safeguarding against unemployment, with unemployment rates being highest for low level of educational attainment (Romania being the exception to the

⁴³ Cf. Gangl, 2000, p. 24.; The analysis had to exclude Luxembourg (because of sample size) and Sweden and Finland (because of incomplete data).

⁴⁴ Cf. Kogan & Schubert, 2003; Wolbers, 2003: Included in the survey are 20 European countries (EU 15 with the exception of Germany, plus HU, LT, LV, RO, SK, SI); due to differences in definitions LV was excluded from the analysis. Target group of the module were recent school-leavers (5-10 years since leaving continuous education for the first time) aged 15-35.

⁴⁵ Germany did not participate.

rule). However countries differ regarding the spread of unemployment according to educational attainment, and the time it takes in the careers of school leavers to reach a stable position. No information on strand of education is included in this analysis, but Austria, a country with a strong dual system, stands out with rather smooth school-to-work transitions for all youth, and unemployment levels being quite similar for tertiary and upper secondary graduates, while less educated youth have more difficulties in finding employment. This example underlines again the significance of national institutional context and type of labour market.

OECD (2000a) in its analysis 'From initial education to working life: making transitions work' concludes that it is not so much the type of pathway (apprenticeship, school-based vocational or general education) that is decisive for successful transition outcomes. According to OECD, other features appear to have more importance, like clearly defined, well organised and open pathways and qualification frameworks, with effective connections to post-school destinations embedded in solid institutional frameworks.

The country reports elaborated for this report include divergent assessments of effectiveness of VET, especially with view to labour market outcomes. In Austria and Germany VET is seen as preventing high unemployment, especially for youth, and as preventing skills shortages as well as over-qualification. Other reports indicate some shortcomings of VET, e.g. slow responsiveness of curricula to labour market requirements (Bulgaria, Slovenia), VET graduates having deficiencies in customer orientation and teamwork (Finland), or key skills gaps in business education, healthcare, ICT (Malta) or with regard to new businesses and to international sales and marketing experience (Ireland). Of a more general nature are observations such as the existence of too narrow profiles of VET in some fields (Finland) or shortcomings in terms of contributing to an enterprise culture (Ireland). Finally, higher unemployment rates of graduates from vocational education (compared with all graduates of the same year; Finland, Poland) or VET graduates in jobs not utilising the qualifications obtained (Czech Republic) indicate low effectiveness in parts of VET.

5.3.5 Benefits of education and training at enterprise level

In recent years the issue of the impact of education and training at enterprise level has begun to be addressed more frequently. Research findings at national level suggest that initial vocational training generates substantial gains for companies, concerning competitiveness, adaptability to technological changes and facilitation of innovation, efficiency, productivity, and the possibilities to recruit adequately trained staff, to mention just a few⁴⁶. Many studies show that adult training has a positive impact on productivity at firm level, on profitability, market share and stock market value, and competitiveness⁴⁷, though '*some studies are arguing that profitability ... is unaffected*' (de la Fuente/Ciccone 2002, p. 13)⁴⁸. Evidence of a positive impact is found for different countries, including Ireland, France, the Netherlands, Sweden, United Kingdom and United States. For most of the studies there is reasonable confidence for maintaining '*that training generates performance effects and not the other way around*' (Hansson et. al, forthcoming). Some studies can make use of data for different countries, thus controlling to some extent for country or institutions specificity⁴⁹. The majority of studies confirm substantial gains for employers from vocational training - even if it is general training that, as a result of worker mobility, is useful in other firms, too. The question of '*Who gains when workers train*' (Dearden et al. 2000) is answered by these studies: both. Companies obtain a high proportion of the returns to training, and those undergoing training obtain a smaller part of the returns. This could be regarded as one of the reasons why returns on company provided vocational training are not very high for individuals.

⁴⁶ Cf. Beicht et al., 2004: Using the survey instruments developed by BIBB the study was replicated for Switzerland; Schweri et al., 2003.

⁴⁷ Cf. Hansson et al. (to be published 2004); Tessaring, 2004; Bassanini, 2004; Fuente & Ciccone, 2002.

⁴⁸ Cf. Bassi et al., 2001.

⁴⁹ Cf. Ballot et al., 2002; Hansson et al. (to be published 2004).

Although comparative international research shows that skills and competencies of the work force are often an important element for companies' performance, expenditure on training is regarded as a straightforward immediate cost, not as a longer-term investment. The good returns yielded by company provided training are not (adequately) identified, measured and reported by most of the companies and thus are not 'visible'. If under-investment in training is caused by the lack of information or underestimation of the returns on training, better reporting of 'intellectual capital' as part of improving the measurement of intangibles could be part of the solution. (University of Melbourne/ University of Ferrara/ NYU STERN, 2003; Nordic Industrial Fund, 2001; Ministry of Economic Affairs Netherlands, 1999; OECD, Ernst & Young Center for Business Innovation (Eds.), 1997.) The conclusions from the last Conference of European Ministers of Education (Oslo, June 2004; <http://www.educonf2004.no/index.php?page=speeches>) underlined the need to increase the visibility of knowledge and competences within enterprises.

5.3.6 Outcomes for society as a whole

In this subsection we will discuss very briefly outcomes for society as a whole, and we take economic growth as example⁵⁰. After an in-depth review of a wide range of international research *'it is concluded that, overall, the impact of investment in education and training on national economic growth is positive and significant'* (Wilson/Briscoe forthcoming). It remains an open question what kind of education contributes most to growth - general or vocational education and training, school- or company-based VET, initial or continuing training. *'The answer to these questions, if any, would be an important information on where funding should go, who should pay and who benefits. At macro level such analyses would require to isolate vocational training within secondary level. However, we did not come across a study of this kind.'* (Descy/Tessaring forthcoming).

A study recently published by Statistics Canada and Human Resources and Skills Development Canada (Coulombe et al., 2004) has another perspective on the question of what investment in education contributes most to growth. It concludes that human capital investment – as measured with the literacy scores – has a positive and significant effect on the transitory growth path, and on the long run levels of GDP per capita and labour productivity in developed countries. The findings suggest that economic growth will not be fostered significantly if investment is limited to the elite group. By raising the literacy level of the low performers quite large economic gains could be realised. Investing in programmes targeted at the group with low literacy skills is worthwhile not only on grounds of equity but also from an economic point of view.

Choosing this example has the advantage that economic growth, at least, is something being defined in a consistent way across countries and getting measured regularly. Problems get even more intricate when looking at social and non-material benefits, and when aiming at detailed results. On a very general basis, however, there is conformity that investment in education and training has positive impacts as regards democracy, active citizenship and participation in general.

5.4 Efficiency of VET

Efficiency of VET - as the relation of input to outcomes - is difficult to discuss in a situation of inadequate and poorly coordinated information. This is especially true when trying to identify efficiency of VET (not just education at a given level) in international comparison. It is necessary to resort to more general considerations on efficiency.

⁵⁰ This draws strongly on Wilson & Briscoe, to be published 2004; Descy & Tessaring, to be published in 2004.

OECD provides information on private rates of return, taking into account costs (tuition fees, foregone earnings net of taxes and adjusted for risk of unemployment less the resources, like grants and loans) and benefits (gains in post-tax earnings adjusted for higher employment probability less the repayment of public support, if applicable)⁵¹. These rates are estimated by comparing different levels of educational attainment. Rates are calculated for seven European countries and Canada, Japan and the United States, and refer to different years according to data availability (1997-2000). The private internal rates of return on upper secondary education vary between 6.4% (males, Sweden) and 19.2% (females, France). At tertiary level the private internal rates of return are between 6.5% (males, Italy) and 17.3% (males, United Kingdom). OECD concludes that despite significantly differing private internal rates of returns across countries these rates *'are in all cases higher than the real interest rate, and often significantly so, suggesting that human capital investment is an attractive way for the average person to build up wealth.'* (OECD 2003a, p. 161). It is unfortunate that there is no differentiation according to programme orientation – general or vocational.

The same holds true for social rates of return estimated by OECD (2003a, p. 162). They are estimated in a narrow sense, excluding non-economic benefits and externality effects. Reflecting that social cost of education is typically higher than the private cost, these social internal rates of return are significantly lower than the private internal rates of return. Social rates of return to education are particularly high in UK and in the US; in France education at tertiary level yields high social rates of return, too. It is interesting to see that in Denmark, Germany and Italy social rates of return for upper secondary education tend to be higher than for tertiary education, while the opposite holds true for France, Netherlands, Sweden and the UK⁵². OECD concludes that social returns to education *'are still well above risk-free real interest rates'* (OECD 2003a, p. 163). But again, unfortunately, no information is available on social returns on VET, compared with general education.

In the country reports prepared for this research, questions of efficiency are treated with differing intensity and direction. On one hand there is Austria's report, indicating that efficiency of education generally is on the agenda, but not so much VET - in Austria more concern is given to teachers' salary level and the (long) duration of university studies. IVET and CVT are regarded as highly efficient (e.g. the total course costs per participant are the lowest in Europe, which is taken as a sign of efficiency). The majority of countries' reports, however, mentions inefficiencies, and several reports note plans or measures already implemented to enhance efficiency. These measures follow different approaches:

- Reform of management in education, allowing for flexibility at lower level;
- Involving social partners in the development of VET (e.g. to support the improvement of training quality or to enhance responsiveness to labour market needs);
- Stimulation of private investments (of companies and individuals) by incentives, e.g. tax reliefs; this aims at enhancing the budget for education as well as at making users consider their educational needs more carefully;
- Funding arrangements with obligatory or voluntary adherence and levies, based on collective agreement or law;
- Share of facilities, co-operation or merger of schools, creation of 'training clusters'.

In comparing these approaches to the 'first look' at good practices selected by the working group 'Making the best use of resources'⁵³ there is a high degree of conformity. It is striking, however, that when elaborating on the question of effectiveness and efficiency of VET, no

⁵¹ OECD points out that the calculated rates of return are likely to be biased upwards as unemployment, retirement and early retirement benefits are not taken into account. OECD 2003a, p. 160.

⁵² This is based on social rates of returns for males. Social rates of return are not shown for all countries included in this analysis.

⁵³ Cf. Implementation of "education & training 2010" work programme, Progress Report: Making the best use of resources. (2003).

approaches on provision of special support for disadvantaged groups have been mentioned in the country reports. Giving this special support is not just a means to make better use of resources; it is also a prerequisite to achieve the Lisbon goal of social inclusion.

Another point should be borne in mind when discussing efficiency. There is an ongoing dispute on the relationship between educational inputs and student performance. Hanushek, (1981, 1986, 1996, 1997, 2003) has conducted meta-analysis of studies examining the impact of educational resources on student achievement, concluding that resources are not systematically related to outcomes. This has been hotly challenged by a number of other researchers who dispute the adequacy of the methodology Hanushek applied and his selection of studies (Hedges et al., 1994a, 1994b; Greenwald et al., 1996; Krueger 2002). In international cross-sectional comparison TIMSS results are not correlated to educational expenditure per student⁵⁴. In a time series perspective educational expenditure on primary and secondary education in OECD countries has risen much faster than labour productivity, though varying greatly between developed countries (Gundlach et.al, 2001). This seems to be roughly in line with the consideration that education is a labour intensive service with only limited ability for productivity gains and hence labour costs increasing faster than productivity (Baumol's cost disease, 1967 & 1993). If increasing expenditure does not translate into improvement of the outcome indicators there are different explanations: on the one hand there might be a 'decline of schooling productivity' (Gundlach et al., 2001), as has been argued by several authors; on the other hand it might be due to the fact that the indicators available are not fully adequate, or that other influences on the process of education are not taken into account. Though performance indicators are rarely available over time, let alone comparable over time, in some countries there is a lively discussion on the decline of performance of students at the end of lower secondary education. If youth performing at lower levels enter upper secondary education, schools and companies have to make a greater effort to achieve stable graduation results if qualification requirements remain unchanged. The probability is, however, that requirements for obtaining a qualification are increasing over time, not decreasing. If these developments are not taken into account, underestimation of the efficiency of the education system is a likely result. Finally, processes of selection and self-selection of individuals into the different strands of education influence outcomes of VET in comparison to general education.

5.5 Conclusion

Information about investment in education and training is in need of improvement as is that on the outcomes of VET. As a consequence there is no solid foundation for a discussion on efficiency of VET. Encouraging and supporting the development and implementation of better data and indicators should be high on the agenda of the Commission. In parallel with this it is necessary not only to isolate vocational education and training as a category of its own, but also to introduce further distinctions between different forms of VET (school- or company-based, position of VET in a countries qualifications system, existence of a qualifications framework, to mention just a few)⁵⁵. Several studies have already used clusters of forms of VET to facilitate international comparative study, but by assigning the individual countries to these clusters contradictory results have been achieved⁵⁶. In a recent study clustering is based on where IVET predominantly takes place: in schools, in companies, or in the dual

⁵⁴ $R^2=0,03$; cf. W. B. Mann, 2000. Expenditure per student in PPP.

⁵⁵ In an ongoing activity OECD is trying to shed light on different qualifications systems and policies on lifelong learning. Starting with the description of the different qualifications systems using an elaborated set of components the activity aims at investigating how qualifications systems influence the volume, distribution and quality of lifelong learning; cf. Behringer & Coles, 2003; Development of suitable indicators may draw on the results of this activity.

⁵⁶ A tabulation of assignment of individual countries to clusters by different studies is provided in Werner et al., 2003.

system⁵⁷. Using indicators provided by OECD and Eurostat on the level of educational attainment, youth unemployment, continuing education and training, and employment rates the differences between these country clusters are tabulated. Caution should prevail, however, when interpreting these differences as strengths and weaknesses of the VET systems as there are a multitude of other factors having an impact on these indicators.

In spite of all provisos and caveats, it is safe to conclude:

- The available evidence suggests that there are high returns to education and training, for the individual, the employers and society as a whole;
- The supply of vocational programmes at ISCED level 3 is an effective measure to foster graduation from upper secondary programmes and thus helps to reach one of the fundamental objectives within the Lisbon process, and to substantiate this, there is a substantial inverse relation between vocational programmes and early school leaving, which has grown stronger during the last years;
- Regarding the question of efficiency of VET robust answers are elusive. There is a variety of measures and policies aiming at improving efficiency at national level, and evidence suggests that investing more in lifelong learning of those who are most in need (low skilled, lacking basic skills) is worthwhile on grounds of equity as well as from an economic point of view.

⁵⁷ Cf. Werner et al., 2003.

Chapter 6

Improving the attractiveness of VET systems

6.1 Introduction

Here we will discuss the question whether or not VET systems in the EU member states are becoming more attractive to learners and companies, both from an IVET and a CVT perspective. Attractiveness refers to stakeholders' opinions and is the outcome of opening systems to the needs and ideas of learners and other stakeholders directly to heighten the responsiveness of systems to the outer world.

Improving the quality of education and training on offer or improving its transparency and accessibility will raise its attractiveness, however this is not the perspective taken in this chapter as it is covered in other chapters of this report. This chapter will focus on the way opinions of a variety of stakeholders are absorbed into VET systems: The concept of attractiveness implies that (sometimes conflicting) opinions and priorities of various stakeholders have been heard and become adopted in VET policy and programme design: *'Attractiveness bridges the gap between students' interests and those of society, including the crude interests of labour market players'* (Nieuwenhuis, et al., p. 136). Attractiveness should become visible in enrolment figures, in benchmarks and indicators and in opinion polls, but also in growing numbers of stakeholders involved in actual decision-making at system level and programme level. In this chapter attractiveness will be analysed from four angles:

- (A summary of) the development of participation rates in IVET and CVT (6.2);
- Measures designed to attract more students in VET (6.3);
- Raising attractiveness of VET to social partners (6.4);
- The strong and weak points in VET systems from a stakeholders' point of view and the ways open to them to communicate priorities (6.5).

6.2 The development of participation rates in IVET and CVT

6.2.1 Participation rates in IVET

The previous chapter showed that participation in education and training after compulsory schooling is high and is increasing slowly in the EU, as successive generations of young people remain longer in education and training (Bainbridge et al., 2004). Data from 2001 show that:

87% of the age group 16 to 18 in the EU15 participated in education and training; around 50 percent of this group in vocational oriented programmes at upper secondary level;

Slightly less than 55% of the 19 to 22 year olds were in receipt of education and training in 2001, 70% of them pursuing vocational programmes;

Around 34% of the 23-24 age cohort participated in education and training in 2001, most of them in occupationally oriented programmes (Bainbridge et al., 2004).

Participation in vocational and occupational programmes increases by age group. With this 2001 snapshot in mind it will be useful to look into the development of the participation in VET programmes at various ISCED levels over time and attempt to answer the question: is the number of people participating in VET programmes at upper secondary, post-secondary and tertiary level growing in the EU?

Is IVET participation at upper-secondary level rising³⁸?

Table 6.1 shows the share of students enrolled in vocational and pre-vocational programmes as a proportion of all students in ISCED level 3 programmes. While in the EU15 participation is rising between 1999 and 2002, the NMS are faced with a set-back. Ten out of the EU15 have an increase in the share of students enrolled in vocational programmes, while only one country (Germany) is faced with a decrease. Among the New Member States (NMS) there is only one country that is not faced with a decrease in enrolment (Latvia), whereas seven out of the NMS have a decreasing share of vocational programmes (there should be a difference of at least a full percent in order to label changes in participation figures as an increase or decrease).

Table 6.1: students in VET as % of all students at ISCED level 3 in 1999 and 2002

	Eu 15	Eu 25	NMS	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S
1999	59,3	60,5	66	65,7	53,3	64,6	25,8	31,2	57,2	20,6	64,7	63,7	67,3	77,9	25	53,2	47,3
2002	63	62,7	60,9	69,7	53	63	40	38	56,3	27,3	64,8	64	69,2	79	28,8	57,2	49,6
	UK	IS	NO	BG	CY	CZ	EE	HU	LT	LV	MT	PL	RO	SI	SK	TR	MK
1999	66,7	32,8	53,6	56,4	14	80,2	33,6	65,5	33,1	36,7	46,7	66,1	69,2	74,8	79,6	48,6	66,3
2002	72,1	38,3	58	55,5	13,8	80,4	31,5	49,7	28,5	39,1	35,1	60,9	64	70,3	76,4	39,4	61,9

Source: own calculations based on Eurostat New Cronos Data, *educat/enroll/enr11a-t/isced3*, *isced3pv* and *isced3voc*; extracted 26.08.2004.

Is VET enrolment rising at post-secondary and tertiary level? Unfortunately, data on enrolment in vocational programmes at ISCED levels 4 and 5 are often not available or grossly incomplete. For 14 countries for which data on enrolment in vocational oriented programmes at ISCED level 4 are available for both 1998 and 2002, it appears that no changes can be discerned since enrolment in ISCED 4 programmes only include VET programmes (100%). In four countries enrolment in VET oriented ISCED 4 programmes (as a share of total enrolment) increased (France, Hungary, Italy and Latvia), whereas in four other countries enrolment declined (Denmark, Germany, Norway, Slovenia).

³⁸ Comparing enrolment rates does not tell the whole story as the distinction between general and vocational programmes is blurring: 'over the last decade there has been a notable pattern of increasing the vocational orientation of upper secondary education either in a holistic way or by providing parallel programmes leading to the same final school certificate with a greater bias towards more academic or technical or vocational learning outcomes' (Deane et al., 2004, 10).

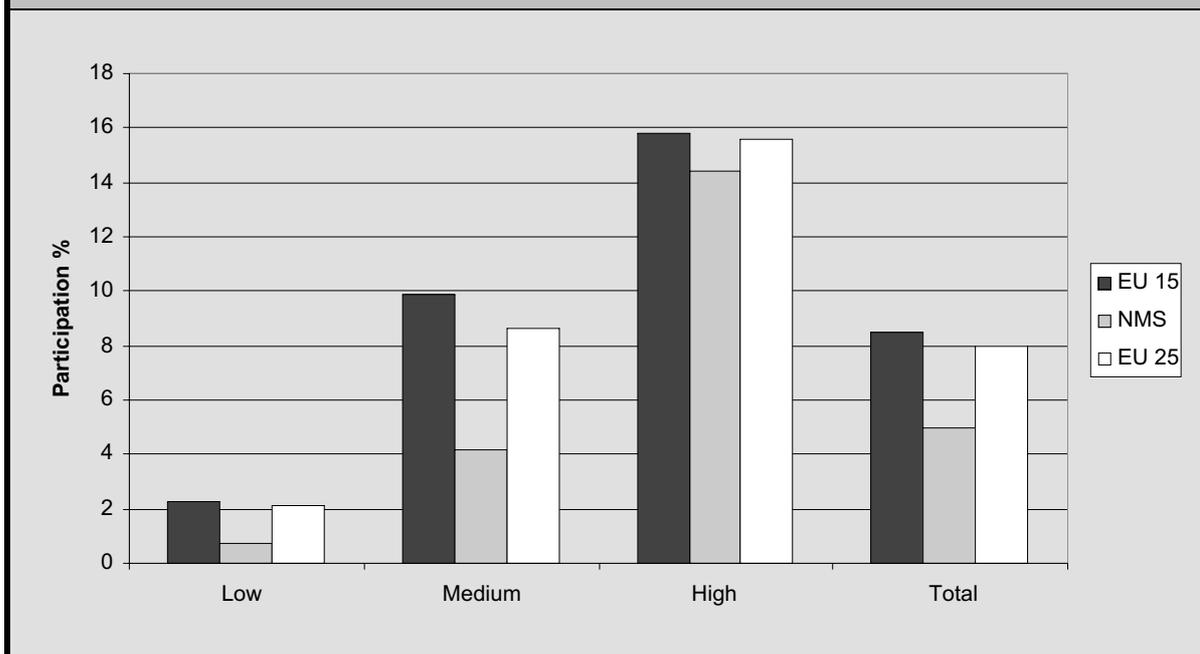
To sum up, in particular, participation in VET programmes at upper secondary level is increasing in most of the EU15 countries, while participation in most New Member States is declining.

Is CVT is growing in terms of rising participation rates?

One of the Lisbon targets refers to participation in lifelong learning: EU average participation in lifelong learning should be at least 12.5% of the adult working age population (25-64 age group). In Chapter 5 we concluded that in the period 1999-2002, those EU15 countries with low rates of participation have not improved much, with the exception of Luxembourg, and - decreasing participation rates were reported for Austria, Belgium, Denmark, Estonia, Italy, Lithuania, Portugal, Spain and Sweden (cf. Figure 5.6). In all, in EU15 the participation rate has risen by 0.3 percentage points between 1999 and 2002. For 2003, notwithstanding data reliability issues, Eurostat figures show a steep increase in participation.

Figure 6.1 shows that the inclusion of the EU10 does not have a great impact on the overall CVT participation rates in the EU. The impact is slightly negative and this is most pronounced at the medium level. The inequality in participation in VET is even more pronounced in the new Member States than in the EU15, with only 0.7% of the low educated participating in CVT against 14.4% of the high educated. This is 2.3 % (low educated) against 15.8% (high educated) in the EU15.

Figure 6.1: Life-long learning (adult participation in education and training) - Percentage of the population aged 25-64 participating in education and training over the four weeks prior to the survey by previous level of educational attainment - 2002



Source: Eurostat Data Sheet, 22.06.2004.
Level of educational attainment: Low: ISCED 0,1,2; Medium: ISCED 3,4; High: ISCED 5,6.

To sum up, the data shows that CVT participation is probably rising very slowly and is biased by higher participation of higher skilled people. This is in line with findings from a range of international sources. For example, Ok and Tergeist (2003) suggest adult workers' participation in training is rising, at least in the OECD member states, although it is not changing significantly in the distribution among different categories of workers - an outcome, that questions the effectiveness of some policy measures taken to date.

6.3 Measures specifically taken to attract more students to VET

How to attract more students to IVET?

There is little doubt whether or not participation in education has the potential to be attractive for individuals. Education and training have positive effects on careers and life wages (see for example Heise et al, in print). Unfortunately it is not clear whether or not general education is more attractive compared to VET routes in this respect (Descy et al, in print). Despite lacking data, many countries, not only new EU member states, are faced with a (growing) student preference for general education. In the eyes of many students (and their parents) VET (still) does not have equal status with general education. Observations from the DGVT questionnaires and the Country Reports show that this is the case in Cyprus, Estonia, France, Greece, Hungary, Iceland, Italy, Malta, Poland, Portugal, Spain, Turkey and the UK.

However, attempts to raise the image of VET have been made in all EU countries. Table 6.3 in Annexes 2.2 shows the evidence for this drawn from DGVT questionnaires and the Country Reports and gives an overview of measures intended to attract more students in VET routes.³⁹ Some examples from this table:

Country examples of measures intended to raise the attractiveness of VET for students

Austria: the introduction of new pedagogical approaches (competence based learning); creation of VET programmes in higher education / access to higher education via VET; Including general education in VET

Belgium: more opportunities for students to design courses themselves/tailor made internet based learning covering a variety of courses; including general education in VET; Information campaign on the added value of VET

Bulgaria: development of VET programmes with different lengths/ diversification of programmes; creation of VET programmes in higher education/ access to higher education via VET

Finland: an ' Occupy your time' campaign aiming to increase awareness of vocational education and training; all qualifications can be completed in three manners: school-based, apprenticeship or competence-based; shift to a student centred approach in learning; competence based programmes/ individual based VET; access to higher education via VET

Latvia: the introduction of basic vocational programmes allowing to enter VET at the age of 15 without having obtained any qualification; creation of VET programmes in higher education

Sweden: introduction of a vocational orientation in almost all national programmes at upper secondary level; the introduction of a new apprenticeship (still a pilot scheme), giving basic eligibility for access to higher education; introduction of Advanced Vocational Education (higher education) open for students with non-academic backgrounds; Learning in working life as an alternative for taking a national programme (with access to tertiary education); obligatory project work in upper secondary school in cooperation with local companies

The UK: linking general/academic and vocational qualifications more clearly together; blurring of the boundaries between academic and vocational qualifications through the introduction of vocational GCEs and A-levels; reforms in apprenticeships: expansion of pre-16 apprenticeships and establishing apprenticeship routes on to advanced apprenticeships with the possibility to enter higher education; in higher education undergraduate level courses do not require any entry qualifications, one can start these courses have qualifications below conventional university entry requirements.

Source: DGVT and country reports

³⁹ Care needs to be taken with this data 1) the respondents were asked to present recent measures, but it is not always clear from the answers whether or not this criterion was met; 2) as the table is intended to present recent measures, it cannot be concluded that facilities not presented in the table are not in place.

A study in 14 OECD countries (OECD, 2000) indicates a common trend in terms of the falling rates of participation in upper secondary vocational education programmes that do not qualify the student for entrance to tertiary study. It also shows a rise in participation, in both general and vocational education, in pathways that provide a bridge to tertiary study. The data in Table 6.3 in Annex 2.2 shows that 23 countries created occupational oriented programmes in higher education and made higher education more easily accessible for students with a VET qualification. Thus is a popular measure in raising attractiveness of VET for young people. Even in countries with a rather high participation rate in IVET (e.g. Germany, the Netherlands, the UK) increasing the access to tertiary education attracts policy attention. Besides increasing access to tertiary education, countries try to increase attractiveness of VET for students by means of pedagogical reform (e.g. Austria, Cyprus, Finland, Sweden), diversification of routes and programmes in VET (e.g. Bulgaria, France, Poland, Portugal) the establishment of guidance and counselling systems, the integration of vocational subjects into general programmes and vice versa or launching information and promotion campaigns.

Young people leaving the education system without an upper secondary qualification, tend to face severe difficulties in entering the labour market (OECD, 2003a). To protect young people from this risk, countries stimulate early school-leavers to undertake some form of education and training. Table 6.4 (Annex 2.2) gives an overview of the measures indicated in the DGVET questionnaires and the country reports, apart from initiatives improving the quality of educational provisions (e.g. Bulgaria, Cyprus, Slovenia, Sweden, the UK). Some examples from this table:

Country examples of measures dedicated to early school-leavers

France: introduction of the 'insertion mission': re-motivation and Integration through alternance training or through (subsidised) work

Germany: a compulsory pre-vocational year for those not taking up regular IVET or not yet ready for doing so; preparation programmes for young people who do not manage to find a regular training place (second-chance option); a new support structure, covering all existing measures to facilitate the development of individualised pathways (foreseen)

Greece: second Chance Schools provide young people with the skills and qualifications needed to enter the labour force

Hungary: reintegration of disadvantaged students through a one-year inclusion training for students not having obtained primary school qualification at the time of reaching the age at which compulsory education ends

Norway: students with specific needs/ low motivation for school may enter apprenticeship directly from lower-secondary school

Source: DGVET and country reports

From the table we learn that the introduction of special programs and targeted facilities within or outside the existing VET institutes are reported in 21 countries. Whether or not young people are free to decide if they want to join a special programme is not clear from the data. This is important from the point of view of the attractiveness of VET because other sources indicate that programmes are obligatory in some countries (Bainbridge et al., 2004). The strategy of making special programmes obligatory is not just focussed on making learning more attractive, but may be more of a way of discouraging (or blocking) alternative ways to spend one's time. Besides special programmes, targeted counselling facilities for (potential) dropouts are reported from four countries, while another six countries report support measures or penalties for dropouts (and/or their families).

How to attract more participants in CVT?

Despite differences in the nature of VET systems, common trends in member state policies indicate a focus on raising the attractiveness of CVT by means of encouraging participation in training by individuals and/or organisations through financial incentives and by increasing recognition of formal and non-formal learning (Bainbridge et al., 2004). The popular hypothesis is that in particular certification and funding systems are supportive in raising the

attractiveness of learning, for a variety of learning goals, target groups and contexts in which learning can take place. A third hypothesis is that transparency will raise the attractiveness of VET – the logic here is that transparency will make it easier for people to select according to their needs and can see clear progression routes in terms of training. This chapter will focus on the measures intended to attract more (working and unemployed) participants in CVT identified in the DGVT questionnaires and the Country Reports. The activities and policies from a social partners' point of view are discussed in chapter 19.

Attractiveness of private investments in learning

Considering the potential return on investment in learning (see Chapter 5), it is clearly worthwhile for individuals to invest in learning. De la Fuente and Ciccone claim a robust relationship between individual wages and extent of on-the-job training, with estimates indicating that a year of training increases wages by as much as 5% (de la Fuente & Ciccone, 2002). Other research findings show that participation in CVT gives an average wage increase of at least 2.6% higher than wage increases of workers who have never participated in CVT. This is also true for low-educated workers; the impact of training on workers of low-educated workers is at least as high as it is in the case with high educated (Ok & Tergeist, 2003). Despite these findings people are found to have less than adequate ideas about the profits of learning and assess the benefits from learning lower than evidence suggests (Becker & Mulligan, 1997; Borghans & Golsteyn, 2004), this is particularly true for people with a deprived background. Therefore, more information on these benefits can be seen as a necessary prerequisite to encourage investment in learning.

Finding the right strategic approach to deciding who should take financial responsibility for learning is a complicated problem. On the one hand governments are reluctant to expand their budget on life-long learning, and on the other hand they are committed to raise the participation in CVT. This also holds for the social partners, given the attempts at the European level with regard to a Framework of Actions for the Development of Lifelong Development of Competences and Qualifications. At the same time, as indicated earlier in this chapter participation in CVT is growing rather slowly and actually decreasing in quite some countries. A major barrier for the investment in (continuing) learning – for social partners as well as individuals – seems to be the uncertainty about the actual return on investments, notwithstanding the evidence provided by various studies. According to a Cedefop report

'There is no single solution to sharing the costs of training between government, employers, trade unions and individuals.' (Bainbridge et al, 2004, 21-22).

Assessments of effect of arrangements and measures for financing CVT are lacking. OECD's Employment Outlook (2003d) presents a taxonomy of strategies for addressing financial (and other) barriers in investing in learning. Although the pros and cons of individual measures have been evaluated and the consequences, such as deepening differences in access and increasing market failures have been identified, comparisons of the effectiveness of schemes are missing⁴⁰. So far, there is no obvious optimal system of institutional or financial arrangements to foster continuous education and training (Ok & Tergeist, 2003).

The European Commission has a view there is also a private (as opposed to public) funding deficit, in other words those who benefit most directly from training, principally enterprises and

⁴⁰ The OECD tried to compare the effectiveness of tax related measures in three countries and although a variety of measures could be identified, no data were found supporting their effectiveness in increasing investments in learning: S. Jansen (2003; internal paper). A study, published by Cedefop, comparing experiments with vouchers in post-compulsory education and training, concludes that voucher-like schemes have considerable potential to promote lifelong learning. Empirical data intended to collaborate this view are not very robust however: 'the fact that private companies are investing additional resources in training already suggests that they feel there are benefits' (Cedefop, 2000).

individuals, should pay more for it (Bainbridge et al., 2004). However, according to the Eurobarometer almost half of the European citizens (EU15) would not pay any of the costs for education and training to keep their present job (37.7%), or even to get a pay rise (47.4%) or a promotion (48.7%) Great numbers of European citizens seems not to be prepared to invest in learning, even if investments result in growing private benefits (Cedefop, 2003; figure 9).

Attractiveness through the recognition of non-formal learning

Universities and academic procedures are no longer seen as the prime source of knowledge production (Gibbons et al., 1994), schools are no longer exclusive venues for learning. Taking this wider perspective, validation of non-formal learning goes beyond post-hoc recognition of prior learning in schools in schools. It opens the way to appreciating that there are a wide variety of places that are effective learning environments. It puts assessment in a new light; being not an end to learning, but a reflective moment in a lifelong learning process. Validation procedures are making learning attractive to individuals because their prior learning is to be valued but also because more frequent feedback on learning is also possible. VET systems need to encourage non-formal learning and its recognition if it is to become more attractive.

In Europe a variety of approaches to the recognition of non-formal learning can be identified, uniting in the trend to have non-formal learning encompassed by the traditional VET systems, at least as a reference point for validating learning outcomes. Problems and priorities in opening up VET systems to non-formal learning are related to the characteristic of national VET systems as for instance the dual system (Austria and Germany) seems to be reluctant to embrace this trend as it challenges the explicit IVET character of the system (Bjornavold, 2004). Although the validation of informal and non-formal learning is a significant option to make learning attractive and to open VET systems to other forms of learning, this issue will be covered in chapter 7 and 12⁵⁸.

Encouraging participation through greater transparency

A third strategy to raise participation in CVT is to have systems in place for making clear the extent of learning opportunities, provide guidance into appropriate programmes and to protect learners from inadvertently participating in poor quality provision. Greater transparency and accessibility in the training market would assist individuals and enterprises to achieve a good fit between training needs and training provisions. Education and training could be more accessible with services from consultancies and specialist networks in place, which identify training, needs, offer advice on training provisions, and adapt provision to specific needs or to mediate in bargaining with providers. An OECD study, covering 14 countries, confirms that effective information and guidance systems are essential in supporting the implementation of lifelong learning policies. Yet, there are large gaps between the policy goals and the capacity of national career guidance systems: at present, services are available largely to a limited numbers of groups, at fixed points in life and are focused on immediate decisions (OECD, 2004a).

In particular, consumer protection provisions could be helpful to overcome hesitation in investment of learning. In a sense it's the other side of the coin of career guidance: who will advise private investors to forward complaints if the quality of services invested in is below standards? Unfortunately, no reports are available reviewing these services.

⁵⁸ No information concerning the effects of informal learning based certificates on entry into CVT or mobility on the labour market was found. However, UK based Ecotec is currently (summer 2004) working on the production of a European Inventory on validation of non-formal and informal learning for the European Commission.

An overview of measures taken by European countries

From the country reports and the answers to the DGVT questionnaire three tables have been constructed, giving an overview of the measures dedicated to raise attractiveness of CVT/lifelong learning for individuals (6.5 in Annex 2.2), for companies (6.6 in Annex 2.2) and of general measures (6.7 in Annex 2.2). From the tables it can be concluded that making investments in learning, recognising non formal and informal learning and making VET systems transparent are indeed central in the planning and implementation strategies in the member states⁴¹. However, other measures are regarded to be helpful as well, in particular the innovation of training provision. Table 6.5 in the Annex 2.2 shows a series of measures targeted on individuals: four clear strands emerge: financial incentives (under certain conditions) for individuals encouraging them to invest in learning (17 countries); refocusing programmes towards the individual needs of (working) adults (8 countries); counselling and guidance services for adult learners (4 countries); and obligations for employers to train workers (2 countries). Some examples, taken from this table:

Country examples of measures intended on raising the attractiveness of CVT targeted on individuals

Austria: tax incentives for employees; a fixed sum to finance educational leave/vouchers provided by regional chambers of commerce

Estonia: the creation of a counselling system for adults; universities are obliged to develop a system registering previous work and study experiences

France: individual training right, for each employee which can be saved up to a maximum of 6 years

Table 6.6 in Annex 2.2 gives details of the measures targeted on companies. Most initiatives encouraging companies to invest in learning are of a financial nature such as tax incentives and direct subsidies for training activities (12 countries). The introduction of support and advisory services for companies is reported from 2 countries. Some examples taken from this table:

Country examples of measures intended on raising the attractiveness of CVT targeted on companies

Bulgaria: a financial incentive scheme for employers to maintain/ enhance the vocational qualification of employees

Hungary: subsidies for the training of employees for the purpose of a higher level of working

Spain: a new funding model on continuous VET making easier for SMEs to be involved in training; simplifying and speeding up the administration procedures; co-funding systems

Table 6.7 in Annex 2.2 presents a varied set of general measures, varying from reforms in education and training provision (10 countries), new political initiatives and establishing new policy advisory bodies (5 countries), the development of a coherent system of qualifications and learning facilities for adults (4 countries), information services for individuals or companies and information campaigns on lifelong learning (3 countries), to the development of new methodologies and procedures raising the effectiveness of services (2 countries). Some examples taken from this table:

⁴¹ See chapter 7 also for more details of measures supporting the recognition of non-formal learning.

Country examples of general measures intended on raising the attractiveness of CVT

Denmark: a coherent system of qualifications will cover IVET and CVT, including the prevention of dead-ends and experiences and aspirations as a starting point for learning; a new law on adult vocational training increases flexibility, transparency and free choice, and a reduced number of programmes in 150 common competence frameworks; options to apply for pilot funding to set up networks and try-out different forms of flexibility and work based learning

Luxembourg: to create a lifelong learning mentality the government has launched a press campaign to make the public more aware of the necessity of lifelong learning

Romania: regional adult training centres are supported to become occupational assessment centres; the government is exploring means to stimulate the access to continuing training such as fiscal facilities, providing for tax incentives for companies and individuals

6.4 The attractiveness of VET to social partners

Social partners in IVET

The involvement of social partners in IVET (as well as CVT) has been a European policy priority for various decades. The report 'Learning for employment' (Bainbridge et al., 2004) provides an overview of the developments in the social dialogue and social partner involvement where VET is concerned and claims that social partners play a significant role in developing VET policies (see also chapter 20). Nevertheless, involvement of the social partners in VET, be it at national, regional or local level, remains an important issue in VET policy making in various countries. Table 6.8 (in Annex 2.2), based on the DGVT questionnaires and the Country Reports, provides an overview of the various measures that reported as being undertaken in order to raise social partners involvement in VET. Here some examples:

Country examples of measures intended to raise attractiveness of VET to social partners

Czech Republic: direct links between educational institutes and social partners in regions; the establishment of a demand – supply relation between regional social partners and VET institutes

France: cooperation between schools and industry/public-private partnerships between schools and industry aiming at local economic development

Liechtenstein: active involvement of the business world in promoting VET (apprenticeship training, in a working group on improving the attractiveness of apprenticeships in the trade area (SMEs) and in promoting attractive training places in industrial companies

Lithuania: a change of status of the state vocational schools in self governing institutions to provide better possibilities to cooperate with the industry, social partners and other public institutes is considered

Norway: a proposition for cooperation between social partners and national and regional authorities in a more dynamic model with closer contacts with the labour market and a reduction of the sector councils (from 20 to 11)

Source: DGVT and country reports

In 21 countries cooperation between social partners/ companies and schools at local and regional level is given priority at this moment, in particular by strengthening partnerships between regional education and training centres and local companies (covering a variety of VET programmes). The development of training schemes for working people is also on the agenda for action. In 9 countries cooperation is increased at other levels (as well), for instance at sector level or at national level. Financial incentives for cooperation are identified in 2 countries, while the case of Bulgaria is unique with a national plan, bringing VET enrolment planning into line with labour market needs:

Bulgaria: adaptation of the national enrolment plan to the branch ministries, on a national level and to social partners, on a regional level. This practice has been established in the past few years and is highly appreciated by social partners

Stage of development: Implementation phase

Further information: National Enrolment Plan for 2004–2005, published on the MES website (www.minedu.government.bg)

Source: DGVGT questionnaire Bulgaria

Social partners in CVT

Social partner organisations define for themselves an active role in promoting participation in CVT. In 2002 the European Social Partners adopted a Framework of Actions for the Lifelong Development of Competences and Qualifications, as a contribution to the implementation of the Lisbon strategy. As these priorities have been identified recently, there are no indicators available that evaluate the success or otherwise of realising these innovations in VET systems. After three annual reports on national actions on the four priorities, the impact on both companies and workers will be evaluated in 2006 (ETUC, UIECE & ECEPP/EGEI, 2004, 81). The key points, in summary are:

- A better match between companies' and individuals' competence needs and learning supply;
- Mobilising resources for competence development through a variety of instruments to promote investment in the lifelong competence development;
- Motivation of individuals and companies for competence development; social partners have a key role to play in informing, supporting and advising employees and enterprises;
- Social partners live up to their responsibilities by facilitating learning in companies and building bridges between formal and non-formal learning.

6.5 VET systems from a stakeholder point of view

VET systems have changed profoundly in the EU Member States. In the words of Deane and Watters (2004):

'The education and training landscape in the European Union has changed dramatically over the past four decades (...) education and training systems at all levels are now based on new learning philosophies, approaches and contexts, and must cater for new learner profiles and needs'

These changes are generally viewed to be responses to social, economic and political changes. From this macro level it could easily be forgotten that VET should also respond directly to personal wishes, expressed by students and social partners. What do they want from VET and what ways are open to them to communicate with education and training providers?

Student views on VET and communication channels

Apart from the Finnish OPAL system (an ICT-based monitoring system for student feedback on labour market training), we did not find international⁴² or national survey programmes to assess opinions on the attractiveness of VET programmes, intended to provide feedback for policy making⁴³. Coming close is the biannual survey commissioned by the Dutch organisation for VET students, JOB⁴⁴, although its impact on national policy making is not obvious. Other examples are from Belgium (Wallonia; *biannual enquête de satisfaction FOREM Formation*) and Austria, where the population is regularly asked their opinion on the education system. From this survey we learn that the national education system has clearly improved in the eyes of the Austrian population; while in 1993 50% of the population rated the school system as good/very good, in 2002 75% of the population held this view; the full time VET programmes at upper secondary level, providing double qualification (access to regulated occupations and access to higher education) being on top with an averaged mark of 1.8 (1 = very good; 2 = good) (Cedefop Info 3/2002).

An example of an incidental survey comes from the Czech Republic. In the framework of the 'Research for Public Administration' programme of the Czech Ministry of Education, Youth and Sports the access of young people (20 – 29 age group) to education and their situation in the labour market were analysed, showing that less young people completing ISCED level 3C (vocational orientation) find themselves prepared for their current work, compared to young people completing level 3A (General academic orientation, in particular with regard to work with ICT, organizational and leadership skills and language skills. Exceptions are 'professional practical skills and competences' and 'teamwork'. (Slightly) more ISCED 3C level graduates, compared to ISCED level 3A graduates, regard themselves prepared for these aspects of work (Czesana & Matouskova, 2003). Incidental surveys assessing student satisfaction with specific programmes are found in Austria (Hoyer et al., 2002) Denmark⁴⁵ and Ireland⁴⁶. Dutch policy evaluations in VET sometimes include students as a response group. Using data from three surveys (Doets & Westerhuis, 2001; Westerhuis & Doets, 2004; Bakker et al., 2004) a preference list can be constructed for VET students at ISCED levels 2 and 3, covering almost identical issues as produced in the 2003 JOB survey:

- Flexible programmes in terms of possibilities to take additional courses/subjects and to influence study timing;
- Assessment of competencies deficits and facilities for improving learning competences;
- The possibility of extra tutoring during the course;
- A reversed learning cycle (taking the student's needs as a starting point);
- Better ties with programmes at a higher level (and provided in another type of education);

⁴² The OECD Programme for International Student Assessment (PISA) coming close however limited to the student engagement in education in general, not having separate data for VET programmes (Willms, 2003).

⁴³ It is quite possible that schools or regions organise on student reviews to evaluate the attractiveness of VET programmes, but no evidence is found that data from these surveys are systematically collected at national level.

⁴⁴ JOB stands for: JongerenOrganisatie Beroepsonderwijs (Interest Organisation for Young People in VET)

⁴⁵ In 2003 A4, a magazine, run by the Danish Confederation of Unions, asked Gallup to undertake a survey on student perspectives on VET. The results were published in this weekly magazine.

⁴⁶ FAS assesses participants' satisfaction with labour market training programmes in terms of their usefulness to obtain a job (see for instance: Byrne, 2003; The Economic and Social Research Institute, 2004).

- To be able to choose between different ways of learning;
- To have their learning focused on real problems in the industry;
- More experience of industrial practice;
- A better organization of courses (more effective use of the time spent at school and as a prerequisite for the organization of one's private life).

There are also examples of direct ways open to students to express their opinion on the VET programmes. The most prominent one is the shift towards a student centred approach in the organisation of learning, a priority in a great number of EU countries (see table 6.3 in Annex 2.2). Strengthening the position of students in school policy making is another strategy. An example is the Netherlands with the founding of a national VET student organisation JOB and the inclusion of students in school advisory councils ⁴⁷.

Citizens' views on CVT/lifelong learning and communication channels

The Eurobarometer, published in 2003 concludes that 80% of the population of the EU15 regards lifelong learning as important for both social and economic reasons. When asked for the reasons to take up learning after leaving schooling, social and personal reasons outweigh work-related motives. Learning is attractive when linked to personal development ⁴⁸: *'employability as such may not be the most promising way to sell lifelong learning to citizens'*, as Cedefop puts it somewhat ironically (Cedefop, 2004, p. 10). A point of view which might cause tensions in lifelong learning policymaking, as industries undoubtedly will have another opinion, despite the increasing evidence that in terms of gains for firms it does not matter whether the nature of training is general or specific (Descy & Tessaring, in print).

Lack of time (due to family commitments or work commitments) seems to be an important obstacle for participation in lifelong learning. The survey into the European citizens' view on lifelong learning indicates flexible working hours, individualised study programmes as well as a personal choice of learning methods might be effective incentives to overcome such obstacles. Having access to individualised guidance and counselling is also mentioned in this context, as is getting a certificate (Cedefop, 2003).

There are few ways citizens can express their views on training priorities and conditions if we regard direct communication with – potential - learners and providers as a criterion, apart from direct communications in the process of applying for a course. However indirect ways are more common. For instance – international - opinion polls (see for instance Cedefop, 2003) or national frameworks for forecasting and anticipating future (labour market) needs integrating in the planning, development and overall provision of VET.

Social partners views and communication channels

Employers' expectations from VET differ. Some perceive limited, school-based work experience as negative (more time needed for acclimatising) and some positive (no harm done yet). Some want specialized school-leavers; others prefer a broad and flexible profile. Nevertheless, as a Czech study points out, they unite in the expectation from VET students to

⁴⁷ In 2004 the Dutch Ministry of Education introduced an amendment to the Law on Vocational Education and Adult Education containing an obligation to establish a school council, solely representing the students, apart from a council representing the school staff. The amendment's explicit intention is to strengthen the position of students in school policy making. See table 6.3 in the Annexes.

⁴⁸ The Dutch experiment with Individual Learning Accounts arrives at the same conclusion. While 39% invested in learning 'to function better in the present job', personal development was claimed by 61% of the working and job-seeking account-holders to be the reason to open an ILA (Source: Geertsma et al, 2004).

have, besides competences related to occupations or professions, competences of a general character: to be able to bear responsibility, to work in teams and willingness to learn (Czesana & Matouskova, 2003).

In all countries social partners are somehow involved in VET policymaking, either on a consultancy basis or directly involved in tripartite decision-making. These formal structures provide a platform to express opinions on the quality and policy priorities in VET. However, although VET systems have undergone a substantial reallocation of responsibilities from national to an school/regional level, facilitating closer alignment to local economic and labour market developments (Bainbridge et al., 2004), direct involvement of social partners in VET policy at local or regional level is felt a challenge in a number of countries (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Netherlands, Poland, Romania, Slovakia, Slovenia)

Cooperation at local level is sometimes limited by the view of some social partners that it is the duty of the state and not of employers to align VET programmes to the needs of the labour market (Zelloth, 2004). Other limiting factors can be the predominance of SMEs, which lack the manpower to invest in relations with VET institutes and the financial resources to compensate social partners for participation or a lack of financial incentives for schools to invest in (contract) relations with local industry.

In more general terms the lack of tradition in partnership and organisation capacity, either on the side of the industry, or on the side of VET institutes, is felt as a barrier to the development of regional partnerships between social partners and VET institutes. Nevertheless, good practice exists, the partnership projects presented in table 6.8 in Annex 2.2 are an interesting example of a direct way open to social partners to express their views on VET programmes, by means of cooperating with VET institutes in designing VET programmes.

6.6 Conclusions

There is mixed evidence that the attractiveness of VET systems is growing. Limitations in data supply suggest it is prudent to conclude that enrolment in VET programmes at upper secondary level is increasing in most of the EU15 countries, while participation in most new member states is declining. A wide range of countries report that VET is still regarded second rate compared to general education tracks at upper secondary level. Data shows that CVT participation is rising very slowly and is biased by higher participation of higher skilled people. An outcome, that challenges the effectiveness of some policy measures taken to date.

All countries report the introduction of measures to raise attractiveness of VET for young people and adults. A rather popular measure targeted to young people is to make higher education more accessible for students on VET programmes, together with the creation of occupational-oriented programmes at higher education level. Even in countries with a rather high participation rate in IVET (e.g. Germany, the Netherlands, the UK) increasing the access to tertiary education attracts policy attention. Also popular are pedagogical reforms in (e.g. Austria, Cyprus, Finland, Sweden), diversification of routes and programmes in VET (e.g. Bulgaria, France, Poland, Portugal) the establishment of guidance and counselling systems, the integration of vocational subjects into general programmes and vice versa or launching information and promotion campaigns.

The lack of data on the participation of young people in VET programmes is a serious handicap in the evaluation of policy actions and, if necessary in safely redirecting policies towards measures proved to be successful in other countries.

The introduction of special – sometimes obligatory - programmes and facilities are popular in keeping dropouts in the system. The introduction of special programmes and targeted facilities within or outside the existing VET institutes are reported in 21 countries. In this case the strategy is not so much focussed on making learning more attractive, as well on discouraging (or blocking) other pathways ways.

In terms of CVT participation the introduction of financial incentives for individuals and companies is a popular measure as is reform programmes that fostering counselling and guidance services for learners and provide advisory services for companies. The development of advisory and counselling services is probably a safer policy option as there is reasonable doubt that incentives in it itself are sufficient to motivate citizens to invest in learning; the majority of European citizens claim not to be prepared to invest in learning, even if investments will result in growing private benefits.

People are found to have less than adequate ideas about the profits of learning and assess the benefits from learning lower than evidence suggests. Therefore, more information on these benefits can be seen as a necessary prerequisite to encourage investment in learning. But it is not enough as almost half of the European citizens (EU15) would not pay any of the costs for education and training to keep their present job, or even to get a pay rise or a promotion. Great numbers of European citizens seems not to be prepared to invest in learning, even if investments result in growing private benefits So far, there is no obvious optimal system of institutional or financial arrangements to foster continuous education and training.

In many countries cooperation between social partners/companies and VET at local and regional level is given priority, in particular by strengthening partnerships between regional education and training centres and local companies. Partnerships are a good example of a way to open VET systems to the needs and ideas of learners and social partners directly. As are initiatives resulting in direct participation of students in designing and planning educational programmes (student centred approaches). Direct involvement in programme design is an invitation to stakeholders to bring attractiveness on the agenda in the most direct way possible.

Chapter 7

Flexibility of vocational education and training

7.1 Introduction

Flexibility seems to have become an imperative for VET. Given the profound changes with which economies and societies are confronted world-wide, and the impact these changes have not only on those economies and societies, but on communities, companies and individuals, flexibility together with lifelong learning and employability appear to have become the key words in the reform of (vocational) education and training systems that are being undertaken across Europe, and outside Europe as well (Green et al., 1999; Nijhof et al., 2001).

If VET is to contribute to achieving the Lisbon goal, it has to become more flexible. Indeed flexibility is one of the key words in the Commission's concrete future objectives of education systems as well as in the Commission's Detailed Work Programme on the Follow-up of the Objectives of Education and Training Systems in Europe.

7.2 Conceptualising flexibility

The Technical Working Group H (TWG H) 'Making learning attractive and strengthening links to working life, research and society at large' sees flexibility of formal education and training institutions and systems as one of the priority issues in making learning more attractive. Flexible, that is modular and active curricula, teaching and learning that appeals to the intrinsic motivation of people to learn, individual learning paths and differentiation in modes of delivery, guidance and counselling, credit accumulation and transfer and validation of non-formal/informal learning are considered to be key issues in realising flexibility (TWG progress report, 2003, pp. 11-13). Although this gives a first indication of what flexibility might be, it also indicates that flexibility is a somewhat 'fluffy' concept. The TWG sees flexibility as part of, or at least precondition for attractiveness. In our perception however, these are two distinct concepts. VET systems can be attractive in terms of the number of students they attract or in terms of the status awarded to VET, without being flexible, whereas flexible VET systems and institutions can still be confronted with a lack of parity of esteem.

The concept of flexibility can be defined, or better, analysed in various ways. One can look at flexibility from a system perspective (input, throughput, output) as well from the perspective of different forms of flexibility (individual, curricular, delivery/pathways, methodological) (Nijhof & Streumer, 1994; Raffe, 1994). The following forms, or better, dimensions of flexibility in the context of education, training and learning can be distinguished:

Organisational flexibility: here a further distinction can be made between inter-organisational and intra-organisational flexibility. Inter-organisational flexibility refers to the existence or absence of institutional barriers between different institutions that together comprise

vocational education; or, in other words, the extent to which it is possible to change from a learning pathway provided by one VET institution to a learning pathway provided by another VET institution without any delays or other obstacles that may unnecessarily lengthen learning time due to the switch. The intra-organisational flexibility refers to the extent to which organisational preconditions (such as: timetables, engagement and competencies of staff, resources, locations, etc.) enhance or inhibit the flexibility in, among others, enrolment, outflow and pathways (De Bruijn et al., 2004);

Pedagogical flexibility: pedagogical flexibility concerns the ways of teaching and learning applied and the instructional and guidance activities of the teachers and trainers as well as the learning activities of the participants themselves. Or as the Bruijn et al. (2004) frame it:

'Pedagogical flexibility means that the educational process – as regards location, learning resources, work forms, composition of groups, guidance activities, and forms of application – is defined in terms of the needs of participants, together with the demands and needs of occupational practice, and is differentiated in terms of these needs.' (De Bruijn et al., 2004);

Flexibility of pathways: refers to aspects like open access, less emphasis on distinctions between groups of participants in different pathways, smooth transfer between different pathways and a greater diversity in the further educational routes and labour market possibilities upon completion of a learning pathway (Raffe, 1994);

Curricular flexibility, which involves flexibility with reference to a number of dimensions, namely flexibility over time, e.g. updating the curriculum due to changes in competencies demanded by occupational practice, across space, e.g. adjustments to regional conditions, and across individuals, e.g. meeting the particular needs of individual students (comparable to input flexibility) (Raffe, 1994).

These forms or dimensions of flexibility are not completely independent. Organisational flexibility (both inter-organisational and intra-organisational) for instance, can be seen as a precondition for realising flexibility in pathways. Similarly, it can be argued that in order to meet particular needs of individual students, not only curricular flexibility, but also pedagogical flexibility may be needed.

7.3 Flexibility: dimensions and developments

Above, we made a first attempt to unravel the concept of 'flexibility'. That flexibility is a 'fluffy' concept becomes clear when one analyses the responses provided in the DGVT questionnaire with regard to the question what specific policies are developed in order to increase the flexibility of VET routes/the VET system for young people, adult learners and industry (question 5). The answers provided show a rather broad range:

- Modularisation (Austria, Belgium, Czech Republic, France, Germany, Hungary, Iceland, Luxembourg, Malta, Poland, Portugal, Slovenia, Sweden, Turkey);
- Establishing national qualification systems/frameworks (Czech Republic, Ireland, Lithuania, Malta, Netherlands, Slovenia, UK);
- Establishing competence based programmes (Bulgaria, Czech Republic, Estonia, Hungary, Italy, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia,);
- Increasing access to higher education (Austria, Finland, Germany, Liechtenstein, Portugal, Spain, Sweden).

Some countries also mention developing credit accumulation and transfer systems (Belgium-Wallonia, Denmark, Portugal), where other countries mention this specific policy as part of the recognition of non-formal and informal learning (question 6 of the DGVT questionnaire).

These ‘examples’ are only broad categories in the sense that the specific measures within these categories can differ between countries (e.g. modularisation of initial VET versus modularisation with a focus on adult education). Next to these ‘common themes’ in flexibility, the DGVT questionnaires provide various country specific examples of policies that should foster flexibility (and with that how flexibility is perceived). It should be noted that in the country reports various countries (about half) do not make a distinction between raising the status of VET, improving its attractiveness and/or its flexibility (it is treated as being the same thing) or that some other countries (notably France) explicitly argue that policies aimed at raising the status of VET also address the issues of attractiveness and flexibility and vice versa.

This section analyses the following dimensions of VET flexibility in relation to the Lisbon goals (and the more specific goals for education and training formulated in its wake) and outlines measures that countries undertake in order to increase the flexibility of VET⁵⁹:

- Flexibility in pathways;
- Curricular flexibility;
- Organisational flexibility.

Given that pedagogical flexibility is closely related to innovation in teaching and learning, this will not be further discussed here, since this is the theme of section 3.

7.4 Flexibility in pathways

Flexibility in pathways concerns, as we have said, open access, more options for progression through the VET system, smooth transfer between different pathways and a greater diversity in further educational routes and labour market possibilities. The extent to which such progression routes have been deliberately built into the system, or at least enabled by the VET system, increases the flexibility in (individual) pathways of participants and also contributes to the accessibility of the various VET options.

National qualification frameworks and credit transfer

An important measure to establish progression routes in VET is the development of national qualification frameworks or systems in which the different VET qualifications at different levels are located. Various countries (Czech Republic, Estonia, Hungary, Ireland, Italy, Malta, the Netherlands, Poland, Romania, Slovenia, Turkey, the UK) mention the development or implementation of such a framework, or at least the intention to develop one (in the case of Italy this goes no further than consensus building). In principle, a national qualification framework establishes both the vertical and horizontal linkages between qualifications. Whether horizontal and vertical progression actually is taking place or is made easier in practice is another issue, and can be influenced by various factors outside the qualification framework (e.g.: required entry qualifications, openness of VET institutions, accessibility of particular provision (remoteness), etc).

Credit transfer systems or measures for credit accumulation can, in this context, be a tool to further enhance horizontal and vertical mobility. Only six countries mention explicitly (the intention to) develop or implement a credit transfer system (often related to a national qualification framework) as part of VET policies (Denmark, Germany (only for access into

⁵⁹ We try to focus the following subsections on actual measures taken. However, often country reports (which provide much more detailed information than the questionnaires) describe characteristics or measures taken during the 1990s or even earlier; far before Lisbon. Therefore, sometimes reference is made to such ‘old measures’, just to complete the picture.

HE), Hungary (very preliminary), Ireland, the Netherlands and the UK, in particular England and Scotland).

Individualised pathways

VET nowadays has to cater for a variety of participant groups that includes young people seeking a qualification to enter the labour market and new target groups that differ substantially from the traditional target group in terms of educational background and experiences, work and life experiences, ambitions and preferences, etc. In order to be able to serve these different groups of participants, flexibility is a necessity; both flexibility in pathways and flexibility in delivery. However, this is not the only reason. Flexibility in pathways in terms of more tailored and individualised programmes, can also contribute to the attractiveness of VET and to its effectiveness and efficiency. Not in the least since VET both as a system and as institutions have to balance between the poles of preparing (young) people for working life and lifelong learning and the own ambitions and background and situational characteristics of participants.

In this context, the most far-reaching form of flexibilisation of pathways is to allow for tailor-made individualised pathways, in the sense that students have a strong influence on the pace but also on the content of their own curriculum. Often this is paired with modularisation (increasing students' choice, partial qualifications). Modularisation in this is only a precondition and does not necessarily result in individualised pathways. In nine countries individualisation of pathways is an issue (Austria, Denmark, Finland, Italy, Malta, Netherlands, Norway, Sweden and the UK), though it is only really implemented in Denmark where students (since Reform 2000) can shape their own individual pathways, supported by a personal development plan, according to content, pacing and exit level. In the other countries flexibilisation of pathways is either still being planned or in a very first stage of implementation.

Guidance, counselling and information

Young people have their own ambitions and problems. They are confronted with increasing opportunities, possibilities, choices and information, individualised pathways being one of them. At the same time, the nature and length of the process of transition from school-to-work is changing as well. Graduation from VET and entering the world of work is no longer such a sharp demarcation in young people's lives as it used to be. Also, the question is whether at the age of 15 or 16 (typical transition age from lower to upper secondary education) youngsters already know what they want to do in working life, whether they have an idea of what an occupation entails. The increased diversification and differentiation, which is typical for many VET systems makes it even more difficult to make the appropriate choice. This holds for both young people and adults. The latter might be confronted with choosing the appropriate education or training at crucial transitions during their working life (such as re-entering the labour market after a period of unemployment or inactivity or reorientation of one's career).

It is in this particular context that installing adequate guidance and counselling systems in order to support young people and adults in making optimal choices in their decisions which education or training to follow, is extremely important. This importance is underlined by the Resolution of the Council of the European Union (May 2004), in which the importance of high quality guidance provision for all European citizens and the importance of refocusing guidance provision in order to support citizens lifelong and life wide learning, is underlined. Although, internationally, guidance seems to be higher on the policy agenda than ever before, various reviews of guidance policies as undertaken by the OECD, CEDEFOP and ETF show that in various countries guidance policies, systems and practices do not yet meet the demands of knowledge-based economies and societies. Nevertheless, the studies show that most countries acknowledge the importance of good quality (career) guidance services and the necessity to expand access to such services in the light of lifelong learning, active labour market policies and sustained employability. At the same time, the delivery of career guidance

and counselling becomes more varied, although in some areas (e.g. higher education, ageing people, the workplace) further development of guidance is needed (Watts & Sultana, 2003).

Guidance and counselling policies or practices were not addressed in particular in the DGVT questionnaire and the country reports, but nevertheless it became clear that with regard to guidance and counselling two distinctions are important. The first distinction concerns the difference between guidance and counselling in VET and guidance and counselling in the labour market context. Where the former often focuses on educational choices (as being an end in itself), the latter still has a strong focus on getting people back into employment as quickly as possible. Watts and Sultana mention Germany and Norway as examples with a public employment service with a more long-term orientation, attempting to strengthen the employability of job seekers. The second distinction concerns the difference between guidance and counselling on the one hand and information provision on the other. Information provision is part of guidance and counselling but in itself more restricted.

Examples of information provision using ICT can be found, for instance, in Belgium FI. (the DIVA data base) and the UK (learndirect). Examples of separate guidance and counselling services that have been implemented or are going to be implemented can be found in some of the EU10, for instance the Czech Republic (guidance and counselling system) and Latvia (national centre of career choice), but also Liechtenstein (career guidance office). These services, however, seem to be more linked to the labour market system than the VET system. Denmark provides a good example of a strong guidance and counselling function within the VET system through the personal development plans each student draws up together with the teaching staff. Other examples of guidance and counselling are the inclusion of specific subjects or lessons in the curriculum of lower secondary education, that should help students in a first orientation on careers and the world of work (e.g.: Czech Republic, Hungary, Liechtenstein.)

Other potential preconditions for flexibility in pathways

Flexibility in pathways can be enhanced by the possibility to obtain a particular VET qualification through different modes of delivery; this concerns mainly the distinction between school-based and work-based delivery⁶⁰. This possibility is only provided in Austria, France, the Netherlands and the UK.

Some countries attempt to enhance flexibility in pathways by merging provision in larger institutions that have the capacity to provide a wide range of programmes (VET programmes as well as adult education programmes). This is the case in Denmark (only recently implemented), France (all VET programmes, irrespective of level), the Netherlands and the UK. This is often combined with an increased autonomy at the institutional level, which gives these providers more space for developing tailor-made solutions for different target groups. A similar trend involving mergers between VET institutions is reported by several EU10 countries (Bulgaria, Estonia, Lithuania), though here the main focus appears to be to achieve economies of scale and increase the efficiency and effectiveness of the VET institutions. However, decentralisation and increase of autonomy at lower administrative levels (be it public authorities or the VET institutions itself) is a common trend throughout Europe.

7.5 Curricular flexibility

In general there seems to be consensus with regard to what should be learned in VET. VET has to deliver competences or qualifications that equip young people with enough occupation-specific skills to be able to enter the labour market and in particular their first job. This is,

⁶⁰ What is considered to be school-based or work-based can differ between countries, but this definition issue is beyond the scope of this chapter.

however, no longer considered sufficient. VET should also qualify young people for the future, which means that they have to be prepared for the unpredictable and be able to cope with new problems and situations and therefore have to dispose of basic skills, job-specific skills and overarching or meta-cognitive skills as well as (inter) personal skills (Green et al., 1999; Nijhof et al., 2001; Raffe, 1994, 2001). The importance of professional or vocational and (inter) personal skills is also underlined in the Commission's concrete future objectives of education systems. VET is also expected to prepare (young) people for lifelong learning.

Broad qualifications

Until now, preparing (young) people in VET for working life has been mainly focused on responding to the (perceived) demands from the side of the labour market and business and industry, as often laid down in occupational profiles or occupational standards⁶¹. Under the old 'industrial regime' with more or less stable occupational structures this was not a problem. However, the emerging knowledge or learning economy is characterised by uncertainty, rapidly changing qualification demands and blurring of occupational boundaries and structures. The common response to such uncertainties is to develop and refine planning methods that increasingly derive the content of VET curricula directly from occupational practice. The risk entailed by this approach is that it leads to a complex qualification structure, with too much specialisation and differentiation, often with many narrow and job specific qualifications that do not meet the demands of preparing youth for both working life and lifelong (and life-wide) learning. This 'backward' mapping might have sufficed under the old 'industrial regime', but is no longer adequate today. The knowledge society seems to require broad qualifications or curricula instead of job-specific ones. The attempts that have been or are being undertaken in various countries (such as Austria, Belgium-Flanders, Denmark, Germany, Hungary, the Netherlands, Slovakia, the UK) to reduce the number of different qualifications or pathways in VET, indicate that the issue of broadening qualifications is an important one in reforming VET in the light of preparing people both for the labour market and for lifelong (and life-wide) learning.

Modularisation

Some countries opt in this context for a further individualisation of pathways through VET, in the sense that they increase the choice options for individual participants to design and/or plan their own route towards a qualification (see also Section III of this report). It is often thought that modularisation is a precondition for realising individual pathways. Modularisation is in the context of making VET (systems) more flexible a hot topic, given the answers provided in the DGVET questionnaires. Modularisation can, however, have a negative impact as well in the sense that it can lead to a fragmentation of the curriculum. If not properly designed, participants (certainly without adequate support) can be faced with the difficulty to see the coherence of the modules and to give meaning to what has been learned in different modules. This being said, it is clear that modularisation is a policy option in nearly all member states, candidate and associated countries, though there are distinct differences in the extent to which modularisation has already been realised as well as the scope and aim of modularisation. In part of the countries implementing a modular approach in (part of) IVET is in debate, has just started or only partially been realised. This is the case in Austria, Belgium, Bulgaria, the Czech Republic, Germany, Latvia, Lithuania, Luxembourg, Malta, Poland, Romania, and Turkey.

Concerning the scope of modularisation, some countries perceive the realisation of modular curricula as of particular importance in adult education (sometimes in relation to the intended implementation of systems for the recognition of prior (experiential) learning). This is in

⁶¹ Depending on the approach applied, this could be broad occupational profiles or standards, but also rather small/narrow profiles or standards that could better be characterised as being job specific. It often is argued that broad occupational profiles or standards are preferable, since they provide the basis for lifelong learning and employability, whereas narrow or job-specific profiles entail the risk to become obsolete more rapidly, if particular industries or production modes disappear.

particular the case for France (the biggest provider of adult education and training has modularised all its programmes), Hungary, Lithuania and Poland. In Estonia a modular system is introduced that should cover both IVET and CVT. With regard to the aim of modularisation the optimisation of choice and the realisation of individual pathways –(for instance through obtaining partial qualifications that can be completed into a full qualification at times or via modes more suitable for the participants) is an issue that is addressed in Denmark, Estonia, Finland, Italy, the Netherlands, Norway and Romania. In addition, in some countries the issue is raised of the ‘breadth’ of modules. This relates to the earlier mentioned potential disadvantage of modularisation. In order to ensure the comprehensiveness and transparency of modular qualification systems, it is attempted to develop broad and relatively larger modules instead of small units. This is in particular the case in the Denmark, Finland, Norway, Sweden, but is also an issue in the Netherlands.

7.6 Organisational flexibility

Organisational flexibility, as said, concerns the extent to which VET organisations allow to switch pathways either within one institution or between institutions, without any delay. The extent to which VET organisation can be flexible in this way, depends on the VET system (among other things) and the amount of flexibility that is allowed by legislation and regulations. This section does not only take up (preconditions for) flexibility at an organisational level, but also the wider issues of flexibility of VET in relation to other sub-sectors and across Europe.

Vertical mobility

An important issue in organisational flexibility concerns vertical mobility, in particular into tertiary education. This is not only an issue of flexibility but also one of attractiveness as has been argued in the previous chapter. The extent to which VET provides access to tertiary education is seen as an important indicator for its attractiveness (see previous chapter). In some countries, in particular the new Central and Eastern European Member States, people can obtain both a vocational qualification and the general diploma that is required for entry into tertiary education, though this often requires a longer period of study or additional studies after having obtained the vocational qualification. Similar options exist in Finland, France (BacPro), the Netherlands, Norway, Sweden and the UK. Different countries (e.g.: Austria, Germany) provide the possibility for VET students to gain access to tertiary education through an (additional) external examination and double qualifications, where they previously would not have had access to tertiary education.

Recognition of non-formal and informal learning

It is now it is widely acknowledged that informal and non-formal learning are as important in the context of lifelong learning and that a lot of informal and non-formal learning takes place. Assessing knowledge, skills and competences acquired through such informal and non-formal learning can contribute towards the accessibility of new or higher level qualifications and open up new formal learning options for participants who otherwise would not have been admitted to a particular VET or higher education programme. According to the answers provided in the DGVET questionnaires (with regard to the question whether or not recognition of non-formal and informal learning is used as a measure to improve the VET system), it is clear that in nearly all countries this is an issue in VET policy; countries are either planning measures in this area, or have already implemented measures to recognise informal and non formal learning.

Table 7.1: Recognition of non-formal and informal learning

Planned	Belgium-Flanders, Bulgaria, Czech Republic, Finland, Greece, Iceland, Liechtenstein, Latvia, Malta, Poland, Romania
Implemented	Austria, Belgium-Wallonia, Denmark, Estonia, France, Germany, Hungary, Ireland, Italy, Lithuania, Luxembourg, Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Turkey, the UK
No specific policy yet	Cyprus, Slovakia

Source: DGVT reports

Table 7.1 gives the impression that a substantial number of countries have already implemented systems for the recognition of non-formal and informal learning. However, it is clear that the recognition and validation of non-formal and informal learning is still in a very early stage in most countries. On the one hand, 'implemented' measures sometimes concern the acceptance of common frameworks or methodologies or pilots (e.g.: Italy, Norway), whereas on the other hand recognition takes place by means of formal examinations to acquire, for instance, access to tertiary education (e.g. Austria, Turkey). Evidence of the impact of recognition and validation of non-formal and informal learning in terms of the number of people who have acquired a qualification through this process is not evident in the DGVT questionnaire or the country reports, with the exception of Norway and Portugal.

Flexibility of VET in relation to other (sub) systems

A particular feature of VET is that it has to retain links with various other (sub) systems and actors. An obvious example is linkage with educational institutions at the lower secondary and tertiary level. Another link, which is perhaps even more important, concerns the relations with the labour market and associated sector or branch organisations, social partners, and (regional and local) employers.

At national level, the establishment of qualification frameworks or, at least, nationally recognised qualifications appears to be an important instrument for enhancing the communication between VET and the social partners. As indicated in the previous chapter (see also Section 4), involvement of social partners at the national level is widespread across the European countries and often concerns in particular the articulation of their qualification needs that are subsequently translated into national qualifications or qualification frameworks. This does not mean that the social partners are the only ones engaged in this issue, but that in most European countries their involvement is (actively) sought in order to ensure that the qualifications delivered through VET are recognised in the labour market. However, the actual involvement of the social partners does vary between countries and is still considered somewhat problematic in some countries (e.g. Cyprus, Greece).

Cooperation between VET institutions and the social partners at regional and local level seems to be problematic in some countries. In the country reports from the EU10 problems in this area are mentioned, although they are not the only countries facing these problems. They perceive that a main impediment for the inclusion of practical or –more specifically- work-based training in the VET curricula is due to the lack of interest from the side of enterprises to become involved in VET (delivery).

At the same time, it are also the EU10 that report an interesting trend towards decentralisation in the sense that curricula have been established at the national level, which allow for a certain amount of regional orientation in their implementation. Often this amounts to about 80% of curricular time 'prescribed' at the national level (in terms of attainment targets), while the remainder of the curricular time can be used to meet specific regional or local labour market demands. Such opportunities for 'regionalisation' of VET curricula also exist, for example, in Austria, Denmark, the Netherlands and Norway.

Flexibility of VET across Europe

An important element in the Copenhagen process is the establishment of a European credit transfer system intended to enhance student and worker mobility in Europe. The TWG dealing with this issue has made the first (methodological) steps towards a framework for such a system. One could put forward the hypothesis that having national credit transfer systems might be an enhancing factor in developing a European credit transfer model. If this hypothesis would hold, the present situation does not seem to be very encouraging. As indicated above only six countries report that they are developing or implementing such a system or have the intention to do so.

At the same time, if one looks at the extent to which Europass in its present form has been taken up, a much more optimistic picture emerges. For those countries, for which information has been provided on the Europass implementation in the national reports it becomes clear that the majority have implemented Europass. It is mainly the EU10 that have not yet implemented Europass but they are either investigating the possibilities to do so or are planning implementation (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Romania, Slovakia). Only a few countries provide information on the actual uptake of Europass. The picture that emerges is that though there is a steadily increase overall the actual uptake is modest (ranging from just a hundred or a few hundred in Liechtenstein and Ireland to just over 5000 in France).

7.7 Conclusions

Flexibility is a concept that is understood in very different ways across Europe. About half of the countries did not make a distinction between raising the status of VET, improving the attractiveness of VET and increasing VET's flexibility. This makes it difficult to draw clear conclusions with regard to the developments in the flexibility in VET and is made more difficult still by the absence of quantitative indicators for measuring flexibility (a 'baseline' measurement of how flexible VET systems and institutions are, is not available).

Nevertheless, with some caution, the following conclusions can be drawn. As far as policy measures aimed at increasing VET are concerned, they mainly focus on creating preconditions at the system level and focus hardly at all on enabling VET providers to provide more flexible VET provision.

Modularisation is the most common policy to enhance flexibility. Nearly all European countries mention this, though the stage of development and implementation of modularised curricula as well as the scope and aim of modularisation differ between countries. Far reaching measures in enhancing the flexibility of VET, such as establishing national qualification frameworks and credit transfer systems (including partial qualifications) that together can contribute to better horizontal and vertical progression routes through the VET system are mentioned by few countries. In some cases examples only concern plans or intentions, which will take a couple of years before they have been turned into real measures. The realisation of individualised pathways is even less common. Again, various countries mention the intentions to come to individualised pathways, but have not reached the stage of full implementation yet. This, to a certain extent, also holds for the recognition of non-formal and informal learning, although it becomes clear that this is an issue that is on the policy agenda of nearly all European countries and quite some of them are in the process of implementing more concrete measures.

Flexibility is not an end in itself; it is a way to better answer the needs of both those who (want to) participate in VET and the labour market. VET institutions have to balance between these two poles, since they are not necessarily reconcilable. The extent to which VET institutions have the 'freedom' to find their own solutions in this balancing, will partly determine how

flexible they can be in their provision and answers. This is highly influenced by national legislation.

Flexibility in VET across Europe seems to be an issue that interests countries, at least if the (planned) implementation of Europass is taken as an indicator. This could also indicate a certain willingness to support a European credit transfer system. However, if the assumption holds that the existence of national credit transfer system might contribute to the realisation of a European credit transfer model, the picture is much less optimistic. Only a rather limited number of countries report that they either intend to develop or implement a credit transfer system or are in the process of doing so.

Chapter 8

Competences in the workplace

The concept of learning workplace skills has developed from an almost exclusive emphasis on the formal teaching/learning of technical skills, to include the acquisition of competences and developing key or transferable skills that people need if they are to meet the needs of a changing labour market.

We can define a competence as:

*'An ability that extends beyond the possession of knowledge and skills. It includes: i) cognitive competence involving the use of theory and concepts, as well as informal tacit knowledge gained experientially; ii) functional competence (skills or know-how), those things that a person should be able to do when they works in a given area; iii) personal competence involving knowing how to conduct oneself in a specific situation; and iv) ethical competence involving the possession of certain personal and professional value'*⁶².

This chapter distinguishes between different conceptions of competences and skills, which in part may be related to the different functions of VET. It examines the extent to which people at work have access to training to upgrade their competences and the extent to which companies make it a priority to invest in peoples' skills.

8.1 The emphasis on competences

The Lisbon strategy calls for a highly skilled workforce as European countries and business sectors move towards an increasingly knowledge-based economy. The European memorandum on lifelong learning (2001), recognises the importance of the need for new and basic skills for all, more investment in skills development, finding ways to value the outcomes of learning from a range of contexts (notably informal and non-formal) and to bring learning closer to the learner. These developments have created the conditions for a debate and a shift in policy emphasis concerning skills, competences and how we learn them. It is helpful to draw a distinction between 'traditional' and 'new' models of VET learning and assessment. The typology from Klarus (2001, p. 269) (shown below in Table 8.1) produces two models for VET that are regarded as a useful as a point of reference.

⁶² The role of national qualifications systems in promoting lifelong learning, International Synthesis Paper, OECD, Paris (in print)

Table 8.1: Traditional and new models of VET learning and assessment

Traditional learning and assessment model	New learning and assessment model
Risks lie with the individual: once a dropout, always a dropout	Risks are shared; dropouts can develop further and have recognition for the competences they have acquired elsewhere
Individualisation of isolated learning activities	Authentic, contextual and social learning
Academic learning content, primacy of knowledge	Application of knowledge in realistic circumstances, emphasis on developing competences
Knowledge: alongside but often separated from skills	Competences: situation + information + experience + skills + attitude
Assessment of knowledge aimed at ranking, gate-keeping, exclusion and the identification of deficiencies	Assessment aims at validating competences and enhancing learning

Source: Klarus (2001)

Two ways of looking at competences can be distinguished within these learning and assessment models. One focuses mainly on promoting the acquisition of generic skills (sometimes called key or core skills) irrespective of the learning context; the other emphasises the importance of specific context or work processes (Onstenk, 2000) in which the learning takes place. The main difference between the two approaches to competences is that one favours a universal model in which the role of the schools is to equip learners with a set of generic basic competences. The second model sees real-work experience as a vital component of vocational education, leading to occupational competences stemming from learners engagement with occupational 'core problems'. Both approaches are similar in one important respect: there is a trend to develop competences through contextualised learning settings.

8.1.1 Key competences: the 'cornerstone' of education and training in the knowledge-based economy

Chapter 4 showed how in IVET increasing emphasis is now placed on learning a range of general skills that are transferable from one working situation or wider life context to another. The Lisbon Expert Working Group developing this theme as part of OMC has identified eight areas of key competences. See Table 8.2

Table 8.2: Eight key competences proposed by the OMC expert working group

Communication in the mother tongue	Learning-to-learn
Communication in a foreign language	Interpersonal and civic competences
Mathematical literacy and basic competences in science and technology	Entrepreneurship
ICT skills	Cultural awareness

Source: Working Group 2004 on Basic skills, entrepreneurship and languages

There is no doubt of the importance of key competences in the minds of both employers and training providers. What exactly the key competences are, and how they are best learned and assessed are more difficult questions (see Section 3 of this report). As training is now expected to cover key competences as well as technical/operational skills, it is important that we find some answers to these questions.

Basic skills

In terms of raising basic skills, which is regarded as a prerequisite for people to cope well with the rapid changes they face in the workplace and community, the European benchmark for 2010 is to reduce the proportion of low-achieving 15 year olds in reading literacy in the EU by 20%, compared to 2000. In gauging the progress towards increasing key competences for the knowledge society among young learners, the PISA 2000 survey (OECD, 2000b), particularly the reading literacy scale, provides international comparisons on one of the main component of basic skills. The mean scores for Finland and the Netherlands show they are the highest performers on this scale, followed by a group of countries that includes Ireland, Japan, Sweden and the UK. USA performs almost exactly on the EU average, as does the Czech Republic, the highest scoring of the new member states. Greece, Luxembourg and Portugal are the lowest scoring of the EU 15, while Bulgaria and Romania score a lower mean than any of the EU25.

The conclusion of the EC staff working paper and the joint interim report is that the basic skills target is achievable, but would require rapid progress in some member states. It would be interesting to test out the role of VET (including prevocational systems) in making progress towards the priority benchmark, or possibly in inhibiting achievement. Given the range of functions that VET systems can be expected to have, does VET contribute to achieving higher levels of basic skills among young people, for example by motivating those who might otherwise be school refusers or dropouts? Or, does the association of VET as a pathway for young people who have not succeeded in the general education tracks mean that VET has a negative image, which translates into demotivation and poorer performance? Since several European countries have separated young people into general and vocational or prevocational pathways early in the secondary phase, it would be useful to know how young people in vocational pathways perform at 15, compared to those in the general pathway. At present we do not have the comparative data to know this. For this to happen, larger numbers of students in VET pathways would need to be included in the PISA study, so that comparisons could be made.

8.1.2 Professional competences and skills

Another way of conceptualising competences locates their acquisition and content firmly within work processes, and understands competences as the outcome of contextualised learning. Some competences, for example, cannot be learnt in school-based settings, since they are bound to the specific environment and constraints of work in a specific field.⁶³ Associated with this, is the idea that occupational domains all have their own 'core problems' (Onstenk, 2000). Cognitive research suggests that the development of competences for a specific profession or occupation is a process that can take many years of practice before the individual becomes a proficient member of an occupational community of practice.⁶⁴

Given the long-term shift away from routinised mass production models new work systems have emerged, which nowadays are labelled as 'high-performance work systems':

'The core of a high-performance work system (HPWS) is that work is organised to permit front-line workers to participate in decisions that alter organisational routines. This may be achieved by using shop-floor production teams or through employee participation in problem solving or quality-improvement teams and statistical process control. Workers in an HPWS experience greater autonomy over their job tasks and methods of work and have higher levels of communication about work matters with other workers, managers, experts and, in some instances, with vendors or customers. Work organization practices in an HPWS require front-line workers to gather information, process it, and act on it.' (Applebaum, Bailey, Berg 2000: 7-8)

⁶³ See for example Fischer & Rauner (2002).

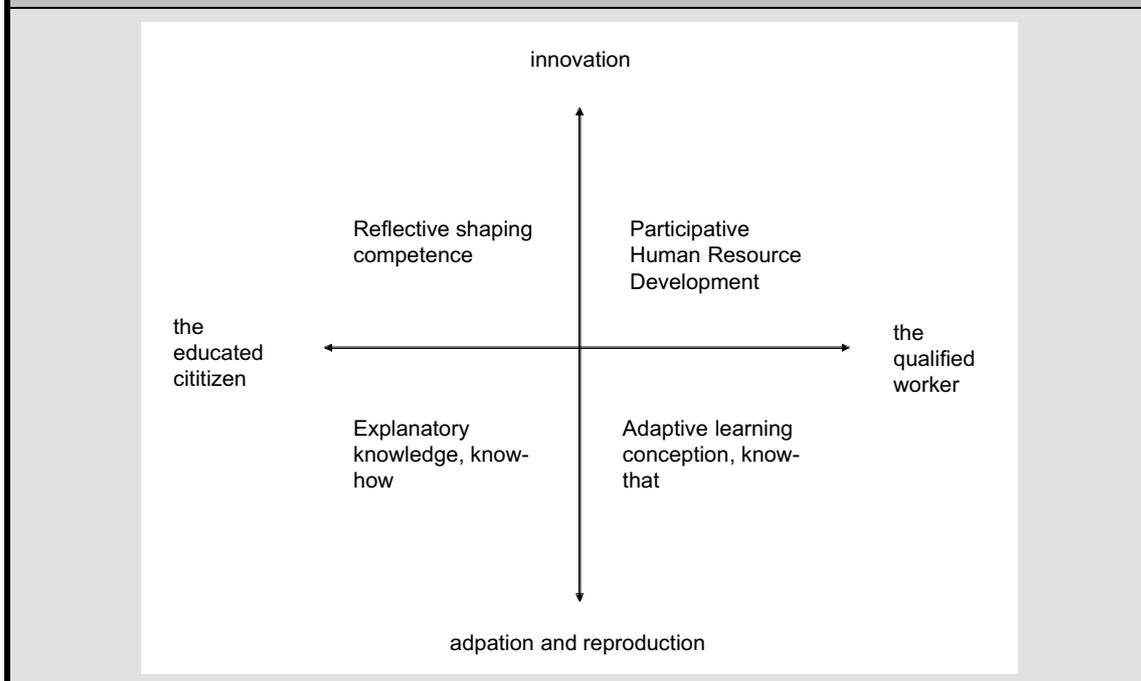
⁶⁴ See also Eraut, 1994 and Falmer, 2000 or the works of Patricia Benner.

Relatively high levels of skills and competence in the work force coupled with broader job definitions and incentive systems (often combined with employment security) are often associated with high performance work systems. The most challenging feature is the skill and competence domain - work requires more (and broader) skills from the employees to do their work successfully. A consequence of this is that it is in the employer's interest to maintain high levels of employment security, so that investment in personal skill development is secure for the company and the individual. The companies' main task is to offer training opportunities to raise the level of employees' competences, by extending skills and knowledge, improving operational skills and teamwork, communication, autonomous decision-making and knowledge handling. These competence-building processes are often highly contextualised and vary with sectors, business processes and use of technologies.

In this respect, the contribution of VET to development of the profiles of competences in the workplace is highly context dependent, with VET being shaped by the work processes as well as shaping the competences in the workforce to carry them out.

In addition to the company and production-based view of competence building there is also a societal level that is important. Obviously, VET is not only shaped by the needs of production and human resource development, but rather embedded in the contexts of general education and active citizenship. Thus, VET and the processes generating knowledge and competence are also influenced by the perception that social goals such as educating responsible citizens lie within the scope of VET. Table 8.3 provides an idealised view of different ways of seeing occupational competence development. In the table, competence lies on the continuum between liberal education and targeted vocational or technical instruction (the horizontal axis). Liberal education develops the educated person/citizen and targeted vocational or technical instruction develops the qualified worker. The vertical axis is a continuum ranging from adaptive and reproductive ways of learning towards innovative and proactive orientations to learning processes.

Table 8.3: Skills, knowledge and competences in fields of tension between different functions of VET



Source: Rauner 2004, *Zur Erforschung beruflichen Wissens und Könnens*.

In real-world conditions the polar types are not generally observable. Commonly both are mixed but with differing emphases: one orientation may be dominant, but the opposite is also present and both influence the other.

Look at a the emerging quadrants of the matrix we find four types of competence:

- An adaptive competence building favouring learning contents primarily derived from external (technological and labour market) demands and focusing on qualified workers rather than on educated citizens⁶⁵;
- An explanatory knowledge and competence, emerging as a result of adaptive competence building and an orientation towards the educated citizen;
- An emphasis on innovative and proactive competence formation, combined with an orientation towards the qualified, specialist worker. This is often associated with the characteristics of high performance work systems;
- Finally, the orientation towards innovative and active workers (learners) in combination with the educated citizen perspective results in a reflective shaping competence.

It can be argued that different European systems place emphasis on different parts of the matrix. An example on the European level, fitting into the two upper quadrants is the European occupational profile “Car-Mechatronic”, combining sophisticated technical, service and business competences. Whether the implementation of the profile tends more towards ‘participative human resource development’ or ‘reflective shaping competence’ depends mainly on the national way of organising the connection between IVET and CVT. ‘Reflective shaping competence’ is a goal that is pursued in the German VET system, but not always achieved.

8.2 What is the contribution of IVET to enable young people to develop their skills?

The completed DGVT questionnaires provide evidence that some DGVTs assess their IVET systems as providing a sound basis for equipping young people with the skills they need for the transition from school to the labour market. Austria, the Czech Republic and Denmark are among those in this category. Others describe their systems as becoming more successful on account of recent reforms, and with the emphasis on further reform.

Case study: Austria

A long-standing tradition of highly diversified upper secondary education, with a wide range of dual-system and school-based options, and programmes that give access to higher education.

An initial VET system that is both kept up-to-date and has well-integrated links with the world of work.

All programmes contain more than vocational skills training – they include occupationally-related theory and practice, general education elements including at least one language, and ICT skills.

Adults can have access to qualifications through special programmes.

A variety of opportunities exist at tertiary level, in addition to convention university courses

Reforms under way include the quality assurance and transparency of qualifications, enhancing mobility and increasing the emphasis on entrepreneurship.

Source: DGVT Report

⁶⁵ In terms of Dreyfus’ expertise conceptualisation this competence type is built upon ‘know that’.

Case study: Czech Republic

The VET qualifications and branches operate in a stable way

The VET system is permeable, and has a low number of dropouts

All VET courses contain general education and the development of key competences

The number of graduates from VET courses is among the highest in Europe, and has grown steadily

Curriculum and evaluation reform are underway, guidance is being improved, and a national qualifications system is being developed.

Source: DGVT Report

Case study: Denmark

VET programmes have a high completion rate

Students completing VET courses have a high level of employability

VET meets the needs and demands of companies

VET programmes use resources effectively

Reforms include 'creating an education system among the best in the world', including high proficiency in qualifications and competences, increased flexibility, promoting innovation and entrepreneurship, increased internationalisation

Source: DGVT Report

Other countries report on a system that has some strong aspects, often through recent reforms, but where the emphasis is on continuing reforms to strengthen the IVET system. Estonia is a case in point cases.

Case study: Estonia

The qualifications system is now established and functioning

VET curriculum design is based on vocational standards and a modular curriculum have been introduced

There are learning opportunities for students with special needs

All schools have good ICT access

Reforms focus on the reorganisation of the VET schools network, with fewer schools and better use of resources, developing a quality assurance system for VET and raising the quality and status of VET

Source: DGVT Report Particular examples and characteristics of IVET will further be explored in Section 3. No DGVT reported a static system of CVT that is not subject to reform, even though in some cases reforms remain at the framework level, not at the level of the learner. This will be addressed in the next chapter.

8.3 To what extent does continuing VET enable individuals to update their skills?

Chapter 5 showed that the priority benchmark for participation in CVT in Europe is far from likely to be reached in 2010, and this cast doubt on the extent to which continuing VET currently an effective role in building the skill and knowledge of people across Europe.

Strengthening participation in CVT clearly has implications for strengthening competences among workers in different employment settings, and appears to be a priority in most European countries. For the EU15, however, (Bainbridge et al., 2004) concludes that:

- Participation for over-25 year olds is rising much more slowly than for under 25 year olds, and falls off sharply with age;
- Highest participation is found in Denmark, Finland, the Netherlands, Sweden and the UK, all well above the EU target. Fastest rates of increase are occurring in Belgium, Finland, Luxembourg and the Netherlands. Participation rates are actually falling for the years in question in Denmark and Sweden (from a high base) and in France and Portugal, from a comparatively low base;
- Men and women with a tertiary education are three or four times as likely to participate than those with basic schooling. The difference was most marked in Greece, Italy, Portugal and Spain;
- Employees are much more likely to participate in training in a large firm than a small one. Note that this partially explains the low participation in some countries with high numbers of SMEs;
- Differences in participation in continuing training seems to reflect for some countries a compensation effect between initial and continuing training (Germany: high levels of IVET, lower levels of CVT; UK, the converse). Nevertheless, the Nordic states – Denmark, Finland, Sweden – combine high levels of initial and continuing training. Greece, Italy, Portugal and Spain, to the contrary, combine a low level of participation in IVET with a low level of participation in CVT.

The conclusions reached by ETF (2003) for the new member states shows, equally, variable performances, but the base line is low. The analysis examines the combination of factors that has created and perpetuated low levels of participation in CVT in central and Eastern Europe. The chief among these seems to be a low level of priority accorded to CVT before transition and in the earlier phases of the re-design of education and training systems (except in some of the emerging service sectors), combined with available financial resources that are insufficient for substantial investment in continuing training. ETF concludes that:

- Overall participation rates for continuing training are considerably lower than the EU15 average. However, participation in the EU10 is broadly on a par with the range of participation found in the cohesion countries;
- The supply of training has become diversified, based on a range of institutions at different levels in the public sector. A private sector in training has emerged, playing an important role in emerging areas such as IT, management, tourism and accountancy; the quality of private providers varies greatly and is not well regulated;
- Training for unemployed people is at a worryingly low level;
- Counterbalancing this glooming picture to some extent, non-job-related training remains a strong tradition, and the adult education systems of some countries remain a feature, with emphasis moving on from upper-secondary to tertiary qualifications.

The European CVTS, which covers only firms in the private sector, gives a clear picture of the extent to which access to continuing training varies not only from country to country, but also from sector to sector. Taking further the analysis in Chapter 5, Table 8.4 shows the extent of the variation, by taking three countries each where participation in training is respectively high (Netherlands, Sweden, UK), medium (Belgium, Germany, Latvia) and low (Italy, Lithuania, Portugal), and tabulating participation in training across four sectors, (post and communications, banking and insurance, sale and repair of motor vehicles, and textiles).

Table 8.4: Participants in CVT courses in particular sectors, as a percentage of employees in all enterprises

EU15 ave for all sectors = 40%	Post & communications	Banking & insurance	Sale and repair of vehicles	Textiles
EU 15 average	62	45	38	15
Belgium	57	67	39	15
Germany	77	42	40	15
Italy	82	55	21	7
Latvia	29	40	14	5
Lithuania	42	32	7	4
Netherlands	43	65	53	27
Portugal	51	48	15	6
Sweden	66	87	50	51
UK	44	36	40	35

Source : CVTS2

The CVTS2 survey⁶⁶ (Eurostat, 2002) asked firms that do not engage in training to give their reasons for not doing so. Among the EU15, three in every four responded that there was no need for training; one in four said there was no time for training, and the same proportion said they recruit people with the necessary skills. Only three in 20 said that training was too expensive. In the new member states the reasons given differed somewhat. Cost featured more strongly. In the new member states there was a wide spread in terms of those who considered that initial training was sufficient.

When this evidence is overlaid with a recognition that workers who are younger, have a high level of education, work for larger firms and have a senior job have much higher chances of involvement in training, it can be seen that the chances for both older people and younger people with few qualifications fall away dramatically – almost completely, it can be said, in some sectors in some countries.

As the sectoral and social partner initiatives develop at the European level, in addition to the national initiatives, the case for identifying and addressing the poor levels of opportunities to participate in CVT for particular groups in particular sectors could not be stronger. Otherwise, it is difficult to see how the Lisbon approach to developing lifelong learning strategies can be meaningful.

However, as indicated, raising levels of participation in CVT appears to be a priority in many countries. Table 8.5 details initiatives reported by one or more country to stimulate demand for CVT, stimulate supply, improve information, advice and guidance, and to reform governance and co-ordination.

⁶⁶ Pages 44 and 126

Table 8.5: Initiatives to increase the uptake of CVT

Strategy	Policies and initiatives
Stimulating demand for CVT	High levels of public expenditure; Training levies and disbursement; Tax allowances for individuals / companies; Training grants for individuals / companies; Subsidies; Individual learning accounts or vouchers; Working towards integration of CVT and HRD; Investors in people; Better definition of skills and standards; Innovative schemes for recognising skills gained in the workplace, etc; Competence-based qualifications/ reforms; Validation of prior-experience, through jury or portfolio; Stakeholders as training 'close to the client' providers: e.g. chambers and Tus; SME training networks; Collective agreements and social partner cooperation; Public relations campaigns; Adult Literacy and basic skills campaigns; Teaching and learning adapted to meet individual's circumstances, not vice versa; Development of 'master-level' profiles and agreements
Stimulating supply of CVT	Stakeholders have new/shared responsibilities; Collaborative Training networks; Development of non-traditional HE courses; Distance learning; E-learning; Increased private sector provider involvement; Wider role for higher education; Training provision for ICT skills; Technological Innovation Centres; Networked training providers; Training centres for independent trades; Chamber of Commerce training provision; Second-chance schools; Creating coherent structures, without dead-ends; Creating new systems for meeting basic learning needs; Additional qualifications; Structured support for on-the-job learning; Workshops for people at risk of exclusion; In company centres, colleges, 'universities'; ESF funds for inclusion-related training; Active labour market policies to raise employability of those at risk of unemployment
Improving information, advice and guidance	Careers and recruitment guidance; One-stop advice centres on-line; One-stop centres in the 'high street'; Career mentorship; Entitlement to guidance and individual learning plan for recognition of informal and non-formal learning
Co-ordination and governance	Licence to practice linked to CVT; Legal obligation on employers to provide training; Legislation entitling the employee to training; Entitlement to paid education leave; Legislation to mediate/regulate the market; Specific lifelong learning targets; Grants to employers for on-the-job training for unemployed; Social partner collaboration; Frameworks for recognition of informal and non-formal learning; Shifting funding from the provider to the learner; Lifelong learning strategies, goals, targets; National employment action plans; Collective agreements and social partner cooperation; Coordinating the responsibility of government departments; Regionalisation and decentralisation

Source: country reports

Investors in People is an approach to incentivising both employers and employees to increase their involvement in continuing training through assessing their own training needs and evaluating the contribution that effective training can have on the success of the enterprise, whether in the private or the public sector.

Case study: Investors in People

The voluntary HR and training-focussed Investors in People (IiP)⁶⁷ scheme was started in the UK in 1990. It credits companies and organisations with IiP status that have met the standard based on 4 principles:

Commitment: to invest in people to achieve business goals

Planning: how skills, individuals and teams are to be developed to achieve these goals

Action: to develop and use necessary skills in a well defined and continuing programme directly tied to business objectives

Evaluating: outcomes of training and development for individuals' progress towards goals, the value achieved and future needs.

Both the IiP Standards and the organisations given IiP status are reviewed every 3 years. It is generally accepted that the investment in Human Resource Development required to meet the IiP status means that credited companies are more productive because their staff are more motivated and better trained.

Since March 2004 an ESF-financed pilot-project has begun to introduce the IIP-Standard in Austria. Ireland's equivalent is Excellence through People (ETP). Similar developments are taking place in countries such as the Netherlands.

⁶⁷ <http://www.investorsinpeople.co.uk/IIP/Internet/default.htm>

Results of the Eurobarometer on LLL (Chisholm et al., 2004) shows that people declare more often that they learned at the workplace in non-formal and informal settings. Nine in 10 Europeans think they learned something in at least one non-formal/ informal learning environment in the past 12 months, but only one in four report they have solely learned in such settings. 39 % think they have learned something in environments that span the formal, non-formal and informal categories. Virtually nobody (under 1%) thinks they have only learned something in formal settings.

This points out that paying attention to the non-formal and informal settings can be an accelerator in motivating people to learn. This does not only count for the qualified, because, the Eurobarometer shows that at least 7% of citizens with low education levels, regardless of their labour market status, say they would never want to improve their professional skills.

However, for those respondents outside the labour market, family and social environments are those where they are most likely to report having recently learned something. This suggests developing non-formal/informal learning opportunities is an important way to draw these citizens into education and training in the future.

8.4 Updating competences in SMEs

The smaller the size of a firm, the less likely it is on average to train employees. The majority of firms are SMEs. Therefore, it is worth looking specifically at skills and competence development in SMEs⁶⁸. A survey conducted by the Observatory of European SMEs in 2003 found that around half of the responding SMEs feature competence development activities in their business plan, and about 40% of these recorded a need to upgrade competence building. A number of obstacles were identified: short-term business pressures, costs, negative attitude to change, difficulty in identifying needs and, importantly, reluctance to invest in people for fear of losing them to another firm and consequently losing the value of the training. The survey also concluded that public authorities in several countries were encouraging initiatives to increase training for competences in SMEs, through both formal training and the introduction of competence-based training involving the recognition of skills gained through practical experience. The survey covered the EU15. It found that SMEs in Austria, Finland, Iceland, Ireland, Liechtenstein, Norway and Sweden and show a comparatively high involvement in formal and non-formal competence development, while France, Greece, Italy, Luxembourg, Portugal and Spain showed the lowest involvement.

8.5 Conclusions

Most governments and stakeholders now place importance on workers acquiring competences as well as technical skills. One version of competence refers to generic or key skills, these can be learned in many settings and may not require any specific context for their development. The second model sees real-work experience as a vital component of VET, leading to occupational competences stemming from learners engagement with occupational 'core problems'. Both approaches are similar in one important respect: there is a trend to develop competences through some kind of contextualised learning setting.

However, even though strengthening participation in CVT appears to be a priority in most European countries as table 8.5 shows, the priority benchmark for participation in CVT in Europe is far from likely to be reached in 2010, and this casts strong doubt on the extent to

⁶⁸ The Observatory of European SMEs, 2003, no1 carried out an analysis of competence development in SMEs

which CVT currently fulfils the potential to have effective role in building the skill and competences of people across Europe.

Strategies for strengthening participation encompass:

- Stimulating demand for CVT and targeted on companies and individuals, e.g. through tax incentives for training, schemes for recognising informal and non-formal learning, social partner agreements, targeting groups with basic skills deficits;
- Stimulating supply: e.g. through innovative learning partnerships, encouraging non-traditional sources of training in the workplace, e-learning;
- Improving information, advice and guidance;
- Co-ordination and governance: e.g. through social partner initiatives, licence-to-practice requirements, lifelong learning targets, entitlement to training or leave of absence to train.

Chapter 9

Ageing population

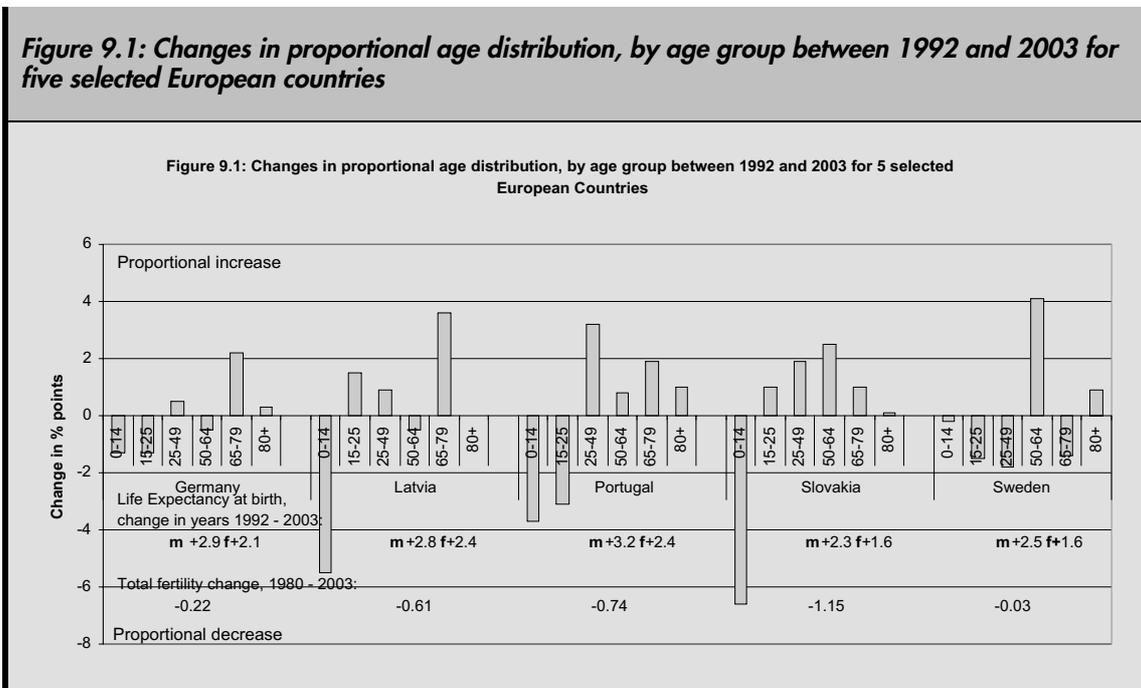
'Employment and participation rates (for older workers) have been declining steadily over the last 50 years.'(European Commission, 2002b, p5)

9.1 The challenge

Section 1 showed that a sharply ageing population profile is beginning to impact across European countries, and that unless the European labour markets, lifelong learning and training systems can adapt effectively, long-term difficulties are piling up. Figure 9.1 shows the ageing profile of five European countries that are typical in this respect.

The Lisbon agreement set a target for increasing the participation rate for older workers (those aged 50 to 64) in the labour market. It identifies lifelong learning as having a contribution to play, not least through improving older peoples' skills and adaptability. This chapter provides evidence and conclusions in response to the questions: What are the implications of the long-term population trends for the labour market? Are VET and lifelong learning policies in place to ensure that older people are able to remain productive for longer, and are equipped to adapt to changing demands and circumstances?

Figure 9.1: Changes in proportional age distribution, by age group between 1992 and 2003 for five selected European countries

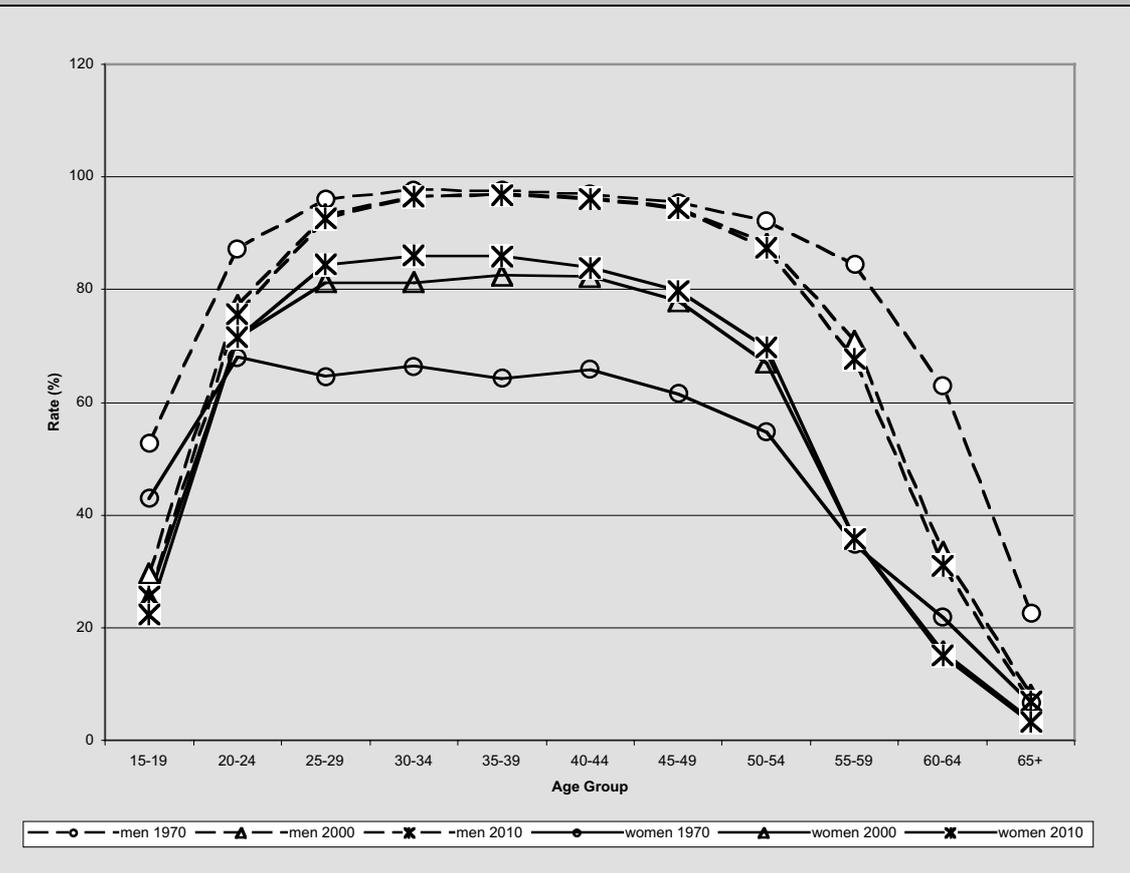


Source: Eurostat: New Cronos. Fertility statistics: Eurostat, Statistics in focus 'First results of the demographic data collection for 2003 in Europe' 13/2004. Table 3.

The European Commission concluded (in its report on increasing labour force participation and promoting active ageing) that in 2002 participation in the labour market declined faster

and earlier than had been the case in 1970. Then, age 60 had marked the beginning of a steep decline in rates of labour market activity. Participation rates for men aged over 55 were considerably lower than in 1970. The decline in jobs, particularly in regions that depended on manufacturing, has had a notable effect on participation rates usually through redundancy arrangements. The decline is sharpest among lower-skilled men. This is combined with a marked difficulty in finding re-employment, even in an economic upturn. Labour market activity up to age 60 is higher for women than had been the case in 1970, reflecting the overall trend in female participation. These trends are shown in Figure 9.2. The decline in employment rates among older workers has been particularly sharp and harsh in many of the new member states. In the transformations of the 1990s, opportunities to develop or change skills through training were minimal, as was guidance in a fast changing or declining labour market in many regions. ETF's recent analysis of reforms in the new member states of the EU⁶⁹ describes how large numbers of older workers in regions with a declining industrial profile became redundant with few opportunities of re-employment. This is in circumstances where skills development through continuing training was a low priority and investment in active labour market policies for the unemployed received little or no funding. ETF also confirms that in several of the new member states itinerant communities such as the Roma are more likely to be excluded from the labour market than other groups. This is a particular cause for concern (see Chapter 10).

Figure 9.2: Economically active population rate by men and women; estimates for 1970 and 2000, projection for 2010.



Source: ILO, EAPEP data. <http://laborsta.ilo.org/>. The economically active population comprises all persons of either sex who furnish the supply of labour for the production of goods and services during a specified time-reference period.

⁶⁹ ETF (2003) executive summary and pp. 124-5

9.2 Active ageing in the labour market: Identifying EU policies and targets, and progress

The European Union has agreed ambitious targets for increasing the active involvement of older workers in the labour market. The targets are that:

- 50% of the EU population in the 55-64 age group should be in employment by 2010 (Presidency Conclusions, Stockholm European Council, 2001); and that
- A progressive increase of about five years in the effective average age at which people stop working in the EU should be sought by 2010 (Presidency conclusions, Barcelona European Council, 2002), that is to say an average retirement age of 64.

Following up the Stockholm European Council agreement, the Commission proposed a partnership approach (European Commission, 2002b). Public authorities are to develop policies to bring about higher participation among older workers in the labour force. They would work closely with the social partners, regional and local authorities and with education and training providers. The Commission recommends a joint approach that focuses on:

- Investing in better access to company training for older employees, enabling them to adapt and keep their skills up to date;
- Finding ways to improve the quality of working conditions and work organisation to meet the needs of older workers, as well as women and disabled workers;
- Changing the view that early retirement is an acceptable solution to problems of restructuring and downsizing;
- Reviewing tax and benefit systems, for example to provide incentives to work after retirement and to discourage or prevent early retirement.

The European Commission reports (European Commission, 2002b, p3) that between 2001 and 2002 the employment rate for older workers in Europe increased by 1.3% (a 5% increase in numbers), reflecting the overall increase in employment rates. The increase occurred in expanding sectors and regions, not in contracting ones. Also, the employment rate for women aged 55-64 remains particularly low at around 30%. The report concludes that the average exit age from the labour force also rose by 0.4 of a year in 2002/3, with large variations between countries⁷⁰. The Commission's report concludes that some progress is being made towards the targets for the participation of older workers, but

*'In spite of these improvements the EU is still far short of both targets, and much stronger efforts are needed to make the necessary progress'.
(op cit p 3)*

On the basis of available evidence, some countries are near or already exceeding the target for participation of older workers, including Cyprus, Denmark, Greece, Portugal, Sweden and the UK. Others are around the EU average, but below the target, including Czech Republic, Germany, Lithuania, Netherlands and Spain. The third group of countries is at least 15 percentage points below the target of 50% participation for older workers. Thus Austria, Belgium, France, Hungary, Italy, Poland and Slovakia sit well below the European average and well below the target. Sweden has the highest participation rate among 50-64 year olds and the highest average retirement age. On the basis of the limited data available, Belgium, Denmark, and Finland have the most rapid growth in the employment rates for 50-65 year olds over the short period covered by the labour force survey.

⁷⁰ This data should be treated with caution, because 2001/02 is the first period for which comparable information is available.

The reasons most frequently cited by older workers for leaving their last job or business are normal retirement (35%), early retirement (22%), illness or disability (17%) and dismissal or redundancy (13%)⁷¹.

9.3 Participation of older workers in continuing training

Despite European Union and national governments' commitment to participation in continuing training, it declines sharply in older workers. According to the Labour Force Survey (Eurostat, 2003), 14% of 25-29 year olds participate in education and training. This compares with 8% of 40-44 year olds and just over 4% of 55-65 year olds. According to the same source, between 1999 and 2002 a highly significant 1% increase (4.7% to 5.7%) in the participation in training of 55-64 year olds took place in the EU15. During the same period the overall increase for all employed people was 0.2%. This is encouraging if the trend continues. But it remains far below the levels of participation required by the agreed European targets for the employment of older workers. The need for older people to update and adapt their skills is a very serious challenge. Particularly since they tend to have fewer formal qualifications than younger workers and are under-represented in the uptake of training. An example of this would be a woman who left the labour market before the universal use of computerised technology in offices. She now has no ICT skills but wants to return to work in administration. Changing career patterns and company employment policies also have an impact. Jobs are less frequently for life. In an unsupportive labour market, it is even more challenging for older workers to update existing skills and acquire new ones. The Kok Report⁷² on creating more employment in Europe endorses the need for a multi-faceted approach to policy, including improved and increased participation in training on the part of older workers. The report points out that:

'Participation in training is low in most member states, but is particularly poor for older workers. Efforts to increase the participation for older workers, especially for the low-skilled, must be intensified as part of a new impetus to build effective and responsive lifelong learning systems and increase participation in training for all.'

9.4 Examples of good practice, major gaps in policy innovation

The Kok Report provides a brief analysis of reforms needed in each country to raise participation rates of all groups in the workplace, including 50-64 year olds. It shows that most countries fail to reduce the availability of early retirement schemes, to improve incentives and working conditions and to make better training arrangements available. The report concludes that improvements in provision and participation in training for older workers remains an aspiration in Europe. It is rarely translated into strategy or policy development.

The Kok report does however record some notable examples of innovations. Sweden leads the rest of the EU in terms of participation of older workers in the workforce. As reported above, Belgium, Denmark and Finland have rapidly improving employment rates for older workers. Denmark has framework agreements for the employment of older workers in local and regional administrations. These offer tailor-made training and gradual reductions in working time to help retain older workers in the labour market.

⁷¹ Eurostat (2003) Labour Force Survey, results 2002, quoted in EC Report 3.3.2004

⁷² Jobs, Jobs, Jobs; Creating more employment in Europe. (2003). pp. 42-44 and Annex 1

Finland has developed a comprehensive strategy that has been implemented since 1998. It focuses on the employability of older workers and on adapting the working environment. Provision is made, for example, for some groups of employees to step down gradually by working part-time and receiving part-pension in their later years. Regulations concerning retirement have been altered. This appears to be sound in fiscal and economic terms. It seems efficient in labour market terms and helps to improve the satisfaction of older employees with their work and quality of life. The Finnish NOSTE programme encourages working people with few qualifications to undertake competence-based assessment. This enables them to gain accreditation for competences developed previously through informal and non-formal learning. The individual has access to guidance, supplementary study and an individual learning plan. Belgium, is rapidly improving. Although initially participation of its older workers was low, it is now in the process of instituting collective agreements. These will enable older workers to make better use of alternative possibilities in case of redundancy. The agreements include advice, guidance and coaching and replacement schemes in restructuring.

Many countries are altering or considering a change to early retirement arrangements and to the threshold age for pensions. These will be the major drivers that extend participation in the labour market. However, this is outside the scope of this report. The country reports prepared for this report indicate that countries are taking a range of measures to improve the participation of older workers and citizens in the labour market and training. A range of initiatives was reported, each intended to enable rather than regulate the longer participation of older people. Initiatives fall into four categories: (i) emphasising the modification of the labour market, (ii) training initiatives, (iii) wider lifelong learning approaches, and (iv) learning or training opportunities for older unemployed people. Some examples of each are shown in Tables 9.2-9.5.

Table 9.2: Policies that adapt the labour market to enable older people to stay at work

Active labour market policies: preventative approach	Austria
Encourage 'end of career' HR policies (stepping down etc)	Belgium, Liechtenstein, Germany
Improving earning possibilities/incentives for pensioners	Czech Republic
Banning age-related employment discrimination	Czech Rep, UK (planned)
HR policy: option to postpone pension; clearer HR focus; job placement schemes	Denmark
Financial support for older employees	Greece, Liechtenstein
Pensions premium for 55+ remaining in work	Liechtenstein
A taskforce / campaign on older people and work	Netherlands, UK, Belgium

Source: DGVT report

Table 9.3: Initiatives to provide training for older employees

Second chance schools with no age bar	Austria
ESF planned projects	Estonia
Plans to recognise informal/nonformal learning	Estonia, Netherlands, France
The NOSTE programme: access to qualifications programmes for older people **	Finland**
Support for employment and training for older workers	Greece
Enterprise training is utilised by older persons	Ireland
(Likely) follow up to EU Equal Programme	Netherlands
Social partners have identified responsibility	Belgium

Source: Country reports

Table 9.4: Initiatives to provide wider lifelong learning, encouraging older citizens to stay active

Internet accessibility for older people	Austria
Targeted National Programme for Computer literacy	Czech Republic, Estonia
Adult education / Folk universities are a strong part of the culture	Estonia, Latvia
Database of LLL opportunities	Estonia
Government committed to active ageing initiatives	Italy
A senior college (50+ year olds)	Liechtenstein
Senior Clubs lead ICT training, and involvement in well-being activities	Liechtenstein
Widespread participation in local, distance and e-learning	Sweden
Forening Sparbanks 55 programme **	Sweden **

Source: country reports

Table 9.5: Initiatives to provide training or wider lifelong learning for older unemployed people

Qualification measures for unemployed older people	Austria
Targets to increase elderly employed in active LM policies	Belgium, Czech Republic
Return to Work for Women	Ireland
New Deal for 50 plus	UK

Source: country report

There are few examples from the private sector. One such is the Swedish *Forening Sparbanken's* '55+ programme' for its employees, introduced in 2003. With 26 per cent of employees aged over 55, this major Swedish bank has set up a four-pronged programme to keep its workforce active for longer. Table 9.1 provides an outline.

Table 9.1: Forening Sparbanken's 55+ programme

55+ Medical Care: Exercise during work, health examinations	On-the-job training: Individual development plan
58+ Reduction in working time 80% working time for 90% salary	Days off 3 extra days free from work per year

Several countries report that raising participation in the labour market of significant numbers of employed and unemployed older people is challenging. Difficulties include a heterogeneous target group, those seeking to remain in work often being more qualified, and the danger of an emerging age-related underclass. Employers are often part of the problem. They frequently prefer younger employees and do not see it as in their interest to train or retain older workers. The older people themselves can sometimes be difficult to engage. They are often difficult to motivate and sometimes lack confidence. Interestingly though, one country (Estonia) reports a high proportion of active, retired people declaring an interest in training for entrepreneurship.

9.5 Conclusion

For the individual, early labour market exit is sometimes desirable. However redundancy, restructuring or the running down of traditional industries and regions often leaves individuals without alternatives. This is despite the fact that many older people wish to be economically active if the labour market (including self employment) is attractive and enabling. Demographic trends are strong drivers for countries to act to increase and extend the participation of older people in the labour market. This cannot be achieved effectively simply through the 'push' of eliminating early retirement and raising retirement ages. A lifelong learning strategy also needs 'pull' factors such as making training available to older people who want to remain in the labour market or to return to work. They also include developing a more accommodating labour market.

Evidence shows that, although a range of initiatives are being taken, most countries have not yet developed effective strategies to cope with the effects of demographic trends towards an ageing population. Many countries recognise that they should counter early withdrawal from the labour market of 50-65 year olds with effective strategies to increase participation. But most are not yet acting vigorously in this respect. Even the European policy documents seem unsure at times where the emphasis should be placed.

Some positive developments can be observed, however. Countries such as Belgium, Denmark, Finland and Sweden and a number of other member states are taking effective action. This includes training and wider lifelong learning policies. Other countries are developing strategies to tackle this important and long-term issue.

Chapter 10: Vet promoting social inclusion

10.1. Groups at risk and their main barriers to learning

'Those who lose out in the educational system are also the losers in the struggle for the most learning intensive jobs. This means that the workplace does not substitute efficiently as an alternative for school based learning for early school leavers.' (Skule, 2004)

This chapter explores the groups of individuals at risk of social exclusion, specifically early school leavers, migrants and women. It defines their main barriers to learning. It identifies emerging patterns of social exclusion. It then summarizes the participation trends in active labour market policies and other policies contributing positively to inclusion with reference to VET. The chapter reaches conclusions concerning the evidence, the indicators that are being used and the policy dilemmas and different strategies that can be used and provides examples of emerging good practice.

Social exclusion generally refers to exclusion from the labour market, housing and education. Social exclusion can be identified at a micro level (individual), the meso (groups) level and the macro (society) level.

A variety of groups in society are socially excluded or run the risk of social exclusion. Although different groups have different characteristics, they tend to have two things in common: the lack of basic competences and encountering obstacles or barriers to access education and training. They are therefore not likely to enter the educational system themselves, either because the educational system is not accessible for them (e.g. people with disabilities, in prison, people living in remote areas or because they do not speak the language well enough), or because they have had negative experiences with the system (e.g. school drop outs, older workers who experienced failure at school) or because they do not have the time or money. Sometimes a mixture of these factors is at play.

The evidence is that in general, the higher the educational level of an individual or of a group the greater the employment rate. Education and training is certainly one step towards social inclusion through work.

Disadvantaged groups within society are, for example, people with low levels of education and qualifications, older workers, marginalised population groups or those living in disadvantaged areas or outlying regions, and people with learning difficulties. These groups are often comparatively unacquainted with the opportunities that exist through education and training. They consider institutions and programmes of low relevance in relation to their needs. One of the fundamental challenges will be to increase the awareness of the disadvantaged groups of the advantages of education and training and to make the systems more attractive, more accessible and tailored more closely to their needs. Conversely, young adults and highly qualified workers are those best placed with regard to lifelong learning. They

are aware of the advantages of updating their competences and are therefore more motivated. (European Commission, 2003b)

The evidence is that continuing participation in education and training is low in most Member states, but it is particularly poor for groups such as older workers (See Chapter 4 and Chapter 9) and for unemployed people. The unemployment statistics for most EU countries show that young people in the labour market are twice as likely to be unemployed, compared to older cohorts. Among the young unemployed, those who left school early and therefore lacking basic qualifications are at particular risk, and in many cases effective measures are not in place. (See Chapter 6.)

The duration of training in the EU10 seems to have fallen in countries where unemployment is increasing. Similarly, many young school-leavers from vocational schools tend to find themselves at a dead end just after leaving vocational school, which they consider inadequate for a successful labour market entry. Overall, the situation is most problematic in Bulgaria, Poland, the Slovakia, and the countries where unemployment is highest. In these countries there is a serious risk of social exclusion for the overwhelming majority of the less well qualified and, in particular, ethnic minorities, above all the Roma, and the long-term unemployed. (ETF, 2003). The same phenomenon happens in particular regions across the other parts of the European Union, where traditional industries have declined without regeneration taking place.

10.2. High risk groups

10.2.1 Early school leavers

Most member states now present policies that are in line with the Lisbon priority benchmark of reducing the number of early school leavers (European Commission, 2004c). Measures range from increased co-operation between schools, companies and regions (Germany and the Netherlands) to more adapted pedagogy and increased personalised guidance of pupils in Austria, France and Luxembourg. Chapter 5 gives an indication of the current extent of early school leavers in Europe.

This is recognized as a challenge in most of the EU15 even when the numbers of young people leaving school early are low. (Implementing lifelong learning strategies in Europe, EU/EFTA and EEA countries).

Norway

In Norway a high dropout rate from school among students with weak theoretical orientation was found. As a consequence, the Ministry decided to improve the possibilities to opt for alternative training paths based on shorter school attendance and longer apprenticeship.

Source: country reports

In the EU10 states high staying on rates mean this is not always considered to be a major problem. However, the drop out rate is highest in VET. Therefore, ETF (2003) considers that there is often a major problem, particularly where young people leave vocational training courses that do not give access to higher education, often making a transition to unemployment rather than to a job in the labour market. Measures to prevent early school leavers or 'drop-outs' are mentioned in the EU10 by Cyprus, Hungary, Lithuania and Malta. Much of the current efforts are intended to promote inclusion and prevent exclusion among young people.

Lithuania

In order to reduce the number of the young people leaving education or training without or with few recognised qualifications legal, social and financial measures have been initiated. One of those measures is the introduction of a strict control of obligatory secondary education and the devolution of the legal responsibility to the parents.

Source: country reports

Lithuania and Slovenia also report on measures for disabled youngsters and youngsters with special needs. Measures are on the one hand targeted to prevent groups at risk of early school leaving by facilitating extra support, whilst on the other hand, the groups who already left school are supported by other forms of training to require enough education for entry into further education or into the labour market.

Some countries establish special programmes outside VET. Denmark for example has established 'Production Schools' that offer single subjects from the VET programmes to young people under 25 without qualifications or have dropped out. The long-term aim is that this offers pupils an opportunity to complete upper secondary education.

As we pointed out earlier in this section of the report, the introduction of special programmes and targeted facilities within or outside the existing VET institutes is reported in 21 countries. Four countries point out that counselling plays or should play a major role for (potential) dropouts. Primary and Secondary school is compulsory in Liechtenstein, but the country report for Liechtenstein points out that only 1 to 2 % per year of the students (on average 5 persons per year) do not start an apprenticeship or upper secondary education and that this is due to the individual counselling system which is in place. In some countries outreach and youth work are mentioned as ways of making contact with young people who have already dropped out. Six countries report support measures or penalties for dropouts (and/or their families).

10.2.2 Migrants

The labour market position of migrants, or non-EU nationals, is substantially worse in respect to the position of EU nationals. The unemployment rate of non-EU nationals in 2002 was twice that of EU nationals. The Kok report (2003) states that the main cause for this situation is that the group has inappropriate or low levels of skill in general as well as cultural and language barriers.

Ray (2004) argues that member states have recognized the crucial role of education in addressing social exclusion and are building integration policies and programmes such as skills training programmes that attempt to promote education for newcomers, their children and in some cases even long-established migrants. Apart from the group that has low skills in general there is a major problem with high skilled immigrants who do not have the opportunity to have their skills recognised, because frameworks are not in place to evaluate systematically the credentials and educational experiences that newcomers attain prior to immigration, as is the case in the Canada and US (Ray, 2004). Even when knowledge, skills and competences are recognised, the question remains whether employers and society are readily willing to accept credentials and experience gained in other countries. Furthermore, Ray (2004) points out that:

'Moreover, far too many people are relegated to an employment trajectory in which they are essentially "de-skilled" by requirements for job experience and/or training credentials acquired in the receiving society.'

The low labour market status of migrant populations is well documented in high migration countries, such as France and Germany and the Netherlands. However, it is the case of the Romas in central Europe that probably provide the starkest case study of the social exclusion of migrant groups. Initiatives for the Roma population have been taken in several countries, (see the case study below).

Initiatives to involve Roma in VET

Latvia: Subsidized workshops & development programmes in vocational schools carrying out Roma minority educational-training programmes.

Poland: The law on education provides to ethnic and national minorities the right to be educated in their mother tongue and to study their mother tongue in primary and secondary schools. Special projects are aimed at integration of young Roma into primary and secondary education.

Romania:

The Access to Education of the Disadvantaged Groups programme (2002-2004), focused on the Roma population, it is implemented in 10 counties and will be extended in other 12-15 counties. The European Union Phare and the Government of Romania jointly finance the programme. The main objectives are: improving the quality of pre-school education, encouraging students to complete their basic education (prevention of early dropout) increasing participation in distance education as a second chance offered to those having failed to finish compulsory education.

In addition, given the reduced participation in education of the Roma population (61.4% of the total Roma population aged 7-16 in 1998), various actions were taken, such as:

The subsidized study places expressly retained for Roma candidates to higher education have increased in numbers to about 150-200 annually;

General schools and teacher training colleges have set up classes/ groups for the instruction of the future teachers/institutors of Roma or other ethnic origin who will be working with Roma students;

Each county school inspectorate has Roma school inspectors (of Roma origin or for Roma students);

Starting with the 1998/1999 academic year, the Faculty of foreign Languages and Literatures of the University of Bucharest set up a department for the study of the Romany language and literature;

Beginner or refresher courses in the Romany language are being developed. The target group for this course is the qualified or non-qualified teaching staff of Roma or non-Roma ethnic origin;

Syllabi, textbooks, and auxiliary material for the study of the Romany language, ethnic history, and traditions are prepared etc.

Slovakia: Measures to integrate the Roma population into the labour market may involve an element of training, e.g. training Roma to become teaching assistants in predominantly Roma schools. Various Phare projects are also making a valuable contribution to alleviating the conditions of Roma communities. A project designed to improve the educational and cultural life of Roma in the Spis region was completed in 2001.

Source: country reports

10.2.3 Increasing the participation of women in the labour market

In the EU15, 6.4 million women of working age are not in paid employment, although they want to work. When the 6.6 million women who are unemployed are added in, it is clear that the scale of the unused female labour supply is considerable. (Report of the High Level Group on the future of social policy in an enlarged European Union, 2004). The differences in labour market participation between women with high and upper secondary or basic qualifications are huge. The prospects for the women with high educational levels is much better than for those with upper secondary, as is the case for higher educated people in general.

The Lisbon target is to increase labour participation for women up to 60% in 2010. The focus on increasing women participation in the labour market is mainly on preconditions for women to enter work such as flexible work arrangements, decreasing the gender pay gap (around 16 percentage points in the EU on average), and increasing the availability, affordability and quality of childcare and eldercare. Given that childcare is presumably one of the most important factors for women to take up work again, it should be noticed that women see their skills and competences degrade and become less employable while taking care for children. Whilst education and training and VET in particular cannot be the answer to complete integration of women in the labour market, it can play a distinctive role for recognising and updating skills of women who have been out the labour force for a long time. Attention is paid in most member states for equal opportunities for training; some member states have active policies to combat education gender stereotyping.

European countries have set up a wide range of VET measures specifically aimed at attracting and retaining women in the labour market; examples are given below.

Programmes established to increase participation by women in the labour market

Austria: specific measures to reduce occupational discrimination by supporting women in technology and science sector.

Bulgaria: Under the "Back to work " project one of the priority target groups to be included in the motivation and vocational training courses are unemployed women over 50 years of age.

Greece: Employer contributions, for instance for hiring unemployed women with two or more children, are subsidised.

Ireland: A training programme 'Return to Work for Women' is aimed at women who have been out of the workforce for some time (usually to look after children) and now wish to return to work. The programme is typically of 12 weeks duration and provides social and interpersonal skills, confidence building and up-dating of skills as required. Trainees either proceed to work or further training after the course.

Luxembourg: Zarabina Initiativen für Frauen, in Esch-sur- Alzette, in the south of Luxembourg, embarked on an ambitious project to develop the region by getting more women into paid work or self-employment. The European Social Fund (ESF) and the Luxembourg State provided most of the money for this all round service. A survey of local and regional businesses revealed the skills needs in the area. Armed with this information, the project promoters worked with the local Centre for Continuing Vocational Training (CNFPC) to develop training for women and provide job advice and support. A special course was also set up for women setting up their own companies or working in family businesses.

Turkey: non-formal training is organised by the Ministry of National Education (MoNE) in particular for individuals who have dropped out of compulsory basic education and illiterate women in the age cohort 14-44. These courses are organised in a flexible way as regards duration, location and level, in order to accommodate the needs of those who are working.

In order to improve the participation of girls in education, the MoNE in cooperation with UNICEF started the "Girls to Schools "Haydi Kizlar Okula" campaign in June 2003. At present the campaign is on going in 33 provinces and a financial incentive is given to the families in order to encourage them to send their girls to school. As a result of the activities carried out under the campaign, the share of girl students who have newly enrolled in basic education in total has risen to 47.8%. The objective is to increase this ratio to 50% by 2006 and thus remove any differences between gender enrolments in basic education.

Source: country reports

10.3 Inclusion policies and the role of VET

The problem of social exclusion is complex; it takes many forms and consequently requires the mobilisation of a wide range of strategies contributing to the policy for inclusion. Education and VET in particular has a key role. Employment is the best safeguard against social exclusion. Unemployment can be a structural phenomenon and is likely to permanently exclude some groups with low levels of qualifications from the labour market. In order to achieve equality of employment it is necessary to develop employability through policies that aim to promote the acquisition of skills and lifelong learning. Lifelong learning is seen by countries as an active measure to help people get jobs and to stay employable throughout one's life and VET plays a strong role in lifelong learning. This is especially the case for people who have fewer chances to find work: i.e. people who generally lack basic competencies or have obtained low levels of qualifications and are disadvantaged. It is clear in consequence that social inclusion as a policy priority has implications for VET.

The Kok report urges member states to strengthen Active Labour Market Policies (ALMPs). ALMPs encompass various types of measures including those that bring people back to work or which maintain their employability. Training is one of the crucial ingredients to achieve the challenge of preventing unemployment and supporting (re-) integration of unemployed and inactive people to employment.

The 2004 update report on the Lisbon strategy, which calls for urgent reforms (European Commission, 2003b) underlines the importance of pursuing the contribution of education and

training to social inclusion policies. Several of the EU15 apply measures in favour of disadvantaged groups amongst society. In the European Commission's progress report on Implementing lifelong learning strategies in Europe for EU and EFTA EAA countries (2003) all member states referenced the case of adults with no or low-level qualifications. The concerns range from functional illiteracy (e.g. Greece and Italy) through those who only completed primary or lower secondary education, to those who have become unemployed because the main skill they learnt is no longer needed. The report emphasizes that it is widely recognized that many of these people cannot be helped through traditional formal education structures. Therefore France, for example, raises the importance of new types of education and training in informal -or non-formal settings, and also of the recognition of skills and learning obtained on the job or in other informal situations. In the UK (England) the Government's Skills for life strategy (for improving adult literacy, language and numeracy skills) was launched in 2001. Literacy and numeracy provision is free to the learner.

Assessment and recognition of work-based experience is used in several European countries (Denmark, France, the Netherlands and Norway) as a way to reduce the duration of formal VET programmes for adults. This offers adults to obtain a vocational qualification within the legal framework of the general VET system, but on other terms regarding structure, duration and, in most of the cases, financing. For some disadvantaged groups within society this could remove barriers to learning.

Denmark

The adult education and the adult vocational training systems in Denmark were reformed in 2001. The aim of the reform was to create a coherent further education system for adults that offered the same qualifications to adults as the general qualification system offered to youth in general. Such a system was constructed with parallel reference levels with the aim to motivate adults to return to learning within a lifelong learning agenda.

Another central element to motivate adults to participate is that the reform also ensured that adults be credited for competencies they have already acquired through the formal education system, informally, through on-the-job training schemes, or through work experience.

Source: country reports

As indicated in Chapter 3 the EU10 have markedly lower early school leaving rates than the EU15, and this could be interpreted as implying that they have fewer barriers to initial education. However, ETF continues to state that the situation for the unemployed and the adult population is less promising than it might appear. Active labour market policies have insufficient public funds to combat effectively barriers to education and training. Again, the case of the Roma population and the long-term unemployed are emphasised. Slovakia reports social barriers hampering Roma minority's access to quality education as they are often directed in special schools for the disabled. Recent policies such as the introduction of preparatory 'zero classes' and employment of assistant Roma origin teachers are aimed at social inclusion of this specific group. Concerning the migrant learner and lifelong learning, member states all emphasize the importance of learning the local/ national language as a second language, this is for obtaining work but moreover to function as a active citizen and therefore have access to education and training.

In the European Commission's progress report on implementing lifelong learning strategies in Europe for the EU/EFTA and EEA countries (2003) a number of countries refer to specific measures and strategies to include prisoners. Access to education for people in remote areas is still seen as an issue needing attention and in Sweden a NET University links up programmes already on offer in educational institutions.

Most common amongst policies to improve the labour market situation of people with disabilities are activation policies such as personalised support, increased participation in education and vocational training, improved legislation to promote integration of disabled, and tax incentives. The majority of member states continue to implement measures to support the integration of migrants and ethnic minorities such as literacy programmes, language courses, diversity plans to increase recruitment of migrants, training and vocational guidance, often funded through ESF programmes. Several member states explicitly refer to the transposition of the two. Advice and guidance system can play an important part in facilitating the return of excluded groups to participation in some form of education, training, or preparation for the labour market. In some countries, however, the high level of social security benefits as

compared to the low wage levels in semi- and unskilled jobs acts as a disincentive to entering work. This is particularly the case in some of the EU member states that have high levels of social spending.

10.4 Conclusions

Education and training cannot on its own create the conditions for social inclusion; it has to go hand in hand with other strategies. Financial help needs to be offered in the first place to give unemployed people a realistic opportunity to enter training and education or to obtain competences and recognise them through more informal settings. But this can bring a powerful dilemma: assistance offered may be more attractive than getting into work. Work has to be the more favourable option. Priorities have to be decided between the calls for funding on the part of different groups, for example the unemployed, families with small children who need day care or older workers who could also retire. Potential benefits of learning are considerable. (See Chapter 5.) The evidence is that considerable numbers of unemployed are strongly motivated to work (Bainbridge et al., 2004). In which case, a sustainable policy to motivate and reintegrate unemployed people, combining education and training is needed.

The Kok report recommends that member states should pursue a variety of actions to improve labour market integration for immigrants. More participation in training and recognition and proper assessment of qualifications obtained outside the EU is important to facilitate integration. This should be combined with other labour market information and guidance schemes tailored to the needs of the heterogeneous group of immigrants. Assistance for setting up businesses can be particularly useful. Efforts must be intensified to increase the desirable participation in training for older workers, especially for the low skilled.

The increasingly high level of qualifications called for on the labour market accentuates the exclusion of the low qualified. There are fewer vacancies for semi- and unskilled jobs. The level of the lower qualified needs to be improved on the one hand, yet on the other hand this group has serious problems with access to the educational system. The outcome of active labour market policies, which in many cases do not lead to qualifications that carry currency in the labour market, nor to sustainable employment, but focus instead on immediate employability, may well undermine the prospects for integration into the labour market. Training efforts need to be supported and should lead to real qualifications or to prospects of longer term future employment, and VET can play a role in making individuals' non-certified competences recognisable.

Emphasis should in all cases be placed on prevention, early detection and individual follow up of those at risk.

Section 3

Innovation in teaching and learning

Introduction: A Changing Mission for VET in Europe

The pace of innovation in VET teaching, learning and its content and structure has grown rapidly over the last ten years. This chapter, together with the four that follow, assess the role of innovation in teaching and learning and its contribution to achieving the objectives of Copenhagen Declaration and the Lisbon goal. These chapters address five areas where the underlying theme of innovation provides is prominent:

- Changes in the learning environment;
- Innovations in contents;
- Innovations in methods;
- Assessing and validating learning;
- Teachers, trainers and instructors as learning facilitators;
- Quality management.

Innovation is embedded in complex patterns of related input, process and output factors. Any attempt to classify and describe patterns of innovation in teaching and learning and its effects must carefully consider the complex interaction of various factors if it is not to risk the danger of oversimplification. It is difficult to estimate the effects of one influential factor without considering the influences of other social, political and cultural aspects. Indeed, some authors have challenged the direct effects of educational and training policies when compared to other cultural and societal pre-conditions, as seen in some statements on the role educational policies and the differentiation of PISA study results⁷³ (Fend, 2003).

In this respect, we need to functionalise such goals as 'social inclusion and cohesion', or 'more and better jobs', to items that are closely related to teaching and learning, either as an input or as an outcome. If we take the more qualitative goal of creating better jobs, one possible criterion for measuring job quality might be the learning-conducive quality of work and workplaces. If social cohesion is seen as another goal, then we need to explore the extent to which VET contributes to the integration of groups that otherwise would be marginalized, and to the formation of vocational identities.

The main methodology employed in this section of the report consists of an analysis of existing literature and research, and the results of the country reports and DGVT questionnaires conducted during the course of this project. Based on the Copenhagen Declaration and an identification of the criteria that define innovation, an assessment of the attempt or effort to innovate in teaching and learning is made. Conclusions are drawn and recommendations made for possible measures and procedures of securing innovation are provided.

The particular nature of innovation in teaching and learning requires references to qualitative data. While this runs the risk of being anecdotal, it does provide the opportunity to gain deeper insights into the topic and to derive conclusions for further monitoring and assessment activities.

The Changing Role of VET in Europe

In order to correlate the findings of secondary research and other work done across Europe with our own findings within this report, an analysis of the DGVT questionnaires and country reports has been implemented. This analysis reveals three principal components of

⁷³ See for example Fend 2003

innovation⁷⁴ in terms of content that are contributing to the changing role of VET in Europe have been identified:

- The formation and development of professional competencies;
- The introduction and strengthening of e-Literacy and ICT;
- The introduction of entrepreneurship as a core VET topic.

In addition to these specific trends, VET reform tends to be characterised by three complementary themes:

- The integration of specialised and general skills and knowledge;
- Reforms that reflect the broad and fast-changing challenges encountered by workers and managers in modern work environments;
- The development of curricular content and methods that are designed to equip people for an environment of continuous change.

Each of the three components and the accompanying themes is described in the following sections, and the findings are related to the relevant Lisbon and Copenhagen priorities. In order to introduce the subject, we start by highlighting the requirements for learning in the advanced modern workplace.

Learning for the Modern Workforce

The acceleration of technological innovation and the local, regional and international integration of business have led to a new definition of knowledge, which in turn has had an impact on teaching and course content. The gradual evolution from the Taylorist mass production model to a new era of 'mass customisation' and flexible manufacturing is seen across nearly all economic sectors. Together with the exponential growth in work-relevant knowledge and the growth of ICT systems, a strong demand for broad competencies and 'situational' knowledge has been created.

Today's rapidly changing competitive and technological environment has created a paradigm shift in production and operations. We can take high technology manufacturing as a leading example. Manufacturing is no longer a standardised, repetitive process, but a customised, fast-changing one. It includes continuous, real-time monitoring, data storage and analysis capabilities and requires new operator competencies and human-machine interaction. The 'High Performance Work Organisation' (Applebaum, Bailey, Berg, 2000) describes a manufacturing system that includes a high degree of worker participation and autonomy and requires higher levels of communication capabilities, knowledge and competencies and can be regarded as an exemplary way of organising work according to the Lisbon goals.

Other changes, such as changing macro and micro-economic conditions and the globalisation of both markets and supply chains have intensified the pace of change. Work methods and technologies in many sectors such as retail and banking, medical technology, and software engineering have brought about a fundamental reorganisation of the workplace and workforce. Consumer sophistication, the rise of the Internet, and the power of integrated databases have created new requirements in customer service, perhaps best captured in the term 'one-to-one' marketing (Peppers & Rogers, 1999).

⁷⁴ While there are certainly other components, for instance promotion of inclusion or learning for citizenship, these issues are discussed in other sections of this report. We have chosen to retain a strong focus on vocational education, for this four components are clearly defined across the EU25.

In this context, workforce competencies are continually being re-designed to emphasise broad occupational competencies, including problem solving. Our understanding of the acquisition of competencies through learning and experience is complemented by the role of informal knowledge and reflected experience (c.f. Schoen, 1983). In this context, learning is not 'memorisation', or fragmented and de-contextualised knowledge, but 'learning by doing'. Human expertise and its superiority over knowledge-based technology are based on knowledge gained through experience (Fischer, Boreham, & Samurcay, 2002).

The links between the workplace, learning and occupational development have therefore changed. Technological changes and organisational innovations have revolutionised work processes and staff qualifications (Fischer, 2003) and today's companies need a workforce equipped to participate actively in these changes. In this new environment, systems of vocational guidance have to articulate educational and employment perspectives, based on shared social representations of careers. This can best be achieved by developing attractive education-to-employment pathways as indicated by the technical working group on guidance policies (European Commission, 2003; Bainbridge, Murray, Harrison, & Ward, 2004).

In this context, two recent projects give important insight into the process of learning and teaching and the arrangement of content:

The 6th FRP Project, FAME⁷⁵ analysed the changing framework of employer-employee relationships and the formation of vocational identities and came to the following conclusions:

'For the individual employee a pro-active, "entrepreneurial" multi-skilled work attitude also generates complex, flexible and multi-dimensional work identities that can continuously be adjusted to the requirements of change. Stability and continuity that were formally generated through, for example, permanent employment contracts and a stable company attachment, increasingly have to be actively constructed by the employees themselves';

The 'Global Village'⁷⁶ developed an integrated curricular approach to combining the different types of skills and knowledge needed in the international knowledge-based economy. Teachers of different subjects and learners from different European schools co-operate in the production of a mechanical part as a simulation of an internationally dispersed production environment. This integrated different types of knowledge and a variety of skills, such as languages, intercultural awareness, ICT, technical and specialised mechanical competencies and skills (e.g. fitting and turning) as well as the planning and design of joint activities. It was found that apart from broadly clustered competencies in occupational profiles and pathways, the integration of various learning contents is a feature of innovative delivery and learning schemes.

It is worth emphasising that new learning demands are difficult to cope with unless learning individuals possess the necessary pre-requisites. Therefore, the promotion of 'curricular flexibility' through the development of a balanced mix between specific/technical knowledge and transversal/generic skills has been identified as a crucial factor in the modernisation of vocational curricula. These build the basis for self-reliant workers who are able to '(co) shape' the triangle of work, technology and knowledge (Heidegger 1997).

Having briefly reviewed the changing needs of high performance work organisations and the impact this has on individual learning, we now move to evaluate changes in the learning environments.

⁷⁵ See <http://www.itb.uni-bremen.de/projekte/fame/fame.htm>

⁷⁶ See <http://www.theglobalvillage.dk>

Chapter 11

Changes in the learning environment

As the report so far has emphasised, the emergence of a knowledge-driven economy requires new forms of learning, work organisation and management: increased flexibility, less hierarchical organisations, a higher degree of employee self-management and autonomy, more participative work environments. In turn, this creates a need to develop new approaches to learning environments, forms and methods. It is not a question of acquiring an ever-increasing amount of new knowledge, but rather new work- and business- process knowledge, which is situated and contextualised. The characteristics of these learning methods can be defined as (a) work-based and ‘real world’ driven (as reflected in the emphasis placed on competency development), and (b) situated in real working environments, i.e. integrated working and learning.

Following the insights of constructivist learning concepts, ‘the enabling power’ of new learning and teaching forms, methods and media is important. These ideas become prominent:

- The learning processes need to support active, self-determined and self-organised (autonomous) learning rather than instruction;
- The new pedagogies need to be subject matter driven, as well as following a developmental logic of learning;
- Learning needs to have a double reference to work processes. First, the learning contents need to be geared to work processes. Second, learning must take place in a real context – normally at workplaces during working time.

11.1 Learning organisations and Workplace learning

The concept of the learning organisation was developed in the late 1980s to describe the need for companies and staff to engage in a continuous process of learning as a source of performance improvement and competitive advantage. Argyris & Schön, (1999) and other authors define the learning organisation as a key competitive factor in modern economies. The link between learning organisations, vocational education and individual competence development has been recognised by a number of authors. Nyhan et al. (2003) state that:

‘One of the keys to promoting learning organisations is to organise work in such a way that it promotes human development. In other words it is about building workplace environments in which people are motivated to think for themselves so that through their everyday work experiences, they develop new competences and gain new understanding and insights. Thus, people are learning from their work - they are learning as they work.’

We can identify a number of practical examples of implementing the link between learning organisations, communities of practice and individual competency development. The

ORGLEARN⁷⁷ project (Fischer & Röben, 2001), for instance, described how workers in a complex chemical engineering enterprise engaged in learning and reflecting about their work and codifying the results in a corporate manual. Other practices are reported from rotation arrangements within aircraft supply chains in the UK (Brown & Keep, 1999).

Other research illustrates the role played by work environments that are conducive to learning. The EC Working Group 'Making learning attractive and strengthening links to working life, research and society at large' (2003) has explored the factors that contribute to a learning conducive environment. A study conducted in Norway (Skule & Reichborn, 2002) identifies the factors that distinguish between low-learning and learning-conducive jobs:

'A learning-conducive environment is one that encourages people to engage in critical thinking and behave in an autonomous and responsible manner. This is a prerequisite for challenging, interesting and attractive learning and for people to develop the capacity for and love of learning throughout their lives. Learning-conducive environments support a genuine learning culture linking theory and practice. Focusing on the learner's needs and motivation, these environments value multiple learning styles, learner-centred approaches, learning together as social participation (i.e. in communities of practice in which people share activities and experiences over time), promoting critical thinking, creativity, autonomy, responsibility and sense of belonging. Taking these approaches into real life can be illustrated through developments in formal learning environments, at the workplace (both in large and in small and medium-sized companies), and in community projects, etc. The issue of work-based learning and how to ensure that theories of this are put into practice so that learning is seen as a strategic investment rather than a cost to enterprise is also relevant here. A major challenge is how to facilitate the transfer of some of these ideas into formal learning systems (which remain the backbone of education and training).'

The authors have made this concept operational, in order to assess Norwegian work places. They identify the following favourable conditions for learning through work:

- High degree of exposure to changes;
- High degree of exposure to demands;
- Managerial responsibility (in the job);
- Extensive external professional contact;
- Direct feed back;
- Management support for learning;
- Rewarding of proficiency.

Issues such as teamwork and the availability of peer group teaching and learning certainly contribute to the quality of learning-conducive work. A key challenge is thus to establish work places with adaptable learning arrangements so as to make both individualized learning and group-directed learning a normal occurrence. According to Nyhan et al. (2003),

'This entails building organisations in which people have what can be termed "developmental work tasks".⁷⁸ These are challenging tasks that "compel"

⁷⁷ <http://www.itb.uni-bremen.de/projekte/orglearn/orglearn.htm>

⁷⁸ See also Onstenk, J. (2000). Training for new jobs: contents and pilot projects. 2nd Report on Vocational Training Research in Europe. M. Tessaring and P. Descy. Thessaloniki, Off. for Official Publ. of the Europ. Communities and Bremer, R. (2002). Berufliche Kompetenz und Identität als forschungslgischer Ausgangspunkt einer berufswissenschaftlichen Entwicklungshermeneutik. Lernfeld: Arbeitsprozess. M. Fischer and F. Rauner. Baden-Baden, Nomos. 6.

people to stretch their potential and muster new resources to manage demanding situations. In carrying out “developmental work task”, people are “developing themselves” and are thus engaged in what can be termed “developmental learning”.

A number of European countries are trying to achieve this goal. Examples include the ‘open learning approaches’ within school-based learning environments. For example, the Danish VET reform of 2000 established open learning cultures in some of the vocational colleges. At the same time, students were supported in defining individual learning pathways through the use of occupational learning management systems and changes in the role of teachers (Danmarks Erhvervspædagogiske Lærerdannelse, 2000; Grollmann, Gotlieb, & Kurz, 2004). It can be assumed that many European countries are following similar paths, however, information is lacking on the design of open learning environments with regard to processes and outcomes, which could be useful for processes of mutual learning across European countries and regions.

Even though open learning environments offer considerable potential for students’ self-directed learning, some doubts about the method persist. Open learning arrangements tend to be too demanding for students who perform poorly or lack motivation. These learners tend to withdraw from the learning situation. At the same time, the traditional role teachers take is challenged, and some teachers have problems with the re-definition of their professional identity.⁷⁹

11.2 Learning partnerships

The debate about learning environments and organisations tends to focus on well-defined yet isolated examples. Many companies, and particularly SMEs, simply cannot provide sufficient developmental learning tasks within their own workplaces and resources. In some cases, small suppliers are organised around a larger original equipment manufacturer, and establish a common platform of work performance cooperation based on shared knowledge and competencies. This has led to the concept of workplace partnerships as an innovative way of linking companies. In Japanese companies, for instance, partnerships may be organized along supply chain networks, and include temporary personnel exchange between companies and their suppliers. The German automotive sector has tested this form of partnership, to exchanging implicit production knowledge and experiences, which are often informal and ‘hidden’ (Endres, Wehner 1996). Automotive supply chains in the UK have also established learning networks that support workers across multiple companies and organisations.⁸⁰

Workplace and supply chain partnerships open the possibility of developing regional innovation centres, including vocational schools and higher education. This has the potential to increase the supply of skills and competences, for both organisations and individuals. Schools can act as brokers of regional information and as network enablers. These activities improve organisations’ regional links and market reputation, and should allow them to improve the performance in their core business.

The GOLO project (Deitmer, Drawing, Heermeyer 1999)⁸¹ is an example of an SME Workplace Learning Partnership integrating learning and working or formal and non-formal

⁷⁹ See DTI report on Reform 2000

⁸⁰ See also Brown, A. and PARTICIPA Project Consortium (2004). Participation in Continuing Vocational Education and Training (VET): a need for a sustainable employability. A state of the art report for six European countries. Bremen, Universität Bremen.

⁸¹ See Bauermeister, L./Howe, F./Rauner, F.: GoLo – gestaltungsorientierte Berufsbildung im Lernortverbund. In: Cramer / Schmidt / Wittwer: Ausbilder-Handbuch, 37. Ergänzungslieferung – Juni 2000, Kap. 11.2.2.5, S. 1-18. Or in English language: Deitmer, L., P. Drawing and R. Heermeyer (1999). Qualification Networks for shared learning in

learning. It was initiated in the Wilhelmshaven region, Germany, and focuses on the needs of SMEs: Very often, SMEs are specialised in specific business fields. This is often an obstacle for offering apprenticeships, since the work processes do not provide for all occupational experiences necessary to train within the scope of a full occupational profile. Networks of enterprises make a rotation of apprentices possible. Through rotation of apprentices between different companies, learning is enriched and learning opportunities are expanded. This allows apprentices the range of experience to complete a comprehensive occupational profile.

Other sectors and regions have adopted the principles of this model. A Leonardo da Vinci pilot project (Work & Learning Partnerships) is exploring tools developed in the partnership, such as the Learning and Working Tasks and Learning Potential Analysis methodologies, with a view to making them transferable to other European regions.

An interesting innovation is the cross-border collaboration in the “Chance Border region” network set up in 2003 to explore, inter alia, cross border VET design between countries adjacent to the new Länder in Germany (<http://www.e2-vet.org>). Seventeen partners from nine countries have begun to co-operate on developing cross-border qualification profiles in numerous sectors. The project is addressing the following questions:

- What impact does enlargement have on individual employment opportunities?
- What new qualification requirements may emerge?
- What potential is there for cross-border VET design in the target sectors?

For the school-based VET systems, work placements are intended to enable learners to gain appropriate knowledge, competence and skills in the workplace. Nevertheless, the Country Reports indicate that by and large these work placements are often considered to be too short, not systematically integrated with the classroom learning, accidental and often with insufficient pedagogy. Improving the integration of learning sites for the school-based VET appears, in many cases, to be a priority. The periods of work experience associated with the vocational baccalaureate in France can be cited as an example of good practice in this respect.

11.3 Workplace learning and dynamic organisations

Learning at work or in educational settings becomes more self-directed because of the changing nature of work and organisations. This puts challenges on teachers, trainers and learners, especially those who perform poorly or lack motivation. On the other hand this reflects the Lisbon Goal of achieving a Europe of more and better jobs. Learning conducive job design therefore provides a lot of potentials to make Europe an Area of lifelong learning.

In many countries (especially the more school-based) efforts have been initiated to provide for a better integration of learning sites. However, many country reports disclose that work placements are often too short to provide a full range of learning opportunities.

Enterprise networks and workplace and other forms of learning partnerships provide promising new forms of work based learning, with the possibility of making comprehensive learning opportunities available. They provide the full range of experiences for the later recognition of informal and non-formal learning.

Lower Saxony in Northwest Germany. Towards the learning Region. L. Deitmer, G. Attwell and B. Nyhan. Thessaloniki, Office for official publications of the European Communities.

Chapter 12

Innovations in contents

12.1 Developing broad occupational competencies in VET

The demands of new forms of learning for the modern workforce translate into specific initiatives for VET. The DGVT questionnaires indicate that 10 of 31 countries establish specific labour market objectives as the dominant focus in current VET policies. At the same time, ten countries report comprehensive approaches to 'processes of modularisation'. We discussed the different rationales for this (such as progression in the educational system and increasing flexibility of institutional offers to learners) in Chapters 6 and 7. Many countries also report that modularisation is mainly seen as an appropriate strategy for the content of teaching and learning in CVT. Modularisation is accompanied by gearing curricula towards real-world work processes. Eleven of the country reports indicate that this is one of the major directions of reform.

A possible tension for the future practice of teaching and learning might lie in the demand for broad competences as suggested by the changing nature of work and the wish to flexibilise educational offerings. Usually, this is resolved through curriculum clusters targeted to a limited number of occupational or subject fields.

Schools and colleges are organised around departments, and contextualised VET curricula as well as qualifications are organised according to such content clusters. On the system level, sectoral councils or associations are involved in the construction of qualifications. A glance at systems of clustering educational content in Denmark, the Netherlands and the UK shows that here are considerable differences between in the number of subject or sector clusters (see table 12.1). The system to be introduced in the UK arranges content according to 15 clusters, of which 10 are vocational in their scope. Denmark uses seven and in the Dutch system there are 18. The shape of those clusters and a possible adjustment between European countries might be an important pre-condition for making European level initiatives, such as ECVT and a European Qualification framework feasible.

Table 12.1: Clusters of organising vocational learning content

Denmark (7)	UK (15 to be introduced, of which 10 are vocational)	Netherlands (18)
Technology and communication	Health, public services and care	Agri-food;
Building and Construction	Agriculture, horticulture and animal care	Building and construction;
Crafts and technology	Engineering and manufacturing technologies	Economy, ICT applications and security;
Food and gastronomy	Construction, planning and the built environment	Graphical and printing;
Engineering, Transport and Logistics	Information and communication technology	Car-, motor and bicycle mechanics;
Service	Retail and commercial enterprise	Trade and Retail;
Trade and Business	Leisure, travel and tourism	Metallurgic, Electro-technical and installation industry
	Arts, media and publishing	Hairdressers;
	Education and training	Textile industry (also high tech applications as in the aviation industry);
	Business, administration and law	Cafes, restaurants, catering, tourism and food (latter only bakery);
		Painting and plastering;
		Health and social care, sports;
		Road and waterway building work;
		Specialised occupations (such as orthopaedic shoemakers; very small body);
		Butchers;
		Transport and Logistics;
		Process and chemical industry;
		Coach building.

The development of competencies⁸² is seen as a major driver of VET reform in terms of content and purpose of the VET system. Key qualifications also play a major role, but they are less often mentioned in the country reports than a stronger work orientation. Even though equipping people with work process knowledge for modern work systems is a critical factor for achieving the Lisbon goal, the function of vocational education also includes other objectives. VET must enable students to cope with and participate in other societal and technological processes, and prepare them for further learning processes. This changing role in the purpose of VET is seen in some examples:

- The Standing Conference of Ministers of Education in Germany has passed the following mission statement for all vocational schools in the year 1991: *'The vocational school conveys a basic and special education and widens the general education received beforehand. Its ambition is to contribute to enabling students to the competent fulfilment of occupational tasks and participation in the design of the world of work and society in social and ecological responsibility.'*
- The Dutch country report states that *'...two things are essential: Competence based education is explicitly aimed at the key issues or problems in professions and careers,*

⁸² Different understandings of competence between poles of "key competences" and "contextualised professional competences" are given in Chapter 8.

and prepares the learner to deal with them; the accent is put on an optimal competence development of the learners, tailored to their personal wishes and possibilities. The aim of competence-based education is to train people to become competent citizens and professionals. Competences and competence development are the pivot around which content, programming, organisation and pedagogic-didactical design of the educational process should be developed.'

There is a strong complementary relationship between competence-based education and forecasting and early recognition systems. Forecasting measures address the adaptation of skills and competencies to be acquired based on continual changes in sectoral and occupational structures. The complementary paradigm for the design of learning content is a policy of prospective curriculum design aiming at equipping workers with the necessary skills and knowledge to cope with and contribute to processes of technological change, such as exemplified through the competence-types "reflective shaping competence" and "participative human resources" as outlined in chapter 8.

This raises an important issue in the basic orientation of the VET system. Answers in the DGVET questionnaires indicate that ten of the countries establish specific labour market goals as the dominant focus of current VET policies. In those VET systems where the actual acquisition of occupational competencies is outside the school, it may be more difficult to achieve an integration of broader educational and social goals as well as occupational skills. It will be left with the individual to establish the connection between acting as a responsible citizen and worker. Research on occupational identities has not yet produced findings on the relation between those two dimensions of identity as well as competence formation. However, they could be of predominant importance with regard to the Lisbon goal of social cohesion.

12.2 Entrepreneurship

The importance of entrepreneurship in the vital areas of job creation, business development and innovation have been widely documented and accepted in key European and international fora and policies. Increased entrepreneurship has an identified role if Europe is to achieve the competitive and dynamic knowledge-based economy with the sustainable economic growth with more and better jobs of the Lisbon goal. The links between VET, entrepreneurship, lifelong learning and the knowledge economy is specifically outlined in the Copenhagen Declaration as well as in a number of other policies, and is including as a core competence in DG's Education and Culture's work programme, 'Education and Training 2010'.

The precise meaning of the term 'entrepreneurship' is often interpreted in different ways in the VET context, so it is helpful to clarify this term for present purpose. In referring to entrepreneurship in education and training, we find it helpful to adapt the definition adapted by the Expert Group of the Best Procedure Project on Education and Training for Entrepreneurship (2002):

'A general attitude and a broad set of personal qualities that form a basis for creativity, initiative, responsibility, independence and a capacity to confront risks.'

The Group further defines two main elements in entrepreneurship teaching:

- A broader concept of education for entrepreneurial attitudes and skills, which involves developing personal qualities and competencies and is not directly focussed on the creation of new businesses, and;
- A more specific concept on training in business start-up and management.

A short review of national systems and EU policies are made of each of these two forms.

12.2.1 Entrepreneurship as a Core Competence

Entrepreneurship has been identified as a key skill in mainstream curricula. The Enterprise DG Working Group on Entrepreneurship reported in November 2002 and again in February 2004 and has taken stock of developments in entrepreneurship education, at least at the policy level, as a key competence⁸³. Some elements recommended by the Best Procedure Project include:

- The importance of entrepreneurship teaching should be recognised in the national curriculum, and a framework put in place;
- Policy commitment should be translated into action;
- Programmes of a 'soft' kind should be developed for primary education;
- International expertise and experience should be disseminated;
- Learning-by-doing schemes such as mini-companies should be encouraged;
- Teacher training must be addressed;
- Attention should be given to data collection so as to monitor progress.

The DG Education and Culture Expert Group has considered entrepreneurship among an integrated set of key competences, and its conclusions include the following:

- Entrepreneurship education should be taken forward in primary and secondary education (including IVET) as a set of key competences;
- Teachers should be both trained and given the responsibility of developing active teaching and learning methods;
- Currently, there is a lack of monitoring and evaluation of key competences;
- It will take time (probably four to five years) before improvements can be identified.

The DG Culture Group concludes that numerous activities relating to entrepreneurial competence were being developed in national education and training policies and this marked a change in culture. However, few of these were part of an integrated curriculum framework, even though national policies recognised the need for such a commitment. What was still needed in most countries was a coherent framework and policy in order to provide a structure through which longer term shifts could be managed, make such programmes or cross-cutting themes available to all students, establish longer-term goals, train teachers and fund innovation, etc.

According to the DGVT and Country Reports and the February 2004 progress report of the DG Enterprise Expert Group 'Education for Entrepreneurship', a number of countries are developing a framework for entrepreneurial education. This is occurring most frequently at the secondary education level, and is most common in initial VET systems and least common in primary education systems. The distribution of approaches as reported by the expert group by country is shown in Table 11.1

⁸³ While the 2002 report takes the EU member states (and Norway and Iceland) into account, the 2004 report has more reference to the new member states.

Table 12.2: Entrepreneurship as a key skill in the school curriculum

National approach	Country
Entrepreneurship specifically included in the vocational school curriculum	Austria, Bulgaria, Finland, Hungary, Latvia, Lithuania, Norway, Poland, Spain, Turkey, UK/England, UK/Scotland
Entrepreneurship specifically included in the secondary curriculum or in a national framework	Finland, Luxembourg, Poland, Norway, Spain (2004/5), UK/England, UK/Scotland
Plans being considered/developed	Bulgaria, Czech Republic, Cyprus, Denmark, Lithuania, Portugal, Malta, Slovenia
Entrepreneurship specifically included in the vocational school curriculum	Less frequent: Finland, Luxembourg, Norway, Spain, UK/Scotland and UK/England. Some others encourage Young Enterprise, and similar areas.
Entrepreneurship activities promoted by outside agencies embedded	Ireland, Malta, Cyprus, Slovenia

Source: DG Enterprise Expert Group.

As seen in this list of countries, it is clear that further work is needed to adapt a common approach to teaching the concept of entrepreneurship as a core competence. The DG Enterprise 2004 Progress Report concludes that in spite of the scale of on-going and new initiatives, these do not appear 'sufficient for making entrepreneurship education widespread in the school system and generally available to students'⁸⁴. Progress is recorded, but much remains to be done.

The complexity of the Lisbon follow up at EU level means that two directorates general have handled entrepreneurship as a theme for VET. Perhaps this is not surprising, given that the theme of opening up education and training systems to the wider world is one of the three overriding objectives for education and training. Yet, this raises the question of whether more coherent reporting of aspects of, for example, innovation, employment, inclusion and education and training would either reflect or create a more 'joined up' approach to policy objectives that different directorates have in common.

12.2.2 Training for Business Start up

Reporting in 2002 on VET research (Descy and Tessaring 2001) covering the theme of training and learning for entrepreneurship, Cedefop argued that promoting an entrepreneurial culture, access to capital and the removal of fiscal and administrative barriers are all-important factors in generating self-employment and business start-up. Training and guidance for potential entrepreneurs is equally important. The research report concludes that:

- In most countries concrete advice, support and training for the potential business starter is done mainly within higher or continuing education. The latter provides seminars, courses and, increasingly, software organised by the state, regions, professional associations and private providers;
- A basic precondition is the business idea and the business plan. In many countries, particularly where there are start-up incentives, the business plan is delegated to or advised by external companies – these may be chambers, tax or management consultants, banks, etc;
- 'Innumerable' initiatives at local, national and EU levels are being made to promote and support business start-ups – including mentoring and incubation schemes, access to capital, networks, partnerships, etc;

⁸⁴

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- Measures are most effective when targeted to markets and client groups. The measures needed for start-ups differ between sectors; start-ups in agriculture and hospitality vary from biotechnology and other modern technologies. Position in the market and value-added chain, location and linkage to innovative environments are important factors in success;
- In any case, quite a high proportion of small and medium-sized enterprises (SMEs) start-ups are not sustained. In the multi-national survey it was reported that only 50-60% of newly created firms survive for five years – with the USA among the lowest on this indicator from the advanced industrial countries.

DG Enterprise has gathered evidence on entrepreneurship training for business start-up. (Final Report of the Expert Group 'Education for Entrepreneurship', 2002). We can summarise this evidence by phase of training.

Initial vocational education and training

The 2002 DG Enterprise Final Report of the Expert Group Education for Entrepreneurship concludes that the IVET systems in most countries are not sufficiently oriented towards self-employment and that, although there are exceptions, a clear focus on self employment is often missing. The experience of IVET in the Netherlands and UK is cited:

'In most cases in this type of education there is not a real focus on self-employment or on setting up a business... This means that very frequently in these schools only the technical aspect is taken into account (for example, the students are taught how to be a hairdresser but not how to start up a hairdressing business). The curriculum requires students and apprentices to become employees, since the main task is seen as being to train skilled workers.'

Based on this report and our own research, we have inventoried examples of simulated or learning-by-doing experiences that some young people have had in the IVET systems and which prepare them in some ways for enterprise start up.

Table 12.3: EU15 initiatives for learning about business start up at the IVET level

Country	Description of business start-up learning at the IVET level
Austria	Business start-ups as a specialisation in the curriculum of business colleges; numerous practice firms and Young Enterprise': considering the number of schools, still have to make a major impact.
Belgium	Occasional projects organised by schools, companies, and chambers. Mini-enterprises are quite a common feature.
Cyprus	Courses on business administration have been introduced in the comprehensive upper secondary schools; pilot projects on virtual enterprises and entrepreneurship have been introduced on a voluntary basis.
Finland	Practice firms; Vocational qualification reform from 2001 include entrepreneurial knowledge and skills.
France	Numerous regions support projects to foster a culture of business creation – also <i>enterprises cadettes and graines d'entrepreneurs</i> schemes
Germany	Regional innovations – such as the InfoBus with a 'starting your own business' theme in one region and a Junior project
Greece	Initiatives expected.
Ireland	Business 2000 and other public/private partnerships.
Italy	Supplementary projects and collaborations organised for example through Confindustria. and other measures
Luxembourg	Encouragement of mini enterprises.
Malta	Voluntary pilot projects have been introduced at the secondary level. Some 27 schools are participating in the 'SCOOPS' project; some 350 students are participating in Young Enterprise.
Netherlands	Encouraged, but at the discretion of autonomous schools.
Norway	A 'vigorous pull' towards young enterprises.
Portugal	Courses aim to contribute to the development of entrepreneurial behaviour and skills
Slovenia	Numerous pilot projects and opportunities have been established at the primary and secondary levels.
Spain	Modules promote business culture (e.g. administrative marketing and management for small enterprises.)
Sweden	Young Enterprise and other initiatives – at the discretion of schools.
UK	England - Education Business Links organisations and partnerships, Young Enterprise, etc. Wales – Entrepreneurship Action Plan being developed for all schools. Scotland – Young Enterprise and other initiatives.

Sources: country reports and DG Enterprise Expert Group.

Case study: Entrepreneurship education in Austria

Entrepreneurship Education is now a priority in the Austrian system. The establishment of practice firms (*Übungsfirmen*) in the curricula of Schools and Colleges of Business Administration and Schools of Management and Services and the setting up *Junior-Firmen* (Young Enterprise) in other forms of schooling are increasing the role of entrepreneurial training at upper secondary level in VET.

The **practice firm** is a compulsory subject in these schools and colleges. Education takes place in business management centres, equipped with all aspects of a modern company infrastructure. The practice firms represent models of existing companies, and the business processes are simulated.

Young Enterprise is set up by the National Economic Society. In contrast to the practice firms, goods or services are made available, requiring the use of capital. Young Enterprise is not part of school curricula but is voluntary and an official school-related activity.

The **initiative 'Unternehmen – Bildung'** (Enterprise – Education) was established by the Federal Ministry in 2000. The statement of intent was also agreed upon by representatives of the economy, with the goal of promoting and strengthening the cooperation between educational institutions and economic organisations. Through this programme, measures are being implemented to increase economic education and entrepreneurial thinking in the primary, secondary and tertiary education sectors.

Continuing vocational education and training

Interestingly, no evidence is offered by the Enterprise Directorate-General in respect to the ways in which IVET and education systems link, whether in a closed progression or with flexible access, with CVT systems, so far as equipping people with the specific knowledge and skills needed for business set up are concerned. Since some systems in Europe appear to create bridges between ISCED Level 3 and 4 qualifications, while others can be characterised by barriers, this area is worth further investigation. In Germany's CVT system, where there is a plurality of providers including the chambers for small businesses, both qualifications and financial incentives encourage skilled people to take their competences further, not least by providing entrepreneurship training for business management.

Case study: CVT for entrepreneurship in Germany

The 1996 *Gesetz zur Förderung der beruflichen Aufstiegsfortbildung* (Upgrading Training Assistance Act) established the individual's statutory entitlement to financial assistance for master craftsman-level programmes or other courses that prepare the individual for a comparable level of advanced vocational qualification. The aim of this assistance, which is jointly financed by Germany's federal government and state governments, is to help individuals acquire a supplementary/additional or enhanced vocational qualification, motivate skilled workers to undergo further training, and provide incentive for individuals who could potentially start up a new business. A recent revision of the legislation included larger grants to cover the cost of training courses for persons starting up their own business.

In the 'Master Craftsman Qualification Online' project (<http://www.gmd.de/PT-NMB/>), the Central Office for Continuing Training in Crafts (ZWH) and the Association of German Chambers of Industry and Trade (DIHK) are to jointly develop quality standards, training software and e-learning models in order to create a common standard for the overall master qualification.

Higher education

In the Best Practice Report, DG Enterprise outlines good examples of promoting entrepreneurship at higher education level exist in Europe. However, because of the status of universities, such initiatives tend to be taken independently by single universities. Nevertheless, a national strategy for promoting entrepreneurship through voluntary collaboration between the state and the tertiary sector is found in some countries: Finland, France and the UK are cited as examples.

In order to understand the role of entrepreneurship in education, it is useful to consider other factors in the broader environment that impact this subject. There is evidence, for instance, that European higher education for entrepreneurship and business start-up suffers from a deficit of funding, particularly in relation to the USA. DG Enterprise Directorate-General report quotes research from Twaalfhoven (2000) who conducted a survey of 2000 entrepreneurship chairs in higher education, and found that business schools in the USA received 20 times more funding from alumni and entrepreneurs than do their European counterparts. The accuracy of this picture is confirmed – at least for 2002 – by the Enterprise Directorate-General's conclusion that:

'Entrepreneurship teaching at the tertiary level currently concentrates mostly on students following economics and business courses, while the offer is still very limited for those studying different subjects, such as sciences, engineering, arts, etc.'

12.2.3 Entrepreneurship in Education and Training

Section 11.4 has reviewed the main achievements of EU policy as well as national systems in integrating entrepreneurship into education and training. As has been seen in this section, the importance and acceptance of entrepreneurship has been gaining ground in recent years, but still does not constitute an established part of EU-wide policy. Part of this gap between acceptance and policy is attributed to a natural time lag; another part is no doubt due to the fragmentation of national authority over entrepreneurship between multiple authorities, including ministries of enterprise, education and employment. The lack of a broadly accepted statistical framework for measuring and reporting entrepreneurship in education and training is also a reason for this, although the Innovation Scoreboard addresses some aspects.

There remains, however, a critical need to improve the role of enterprise education and training in EU and national policies, in order to support meeting the Lisbon goal. Existing initiatives, such as the various working or expert groups, are an appropriate place to start, but require additional resources and policy leadership. The role entrepreneurship in VET systems must be introduced on a systematic level. This is all the more urgent due to the internal and external competitive, demographic and social forces affecting Europe, which will only accelerate in the second five years of the decade to 2010.

The introduction of entrepreneurship is in many ways similar to the introduction of ICT in learning. The importance of ICT was affirmed at a policy much earlier than entrepreneurship, in no small part due to the importance of the Internet and information technologies in society and business. The role of learning for information literacy offers valuable lessons for the integration of a totally new subject into the national VET area, and we now turn to learning for the information age.

12.3 ICT as a subject of learning

While the role of ICT has been present in modern society and the economy since at least the last 40 years, their role has become pervasive in the last decade. Changing economies of scale have made the presence of a computer, often with an Internet connection, a standard aspect of business and family life. The linking of personal or business computing with increasingly sophisticated technologies in the workplace, such as the emerging radio frequency identification (RFID) standards, GPRS and 3-G application for mobile telephony, WiFi systems, nanotechnology and others all point to a continued acceleration of the trend in total information awareness⁸⁵.

Information literacy, or 'e-literacy', has been defined as a fundamental 'key competency' approach pursued by the European Union. Building on the definition on competences given above (Chapter 8), e-literacy and ICT can either act as a key qualification mainly comprising of the knowledge and skills to deal with the new technologies. On the other hand, if e-literacy and ICT capabilities can be integrated into contextualised occupational competences, then they are one component contributing to a comprehensive occupational competence, rather than an item on their own. A recent study by Price Waterhouse Coopers on behalf of the Dutch Ministry for Economic Affairs (2004) has identified, that it is less the access to ICT but more the necessary skills, which will be of critical importance to the conversion of Europe into

⁸⁵ GPRS- General Packet Radio Service. 3G – third generation, WiFi - Wireless Fidelity.

an information society according to Lisbon, since much has already been achieved with regard to technical infrastructures.

VET systems have adopted e-literacy as a fundamental component of most curricula at the secondary level. As the Eurydice report (2002) states:

'Advances in telecommunication and microprocessor technology have expanded, intensified and altered the ways in which people interact. ICT has revolutionised business, public administration, education and the home. The magnitude of its economic and social implications has made universal access to computers and the Internet a top priority. With the mass of information available on line, the ability to access, select and administer relevant data is considered a key competence. Computer literacy, meaning the constructive and critical application of ICT, is the key to successful participation in the information society. Proficiency in ICT also serves as a catalyst for literacy, numeracy and many subject-based competencies. Familiarity with the etiquette of text messaging, electronic mail and chat rooms is a social competence for any cyberspace user. Gaps in online access and inadequate ICT competence in parts of the population could have serious repercussions for social cohesion by creating a digital divide into the information-rich and the information-poor.'

This section reviews the progress made by different countries in reforming their curricula and broader qualifications frameworks for e-Literacy. There are two sub-sections of relevance:

- e-Literacy in the VET System;
- e-Literacy in the Workplace.

The role of information technologies in learning and training methods is covered in 12.4. The approach taken by national systems and the European Union in introducing e-literacy as a key VET objective offers a number of object lessons for VET reform, and could be transferable to other policy areas that constitute the Lisbon agenda.

12.3.1 e-Literacy in the VET curriculum

e-Literacy is recognized as an important component for national VET systems, as well as for employee skill portfolios. Various countries have inaugurated ICT action plans (e.g. Czech Republic's Outline of State Information Policy in Education, Denmark's ICT Action Plan; Turkey's Preliminary National Development Plan, etc.) with the purpose of ensuring adequate consideration of new domain specific ICT contents in the different occupational fields. Other countries have been introducing new qualifications programmes: countries such as Austria or Germany have developed ICT apprenticeships in the dual system, which Hungary has developed school-based programmes.

According to the findings of the DGVT questionnaire, the majority of responding countries agree or strongly agree with the statement that by 2010 ICT in vocational learning will be embedded in work and business processes, rather than mainly involving simulated activities or distance learning. Some countries give equal weight to both statements. This may be associated with the description of countries providing VET mainly in either work-based or in school-based systems. Those countries describing themselves as pursuing work-based VET policies tend to agree strongly with embedding ICT into work and business processes.

However, while the recent Eurydice report (Eurydice, 2002) stressed the importance of a broad approach to ICT, in reality the implementation of ICT in the curriculum has probably been narrower. A report by the Socrates I-Curriculum project entitled 'An Overview of Current ICT teaching' (Ulicsak and Owen, 2003) concludes that in practice:

'...there is a focus on operational skills; the competencies tend to focus on how to use ICT rather than at a meta-competency level, that is, how technology can be used to model and transform an activity. Even in Germany, where the goal is

to shift to project-oriented education so that the students understand the relevance of ICT and use it to model and hence reflect on problems, it was noted that operating skills are taught initially then weeks or months later the role of ICT in the wider context is addressed.'

In summary, it is recognised that there is a need for new basic skills in e-Literacy as a result of the far ranging impact of ICT in society. However, present basic skills provision is limited, focusing on the operational skills of how to use technology and failing to develop the critical thinking skills needed to make judgements and the creative skills for constructive and critical application of ICT.

12.3.2 Development of ICT and e-literacy in the workplace

While the recent Eurydice report and the I-Curriculum project are school-based studies, the role of e-Literacy and ICT in the workplace has been equally profound. The institutionalisation of new occupational profiles in ICT represents a new approach to designing providing training pathways, In Germany, for example, this constitutes a milestone in the modernisation of the entire German VET system (Dietzen, 2002). Some features of the new IT occupational profiles, which will be transferred to other sectors in Germany, include:

- Flexible apprenticeships;
- Work process-orientation;
- Regulated training pathways to continuous training and higher education;
- A comprehensive training approach, including technical, business, economic and management qualifications, competencies and skills;
- New assessment procedures;
- New contents, in terms of skills and knowledge, which better address changing working environments and requirements.

Germany has implemented new occupational profiles within the vocational education and training system, and Austria has implemented about 10 ICT apprenticeship trades and about 30 school-based ICT programmes. In ICT occupations, as in other newly emerging occupations, the distinction between VET and higher education is becoming blurred. Universities and polytechnics tend to offer essentially vocational courses, and consortia arrangements being formed between industry, VET and higher education provide training.

For the emerging occupational profiles in the ICT sector, some trends can be observed, and these may be significant for future policy and the Lisbon objectives. The first is the relationship between higher education and VET. Because of the level of technology, there has been a tendency for universities as well as software companies, industrial automation firms and consultancies to take the lead in supporting the new occupational profiles. This is despite the fact that much of the training required is vocational in nature. It may be that there will be a need for a new partnership culture between higher education and VET, at least at an institutional level.

A second trend is the recognition by higher education providers that the new occupational profiles require training in practice and significant periods of work experience, which confirms the importance of partnership arrangements. The most demanding challenge for school-based systems is to provide sufficient and appropriate real world practice rather than 'training institution practice', which is a shortcoming of many school-based systems. We discuss workplace partnerships in the next chapter.

It remains the case both in school and at the work place, that pedagogical issues raised by ICT and e-learning have not yet been solved satisfactorily.

12.4 A paradigm shift in the mission of VET ?

In which way and how far do the innovations in learning and teaching contents contribute to achieving the Lisbon goal? What are the results on the European and on the national levels? This concluding section summarises the key issues relating to these questions covered through chapter 12 of this report.

The new mission for VET in Europe

Innovation, competitiveness and social cohesion are among the main aspirations established in the Lisbon agenda. As seen in Chapter 8, specific forms of work organisation are seen as enhancing and reflecting the realisation of this triangle of goals. In addition, the impact of rapid technological change in ICT is reflected in the content of teaching and learning across Europe and in the extent to which entrepreneurship is being embedded into teaching and learning processes.

The analysis of European research projects showed that in order to develop the competences needed for modern work processes, an integration of more generic as well as more domain-specific, technical skills is needed. This has to be reflected in modern curricula, which at the time have to be robust enough to 'survive' in an environment of continuous change.

The current trend in many European educational systems is to gear the content of education more intensively towards the world of work while at the same time reinforcing the significance of 'key qualifications'.

In the field of curricular structures, many systems are introducing modularised pathways in order to make VET more flexible and attractive, as has been seen in Chapters 6 and 7, which also reflects the introduction of a European credit system for VET (ECVT) on the European level and a European Framework of Qualifications. However, it was also shown that there are considerable differences within the broad curricular structures existing in European countries. These structures, however, can be seen as an important pre-condition for the organisation of contextualised and integrated learning processes targeted to broad occupational profiles.

Entrepreneurship in education

Entrepreneurship, defined as a set of active skills, predispositions and attitudes, is becoming more of a feature of the European education and training systems, at least at the level of national policies. A greater number of countries are developing a framework for entrepreneurial education as a key competence. This development is most common in IVET systems and least common in primary education systems. Countries will need to set up support measures to bring about effective change. Progress is recorded, but much remains to be done.

Training and advice for potential entrepreneurs is important, but often neglected in initial VET programmes. In most countries, concrete advice, support and training for the potential business entrepreneur are mainly offered at the level of higher or continuing education. This is complemented by a wide range of initiatives at local, national and EU levels to promote and support business start-ups, including mentoring and incubation schemes, access to capital, networks, partnerships, etc.

Measures are most effective when targeted to markets and client groups. However, the VET curriculum mainly prepares students and apprentices to become employees, and in only a few countries is the focus on self-employment or on setting up a business. Initiatives such as the Austrian Junior Companies and Training Firms, the initiatives taken in Germany to ensure a through-flow of people to *Meister* status (entailing business start-up and managerial skills as well as technical skills) and the CREA programme in higher education in France, provide successful case studies showing how the VET system can encourage learners to take up self employment or consider a business start-up.

The EC Directorates General that reported on entrepreneurship – DG Education and Culture and the Enterprise DG - conclude that in these respects, VET can achieve a lot more.

While it would be beneficial to follow up entrepreneurship through the open method of co-ordination, quantitative data collection does not appear to be a priority of member states, at least at present.

ICT as a subject of learning

The role of ICT in the economy at all levels of manufacturing and services reflects the aspiration to transform Europe into a knowledge-driven economy. Consequently, VET systems have to embrace ICT, and particularly the integration of ICT into modern work processes.

The importance of ICT is reflected in a number of programmes and initiatives at the European level such as Leonardo da Vinci, Socrates and other education programmes, the e-Learning Action Plan and in nearly all national innovation strategies regarding teaching and learning. In addition, Cedefop has developed career space generic ICT-profiles. European research suggests that ICT in education is often focussing strongly on operational skills and not on the question how to use ICT for the transformation or modelling of an activity or work situation.

Differences between the countries can be found in conceptualising ICT mainly as general ICT literacy or as ICT integrated into work processes. In some countries both strands can be found, especially in those with a strong vocational orientation, school-based as well as work-based. A small number of countries have introduced vocational education pathways for ICT occupations integrating formal and non-formal learning, such as Austria and Germany.

For each of the three issues raised, little is known on a large and comprehensive scale across Europe. Broad, contextualised occupational competences, and the integration of ICT and entrepreneurship into the content of VET practices can hardly be measured through large-scale assessments, such as PISA style assessments. Qualitative targets that can be followed up through a research-assisted reporting process would have a better chance of leading to change. At the same time, it might be worthwhile to consider the development of an inventory of tools and instruments targeted to occupational clusters for the level of practitioners to assist the introduction of curricular changes in VET practice across Europe.

Chapter 13

Innovations in methods

The last decade has seen an expansion of innovative learning methods. Self-directed learning as a principle in educational processes was introduced widely and is the complement to the changes in work and organisations described in the preceding chapters. In addition to ICT as a learning content, it has also received increasing attention providing for new methods of learning, i.e. e-learning. The following chapter evaluates the implementation and use of those methods.

13.1 Self-directed learning

Self-directed or group-directed learning illustrates a changing characteristic of workplace learning: individual initiative is expected to drive the learning process. In school environments, self-directed learning allows the individual student to select learning modules, define the sequence of working with these modules and set the pace of learning. Thus, students have the opportunity to learn within individualised learning arrangements. Since self-directed learning occurs at the micro-level of teaching and learning, it is very difficult to assess whether and to what extent this approach is becoming more common. The table on curricular reforms in Annex 3.1 provides some preliminary evidence on the diffusion of attempts to introduce self-directed learning. Self-directed learning can be regarded as the individual complement to learning organisations and open learning environments (see chapter 11 for more examples).

In combination with open learning environments and appropriate re-definitions of teachers' roles, self-directed learning offers new opportunities for students. Some examples contained in the country reports are the Irish Leaving Certificate Vocational Programme (LCVP), which requires students to take three activity-driven Link Modules (Enterprise Education, Preparation for Work and Work experience). As part of this approach, mini-company activities are supported, through which students plan, develop and manage a virtual or micro enterprise on their own (Irish country report). Similar approaches are found in Danish VET schools.

There may be some limits to this approach. Self-directed learning may be better suited to well-motivated students, but might also have a de-motivating effect on the weaker students. Self-directed learning is unlikely to be a panacea for school-based systems. Given the challenges of time and stress in the modern workplace, self-directed learning may be more difficult to implement. Under favourable conditions of learning-conducive work environments, self-directed learning can take place, but the evidence we have presents few successful cases.

13.2 e-Learning and the role of ICT in VET

While the integration of ICT into education and training in Europe has been widely accepted, its impact is the subject of growing debate. The European Commission, in the Barcelona Declaration of March 2002, declared:

'In order to raise the level of learning in Europe, the integration of ICT in the educational process is seen as an opportunity to advance the change process and to increase both quality of and accessibility to learning processes.'

A recent report of the Economist Intelligence Unit (2003) came to the conclusion that comparing world regions Western Europe is at the top of implementing e-learning in terms of culture as a precondition for "e-learning readiness".

In most policy initiatives, the impact of ICT requires careful evaluation. In an assessment of the status and growth for e-learning technology in various market sectors, Hasebrook, Herrmann and Rudolph (2003) described the situation as: 'Disillusionment in the US. Europe never really gets started'. Similarly, in a report for Cedefop on e-learning in SMEs (Attwell, 2003), the author commented that despite the high initial hopes, the reality of e-learning has been less than convincing.

Here we review the state of e-learning as an innovation in VET among two core target groups: enterprises and the wider VET systems.

e-Learning teaching and learning methods in enterprises

The private sector has pioneered the growth of ICT and e-learning methods in education and training. Early adopters used web-based and/or network-based content for issues such as corporate information and policy, demonstrations of specific tools or software utilisation, and knowledge management-related learning. The growing complexity of ERP and manufacturing automation led first to education in specific systems, and later to the adoption of such systems and platforms as a core-learning tool in non-ICT areas. In recent years, the relationship between ICT and occupational standards has grown, as the role of electronic testing for educational achievement as well as vocational occupations indicates.

The take-up of ICT in training and learning among enterprises, however, is not uniform. A number of factors, including preparedness and a lack of experience with new forms of learning distinguish between successful and unsuccessful adoption of e-learning methods in enterprises. As the German country report states:

'The numbers of those actually opting for the wide range of opportunities offered by computer-assisted, tele-networked and networked learning directly in the workplace are few and far between. This is the conclusion of the study on the "learning-conducive design of workplaces for skilled workers on the basis of e-learning", conducted by the Federal Institute for Vocational Training (BIBB). In contrast, in enterprises that have adopted e-learning, learning on the basis of electronic media carried out directly in the workplace already accounts for over 50 % of the overall training effort offering a wide range of e-learning opportunities. A majority of the surveyed small and medium and nearly half of the bigger enterprises do not use e-learning and has no plans to introduce e-learning in the future. The main reason is a lack of experience with this new form of learning. Personnel managers and trainers do not feel adequately prepared for e-learning: three-quarters of this group would welcome assistance in practical planning and decision-making.'

The findings derived from recent research (e.g. Cedefop, 2003 Attwell, 2003; Admiraal, 2004) indicate that there is limited use of ICT for learning in SMEs. In a small-scale study undertaken by Cedefop (ibid), the attitude of individual managers emerged as the single most decisive factor in influencing the development of ICT for learning in SMEs. Yet, perhaps surprisingly, there seemed little support on the part of managers in SMEs to introduce e-learning. Furthermore, there was little evidence, apart from isolated knowledge-rich companies, to suggest that SMEs are able to provide an infrastructure to support learning. The Cedefop report found that providing access to advanced e-learning technologies without a secure and well-developed learning infrastructure does not work.

In the short term, therefore, it seems unrealistic to expect that SMEs will themselves develop the necessary learning cultures and accompanying infrastructures. Networks seem to provide the best opportunity to provide an infrastructure. At present, where networks or regional bodies are undertaking this role, expertise in training tends to be separate from expertise in the provision of computer-based infrastructures. These fields of expertise could be brought together to unlock the potential of e-learning for SMEs. Given the important roles of SMEs in the economy and in provision of employment opportunities this is a matter of some concern.

e-Learning and Teaching and Learning Methods in the VET System

Earlier research by Eurydice (2002, 2004) illustrates the extent to which e-learning has been adopted in the general VET system as well as in the teaching profession. The country reports indicate that most of the EU25 countries have begun to implement ICT action plans in VET over the last few years. Countries with school-based VET systems in particular introduced ICT skills into their VET programmes, whether under IT literacy initiatives or integrated into other learning programmes. Other innovations, such as online learning portals, are contributing to e-learning. For example, the Czech Republic has set specific targets for ICT in education:

'For the purpose of improving information literacy levels, an Outline of State Information Policy in Education was established in 2000. The objectives of Stage I of its implementation (until 2005) include the following: to establish conditions facilitating effective and efficient implementation of ICT in school instruction and, consequently, achieve appropriate levels of information literacy in school leavers; to facilitate the use of ICT as a common instrument by 75% of teachers; to create conditions for the involvement of schools in the system of lifelong learning in ICT' (Czech Republic Country Report 2004).

Future developments in this respect are by no means simple to plan for. This issue is illustrated in the Danish Country Report, which states:

'With the advance of ubiquitous information and communication technologies (ICT) we can expect e-learning to play a more central role in the skills strategy in firms, but with quite different models and approaches than that of the institutionalised electronic classroom predominant in Denmark'

The evidence seems to suggest that apprenticeship training tends not to focus on e-learning, but rather to relate enterprise skill strategies with challenges and opportunities of ICT in workplaces. Consequently ICT is seen particularly in terms of its relevance for manufacturing and service work.

The conditions in the EU10 seems to be polarized: One group of countries lags behind the EU15 average with regard to existing ICT facilities (e.g. Poland and the Slovak Republic, as indicated in the country reports) and computer/vocational classroom ratios, and another group that is pushing ahead fast (e.g. Estonia and Slovenia).⁸⁶

E-learning clearly has the potential to stimulate learning networks and new forms of training organisation. Learning networks using e-learning take a number of different forms:

- Institutional networks between VET providers, which allow institutions to share infrastructure and learning materials as well as expand the provision of services.
- Subject-based networks between VET providers, which provide e-learning in specific subjects. There are increasing stable transnational networks in some subject areas, for instance Construct IT Europe.

⁸⁶ See also ETF 2002: Report. Key Indicators on Vocational Education and Training – Central and Eastern Europe. Torino.

- Supply-chain networks that bring together enterprises with VET providers in a specific industry, such as the UK-based Motor Car Supply Chain network. The use of e-learning platforms is also at the heart of the developmental work with the Leonardo V project Work & Learning Partnerships (see above). Here, e-platforms will be used to administer and broker workplace learning opportunities.
- Networks between industrial organisations, such as chambers of commerce and VET institutions. These networks may provide e-learning in a wide range of different subject areas based on a regional geographical basis (e.g. Birmingham Learning Support for Small Businesses; VIVO the regional learning network in Ostwestfalen-Lippe).
- New e-learning network organisations, which comprise organisations providing contracts to VET providers for materials development and local support for e-learning provision (e.g. UK-based learn direct or the German trainers' forum, www.foraus.de)
- City and regional networks of all education and training providers, such as the Swansea Learning City.

The development of new networks and new forms of organisational provision may be one of the major trends in e-learning for VET over the next period.

Table 13.1 VIRTUOSO

Modern conveniences are attractive to most Finns. They want to be in the forefront in the development of eLearning, and this is being promoted by government in the Information Society Initiative. They are open about the fact eLearning is just in its infancy, but the Finns would like to be ahead in the area and to have an advantage in a few years down the line. Distance and virtual learning in Finland has always been popular and is justified on the basis of the sparse population living in a relative large land mass, with educational establishments well scattered throughout the country. Virtual studies are possible from the lower levels of comprehensive education (the virtual school) through to higher education. From the point of view of where and when to learn, these facilities have advantages for adults who could be attracted by the anonymity factor, which is absent in contact education. As one expert in Karelia pointed out, adults are often embarrassed about showing their weaknesses in front of young people and would avoid classes in which groups are mixed.

Virtuoso is a project of the municipalities of North Karelia to develop a concept for eLearning for the region's upper secondary schools. It tries to represent the view of the region and capitalise on regional strengths. It involves the co-operation of about 300 teachers and a school population with ages varying between 16 and 65. The skill base of this population is lower than those at universities and polytechnics and this influences the type of virtual schooling to be developed. The main preoccupations thus far have been:

- How, when and why use eLearning at this level?
- What pedagogical support should be used?
- What kind of support does the teacher need to use eLearning in teaching?
- What are the different roles for the teacher?
- So far the project has focused on the teacher's role:
- What can the teacher achieve alone and as part of a team?
- What teaching material already exists for the teacher and what must he/she create?
- A pedagogical approach involving three roles for the teacher has been developed:
- The teacher-virtuoso, who works as a tutor and adviser in eLearning.
- The material-virtuoso, who has skills to produce materials to be used in eLearning.
- The support-virtuoso, who can offer support to colleagues working as material or teacher-virtuosos.
- (From the Finnish OECD Thematic Review on Adult Learning, OECD 2003)

Future integration of ICT and e-learning

Early development of the use of ICT for learning focused on technology and on the use of technology to essentially replicate traditional learning environments (Downes, 2004). More recently the focus of discussions on e-learning has changed. Rather than emphasising

technology, the focus of new thinking on e-learning is increasingly on the learner (Attwell et al, 2003). This is seen as more important for the quality of e-learning provision and the success of ICT-supported learning processes. In her keynote speech to the Leonardo da Vinci Conference in Dipoli entitled 'Dropping the e and keeping on learning', Anne Nevgri (2002) made clear that in spite of the rapid advance of technology we have to solve very traditional problems if we want to make learning processes more successful. This includes helping people to change the way they see, experience, understand and conceptualise the real world (Ramsden, 1988).

e-Learning moves the learning experience from the traditional classroom into the learner's world, providing access to learning anytime and anywhere without geographical or time barriers. The Internet provides access to learning materials and interaction with experts and fellow learners. This leads to the recognition that e-learning is a useful tool to help develop learning processes. However, the design of the whole learning process (possibly supported by e-learning) remains the decisive factor for the learner's success.

13.3 Strengthening teaching and learning in Europe

The continued integration and development of ICT and e-learning in VET will support the Lisbon goal and achieving the Copenhagen priorities. Improvements in these areas will contribute to a better education and qualification of the work force and thus improve production and increase competitiveness. Furthermore, new forms of learning, such as work-based or situated learning might contribute to stabilize the learners from disadvantaged groups by sustaining their vocational identity, and thus contribute to social cohesion and inclusion. Policies across Europe appear to vary in this respect.

A broad conception how to implement ICT and e-learning is important, rather than a concentration on the technological side. (See also the recommendations for the implementation of ICT and e-learning in the annex 1.5). E-learning in VET is probably most powerful when it is integrated in work processes. In this case, the tools or software systems used in learning will often be everyday business or manufacturing systems and software. This is a more successful medium by and large than when e-learning contents are delivered as de-contextualized learning units.

The importance of blended and/or integrated learning solutions when it comes to the development of contextualised occupational competences is illustrated by the following quote from the mentioned report of the Economist Intelligence Unit:

"As good as e-learning is, I don't want to have open-heart surgery from someone who only got his education online and has had no in-hospital training," says Fred Poker, a managing consultant in human capital management knowledge, content and e-learning solutions at IBM Business Consulting Services.

An innovative approach to ICT and vocational learning needs to take an integrated view of work and technology as learning content and learning form. Otherwise much potential for the use of ICT in situated learning will be overlooked.

Chapter 14

Assessing and validating learning

Assessing and validating learning is a key area in reforms of VET systems in Europe. The emergence of occupational competencies, the importance of situated and contextual learning and the rapid change in job requirements point to the need for developing new methods of assessment. Social requirements, individual needs and the emergence of lifelong learning today allow for greater flexibility and the individualisation of learning and of VET systems. Furthermore, the requirements of the European and global economies establish the need for greater transparency and portability of skills and their certification.

This chapter reviews policy reforms and innovations identified in the area of assessment and validation. It reviews the European perspectives on assessment and validation. It will also review individualised learning and assessment methods required by the modern workforce. Finally, it will outline some tensions in current approaches to assessment and validation.

14.1 Individual assessment methods

Recent developments in assessment are responsive to more individualised forms of learning:

- With the introduction of large-scale assessments such as TIMSS and PISA, examination and testing has received increasing attention at the international level. These two large-scale studies have shifted away from testing formal curriculum-driven and occupational knowledge concepts to evaluating everyday competencies. However, the overall question of evaluating actual occupational skills remains open to debate. Performance on tests and examinations send important diagnostic signals to employers and educational institutions, and forms part of the framework of individual working and educational careers;
- The increasing importance of assessing non-formal and informal learning (Bjørnåvold, 2001) has become an issue in many European countries as a means of acknowledging acquired work experience, knowledge and skills (Bouder et al., 2001). The models that attempt to approach competence assessment can be described in terms of three distinctive lines of approach: (a) qualitative and content-oriented investigations, (b) biographical descriptive investigations, and (c) quantitatively based investigations (Moser, 2003). Such assessment systems are usually broader in scope than traditional forms, and therefore require a different set of methods. However, in other respects they have to fulfil the same innovation criteria as other testing and assessment systems (Erpenbeck, 2003);
- Testing and assessment act as a quality control for learning processes on both the individual and the aggregated level of learning institutions and educational systems. Testing and examination have important functions and effects at the individual and classroom learning process levels, such as the recognition and diagnosis of individual mastery and the improvement of teaching and learning processes (U.S. Congress, 1994). However, summative and formative purposes of assessment may on occasion not fit well together.

Learning for competence development in high-performance work systems cannot easily be assessed and examined by traditional occupational testing models. Competence for modern work processes cover not only the performance of single skills and abilities, but a comprehensive set of situational occupational requirements that demand a high degree of autonomous and reflective behaviour. This should be reflected in the national and European attempts to install credit transfer systems. Since work processes are very dynamic, it is increasingly difficult to maintain equivalent testing systems. As a consequence, two methods of dealing with this have emerged:

- A further generalisation of testing and competences (sometimes called the 'bolt on' approach) or;
- A shift towards embedding assessment directly into work-processes (e.g. through portfolios, presentations, learning diaries, reflection, discussion, observation).

While a number of teaching and learning concepts, such as cognitive apprenticeship or situated learning (Lave and Wenger 1991; Collins, Brown & Newman 1990) have been developed and implemented to meet the new demands facing teaching and learning, assessment forms have often proved to be resistant to change. Yet changes in assessment are critical, since many studies have shown that tests and examinations influence and shape learning more strongly than any other aspect of curricular input or pedagogical approach (Eraut, 1994).

In practice, different assessment approaches may differ in terms of their particular strengths and weaknesses with regard to the different functions each performs. Thus, the typical critique of traditional selected response methods, such as multiple choice or matching, is that they might lead to unintended consequences on the learning process, and that equity problems often arise. The alternative to traditional testing methods are more authentic, contextualised forms of testing, including open-response items, such as realistic simulations, extended performance events, exhibitions, judged competitions, portfolios, and other forms of demonstrating learners' mastery. However, these ways of testing are usually both time consuming and cost-intensive, and the increase in validity often seems to be bought at the cost of a decrease in reliability. Nevertheless, sectoral approaches seem to be particularly promising with regard to this approach, since they are based on existing experience and grounded in practice (Bainbridge, Murray, Harrison, & Ward, 2004).

14.2 Validating learning

European approaches on assessment and validation of knowledge differ significantly based on the objectives of national VET system and its characteristics. From the literature, it is possible to identify at least three different perspectives on assessment, examination and testing:

- As concerns their appropriateness and responsiveness to particular learning modes (school based or workplace oriented, formal or non-formal);
- In relation to the way that the qualification is constructed (e.g. complete vocational qualification, or standalone units or modules); and
- As concerns their efficiency, reliability and validity.

Taken together, these findings enable an assessment of progress being made in European countries towards meeting the Copenhagen Declaration's priorities on common measures and principles for certification, as well as on the development of a credit transfer system for VET.

Some countries that have a dual or apprenticeship system for VET traditionally organise school exams, comprising theoretical and practical components with a strong bias towards

practice. However, the final occupational exam takes place under the auspices of the industrial and crafts chambers, and has its own theory and practice components (see the box).

Examinations in the German Dual System

Traditionally in the German IVET system, all qualifications require a final examination. The general framework for the interim and final examinations for the dual vocational qualifications are part of the training ordinances. The exam is carried out by the chambers or the corresponding authority. The apprentice is to maintain a logbook during training. The final results of the vocational schools testing and exams are only mentioned but no decisive part of the qualifications exam, which has his own theoretical and practical part.

By the so-called "extended" final examination (credit transferability of interim exams to the final examination) shall be tested in twenty training occupations. The pilot regulations for five training occupations were issued on August 1, 2002. Pilot regulations for another fifteen occupations are planned to be issued in the current legislative period. As this pilot model is of fundamental importance, it will be evaluated by external experts.

During the past legislative period the Federal and Länder governments, together with workers and employers, also decided within the framework of the Alliance for Jobs, Training and Competitiveness to examine whether and how vocational school credits could be transferred to the final vocational examination. In late 2002, the Länder governments submitted an inter-Länder draft agreement designed to lay down the necessary prerequisites for ensuring a minimum of equality in assessing school achievements and their recognition in the final vocational examination. Following this agreement, common competence standards are now being developed for all levels of education. (German Country Report)

As illustrated by the German example, recent developments in the dual system include the planning of credit transfer systems between vocational school credits and the final vocational examination. However, this also indicates the need to address the role of non-formal learning and related accreditation necessities. The strong role the dual system in the associated national education systems and the widely accepted role of vocational/occupational competencies may hinder a broader discussion on non-formal learning and APL.

Recognition of prior learning

Knowledge and skills can be developed through formal learning. However, skills development also takes place through informal and non-formal learning such as on the job training, domestic chores, voluntary work and hobbies.

We can observe a general trend in almost all European countries towards a greater variety of vocational learning paths, which to some extent are a direct result of the impossibility of regulating all emerging occupational profiles. Because VET in itself addresses occupational knowledge, some VET systems give the opportunity to substitute formal learning with prior learning after a recognition path, sometimes complemented with more formal ways of learning.

With the acknowledgment that learning takes place everywhere, the increase of attention for informal and non-formal learning and the desire to make best use of all learning, the necessity of valuation, recognition, assessment and certification rises. Assessment of knowledge is assumed to be feasible through tests on objective knowledge. On the skill side, various means to recognize and assess skills earned through prior learning are interviews, (self-) assessments and tests; all of which try to re-construct the contexts of skill acquisition. Eventually, all assessments need to cover reliability, validity and legitimacy; the former require a consideration of contexts of learning, the latter strongly rely on state and stakeholders' cooperative activities in formulating criteria, parameters and rules for assessment (Bjornavold, 2000).

If the future of European VET systems aims at developing occupational competence, the role of workplace learning, work placements and the integration of learning sites is becoming a crucial point, which VET has to anticipate. This concerns both IVET and CVT. Recognition of prior learning within IVET can moderate the modularisation of programmes, opening up the system, strengthening the links with other forms of formal education and attract those students who enter through non traditional routes (school drop outs, migrants). In CVT it can enable individuals to get recognition for their prior learning and might increase the mobility in

the labour market whether it is vertical (in case of promotions) or horizontal (switching career paths) or for entering the labour market.

The findings of the country reports suggest that almost all countries are opening up for recognition of non-formal learning and most of them consider the accreditation of prior learning as an important issue, but most are not yet conclusive of and how to integrate it in the formal educational system. A view at the responses of the DGVT questionnaires discloses that almost all EU10 countries are in the stage of planning national accreditation systems (only few exceptions like Lithuania, Estonia and Hungary where a system was already implemented). With the EU15, the situation is more favorable, most of them have implemented national accreditation systems (for details please refer to table 7.1 and to chapter 7.6 in general)

It remains to be seen whether accreditation in practice can match the validation principles developed by the Commission Expert Group H (see Progress Report November 2003). In most cases the question of whether these informal and non-formal pathways will be given prominence or not is subject to political decisions.

An example of an approach to integrating the recognition of informal and non-formal learning at VET system level is seen in the French system. The 'bilan de compétence' includes a procedure to assess actual individual competences, which may not be reflected in certificates. Alongside other validation procedures, the bilan de compétence combines the assessment of non-formally acquired competences with individual goals of the person undergoing the procedure. These goals may range from developing personal career orientations to increasing employability. The 3-phase procedure aims at enabling the workers to analyse their personal and vocational competences and to explore their motivation in order to develop a plan for their future vocational development. Although a law (dated 1991) regulates the whole procedure, there are many uncertainties with the bilan de compétence, partly originating in the ambiguity of the term 'competence', but also due to the different backgrounds of the institutions conducting the procedure. Nevertheless, the bilan de compétence seems to be an important measure for career planning through assessment of non-formal competences, with an established level of demand.

Similar examples for the recognition of prior learning and thus measuring of competence are given by the Competence book (Kompetenzbuch) in Switzerland and by the QUEM project in Germany (QUEM 2001). QUEM is a project/programme on the management of qualification development. It administers a programme on Learning cultures and competence development, which runs since 2001. Building on approaches measuring dimensions of competence (like competence of methods, social competence etc.) the currently running and QUEM-sponsored project KOMBI is developing, applying and evaluating quantitative and qualitative methods for measuring and assessing competences by using competence portfolios to interview test persons (<http://www.abwf.de/main/projekte/>).

One step further go the concepts of competence measuring building on occupational development tasks, which are confronting test persons with assumedly typical practical problems of the respective occupational field. Solving these development tasks requires occupational competence. The way and degree to which these tasks are solved can then be assessed (Haasler, Beilmann 2004).

Traditionally, many school-based VET systems tended to examine and test knowledge, rather than occupational competence. In an effort to expand the practical knowledge gained during studies, recent reforms have seen the introduction of practical sections and work experience, in which the practical activity is also assessed, often through demonstration, project or portfolio. Thus, reforms are under way in this area as well. The Finnish example of including competence-based qualifications and skills demonstrations in the school-based systems provides a good example for this (see the box).

Competence-based qualifications

Competence-based qualifications and skills demonstrations in Finland

Vocational adult education and training have involved a system of competence-based qualifications. Competence-based qualifications consist of competence tests, which are independent of the way in which skills have been acquired. The Qualification Committees play a significant role in this system. Assessment of competence tests also involves working life experts from outside the vocational institution and qualification certificates are awarded by the appropriate Qualification Committee. Competence-based qualifications and skills demonstrations require external assessment by a representative of working life. (Finnish Country Report)

Competence-based VET qualifications were pioneered in the UK from the end 1980s, with the programme of national vocational qualifications (NVQs) and Scottish vocational qualifications (SVQs) not very innovative either. Countries implementing an NVQ-based system (e.g. Romania which, according to the country report, during 2003-04 laid down the basic principles for introducing a Romanian National system of Vocational Qualifications) gain certain advantages in dealing with the accreditation of different learning routes due to the strong output orientation of the system, particularly when embedded into a national qualification framework. But NVQs have been found in the UK to be an insufficient tool on their own to assess the full range of skills and knowledge needed by young people on completion of an apprenticeship, even with the addition of key skills assessments: a technical certificate has been introduced to complete the assessment of skills and knowledge needed by the young person to acquire the requisite range of knowledge and skills for working in a skilled professional profile.

14.3 Assessment and Validation across Europe

Any assessment and testing practice in Europe finds itself caught in a dilemma between achieving efficiency goals by limiting the cost and time of assessment, and aligning testing and assessment with learning objectives. National systems tend to resolve the issue by emphasizing one side or the other of the dilemma. At worst testing and assessment procedures determine the learning processes and contents 'teaching to the test' and thus define the curriculum. This outcome can occur in both school-based and workplace learning systems.

In most European countries, certification has become increasingly important. This can be seen in the EU10, most of which have rapidly developed their national qualification and certification systems. However, according to Descy and Tessaring (2001):

'...certification is becoming a component of training in its own right, and increasingly independent from training (what is termed "autonomisation"). By looking for methods that are better able to measure people's competences, the stress is placed more on people's ability to mobilise their competences and less on the way in which these competences have been acquired. This approach is leading to new forms of recognition (especially for non-formal learning)'

Innovation in testing and validation has a role in contribution to the Lisbon goal of better work places and greater work force mobility in Europe. This is confirmed in the concrete action following on the Copenhagen Declaration.

Chapter 15

Teachers, trainers and instructors as learning facilitators

This chapter addresses professional issues concerning vocational teachers and trainers. It addresses in particular questions of their professional status and identity, the profile of the profession, its education and continuing training, and recruitment in the light of an ageing profession.

15.1 Challenges

One of the core problems of vocational educators' search for professional recognition is based on a paradox: while vocational teachers and trainers are essential to supporting skill development in the workforce, they are not high status for this role. Worldwide, some two thirds of the workforce, which constitutes the backbone of each economy, are skilled workers, who have learned a substantial part of their occupational skills and knowledge through the support of VET and HRD teachers and trainers. Given the basic importance of vocational training for economic success, it is remarkable that in many countries VET has failed to achieve the level of social recognition that is needed to establish a profession. This is reinforced by the fact that teaching has always had problems gaining professional recognition, and has even been referred to as a 'semi-profession' (Etzioni).

Given the increasing emphasis on lifelong learning, teachers and trainers as learning facilitators can be regarded as one of the core professions in the knowledge society. Improving teacher quality is therefore a significant lever for increasing the quality of vocational education, as acknowledged by the Commission's technical working group (Bainbridge et al., 2004). This problem is recognised in national and international organisations' attempts to raise the status and the quality of teaching, such as the forthcoming UNESCO initiative for an M.A standard in vocational teacher education, the Leonardo EUROPREF and EUROFRAME projects, Cedefop's TTnet, and the recent monitoring activities of OECD with regard to attracting, developing and retaining teachers.

A working group has been set up within the education and training 2010 process, and is dealing with the question of improving education of teachers and trainers. It has identified the following key issues:

- Identifying the skills that teachers and trainers should have, given their changing roles in the knowledge society;
- Providing the conditions that adequately support teachers and trainers as they respond to the challenges of the knowledge society, including through initial and in-service training in the perspective of lifelong learning;

- Securing a sufficient level of entry to the teaching profession, across all subjects and levels, as well as providing for the long-term needs of the profession by making teaching and training even more attractive;
- Attracting recruits to teaching and training who have professional experience in other fields.
- (European Commission. (2003). Directorate-General for Education and Culture and Working Group "Improving Education of Teachers and Trainers" Implementation of "Education & Training 2010").

To address the first issue the working group has defined a set of competences as common goals to achieve through teacher education, such as the promotion of new learning outcomes, restructuring of work within and beyond the classroom, the integration of ICT in formal learning situations and in all areas of professional practice, and the growing professionalisation and increased individual responsibility for professional development.

There are some particular aspects of recruiting teaching and teachers in VET, which differ from teacher recruitment and education for general secondary school subjects. Given the variety of teachers' and trainers' roles and functions in the knowledge economy, one of the crucial issues is to identify the kinds of knowledge teachers and trainers use in effective learning processes.⁸⁷ This problem is reinforced by the fact that – as opposed to general education subjects – there is no clearly defined subject matter for VET professionals-- the content of vocational learning is highly embedded within the contexts of work, education and technology. Therefore, some teacher recruitment and training policies favour educational background over work or technological experience, and vice versa.

15.1.1. Profiles of vocational teachers and trainers across Europe

The different country reports gathered in this research identify several broad clusters of teachers and trainers. The sector has grown larger everywhere, although it is not everywhere well defined. The main categories are:

- Teachers or lecturers working in formal school or college settings and giving instruction in vocational courses;
- Instructors and laboratory assistants, working in school or college settings in vocational labs, who teach with a high degree of autonomy or sometimes act as assistants to other vocational teachers;
- Trainer, tutor, and others in enterprises who integrate training and education functions in to their jobs with varying degrees (from incidental to full-time teaching of trainees and apprentices). In dual systems, this function is often separated from HRD functions within companies, while in others this distinction is not strongly maintained;
- Instructors and trainers working in labour market training institutions supported by governments and public authorities, often with a strong focus on social inclusion and basic occupational competences;
- Instructors and trainers working in employers' organisations, such as chambers of commerce, sectoral training institutions or privately-run training companies and providers that focus on upgrading of technical competences, training in communication skills, etc.

In addition to these broad categories other professionals may be involved, such as HR professionals, guidance counsellors, general subject teachers, or social and youth workers,

⁸⁷ See also the references in and the text itself: Lassnig, L. (2001). Steering, networking, and profiles of professionals in vocational education and training (VET). In P. Descy & M. Tessaring (Eds.), *Training in Europe. Second report on vocational training research in Europe 2000: background report* (Vol. 1, pp. 11-71). Luxembourg: Off. for Official Publ. of the Europ. Communities.

who provide specialised services. Sometimes these additional services are integrated with teaching, thus expanding a teacher's or trainer's role.

Overall, the regulation of entry and educational requirements for teachers and trainers in VET is changing. In the traditional work-based systems, such as Austria, Denmark or Germany, there are regulations in place for in-company trainers, which make some pedagogical training a requirement. In Hungary and Luxembourg, similar requirements also exist for workplace trainers. Usually, the training qualification is integrated into the upper level training of the respective craft or trade (e.g. Meister qualification). With the new law on VET, Italy has introduced new requirements for trainers involved into apprenticeships (tutor aziendale per l'apprendistato). Finland is currently running a major training programme for those who are involved in learning processes at work (see below). For both Finland and Italy, indirect requirements are also reported in the case of regional and labour market training, where the trainer's qualification is one criterion for the allocation of public training subsidies.

Higher recruitment standards on the one hand, and the need to meet the demand for teachers on the other, has caused many countries to reform their teaching profiles and teachers' progression routes. In those countries with regulations and relatively high recruitment standards, vocational teaching profiles are geared strongly towards the model of the secondary teacher, e.g. as a civil or public servant with contracts and promotion mechanisms based on the rules of public administration and seniority. In the case of the Netherlands, different levels and fields of professional teaching standards, oriented towards performance criteria, define progression routes.

15.1.2. Initial and continuing development of knowledge and expertise for VET professionals

Within the EUROPREF project and in co-operation with Cedefop the following basic patterns of teacher recruitment and professional development across Europe have been identified:

- The 'French' configuration: the VET profession is summarised by the phrase 'ingénierie de formation', which represents a combination rather than an integration of different subject areas. Postgraduate programmes lead to expertise in very specific areas; the common level of formal education is usually a university degree. Since the early 1990s, teacher training has been hosted at the IUFM, which is the body for all general or vocational teacher-training activities.
- The 'UK' configuration: Mainly based on the recruitment of practitioners who complete additional courses in teaching and training management techniques. Some paths lead to higher qualifications and a predominant HRD orientation. A special teaching certificate is required to work in further education colleges. The level of formal education was not determined for a long time, but now is now set to NVQ level 4. The goal is to have a 100% qualified teaching force in Further Education colleges by 2010.
- The 'German' configuration: Based on an academic path with a scientific discipline and strong representation of subject specific didactics (to Masters level) to becoming a vocational teacher, often without integrating HRD, pedagogy and subject matter;
- The 'Nordic' configuration: A semi-academic model of training and recruitment in special pedagogical institutions with a very practical orientation.⁸⁸ Historically a similar model could be found in Germany and still exists in Austria and Switzerland. However, the latter are both upgrading their institutions at the moment to the University level. Usually, this form leads to a B.A.-equivalent level qualification.

⁸⁸ This typology is a further development of Kämäräinen, P. (1995). Bemerkungen zum Projektentwurf des ITB "Neue Formen der Aus- und Weiterbildung für Akteure in der beruflichen Bildung" im Rahmen des Leonardo Programmes. ITB. Thessaloniki; Heidegger, G. (1997). Key considerations in the education of vocational education and training. Promoting vocational education and training: European Perspectives. In A. Brown. Tampere: 13-23; and the evidence from the country reports.

These typical models can take different forms in reality. In Denmark, for example, the subject matter emphasis is less important, apart from occupational experience and a qualification in the respective occupational field, whereas in Norway there is an integration of subject matter and pedagogy. This integration also exists in some German universities, whereas in others the vocational teachers' subject matter education is oriented towards the respective engineering or business degree. This conception can be found in Hungary or in Turkey too, albeit leading to a four-year B.A. degree for the prospective vocational teacher.

Another difference is in the typical sequence that training and recruitment follows. A common model across Europe is the in-service model, in which the teacher's qualification is acquired with the first, usually probationary phase of employment. The length of this qualification varies from 40 hours to a B.A. equivalent degree according to the country reports. Typically, the in-service model does not take into account the respective subject matter, but is mainly focused on psychological and basic educational knowledge and on teaching methods and techniques. In most cases, the precondition to employment as a vocational teacher is a B.A. degree plus relevant work experience. Sometimes the in-service courses are offered at the university level, sometimes in specialised public institutions tailored to teacher training. The in-service model can be found in different variations, sometimes with a short pre-service training period as the dominant model, as is the case in the Baltic States, Denmark, UK, Ireland, Cyprus, Spain and Greece. In the other countries, in most cases, there are longer pre-service programmes in place to qualify for teaching positions.

Work experience is normally required for teachers in vocational education. According to the country reports the following countries put particular emphasis on this dimension in their teacher recruitment: Austria, Denmark, Ireland, Slovakia, Sweden and the UK. Work experience might be a pre-condition in other countries too, but in the aforementioned countries it is the *major* precondition for entering the vocational teaching field. Even in Germany, which maintains the highest formal level in terms of academic requirements for entering the vocational teaching field, there is usually real-work experience prescribed through the University curricula. The majority of student teachers in Germany hold an occupational qualification in their field. Work experience as a recruitment criterion for vocational teachers was also rated significantly by most of the countries in the DGVT questionnaires. Those countries with school-based systems and which have low levels of participation in VET, view work experience as less important in recruitment of teachers.

For many countries with a consecutive sequence of teacher training (subject matter first, then educational qualification), the B.A. is the typical entry requirement for enrolling into teacher preparation courses. Some of the former specialised teacher training institutions have been or will be transformed into institutions with university status in line with the Bologna process, which opens up new possibilities for those who have obtained teaching qualifications to deepen their studies at the M.A. level.

However, there are also signs that training in pedagogy may be weak. For example, one Baltic country report states that:

'At the beginning of the 2000/01 academic year only 40% of the teaching staff has any pedagogical training at all'.

This figure can be seen as representative for many of the accession countries but also for some of the EU15. These data indicate that strenuous efforts still must be made to upgrade the vocational teaching profession.

Developing high-quality teacher education infrastructures

Whatever the form of initial teacher training, there are some specific challenges with respect to its content. The most significant challenge is the integration of subject matter and pedagogical training. Attempts are being made in some European countries to build coherent research and training programmes that reflect the integration of subject matter and pedagogy in VET. One example of this kind of integration is the idea of *research on occupational clusters* (Berufsfeldwissenschaften) as developed within the Working Group on 'Gewerblich-

Technische Wissenschaften' in the 'Gesellschaft für Arbeitswissenschaften' network of German University Institutes for the training of vocational teachers and trainers, where all research activities are focused on 'core-problems' and 'developmental tasks' (see chapter 8) within specific occupational clusters, such as manufacturing, electronics and ICT etc. A similar approach can be observed in the French discussion on ergonomics, as the French country report illustrated. The integration of subject matter and pedagogy is also the rationale behind the B.A. and M.A. level courses offered in Norway's vocational teacher education college accompanied through a newly established research programme (introduced 2003), and it is also developed within the teacher education schemes in Turkey and Hungary. In light of the abovementioned UNESCO initiative, a group has been formed to further develop research-based vocational teacher training in Europe at a recent conference in Hamburg and in co-operation with VETNET⁸⁹, the group for research in VET within the European Educational Research Association. The further development of M.A.-level degrees and courses in vocational teaching is of significant importance to providing teachers with attractive and high-quality progression routes. This is especially relevant for countries, which have set ambitious goals with regard to upgrading teacher qualifications, such as Estonia or the UK, influenced by Education 2010 (see country reports).

Professional development and continuing training of teachers and trainers

Once initial training is complete, another challenge concerns how to support continuous learning of vocational teachers. According to the Finnish country report, vocational teachers and trainers are in general more active in updating their skills and knowledge than their counterparts from general education, which may be connected to the changing nature of their subject fields. Experience in the USA⁹⁰ reinforces this picture.

The formative role of previous teaching experience is emphasised in different approaches to learning and professional development: professional knowledge is mainly developed and rooted within the professional practice (Schön, 1983, Putnam & Borko, 1997, Fullan, 1999). This has led to increasing attention on cultures of teaching and their social and institutional context (Hargreaves, 1997; McLaughlin & Talbert, 2001). In the schools and colleges of vocational education, a major challenge is the diverse backgrounds of teachers and trainers. This tends to create diverse conceptions of teaching and learning, while at the same time there is a growing need for teachers to collaborate and work together among peers and outside of the schools.

⁸⁹ <http://www.vet-research.net>

⁹⁰ U.S. Department of Education, Silverberg, M., Warner, E., Goodwin, D., & Fong, M. (2002). National Assessment Of Vocational Education. Interim Report to Congress. Executive Summary. Washington: U.S. Dept. of Education Office under the secretary.

Continuing teacher training in Finland

Continuing education, focusing on education policy priorities, is supported by the State: priorities and funding are determined on an annual basis. The National Board of Education plays an important role in the continuing training of teachers. The office allocates annual state budget funds (nearly 8,200,000 euros in 2004) for further education of teachers. The topics prioritised in 2004 are:

1. Promoting e-learning
2. Developing the foundation of learning and subject-specific skills. Entrepreneurship
3. Increasing the well-being of the students and developing guidance
4. Developing on-the-job learning and skills demonstrations
5. Multicultural school and cultural clashes
6. Training for school management

This education is free of charge for participants. Each employer decides whether individual teachers may participate in education during their working hours and with full salary benefits and whether they receive compensation for possible travel and accommodation expenses.

For vocational teachers, the National Board of Education has drawn up two continuing training programmes, the näyttötutkintomestarikoulutus (= specialist in competence-based qualifications) and opettajan työelämäosaamisen opinnott (=studies for teachers in increasing their competence in the world-of-work). Both comprise 15 credits (=22.5 ECTS) . These programmes support the VET reform in the late 1990s, which brought on-the-job learning periods and skills demonstrations to all vocational upper secondary education and training. In 2003, the state allocated 1,346 million euros for providing teachers in VET with continuing training related to on-the-job learning. In 2000-2003, 48 % of the teachers participated in this training.

Many VET schools have their own programmes or are involved in projects providing the teachers with the opportunity to take part in on-the-job learning periods.

In Finland, teachers are very autonomous in their professions and thus have considerable opportunities to influence their work. The transfer of decision-making powers closer to schools and teachers has been characteristic of the Finnish education system since the 1980s. Such a development trend became particularly strong in the 1990s. The aim in increasing the decision-making powers of schools was to strengthen the schools' readiness to meet the needs of their surrounding communities and to take decision-making to be as close as possible to those affected by the decisions. In addition to their opportunity to influence the curricula and course design, they are also free to make their own decisions regarding pedagogy, learning materials and student assessment. Finnish teachers can also very often participate in making decisions on the school budget and, in particular, on the allocation of resources within the school.

(From the Finnish country report)

Many European countries have introduced new progression and recruitment routes for teachers and trainers. In Denmark, for example, a grid of teaching competences has been developed which aim to orientate all the teacher professional development activities carried out in individual schools. A number of European countries, including Austria, Finland Hungary, Ireland, Latvia, the Netherlands and Romania, have introduced mandatory requirements for continuous teacher training. The box illustrates the connections between reform, school autonomy and continuous training in the case of the Finland. Other countries have also implemented special school development or overarching reform plans in which teacher training is an integral component. Another example of this is the Danish Reform 2000.

15.2. Supply, demand and retention of vocational teachers

All of the monitored countries acknowledge the importance of the teaching force in developing their VET systems. However, there are some structural challenges to the further upgrading the teaching force and raising its status.⁹¹ Demographic factors are a known, but often overlooked and powerful driver of teacher recruitment policies. The late sixties and beginning seventies (the 'baby-boomer' generation), for example, which saw a huge expansion of the teaching force. As a result, in the OECD member states, 40% of the teachers are between 40 and 50 years old. Several country reports mentioned the ageing of the teaching force a particular challenge: the Czech Republic, France, Germany, Hungary, the Netherlands and Slovakia.

Other crucial structural determinants of teachers' work and professional situation are the hours they have to teach and the number of students they have to care for, usually measured in the student/teacher ratio and the payment they receive. OECD studies have shown that in some European Countries the average pay of (primary) teachers, which can be used as proxy for the relative wages across countries for other teaching salaries (no information for vocational teachers in particular is available,) is higher than the predicted relative salary (highest difference in Ireland, Portugal and Spain). This comparison suggests that in many countries of the European Union, payment is not the biggest issue, when it comes to the structural conditions of teachers' work. However, this rough comparison can only be validated with specific data on vocational teachers' salaries. In addition, it would be important to gather data to compare the salaries and benefits provided to vocational teachers to those in alternative jobs that teachers might take in the labour market. Some states have already set ambitious goals with regard to teacher pay. In the Czech Republic, for example, a goal has been set to increase teachers' wages from a level of 20% below the national average to 37% above it. Similar objectives can be found especially in the new accession countries, but also in some other European countries.

Table 15.1: Structural policies and problems with regard to VET teachers (information mainly from country reports)

	New profiles and progression routes	Wages below national average	Ageing and actual or future Teacher shortages		New profiles and progression routes	Wages below national average	Ageing and actual or future Teacher shortages
Austria		x		Ireland	x		
Belgium	x		x	Latvia		x	
Bulgaria		x		Lithuania	x		
Czech Republic	x	x	x	Netherlands	x		x
Denmark	x		X	Poland	x	x	
France			x	Romania	x	x	
Germany			x	Slovak Republic		x	
Hungary		x	x	Turkey			x
Iceland			x				

It is important to increase teacher pay for at least two reasons. First, lower wages are less likely to attract more qualified individuals into the profession and may contribute to 'contra-selection'--those who do not get employment in other domains enter the teaching field. Low

⁹¹ For most of the quantitative information in this section see: OECD, M. Carnoy and K. DeAngelis (2002). Chapter 3: The teaching workforce: concerns and policy challenges. *Education Policy Analysis*. OECD; Paris, OECD. Other information is coming from the country reports gathered within this project, studies provided by CEDEFOP and REFERNET and a book to be published with Kluwer by the end of this year: International perspectives on Teachers and Instructors in TVET by Felix Rauner and Philipp Grollmann.

pay can also signal undervaluation of teachers' work, which can lead to a lack of commitment to the job. This can take three distinct forms:

- Qualifying for the teaching job through targeted and costly programs, but entering a different field of employment;
- Leaving the education sector, because of more attractive possibilities on the external labour market;
- Working in the education sector, and taking on a second job in education or the respective subject field.

These outcomes of low teacher pay were mentioned in some of the country reports.

Table 15.1 also documents teacher shortages in many of the countries studied. For some countries, including Austria and Germany, shortages occur for teachers of specific subjects, especially those in high demand on the external labour market. In other countries, broader demographic trends account for teacher shortages. Many of the countries not appearing in the table have very flexible, but also not very professionalised structures with regard to vocational teachers, lecturers and trainers. Thus, they may have enough teachers, but of lower quality.

<i>The Dutch reforms with regard to teacher education</i>
<p>In April 2002, the social partners in the educational sector, united in the SBO (Sectorbestuur Onderwijsarbeidsmarkt - Sectoral Board for the labour market in the educational sector), have taken the initiative to start a process to reduce shortages of skilled personnel and to revitalise the sector so as to be able to reach the ambitious (European) aims. The shortage of unfulfilled vacancies in secondary education in 2006 will reach 6 000, if there are no policy changes. In Agenda 2006 - involvement of social partners in the educational sector, the sectoral employers' and employees' organisations have formulated an agenda with eight main points:</p> <ol style="list-style-type: none"> 1. focus on the professionalism of trainers and teachers, 2. the entrepreneurial school, 3. professional management, 4. strengthening of human resource management policy, 5. training of teachers and other personnel in education, 6. competitive conditions of employment, 7. attractive working environment and 8. developing links with other sectors to attract teachers. <p>A national information point has been opened for those wanting to work in the educational sector (in various functions). For people wanting to work in the educational sector as teacher or in another function, special dual training projects have been started as cooperation between VET institutions and teacher training institutions. The aim is to provide a shortened two-year training course to teach the specific skills needed for working in various functions (assistant teacher, teacher or support staff) to enable a maximum of interested people to work in the educational sector. There are also specific projects financed by the sectoral social partners in the educational sector (SBO-Sectorbestuur onderwijsarbeidsmarkt) aimed at specific target groups such as ethnic minorities. Within the framework of the decentralisation of responsibilities from government level to the educational institutions, more importance is attached to the management skills of the often very large regional training centres and educational institutions. A great number of in-service training of short-term courses are provided by various private training providers. These courses are paid for from the lump sum budgets of these institutions.</p> <p><i>Integral human resource management (IPB)</i> The responsibility for human resources has shifted from the government to the educational institution and will be implemented on all schools in 2005.</p> <p><i>Occupations in Education (Beroepen in het Onderwijs -BIO)</i> The law proposal on the Law Occupations in Education (Wet op de Beroepen in het Onderwijs) describes the competence profile of teachers and supporting personnel and will be in force in 2004. The framework of competences is developed and will be maintained/updated by teachers under the umbrella of SBL, the organization that coordinates the competence development of teachers. The framework is based on 7 competences (see p. 28) and offers a grid for the translation of the features of good education into responsibilities of teachers. The new Law prescribes that competences have to be maintained and developed throughout the teachers working career. The employer/educational institute has to establish this in a protocol in the quality report. This protocol will be translated into personal development plans. Competences of management in VET are not regulated through this law. A coherent qualification structure and accompanying platform for occupations in the teaching profession will be developed to enhance streaming within the educational professions and improve career perspectives. Teacher training in the school means that schools and teacher training institutes for teacher training have a shared responsibility. To stimulate this cooperation the Project Educational Partnership was set up. It ended in 2004, but the community website is still active. The website is meant primarily for teacher trainers who want to exchange experiences and information.</p>

The danger is that in many countries the main rationale behind reconstructing recruitment and career routes is the demographic or other constraints the respective country faces. There is

little data on other determinants of teachers work such as student/teacher ratio or hours of work that might be useful to policy makers. On the post-secondary level and in private CVT provision the working hours of lecturers, teachers, and trainers can vary considerably according to the status of the organisation, its size (such as SME or bigger enterprise), and the status of the individual (freelancing/contracted, full-time, part-time, etc.). The same holds for the student/teacher ratio. Quite clearly, a low ratio is the best way to provide teachers with the necessary preconditions to be able to carry out their multiple roles. However, even some of the new accession states, which have comparatively low ratios, are not always able to turn this to their advantage. As education systems have significant personnel costs, countries are very interested in finding ways to increase teacher efficiency. Better data that includes information on the various dimensions that contribute to efficiency, such as salaries and work conditions, would be most beneficial.

15.3 Policies and practices for training vocational teachers and trainers for 2010

We can draw some conclusions for teacher policy that reflect the challenges of Lisbon and the Copenhagen Process: By establishing a technical working group and respective sections of the Copenhagen Declaration, the issue of teachers' and trainers' skills and knowledge is acknowledged as an important factor influencing the quality of all educational activities. Vocational trainers and teachers can be seen as one of the core-professions with regard to achieving the Lisbon goal;

- Up to now, there have been few attempts at the European level to tackle the specific challenges of the education and training of vocational teachers and trainers. This issue deserves special attention in view of the importance of vocational teachers through their direct and indirect influence in the development of skills in the economy, and also in view of the varied occupational tasks they have to fulfil;
- Two trends are worth watching. Some countries (e.g., Estonia and the UK) are envisaging major steps towards the further professionalisation of teachers and pursuing ambitious goals to improve teacher quality. In contrast, other countries (e.g., Germany, Turkey, Netherlands) appear much more oriented towards allowing more flexibility in teacher and trainer recruitment policies and practices. This reflects the difficult compromise between acknowledging the need for quality teachers, while at the same time having to struggle with demographic and economic problems regarding the operation of the countries educational systems in the future;
- Many European countries have introduced mandatory requirements for teacher continuing training. A quality model of vocational teacher and trainer education, training and recruitment policy has to be flexible in order to attract individuals with different backgrounds, while at the same time raising standards in skills in knowledge (especially with regard to pedagogy and the subject matter);
- In some European countries with a strong research culture in VET, particular emphasis is placed on identifying the 'domain specific' features of skilled work in different occupational or career clusters. This research is directly connected to teachers, whose must integrate and link the relevant subject matter with the right pedagogical methods for the individual learner;
- Given the fundamental importance of VET teachers and trainers for the further development of Europe towards the Lisbon goal, overcoming the current fragmentation of VET professionals and their education should be high on the political agenda;
- Stronger cooperation among European higher education institutes involved in teacher training may help to raise standards and improve the European dimension.

Chapter 16

Quality management and Innovation

16.1 Introduction

The Copenhagen Declaration envisages that establishing quality standards for vocational education can assist increased occupational and geographical mobility of the work force in Europe and enable wider access to lifelong learning. In the meantime the Education Council has decided to promote the use and dissemination of the Common Quality Assurance Framework with its conclusion from 18 May 2004. This means putting into practice measures to achieve and secure quality in learning and teaching. This chapter looks at quality management mainly from the institutional perspective since VET providers, such as schools, colleges and other institutions and organisations offer VET learning opportunities.

The increasing autonomy and decentralisation of VET providers is one of the main reasons for the introduction of quality management. Therefore, measures and activities taken at the European and at the national levels with regard to quality management are also discussed.

The chapter establishes the connection between quality management at the institutional level and systemic innovation, and draws some conclusions looking through this overarching lens. It will be argued that quality development is embedded in to different VET innovation cultures, about which currently only little knowledge is available. Finally, conclusions for innovation in teaching and learning are drawn.

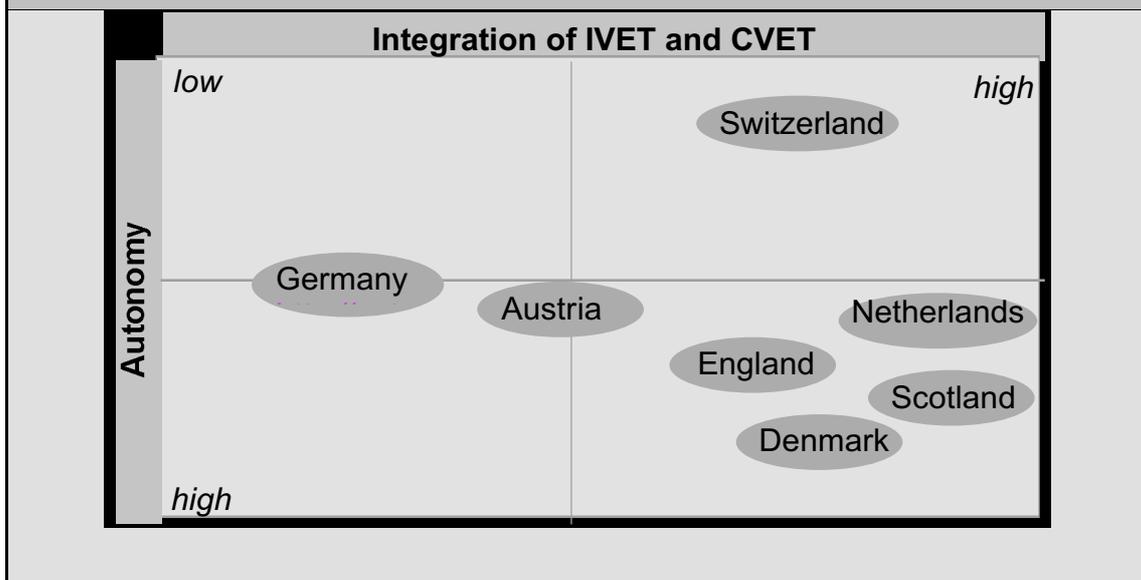
16.2 Changing mission – changing institutions

As discussed in the preceding chapters, the learning organisation is a concept that also applies to schools and colleges. The concept of learning organisation for VET providers is accompanied by other developments in VET: the decentralisation of responsibilities to the institutions and the need for institutions to take on new roles with regard to lifelong learning. Both developments are directly connected to the issue of quality. One of the main reasons for the decentralisation of competences to schools and other providers is the assumption that educational activities can be best managed at the level closest to the practical needs of learners. Thus, many VET systems devolve considerable curriculum decision-making responsibility to institutions. This decentralisation necessitates new systems of quality assurance necessary, in to ensure quality in and across institutions. Increasing demands for public accountability also reinforces the need for quality assurance.

Taking on new tasks to support lifelong learning requires that institutions develop a clear mission and policies. In a climate of change, institutions have to keep these under review and develop them. However, studies of the reform of VET schools indicate a gap between policy aspirations and the management of VET institutions. Local strategic planning is impeded by structural barriers, traditional conceptions of teaching and schools and by a lack of tools and instruments for achieving change (Rosenfeld, 1998; Nieuwenhuis, 2003).

Table 16.1 shows that the extent of institutional autonomy for VET schools varies between European countries, with schools in Denmark, the UK and to some extent the Netherlands able to combine autonomy with the flexible integration of IVET and CVT provision. Kurz (2002) argues that these are the core dimensions for the likely future development of VET institutions. Institutional autonomy can be regarded as a key pre-condition to innovation, since it allows best for the fast adaptation to local needs of individual learners, organisations, enterprises or economic sectors or clusters. Autonomy, therefore, becomes a pre-condition for VET providers to engage in regional innovation processes. This engagement can be achieved through tailored courses geared to meeting lifelong learning needs and a supply of CVT opportunities for the regional workforce.

Table 16.1: School autonomy and the integration of IVET and CVT for selected European countries and regions



Source: adapted from Kurz, (2002)

Initial VET also benefits from this engagement because the institution exposed constantly to the regional employment system. The involvement of VET institutions in lifelong learning can therefore be seen as a major factor in innovation.

16.3 Quality assurance and development

16.3.1 The technical working group on quality

The technical working group on quality has developed a set of ten quality indicators at the systems and institutional levels, many of which are dealt with within the chapters of this report. The group found that the focus has changed from input to output standards in a number of member states. In addition, the working group has produced a European guide for self-assessment. The guide is primarily addressed to VET providers and includes methods for self-assessment and is illustrated by examples from different VET systems.

An outline proposal for a European framework for co-operation in quality management was also proposed and adopted within the Education Council conclusions in May 2004. The underlying idea is that transnational co-operation should focus on existing and developed instruments. A particular emphasis is placed on peer review, networking and benchmarking as tools of transnational co-operation.

The potential for system development and its sustainability are also important criteria for assessing the extent of quality improvements in VET. These criteria go beyond ISO and EFQM.

16.3.2 Is quality assurance an established principle across Europe?

The information obtained through the DGVT questionnaires and the country studies allows us to generate an overview about strategies being developed and implemented in different European countries. Table 15.2 shows that many VET systems are applying new systems of quality development and assurance. The range of methods introduced varies between standard quality management procedures such as ISO or EFQM and approaches specifically targeted to the needs of schools, such as the QIS (Qualität in Schulen) in Austria.

The DGVT questionnaires indicate that the issue of quality assurance is on the political agenda of all European countries. Many have just started planning, while others have implemented quality assurance systems (e.g. Austria, Belgium-FL and Ireland,). Unfortunately, in many cases, the precise means of quality assurance in use remain unclear, since there are still many different conceptions existing about quality, quality assurance and development across Europe (see also Table 16.2). Further research will be helpful.

The country reports indicate that it is common for the vocational schools to be subject to inspection conducted by the respective ministries of education. The value of these for quality assurance is difficult to assess. In many countries, the procedure of inspection is described as a consultative process without explicit consequences. However systems vary. For example, a report of the Cedefop's study visits programme concludes its visits to various Danish VET schools with the judgement that, *'we have seen a very good working system with sound quality processes, activities and commitment at all levels and to all agencies to raise effectiveness of quality assurance'*. Among the variety of different approaches to be found during the visits, the self-evaluation/self-assessment seemed to be the most prominent one.

The Dutch Adult and Vocational Education Act of 1996 (Polder, 2004) provides an example of how an evaluation methodology might serve the purposes of evaluating the outcomes of learning and the reform of VET systems. The Act targets changes in the national qualification structure (e.g. reinforcement of work-based learning), the system of quality control and, most importantly, provides for an evaluation of effectiveness and efficiency. Focusing on a limited number of themes, the formative evaluation allows participants to take into account developmental processes. Since only one cohort of students had experienced the reformed system, this evaluation acted as an early warning system (Polder, 2004). This example highlights the advantage of in-process evaluations at the institutional level and their potential for redirecting reforms.

Table 16.2: Quality development and assurance on the systems and the institutional level (information drawn from the country reports)	
Austria	school inspectors look into the quality of teaching and the implementation of administrative tasks; mainly advisory in nature; newly introduced institutional self evaluation for staff, Quality in Schools Project: evaluation and school development; quality of apprenticeships, especially aptitude of the company through Lehrlingsstellen, "Ausgezeichneter Lehrbetrieb" award
Belgium	the inspectorate: a professional system of external supervision; educational supervision: professional internal support; attainment targets
Cyprus	participation in ReferNet and in the , European Network for Quality Assurance in Higher Education (ENQA)
Czech Republic	inspection and consultation with the school director; EVOS (Evaluation of post-secondary technical education): Accreditation system, use still limited; continuing vocational education: lack of legislation in this area. Sometimes satisfaction surveys; still only marginally developed
Denmark	Danish approach to quality is the demand for systematic self-evaluation and follow; framework governance; continuous quality development; task of the ministry: to offer support and inspiration to local initiatives.

Estonia	school quality award; pilot projects with 9 VET schools; European quality award based on the principles of total quality management
Finland	self-evaluation obligation for schools and colleges
France	companies have to provide to the administration an annual questionnaire detailing the amount and the use of the sums they have dedicated to the continuous training; providers of training; standards of quality: AFNOR (Association Française de Normalisation) or ISO;
Germany	examinations serve as an indicator of the quality of training achieved; no specific methods for quality management are stipulated; school development programmes; initiative to establish a certification system for CVT
Greece	mainly curriculum development through respective agencies, such as public research institutes
Hungary	emphasis on examinations; stronger initiatives with regard to quality <i>development</i> needed
Latvia	mainly through CVT of teachers
Lithuania	formative assessment organisation during the process of studies; institutional self analysis; accreditation with regard to curricula and qualification and experience of staff through HE council
Malta	national minimum curriculum; training initiatives for school heads, deputy heads, teachers and staff members; formal quality management systems
Netherlands	law on educational supervision (WOT); self-evaluation of the institution is point of departure for the external quality insurance for which the Education Inspectorate is responsible; Education Report 2003 shows that the quality assurance in VET-institutions is insufficiently developed
Poland	evaluation of secondary schools in a five-year cycle; accreditation of HE programmes ; accreditation of continuing education institutions: qualifications of the teaching staff, school equipment, teaching methods applied, development and publication of didactic materials for teachers and students; Accreditation procedures will start next year and the relevant processes and results will be monitored
Portugal	mainly through technical-pedagogical support processes
Romania	pilot system of quality assurance and School Action Plans (SAP) under development
Slovak Republic	consultative inspectorate by an independent body; Self evaluation questionnaires for HE; sometimes evaluation through sector organisations or chambers
Sweden	Educational Inspectorate
Turkey	TQM Project; organisational development-management teams; some schools received ISO-9000 certificate; skill competitions among VET schools and students are organised

16.4 Scaling-up – relating innovation and quality

Many of the country reports mentioned single schools or institutions that are known for developing highly innovative or high-quality practices. However, those practices are not always easily transferred across the system. This problem is mentioned in several reports from the accession states or candidates (e.g., Lithuania and Latvia, the Czech Republic, Turkey, Malta, Cyprus and Greece), and may well exist in many Europe 15 countries.

An important question for an assessment of the different country strategies is how well and how fast they are able to scale-up any innovation. The implementation of pilot projects is a very common and a well tried means to introduce or test new methods, processes or concepts in vocational teaching and learning in most European countries. Loos (2002) compiled and analysed model initiatives from Austria, Denmark, Greece, Liechtenstein, Luxembourg and Spain. The analysis uses the implementation and transfer potential as criteria for assessing the pilot projects, and points to weaknesses in some of these efforts.

Germany, for example, has initiated and funded many interesting pilot projects in vocational schools, but in the end these pilot projects failed to scale up or disseminate throughout all German 'Länder'. One reason for this was the German federal system of education, which permits the central government only very limited intervention in school matters. Therefore, pilot projects can only scale up to systemic reform, if they are backed by a political consensus on the aims by the respective actors and if the transferability of the innovation and the conditions for transfer are planned for from the beginning and throughout the lifetime of the project (Rauner, 2004).

Thus, the sustainability and system building potential of many innovative VET concepts are not fully tapped. This clearly is detrimental to the quality improvement of VET systems as a whole.

Denmark provides a positive example of scale-up from local or regional pilot projects. Well-developed mechanisms and comparatively few institutional and political barriers support a fast, wide and continuous dissemination of innovations in VET. The success factor in this case seems to be a high degree of local and regional networking among VET actors and embedding in regional innovation systems. In the Danish example, a number of piloting locations are selected—an approach which builds a network for the exchange of experiences with innovative practices. Curriculum innovations often originate in problems that arise at the regional level, which are then tackled through close co-ordination between practitioners from schools, regional or sectoral advisory boards and national policymakers. The experiences and practices gathered at the local level can, after a certain period of time, be transferred to the next higher level; ultimately, this process leads to a comprehensive system-wide change. The Danish Institute for Vocational Teacher Education's model of teacher education involves a process for spreading innovation through so-called reform-consultants. Reform consultants are sent to colleges to help with the implementation at the respective sites, and therefore spread positive and negative experiences from one site to another. This example shows the advantage to integrating system reform, teacher education and school development. Some of the new accession countries are planning similar, integrated approaches in the future, as for example indicated in the Lithuanian country report.

16.4.1 Models for creating a culture to sustain change

Looking from a European level, it is clear that quality development in VET is not necessarily correlated with the type of VET system. Rather, it depends on political, administrative and institutional structures and also on the specific prevailing innovation cultures. It would be helpful to have systematic information about the differences and commonalities of European models of innovation in VET. Currently, the ongoing European Commission funded project OBSERVE within the Leonardo programme is exploring this issue by scrutinising innovation and reform measures aiming at fundamental changes in nine European VET systems (Denmark, the new German Länder, Greece, the Netherlands, Northern Ireland, Romania, Scotland, Spain and Wales). By selecting a historical reform case and an ongoing one, the project will be able to compare the implementation contexts at different points in time.

As the country reports and the background work of the technical working group show, various institutions are responsible at the system level for the quality of VET. Sometimes, it is the ministry of education, perhaps in co-operation with the ministry of labour. In many countries, special institutions have been set up which are responsible for the evaluation of the system, such as special educational research or monitoring institutes. Apart from that, some countries have introduced systems following the main lines of the architecture of the UK qualifications system with an emphasis on separating the responsibility for learning processes from the quality assurance procedures. This concept has been taken up in the Baltic States: Estonia and Lithuania report that around 300 qualifications and courses have been developed in recent years.

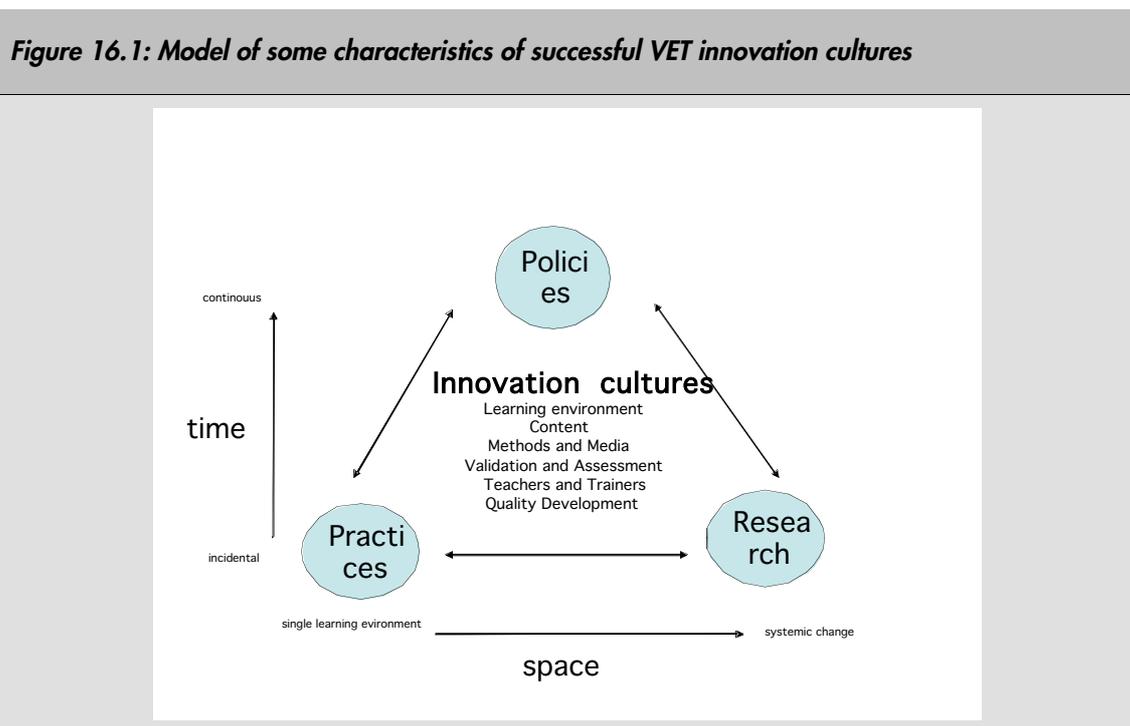
If the Copenhagen priority of promoting quality is to be achieved, it seems likely that some countries will place need to place reliance on externally developed VET innovations. (e.g., EC programmes pilot projects or national pilots). The Danish VET reform 2000 provides an example of how countries can benefit from innovation transfer between European Countries.

Denmark traditionally has looked at the different experiences in surrounding countries to inform the development of their own educational system (Rützebeck, 1931). A good example exemplifying this open-mindedness and readiness to learn from other countries is provided in Cedefop's Community study visits programme 'end of visit' report, where a Danish vocational school vice-principal is quoted as follows: 'Steal the good ideas and drop the bad ones' (End-of-visit report, Group Nr. 59 2003). The resulting broad and extensive borrowing and blending of policies and practices may compensate for the lack of a VET research infrastructure in Denmark. In this context, the emphasis placed on peer-review and networking by the technical working group seems to be appropriate.

It seems important to align the different R&D programmes related to VET on the European Level more closely with specific European goals. However, those goals may or may not reflect practitioner needs and may need further development. Research might be needed to close this gap.

In addition, national scale-up efforts must be fostered or installed in order to transform local improvements into system-wide innovation. With regard to sustaining quality in VET system, it remains to be seen how the different European country plans are put into action. In particular, the role to be played by ISO and other international quality assurance standards (like EFQM) should be observed carefully. It can be expected that available, well-tried practices in using formative evaluation and assessment tools (e.g. in Denmark and the Netherlands) may help other countries which are just beginning to develop quality assurance systems. The EC technical working group on quality in VET can play a positive role as an information exchange platform.

Based on the preceding and this section the figure below suggests a model of some characteristics of successful VET innovation cultures.



Sustainable innovation cultures consist of the following elements:

- Innovation is being developed in the triangle between policy (social partners, government), practice (teachers, learners and the wider public) and research and needs some alignment of the agenda of those different actors;
- Innovation is spread across space (cross-institutional transfer) and in a continuous manner over time; mechanisms of innovation transfer have to be considered throughout levels and domains of actors;

- Innovation integrates the different aspects (changing learning environments, content, methods and media; validation and assessment; teachers and trainers and quality) of teaching and learning in coherent way.

The evidence gathered through the country reports suggests that none of the European countries at the moment fulfils all these criteria, but some countries do have coherent approaches. Denmark, for example, has a coherent system despite an almost complete absence of research structures. They have adopted a policy of borrowing and blending, which seems to work in a small country. De Bruijn (2004) has proposed a model of 13 building blocks to further advance the reform agenda in The Netherlands. Over 30 years, Germany has developed an interesting model of piloting innovation. However, it has been argued that it lost political significance in the last years, even though it has been based on a strong research infrastructure (at the university level and through the BIBB).

16.5 Conclusions

Innovation in teaching and learning is a difficult topic to research, but an important one if VET is to make its contribution to the achievement of the Lisbon goal. The evidence suggests that European countries continue to take a wide variety of approaches to tackle the challenges they encounter with regard to their national objectives as well as the Lisbon goal and Copenhagen objectives. Given the importance of innovation in teaching in learning, this theme should be included in future actions at the European level especially with consideration to the following:

- Closer co-operation could be encouraged between local R&D and VET agencies;
- The fragmented situation with regard to the education, training and recruitment of VET professionals is an obstacle to innovation in teaching and learning. This fragmentation could be partly overcome by a closer co-operation between institutions of VET teacher and trainer education and training across Europe as well as a closer connection between the 'community of practice' of VET professionals, researchers and policy makers;
- In the long-term, self-sustaining innovation structures are needed to develop an innovative and reflective teaching and training workforce;
- The sectoral approach and ECVT could benefit from applied research and development projects targeted at innovation in teaching and learning in specific sectors;
- Instruments and tools could be developed to initiate or scale-up innovative vocational education practices across Europe. The education and training 2010 process would be strengthened by specific actions to support and implement innovation in vocational teaching and learning;
- Use of ICT and e-learning in VET learning contexts should be encouraged, and should take an integrated view of learning, work and technology as far as possible.

Section 4

Building Competences for a European Labour Market

Introduction

European VET systems: Building competences for a European labour market

Against the background of the Lisbon strategy, this section of the report analyses how the VET systems in the EU member states are developing to respond to challenges arising from a globalising labour market which drives specialisation and new types of innovation dynamics within sectors and countries. These developments not only affect the types of skills that are in demand, but also how VET systems adequately can respond to these demands. The section focuses on five different yet interrelated questions:

- In light of the Lisbon strategy and a globalising, increasingly knowledge-intensive economy, what are the character, scope, and implications of the challenges facing the European VET systems? (Chapter 17);
- To what extent are the European VET systems geared to anticipate these challenges, risks, and dilemmas and what role do employment policies play in the adaptation of VET systems? (Chapter 18);
- To what extent are sectoral dialogues and social partnerships used efficiently as tools to develop VET and anticipate new requirements for a European labour market? (Chapter 19);
- To what extent have the national VET systems developed and integrated a European dimension as an impetus to change and development? How do countries perceive the governance mechanisms underlying the realisation of the Copenhagen Declaration, and how are particular measures in the Copenhagen Declaration contributing to more responsive and internationalised VET systems in Europe? (Chapter 20);
- How far have Member States come in achieving the objectives laid down in the Copenhagen Declaration, particularly with regard to recognition of competences, sectoral involvement, and mobility? Chapter 21);

The Lisbon strategy context

An important element in the Lisbon strategy is its focus on human resources and on the need to invest in training and education to further economic and social goals. It is widely agreed that the creation of *'more and better jobs'* can only occur with open and flexible modernised education systems and the possibility for every citizen to receive education and training and further education on a life-long and life-wide basis. The quest for more and better jobs means that the EU member states have set themselves the task of becoming competitive through high-skills-levels, high-productivity, and flexibility strategies, in businesses as well as in the labour force. Innovative reform of the EU member states' vocational and adult training and education systems is one important tool in achieving this objective.

In the European context, the drive for economic competitiveness is also connected to concerns for social inclusion, active citizenship and environmental sustainability. This is highlighted both in the Treaty texts of the European Union and in the Lisbon strategy. Chapter 4 showed how economic competitiveness and social inclusion might, in some economic systems, be seen as contradictory. The fundamental ambition of the Lisbon strategy and the European Social Model is, however, that economic competitiveness should not be achieved at the cost of increased social exclusion, but rather with a view to supporting social inclusion. Competitiveness should be achieved in ways that facilitate the active involvement of the entire population in society - as citizens, consumers, employees or employers, or as human beings - and reformed education and training systems are expected to contribute to this goal.

Adaptable and flexible training and learning systems are expected to support the individual's development of skills and competences not only for employability and wider economic purposes, but at the same time also as the basic preconditions for active citizenship on a lifelong life-wide basis.

Different views have been expressed as to the role of public policy in the realisation of the Lisbon strategy, overall and specifically as regards training and education. Some have argued for the need to *'give public policy an important role as the driver of change towards the Lisbon objectives'* in order to *'catch up in economic terms, to modernise the European social model and to match the dynamism of the US, whilst preserving the commitment to social justice.'*⁹²

Others have argued that it is not for public policy to intervene, but that an enterprise and market-led approach to training will be effective in enabling firms to respond to changes in the market and in achieving sustainability and prosperity. Chapter 4 described the difference between these approaches and identified what may be emerging European models. Elements in this market-led approach are reflected in some of the current changes in financing frameworks for training that introduce different forms of co-financing as an instrument to create efficiency. Other market-led instruments are demands for tax cuts and fewer regulations, such as argued both at confederation and enterprise level across sectors and countries.

At the same time, the developing European social dialogue in many sectors and at enterprise level has come to a joint agreement on the need to focus on longer-term labour/management stability and skills as a lever to ensure longer-term growth and competitiveness as illustrated further in Chapter 21. Examples of the above and seemingly contradictory trends can be seen within the same sectors in Europe. Some firms within the same sector compete primarily on efficiency and cost-cutting measures. Others take on board new work organisation practices and skills investments as a prerequisite to product and process innovation. Several recent sector studies illustrate this phenomenon and show a significant impact on the nature of future skills provision and skills requirements (EMCC - Dublin 2002-2004)

⁹² From a speech by UK Prime Minister Tony Blair, summarised by Lloyd and Paine (2001)

Chapter 17

The challenge for VET in a globalising world

17.1 Introduction

Taking a broad view of the Lisbon strategy, this chapter discusses the underlying assumptions behind its objectives regarding education and training and their interconnection with labour market policies in the context of lifelong and life-wide policies. DGTV responses, country reports and recent research are used to elaborate from different perspectives some of the challenges and opportunities that face national VET systems in light of the Lisbon strategy and the aspirations of the Copenhagen Declaration. The section develops a number of themes that we have introduced in section one of this report.

Excellence in knowledge and learning - challenges and assumptions

The Lisbon strategy's approach to education and training can be understood against a background of a number of challenges confronting Europe's training and education systems, if Europe is to pursue excellence in knowledge and learning for individuals and on a system basis. As part of the FUTURES project, Europe 2010 from IPTS (Gavigan, 1999) emphasises the following key challenges for the future of Europe's knowledge and innovation systems. Although the study pre-dates the Lisbon Strategy, it is of relevance because it points to the need to develop integrated and comprehensive policy measures in order to:

- Transform the relatively unconnected institutions of education, training, R&D knowledge generation and innovation, into a coherent learning system. - not least in the context of lifelong learning policies;
- Ensure an adequate labour market supply of specialised knowledge and skills in rapidly advancing and converging areas of technology, given the uncertainty and speed of technological change and uptake – even in mature sectors;
- Maintain a sustainable level of general literacy and technical proficiency across the whole population so as to avoid knowledge-based social exclusion - a theme that is also emerging within E-Europe 2005;
- Induce a Europe-wide learning culture founded on both tacit and explicit knowledge and learning capabilities. This refers to competences such as creativity, analytical ability, and teamwork. In organisations this refers to knowledge management and networking. At a system level it means efficient administration, favourable policy frameworks, and the development of informal knowledge assets and social capital.

The Objectives for Education and Training 2010 can in many ways be seen as a concerted effort between Member States, Social Partners and the European Commission to identify and give priority to innovations in our education and training systems. This is in response to the challenges of a changing socio-economic situation and is analysed in the model below:

Table 17.1: From industrial economy to learning economy

ISSUE	Industrial Economy	Learning Economy
Markets	Stable	Dynamic
Scope of Competition	National	Global
Organisational Form	Hierarchical	Networked
Organisation of production	Mass production	Flexible production- embedded services
Key drivers of growth	Capital/labour	Speed in innovation- through R&D and by learning from customers and alliances
Key technology Driver	Mechanisation	Digitalisation, miniaturisation
Source of competitive advantage	Economies of scale	Specialisation
Relations with other firms	Single mover	Alliances and collaboration, "co-petition"
Workforce	Educated and trained to a profession/ a trade	Deep and broad qualifications. Head and Hand in Harmony
Policy Goal	Full employment	Employment and Employability-
Occupational profile	Fixed professional identity defined in the national/regional trade context	Converging and continuously emerging and being reshaped tied to globalising contexts and technological advance
Skills	Job-specific	Multidimensional - including personal abilities.
Requisite Education	skilling = qualification	Lifelong and lifewide Learning

Shapiro 2004- adapted from dapted from. (Atkinson, 1998).

Hence, in all VET systems there is a search for a new balance to create bridges and ladders between initial VET and lifelong and life-wide learning, between learning for employment and learning for employability, between depth and breadth in competences, and in terms of partnerships and collaboration mechanisms to meet diversified demands in efficient and responsive ways. This is discussed in more detail in section two, and is also illustrated by many of the DGVT responses and country reports. These developments are covered in further detail in chapter 18-20.

17.1.1 Is 'the knowledge economy' understood uniformly?

One of the key EU responses to a volatile and globalising labour market has been the recasting of knowledge and knowledge systems as an instrument to increase employability. This led to an increased strategic focus on collaboration within the field of education and training at all levels of governance. Most discourses about the knowledge economy focus on the workplace and on competitive strategies of firms, sectors and economies. But some researchers assumed that the emergence of the knowledge economy was something much more comprehensive. Their assumptions are associated with visions of a connective, high trust and participative democracy, which, in many instances, also requires changes in the socio-economic institutions and fabric (Lloyd & Paine, 2001).

Different approaches towards embracing the advance of a more knowledge-intensive economy are emerging among the EU member states (see Chapter 4). The different models adopted seem to have quite different effects on productivity, employment, and equity.

Economists such as Ashton and Green (1996) take an evolutionary view of the knowledge society and see an important role for the state in realising the visions of a knowledge economy by enforcing institutional arrangements regarding the process of skills acquisition and social partner interaction - a trend that is confirmed by the responses of many of the DGVTs. However, even if we accept a rather narrow competitiveness-oriented understanding of the knowledge economy, the view that we are entering a knowledge-based economy as an entirely new economic order has been contested for several reasons (Knight, 2002):

- The application of knowledge to the economy is hardly novel. It was central to the industrial revolution, for example;
- Furthermore, knowledge is heterogeneous in nature. Its value is not intrinsic, but is highly dependant on its relationship to the user and the context in which it is applied. This implies that raising the skills levels in itself will not be sufficient to further the Lisbon objectives unless it is accompanied by substantive innovations in work organisation practices;
- While many companies state that the intellectual capital of core employees is a major source of innovation and competitive advantage, a majority of the workforce does not depend on high skills to perform their occupational roles, as shown by both the UK and the Portuguese DGVT responses. Rather, there is an under-utilisation of skills in many jobs. In the DISKO project – a longitudinal study on the Danish innovation system from 1996-1999 - Lundvall (1999) came to similar conclusions based on firms' competition strategies.

A recent comparative study on vocational education supply between the USA and Denmark for the ICT labour market and ICT intensive user companies (Shapiro, Rosenfeld, 2004) shows that both in small and large firms the increased focus on personal and social skills may reflect a mismatch between qualifications and the labour market. As more applicants enter the labour market with higher skills levels, the value of qualifications as a screening device declines according to many employers interviewed. Personal qualities are emphasised as a sorting mechanism. The study shows a bias in favour of those with academic qualifications. This is because they are viewed as having a better foundation in terms of broad general and personal qualifications and abilities such as problem solving, learning to learn, and team working. Many VET systems are in the process of reforming or have reformed towards broader and more flexible frameworks as discussed in sections 2 and 3. The study does however seem to show the complexity of *system attractiveness* from both a European and national policy perspective. For newer sectors such as ICT, media, or knowledge intensive services, that do not have their roots in vocational education and training, VET may still carry the brand of an industrial economy, potentially limiting employment prospects of VET graduates in the emerging sectors.

17.1.2 Routes to competitive advantage

While EU policies aim at competitiveness in the context of globalisation, the responses from the DGVTs as well as different research sources seem to suggest that the single European market also contains a risk of increased competitiveness within the EU with severe dislocation for those industries and regions that are not competitive⁹³. While education and training might be one instrument in addressing these dislocations, it is not clear that it is the crucial one. In the 5th framework project under the IST programme, Emergence⁹⁴, Huws et al. (2003) identified twelve factors that influence the location/relocation of work, only four of which are directly related to education and training policy.

The high skill/high value-added strategy linked to a well developed and modern VET system capable of delivering a high skilled work force is just one among a number of viable models

⁹³ For a sectoral discussion on the implications of the single market see Shapiro and Svava Iversen (2004).

⁹⁴ <http://www.emergence.nu>

available to European firms and countries. Keep (2001) claims that there are other equally attractive routes to competitive advantage from which firms can choose. Different companies, sectors, and even countries, are following a range of divergent trajectories such as seeking protected markets, growth through takeover, cost-cutting, and establishing new forms of Fordism. Data from OECD Observer (2004) show that job creation in a number of European countries is characterised by an increase in low-skilled jobs apparently contrary to current trends of off-shoring low-skilled jobs. The figure could be explained by a growth of labour intensive jobs in the service sector, for example in tourism and personal care.

This range of routes to competitive advantage suggests that a broader framing of innovation across different policy domains is needed to meet the Lisbon Strategy's European, national, regional, and sector targets regarding the balance between education and training policies, labour market policies, and innovation policies. As the summary report on lifelong learning (Chisholm, 2004) also pinpoints barriers to lifelong learning are found not only in the design of education and training systems but also in other sub-systems such as work organisation, labour- and product markets, industrial relations, and innovation systems.

The full extent of society's expectations of education and training systems is incommensurate with what these systems can realistically deliver. Even the most ambitious reforms are unlikely to be a panacea for all emerging learning needs (Grubb & Lazerson, 2004). DGVT responses, particularly from new member states and candidate countries in the midst of economic restructuring, express concern as to meeting the targets for education and training. These countries must also balance other policy priorities under a tight financing scheme and in a situation where new modes of governance are in their early stages. This changing context and VET systems adaptability and orientation towards changing demands and priorities are discussed in the following sections.

17.1.3 Employability: the 'individualisation' of responsibility

The focus on 'employability' and 'lifelong learning' put the individual rather than the system in the centre of action. It thereby provides a framework for a learning pathway suited to the individual. The flipside is, however, that it becomes the responsibility of individuals to ensure that they have the appropriate skills, knowledge, and motivation to do the job in question - regardless of personal life circumstances, the form of employment contract they may have, the type of work organisation practices that may be in place which favour or impede lifelong learning, or the type of skills the individual possesses (Doogan, 2001). Ritchie (as quoted in Salganik & Stephens, 2003) has also argued that the focus on competences has shifted the balance of the responsibility for unemployment and underemployment too far in the direction of workers, mentioning that for example the term 'flexibility' could not only be a personal characteristic, but could also mean that employers should be more flexible in accommodating workers' participation in education programmes. This is an issue of particular relevance given the growing numbers of temporary employment contracts. Heidemann, (2000) similarly argues that it is 'personalisation' of VET with its emphasis on employability and lifelong learning that could engender a crisis in the traditional models of VET. While education and training may pertain to individualised preconditions and consequences, the conditions for participation in and the widening of opportunities require a more general 'collective' form of regulation, either by legislation or by collective company agreements. The challenge within a European model will be to find the balance between regulation and the market, and between the European and national systems and orientations. The growth in European Work Council agreements could be a response to this challenge, and is addressed in 19.1.5.

Improved guidance systems and qualifications that are easily available to the individual across labour markets and education and training systems are also central to realising the underlying intentions of lifelong learning and employability. In the May Council resolution the Education Ministers reaffirmed "their commitment to the development of high quality guidance provision for all European citizens, accessible at all stages of their lives to enable them to manage their learning and work pathways and the transitions therein". This is an important step in that direction. The joint resolution needs to be carefully followed up by a monitoring system to measure progress and dissemination and training actions targeting the different actors involved in guidance services.

17.1.4 Balancing supply and demand- the risk of exclusion

Education research conducted under the framework programme between 1995 and 2003 suggests that the introduction of market mechanisms in education and training does not always follow the assumptions made by the advocates of a better balance between supply and demand in VET (Agalianos, 2003). A number of unintended and negative effects are thus reported, for example regarding increasing levels of temporary employment. In particular, the introduction of market mechanisms could lead to a further inequality and social exclusion for disadvantaged groups if, for example, training initiatives favour company-specific narrow skills and also do not address broader literacy skills. These challenges are reported in several of the national country reports, especially concerning individuals at the fringe of the labour market with long periods of unemployment.

The current switch in many systems from a supply-driven to a demand-driven situation gives rise to market-based education and training systems parallel to formal public systems (Adelman, 2000). This adds further urgency to the need for policy reform to ensure protection of those learners that for various reasons are not able to position themselves in a new learning landscape. It also involves the ability of the individual to articulate competences acquired in informal learning settings. Without these competences the individual's labour market mobility and career prospects may be seriously impeded (Webster et al, 2001).

This would argue for intensifying policy initiatives at national levels with involvement of social partners and sectors regarding APL instruments, particularly in work-placed settings, to get more concrete experiences with how and to which extent work-based APL can be an instrument to further labour market mobility and career prospects of the individual. According to the DGVT responses and the national reports. APL instruments for summative purposes have made considerable progress according to DGVT responses. But APL instruments for formative purposes (recognition in work-based settings) are currently less developed and seem to play a minor role in most member state countries. (See chapter20)

17.1.5 The "Matthew-effect" in education and training

"For unto every one that hath shall be given, and he shall have abundance: but from him that hath not shall be taken away even that which he hath"

Training appears to have an impact on both subjective and objective measures of employment security, possibly because training of the lower-skilled allows attaining and maintaining competences required to bring productivity in line with market wages, thus sustaining the employment prospects of the low-skilled (Employment Outlook 2004, p. 185). Against this background, the Kok report recommends that that Member states make it easier for all workers to get the training they need by improving access to training throughout life. Priority should go to those most in need, namely the low-skilled, older workers, and employees in small firms. Public intervention for equity reasons, emphasis on not merely firm-specific skills, integrated guidance and learning, flexibility in training with regard to learning styles and time and place access, less institutionalised forms of learning including networks between firms or between producers and their sub-suppliers, and use of innovative forms of e-learning that can alleviate literacy and language difficulties - all these are components that can improve not only formal access to lifelong learning, but genuine involvement in lifelong learning (Beyond Rhetoric: Adult learning policies and practices OECD 2003).

The IALS survey and OECD Employment Outlook (2003d) also point to a strong correlation between low literacy levels and low participation in adult education and training. This finding emphasises the need for a European Employment Strategy to address transferable skills development, rather than just training for specific job-functions, and also to further develop new and less institutionalised forms of learning in order raise motivation amongst the lowest skilled (Pont & Sweet, 2003). Within the context of the Copenhagen Declaration this finding underlines that countries should ensure that their VET systems build on broad and dynamic occupational profiles that also prepare and motivate the individual to participate in learning on a lifelong life-wide basis. Even if VET reforms in many countries move towards broader

qualification profiles, there is a particular challenge to find new, innovative ways to address numeracy and literacy in our VET systems, particularly for students who already have experienced “system failure” or for students with different cultural backgrounds. Chapter 18 provides examples of such innovations drawn from the national reports in particular.

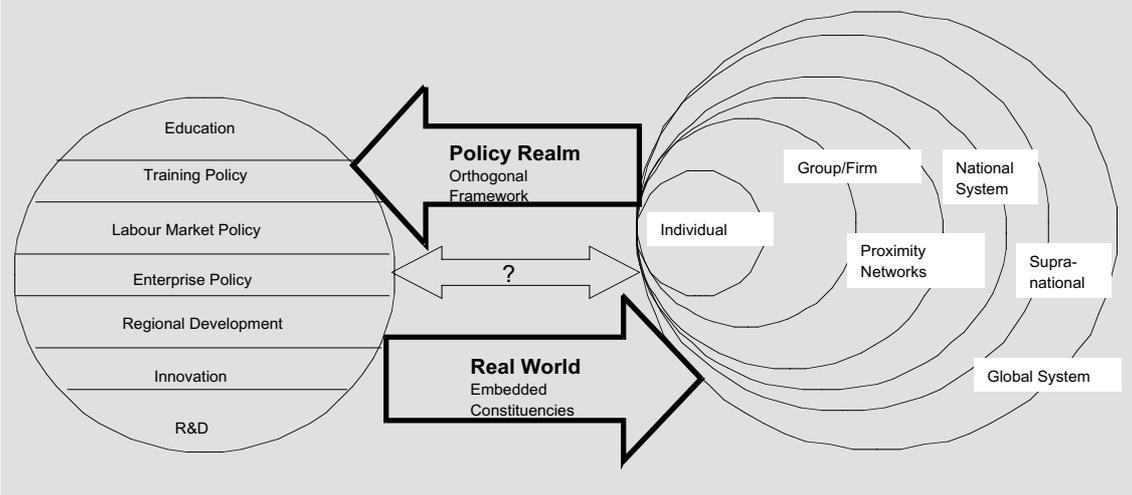
17.2 Conclusion

The nature of knowledge diffusion, acquisition, and obsolescence, and the role of individual and systemic learning (and forgetting) are undergoing change. To better respond to these changes it is necessary to address reforms in vocational education and training interconnected to other policy domains such as labour market and innovation policies. The disconnectedness of policies both at national levels and at EU levels is a challenge, as the DGV reports underline, if we assume that it is a central goal of EU policy action to develop learning abilities within systems. This in turn could mean that we need to re-configure traditional policy realms in order to develop much more integrated policy approaches in the realisation of lifelong learning for all.

This could be accomplished through broader joint DG programme initiatives around the theme of adaptation and innovation of our learning systems. The Commission has previously issued such broad calls for tenders - for example in the context of European multimedia. The messages from the Kok report (2003) also seem to suggest a changed understanding in the interconnectedness of different policy domains as a prerequisite to change and innovation:

Figure 17.1:⁹⁵

Diagram suggesting the deficiencies of an *orthogonal* policy framework in serving a hierarchy of *embedded* knowledge and learning constituencies



Source: Gavigan (1999) p- 19

Different policy areas are interconnected with knowledge and learning. Examples are entrepreneurship, mobility, or inclusion. Several of the DGVs report that European and national initiatives are taken, and monitoring and reporting groups are set up with little regard to these interconnections. A central aim of policy action should therefore be to develop

⁹⁵ *Orthogonal* def: In mathematics, relating to or composed of right angles. Generalized to mean independent of, separate from or perceived as irrelevant to.

learning abilities within the system of actors (Lundvall, 2000). This could be established through fewer and better integrated reporting procedures. It could also provide the basis for using the different reporting procedures for dissemination and awareness purposes in the member states.

A number of issues thus emerge in relation to the overall governance models and to the conception of what it means to create a high-skills learning society in the EU (cf. Lloyd & Paine, 2001; Gavigan, 1999):

- Are there – as suggested in Chapter 4 - major cross-European differences in what is understood as the knowledge society, and if so what opportunities and challenges does that pose in terms of governance models and strategic aims for the future orientation of VET?
- How should the problem of those marginalised in the labour market and those least educated and least motivated to engage in lifelong learning be addressed within the high skill / high value-added strategy?
- To what extent can a European strategy fruitfully provide a common framework in all Member states for goals as diverse as competitiveness, inclusion, and civic participation in its broadest sense?

The view of the Member States

From the point of the view of Member States, DGVT responses indicate that the approach and the instruments of the Copenhagen Declaration have been taken on-board and are seen as contributing to or being in line with national reforms and aspirations. At the same time, the national reports show the multiplicity of approaches and current priorities tied to particular national and regional contexts and trajectories, thereby underlining the necessity of a bottom-up approach as framed by the Copenhagen Declaration.

Progress has been made and can be furthered according to the DGTV assessments, through: (i) increased bench-learning between Member States and between the Member States and the European Commission, not least given the variation in policy contexts and resources available for system reform; (ii) implementation of common European reference frameworks as essential to establishing a common exchange mechanism for qualifications given the variations in qualification frameworks and not least also current European sector developments; (iii) methodologies for increased use of APL - both in education and training contexts and in work settings; (iv) a more strategic and stronger linkage between labour market initiatives and VET, and between IVET and lifelong learning; and (v) a more interconnected use of European programme initiatives and work groups.

These issues are addressed in more detail through policy analysis and country examples drawn from the DGVT responses and national reports in the following chapters.

Chapter 18

VET development, orientation and adaptability to demand

18.1 Introduction

This chapter discusses what the external requirements are of VET systems in terms of their ability to develop continuously and adapt to demand in the context of the Lisbon strategy. It then goes on to analyse the extent to which changes in skills demands and skills requirements can be anticipated by VET systems. It takes examples from DGVT responses and national reports of current attempts to forecast and anticipate future changes in skills requirements and employment patterns. A number of relevant conceptual and methodological trends are described.

The chapter provides a focus on Lifelong learning, the ways national VET systems are currently progressing towards developing VET so as to match external requirements and increase adaptability to the needs of individuals and enterprises. Finally, we address progress on VET reform in the context of lifelong learning in the new EU member states and candidate countries.

18.2 New external requirements to VET

A central trend in the so-called knowledge economy is that innovation cycles are getting shorter (IPTS 2000). They are constantly being disrupted by technological innovations in a 'creative destruction' process. This applies both to traditional sectors and to new high-tech sectors, though with great variations across countries and within the same sector.⁹⁶

Greater focus is therefore placed on the design of educational and learning systems that can foster construction of new knowledge as a central educational domain on a lifelong life-wide basis, rather than primarily focusing on acquisition of existing knowledge domains.

Work in rapidly changing industries involves learning at the cutting edge of work practice. Learning often extends beyond the assumptions of traditional career models. Furthermore, learning is an activity that goes beyond the individual, taking place in a variety of contexts in varying groups, teams, and 'communities of practice'. Learning is directed towards innovation in the occupational role performed. Case study work from the ICT sector (Shapiro, 2000)

⁹⁶ For a broader illustration of this see: European Monitoring Centre on Change: Dublin, Sector studies on ICT as a driver of change.

seems to indicate that from the outset there is a tacit component of new occupational skills that over time is transferred to the sector as a whole. The understanding of the term 'skill' is fluid and unclear under these circumstances. The border between 'skills' and personal attributes and personal characteristics becomes increasingly blurred. Great emphasis is often placed on personal attributes such as flexibility, team orientation, and problem solving capabilities. These are seen as the foundations for continuous learning beyond the needs that are immediately foreseen. This emphasises the need for VET systems to accommodate not only professional competences but also personal competences and abilities, both in terms of content but also in terms of pedagogical practices as discussed in section 3.

Against this background, it is understandable that the 2003 Spring Report on progress towards the Lisbon Strategy objectives (European Commission 2003c) presents innovation, education and training, and R&D policies, as closely interconnected policy areas. Rather than looking at the education and training system in isolation, it makes sense to take a broader view of the knowledge system and knowledge infrastructures.

18.2.1 Increased accessibility of knowledge

In the globalisation of knowledge systems and the economy a significant proportion of scientific, technical, and other exploitable information and knowledge becomes accessible from anywhere with relative ease, freely or at price - be it in a codified or tacit embodied form, for example in patents or in new product innovations. These developments also drive the increasing use of benchmarks and indicators in measurable codified knowledge areas (Krieger, 2004) - at times, possibly, at the expense of other knowledge domains which might have more relevance to policy but are less measurable (Haahr et al., 2004).

Developments also occur in ICT, especially in corporate learning, and they are embedded in education and training systems. This can create new opportunities for increased efficiency and innovation in learning systems. The development and growth in ICT-enabled corporate universities and private players, particularly in the USA, illustrates this phenomenon. In the USA, private health care along with ICT-enabled education and training show the largest enterprise market growth in 2004. As firms globalise, so could their education and training supply. At present this new competitive situation is particularly experienced by the European business schools, but could also become a reality regarding adult education and training in broader terms, not least as financing schemes for adult education are changing towards more market-led approaches.

The growing accessibility of knowledge and information implies that traditional education and training actors may increasingly come to compete with new providers for shares in the developing education and training market.

18.2.2 The significance of unique local knowledge

The importance of clusters in knowledge creation and knowledge specialisation (Lundvall, 2000; Maskell et al. 1998; Berg, 2000) for economic development is illuminated in research and policy actions at national levels and EU levels. Businesses are becoming quite sensitive to geography and to the particular skills and knowledge resources which local social capital may offer. This is exemplified through case studies from several regions in the OECD publication on learning regions from 2001. It has implications for VET systems. The significance of unique, locally embedded forms of knowledge and capabilities highlights the need for vocational educational suppliers to be able to engage in networks and focus on core capabilities. Through such measures they can obtain volume and be able to provide a comprehensive offer, rather than taking a mono-institutional approach in areas where they have little activity:

Trans-Atlantic Technology and Training Alliance (TA3) is an innovative example of a consortium of leading European and American vocational education and training institutions. It was founded at the end of 1995, initially with some funding from the first phase of the US/Europe Collaboration agreement.

Its objective is to improve the business competitiveness and cluster development in local areas through trans-Atlantic collaboration. The role of the institutions is to act as catalysts in transferring new technology and ideas to companies. The role of the network is to develop and pass on information about good modes of operation, through joint curriculum development, comparative studies, exchanges of staff and students, and national and international workshops

Country Examples - Firms and Sectors in VET supply.

Spar Konzern in Austria trains 2700 apprentices (2004) in 12 apprentice trades (e.g. office administration, wholesale trade, etc). 8% of the total staff are apprentices. SPAR AKADEMIE runs the only private vocational school acknowledged by the State. 97% of the apprentices pass the final examination. Further training takes place within the SPAR Konzern.

Developments do not only regard new forms of more enterprise-driven approaches such as illustrated by the Austrian case, collaborative alliances are particularly relevant in areas where knowledge rapidly becomes outdated. Alliances make it possible to respond rapidly and efficiently to skills needs as they emerge while allowing for the anticipation, development, and delivery of broader and longer-term skills requirements.

VET Partnership, Maltese Chemical Industry. A course comprising 5 modules of 15 hours each was designed by Malta Enterprise, ETC, and the University, which will lead either to later entry to MCAST Clinical Chemistry courses or to entry into industry as operators. MCAST is also expanding its offerings by introducing top-up training modules for healthcare and food & beverages. Other plans include the introduction of modules in Analytical Chemistry, Industrial Pharmacy at the undergraduate levels of the University of Malta, as well as a Post Graduate Diploma.

There are now 31 students in the Clinical Chemistry course, while links between the healthcare industry, the University, and MCAST, have been strengthened. This will positively impact the future HR needs of the industry as well as open up cooperation possibilities for future training.

The Dutch carpet industry, initiated in 2002, now called the Association of Dutch Carpet Manufacturers (VNTF), has had an improved training system in operation since 2003. The content of the courses is developed by the companies and directly related to their needs. The main learning environment is the company. In addition, there is a school component, fitting perfectly with the learning experience in the company. The employee/student has direct access to all the course material through the Internet. The managers of the employee/student function as coaches and discuss his/her learning progress and development. The new approach results in a higher level of motivation and much more effective learning.⁹⁷

Finnair, the Finnish airline company, started the Competence Management Programme in 2001. The Programme defines the key competences in four roles in each business unit. The roles are management, superior, expert, and employee. The key competences are the same at all job-function levels, but the content has been adapted according to the specific needs of each role.

⁹⁷ Trade unions: FNV (Dutch Federation of the trade union movement), MHP (Trade Union Federation for Intermediate and Higher Employees) and CNV (National Christian trade union federation), members of ETUC. Employers: VNO-NCW (Confederation of Netherlands Industry and Employers), member of UNICE; MKB-Nederland (Royal Dutch Association of SMEs), member of UEAPME, and LTO Nederland (Dutch Organisation for Agriculture and Horticulture)

While there are other examples of new forms of partnerships, it is surprising that vocational education and training institutions seem to play a rather moderate role in the seventeen networks funded by the R3L Initiative under DG Education.⁹⁸

18.3 Concepts and methods relating to skills requirements

In order for VET system to be able to anticipate and meet new forms of demand, certain conditions require particular attention, not least for systems that involve several parties in the definition and development of VET. One prerequisite is a clear understanding and definition of new types of skills in terms of both present and anticipated labour market demands. The following describes recent developments in skills definitions and attempts to measure new forms of skills. Reviews in the USA and other countries (OECD, 2001) have documented a broadening conception of skills which now includes a variety of 'soft', 'generic', 'transferable', 'social' and 'interaction' skills. These are frequently indistinguishable from personal characteristics, behaviours, and attitudes, which in the past would not have been considered skills at all (Payne, 1999; Keep & Mayhew, 1999; Stasz, et al., 1990, Shapiro, 1999; OECD 2001. See also Chapter 8 on competences in the workplace).

Rychen and Salganik (2003) conclude that a review of various initiatives reveals a lack of consistency in the use of terms related to competence. Terms such as 'skill', 'qualification', 'competence' and 'literacy', are used interchangeably in order to describe what individuals must learn and must be able to do to succeed in school, at work, or in social life. Generally, the various terms refer to *'multifunctional and trans-disciplinary competences that are useful for achieving many important goals, mastering different tasks, and acting in unfamiliar situations'* (quoted by Rychen & Salganik 2003). Salganik and Stephens (2003) report several initiatives that attempt to identify what are called key competences required by various professions or clusters of professions. The Framework of key competencies for the knowledge-based society developed by the Objectives working Group on Basic Skills⁹⁹ has made an important contribution in this direction. The working group, however, also recognises the limitations of some of the definitions provided¹⁰⁰

Key Competences and new professional profiles. Country examples.

Examples of this are the COBRA System in Belgium (a catalogue of required competences for different careers in the Flemish Labour Market, drawn up with the key stakeholders), and O-Net On-line from the US Department of Labour. Similarly, they report on a number of employer surveys from countries such as New Zealand, Finland, and Sweden that aim at identifying skills that employees should possess. Competences are defined very broadly and frequently emphasise communication, cooperation, creativity, and critical thinking. The Finnish study also includes such qualities as initiative, interest, honesty, and conscience. One of the biggest limitations of the use of key competences is that research seems to indicate that they are not as generic as often believed, but are defined within the context in which they are practiced. In Italy, for example, several sector analyses have led to the definition of 37 new vocational profiles in the agriculture, industry and craft, ICT, building, tourism, transport, and environment sectors. Qualifications are recognised at a national level. Denmark and France are also engaged in activities to develop indicators or to measure competence levels of their populations.

⁹⁸ Regional Networks for Lifelong Learning- Call for Application 2002

⁹⁹ <http://www.eaea.org/index.php?k=3222&aid=3222>

¹⁰⁰ (Second report on the Activities of the Working Group on Basic Skills, June 2003 section 33 p. 14)

The OECD study ALL (the Adult Life Skills and Literacy Survey), and the Young Adult Survey from Switzerland are also examples of such efforts. At EU level, a similar DG Education initiative is under preparation as part of the efforts of LEONARDO Statistics and in the context of lifelong learning. The main aim of the study is to assess different strategic avenues to measure the competence levels of populations based on an assessment of previous national and transnational initiatives.¹⁰¹ Also the OECD plans to launch an initiative to measure skills in the adult population, building on the experiences from IALS. For countries concerned with balancing growing demands against efficiency and budget expenditure, a carefully designed methodology for direct assessment of skills can be one of several instruments used to prioritise investments.

18.4 Structural changes in employment patterns and skills requirements

Rapid and sometimes radical changes are taking place in some sectors; at the same time several sectoral studies show that quite different trajectories of change can be identified within the same sectors¹⁰². This means that not only does the need for labour across different sectors vary widely over time - it may also vary widely within the same sector depending upon the competition strategy adopted by a particular firm¹⁰³. Across Europe, new professions and industries emerge and converge such as for example biotechnology and technical textiles, whereas others decline in relative importance such as for example agriculture. The length of the business cycle varies considerably. Generally the economy is globalising, which leads to delocalisation of work and creates a demand for different types of skills.

All these trends contribute to making it increasingly difficult to make well-grounded strategic assumptions about which skills our educational systems should deliver in order to meet the needs of the labour markets. The number of forecasts made in the late nineties about a tremendous demand for ICT labour both in Europe and in the USA, and the later developments in the economy - not only caused by the dot.com crisis but also contributed to a growing off-shoring of ICT jobs to India - illustrate these difficulties.

18.4.1 Key trends in employment and broader skills requirements

The Learning for Employment study (Bainbridge et al, 2004) shows that changes in the sectoral structure of employment in recent years have been similar across Europe and relatively consistent over time. Employment is increasing in advanced and community services, declining in agriculture, and falling or expanding relatively slowly in industry and basic services.

A projection of current occupational shifts indicates that some 80% of net additional jobs will be for managers, professionals and technicians, while the number of manual workers in employment is set to decline slightly, especially among skilled operatives. The study does not address a parallel growth in particularly low skilled service jobs. The share of jobs for those with upper-secondary education is projected to decline slightly, reflecting in part the decline in demand for skilled manual workers. The study, however, also recognises that the above mentioned changes in employment patterns may change in future years, and that required skills levels may not remain constant.

¹⁰¹ "Developing a Strategy for the Direct Measurement of Skills". Project under implementation, to be finalised in the autumn of 2004 by the Danish Technological Institute, RAND Europe, and SKOPE, UK.

¹⁰² For a wider coverage see sectoral studies from European Monitoring Centre on Change, Dublin.

¹⁰³ For an illustration of this for the European textile and leather sector, see Shapiro and Svava Iversen (forthcoming 2004).

The uptake of new technologies and processes in mature industries such as food production (with functional foods), building and construction, or textiles, could affect those projections. The innovative use of new generic technologies in mature sectors can lead not only to the revitalisation of sectors, but also to demands for totally new types of cross-sector competences such as has occurred in technical textiles and bio-engineered food.

18.4.2 Examples from the European textile industry

The textile sector has traditionally played a central role in many of the European countries, and it is one of those sectors that have been heavily affected by globalisation. To exemplify how competition strategies may impact the nature and size of demand and how strategic investment in skills as part of an innovation strategy, the following examples from Italy and Denmark are quite illustrative (Shapiro & Iversen, 2004, EMCC). The overall study shows that not only has the sector taken quite different avenues to globalisation across countries, it has also taken different forms within countries depending upon where the specific countries are placed in the supply chain or which skill strategies they embark on. Other sector studies under The European Monitoring Centre on Change show similar variations and uncertainties concerning skills projections.

Different pathways to success- the cases of Denmark and Italy

Denmark with relatively high wages has followed an outsourcing strategy. This led to the virtual disappearance of low skilled jobs in sewing and production but also to new successful company and job creation related to textile design in the fashion industry and industrial textiles. Close collaboration between the sector and fewer vocational institutions acting as sector one-stop-shop competence centres has been an important factor in the transition.

In Italy the predominant strategy has been to maintain the whole value chain within the country, relying heavily on ICT to optimise processes, and on strengthening market intelligence through closer connections to the retail end of the value chain. Another component in the Italian strategy has been to strengthen the brand of "made in Italy", not only for the high-end fashion industry, but also for the industry as a whole. In-house training and learning through customers and suppliers play an important role.

Similarly, a cross-country Leonardo study on the textile industry (Totterdell, 2002) shows that the type of competition strategy chosen leads to quite different skills demands. Where cost is still the prime focus, education and training remains ad-hoc and technology-specific. In companies that have broadened their innovation strategy, the complexity of skills demands in the textile industry for the future is as advanced as in high-tech sectors and consequently is strongly dependent on VET.

18.4.3 The time-lag challenge and responses to it

A study from Cedefop (Schmidt et al, 2003) on early identification of skills needs in Europe underlines the need for appropriate methodologies to cope with skills demands in a longer term perspective while at the same time allowing for information on skills requirements not yet defined by statistics and job classification. The reason given is the time lag between the emergence of substantially different skills requirements and the graduation of a new cohort with the appropriate new skills profiles.

Partnership as a sector approach to change

In Germany, the Department for Education and Qualification of the Executive Board of the DGB (Confederation of German Trade Unions) started the project LeA (Leben und Arbeiten – Life and Work) on qualification and counselling at the end of 2002. The project is sponsored by the German Federal Ministry of Education and Research (BMBF) until October 2005 and develops and tests opportunities for improving work-based learning through coaching within and between companies. The project focuses on the early recognition of skills needs in the metal and electro sector and in health care services. It aims to address how training and learning should be designed to make companies prioritise lifelong learning as a business issue. The project involves trade unions, companies and political representatives of vocational training in cooperation with the Fraunhofer Institute for Industrial Engineering IAO as well as

the bfw Hamburg. A component in the project is the development of a competence profile for a training coach. This aims to take an integrated approach to qualification, learning, and career counselling. The CareerSpace initiative taken by a number of multinational companies in the ICT sector in collaboration with Cedefop and the European Commission, and the European computer driver's license, which has become a de facto standard for basic ICT skills in many countries, can both be seen as large scale attempts at new forms of partnerships that may have a systemic effect on vocational supply in fast-changing industries. Whereas industry certifications are an attempt to reduce the time lag in VET, the Career Space initiative and the ECDL initiative can both be seen as examples of how public-private partnerships lead to new forms of dialogue and new types of qualification responses to changing industry needs.

18.4.4 Forecasting and anticipating future labour market needs for skills in an uncertain economic climate- DGVT responses – question 11

Only seven countries are planning some form of forecasting mechanism. They are Estonia, Turkey, Slovakia, Hungary, and Belgium (Flanders), Luxembourg (partial planning). Other initiatives are mentioned as implemented, but do not seem to deviate from traditional instruments dealing with monitoring and forecasting of skills in the labour market. Though little information is provided in many instances, these types of initiatives do not seem to consider broader drivers for change and how they may affect medium-term skills demand. This issue was also raised in the Cedefop publication *On Early Identification of Skills Needs* (Schmidt et al., 2003).

The national report from Slovakia, for example, reports that the responsiveness of VET systems to the needs of the labour market is constrained by the lack of systematic collection of data about the developments and dynamics in the Slovakian labour market. The risk is that there will be a mismatch between the skills provided by the VET schools and the emerging new requirements of the labour market. Though not so directly reported, several of the DGVT responses and national reports from the EU10 and candidate countries express similar concerns. In the Czech Republic, for example, there is a strong linkage between ISA - an information system of school graduates' entry into the labour market - and skills forecasting mechanisms.

There are however a number of interesting examples where countries have adopted a clear futures perspective in their methodology, integrating trends that may drive change such as sector convergence, technology developments, and local/global specialisation:

- In France an agreement between the social partners, dated 20 September 2003 requires that each branch that has not already done so should take the necessary steps to establish *Prospective Observatories* on professions and qualifications, to be operational by September 2004;¹⁰⁴
- UK - the UK Skillsbase. This was set up in 2000 by the Department for Education and Employment (DfEE), now the Department for Education and Skills (DfES), in response to proposals in the 2nd report of the National Skills Task Force. www.dfes.gov.uk/skillsstrategy/ ;
- Austria, the Qualification Barometer. This is a public-private initiative that gives information about anticipated qualification trends. <http://www.ams.or.at/neu/2339>;
- Belgium (Flanders) is planning to collect wider socio economic data in collaboration with regional social economic committees as a supplement to the collection of labour market data that is already in place;

¹⁰⁴ For further reference see "les dossiers Insertion, Education et Société. Prospective employ formation 2015 Ministère Education, Nationale Enseignement Supérieur Recherche. July 2004- no 155..

- Ireland - a futures approach has been adopted through the expert group on future skills needs. www.skillsireland.ie;
- Finland - with support from the Social Fund FI has taken a very comprehensive approach through a foresight methodology on a nationwide basis using a method known as the manpower requirement method. The method was originally developed in the sixties but has been considerably refined using a computer based tool.¹⁰⁵ Working groups produce alternative forecasts, for example describing the consequences of a slow, rapid, or steady economic development. An inter-governmental working group on forecasting issues 2004- 2007 was established comprising 11 ministries <http://www.oph.fi/english/page.asp?path=447;490;6750>;
- Germany has participated in research on early identification of skills needs. <http://www.frequenz.net>;
- Norway - a new longitudinal instrument, "The Learning Conditions Monitor," has been implemented in 2003. It addresses the issue of skills supply and demand in the context of Lifelong Learning, and how large scale measuring can take account of skills acquired outside a formal learning context. <http://www.faf.no>.

The Cedefop study on early identification of skills needs provides several more illustrative and innovative examples (Schmidt et al. 2003).

However, there is little evidence of how these new methodologies are used in a more systemic way, and whether the use of futures methods as opposed to traditional planning and forecasting instruments results in a better responsiveness and a more strategic orientation of VET systems. Though the European Commission - particularly in the 5th framework - have funded several studies on the impact of futures thinking for example in relation to information society policies, there seems to be little knowledge of the effects of futures thinking for educational policy purposes. The OECD/CERI initiative on Schooling for Tomorrow aims to analyse impacts of futures thinking on policy formulation. The Leonardo programme could be an ideal platform for member states, social partners and sector bodies to explore possibilities of futures thinking relating to early definition of skills demands as part of an innovation feature within systems.

18.4.5 Employment protection legislation and active labour market policies - the art of walking the tightrope.

OECD Employment Outlook 2004 and many of the national reports prepared for this study show that countries come from very different points of departure with regard to the targets set out by the Lisbon Employment Strategy. Most countries have actively adopted policies relevant to the Lisbon Employment targets. In many of the initiatives a combination of training and counselling forms a central element, as set out in the guidelines for the European Employment Strategy.

In many instances, policies aim both to meet the need for firms to adapt to fluctuating market conditions and to balance that against employees' labour market security through a mixture of legislative, fiscal, counselling, and training instruments, *'taking into account the need for both flexibility and security'* (Copenhagen Process; First report of the Technical Working Group; credit transfer in VET, 2003).

Many countries have approached market flexibility by increasing the use of temporary contracts while keeping existing provision intact for regular or permanent workers. According to Employment Outlook 2004 this is the case in Belgium, Denmark, Germany, Greece, Italy, the Netherlands, Norway and Sweden. In Finland and Austria, reforms have taken place effecting on Employment Protection Legislation (EPL) for regular contracts. In Estonia and

¹⁰⁵ Demand for Labour in Finland. 2010. The dimensioning of Education and Training, National Board of Education, 2000

Portugal, previously characterised by a high level of EPL, governing both permanent and temporary work have been eased. Increasing levels of temporary employment implies a risk of under-investment in education and training for those employees. This is documented through several studies conducted by The European Monitoring Centre on Change.

The Netherlands country report provides a best practice example on how to avoid the erosion of quality of work for temporary employees. This is based on a broad notion of individual rights, also involving the rights to education and training after a certain period. Recent legislation on flexibility and security and collective agreements have allocated new responsibilities to temporary work agencies (TWA). The relationship between a TWA and a temporary agency worker is to be treated like a normal employment contract with normal entitlements for the workers to social security, although the first 26 weeks allow for more freedom in hiring and firing. A collective agreement for the years 1999-2003 introduced a four-phase model in which temporary agency workers gradually acquire more rights, including rights to training, as the length of the employment relationship increases. For the EU10 and the candidate countries complete figures are not provided on changes in EPL and there is no data for the 80s.

Given the growing number of temporary employment contracts and the inherent risk of underinvestment in skills for those with temporary employment contracts, the Dutch example provides a particularly innovative example with regard to public policy intervention in flexible labour markets.

Stricter employment regulation is still a feature of the southern European countries. While Italy had one of the most regulated labour markets in the 1980s, it is moving closer towards the middle while France has strengthened EPL measures. The country reports furthermore show that EPL deregulation is often combined with initiatives to create more efficiency in placement and guidance services. The study also points to the necessity to take into account the institutional and overall policy environment in which EPL operates. If not, reforms risk biasing the estimated relationship between EPL and labour market outcomes.

OECD Employment Outlook 2004 seems to indicate that stringent employment protection tends to decrease employment rates of both men and women. A certain level of employment security may on the other hand enhance productivity by encouraging investment in human capital, since longer-lasting employment is likely to increase the expected returns to training.

The informal economy - skills and employment

There is anecdotal evidence of the negative effects of undeclared work and misuse of self-employment in traditional sectors, such as building and construction and the labour intensive service sector. This affects both skilled and unskilled workers, particularly in countries bordering up to the EU10. The OECD study also shows that, however methodological difficulties in measuring the magnitude of an informal economy; relatively few resources seem to have been allocated to policy analysis on the informal economy and the effects it has on sectors and on qualifications where cost traditionally is one of the most important competitive parameters.

Apart from inspection and control measures, several countries provide best practice examples of measures to reduce undeclared work. Estonia and Portugal have introduced minimum wages in traditional low-skill, low-pay sectors such as tourism and textiles. According to Employment Outlook 2004, data seem to indicate that this measure might be one of the more successful policy instruments to reduce individuals' motivation to accept undeclared work.

The Belgium country report also provides a best practice example for the service industry.¹ Service vouchers can be purchased by consumers of certain services for which there is a large share of presumed undeclared work (e.g. household services). The vouchers are a means of payment that also provides social security rights. The scheme is largely subsidised by national and regional authorities. Job seekers are recruited under a legal work contract by authorised companies (non-profit organisations and public bodies such as municipalities). At the Employment Conference of September 2003, it was agreed that the system would be simplified and extended in order to create 25,000 additional jobs by 2005.

In Hungary, legislative measures have been introduced in 2003 so as to reduce illicit use of self-employment when it in reality functions like undeclared work for the employer.

It is possible that an improved supply of qualifications - for example relating to quality, customer service, or e-business skills - could be an incentive for employers in sectors where undeclared work is widespread, such as building and construction or tourism, to take on-board qualified labour to improve gains through increased productivity and quality.

More European case-based research and information campaigns are needed to illuminate the correlations between qualifications, labour, productivity, and improved customer satisfaction, in order to document the advantages of a qualified-labour strategy in traditional labour intensive sectors.

EPL, ALMP, and lifelong learning

By 2003, Denmark, the Netherlands, Sweden, and the UK, had overtaken the US in terms of employment rates. Sweden in particular, but also UK, have shown strong employment creation for both low skilled and high skilled, for the high skilled most notably in the knowledge intensive service sectors. This is similar to developments in the US (Employment in Europe 2004). With regard to the interlinkage between lifelong learning policies and employment, the intensity of spending on youth measures and employment services is found to have the strongest impact on the employment rate. Both the national reports and OECD Employment Outlook 2004 show that many of the member states, particularly the new member states, are in the process of reforming their employment services. This could be an important contribution to reaching the Lisbon employment targets.

Flexibilisation of services

Flexibilisation in the labour market includes flexibilisation of services. Many of the EU10 are taking particular measures to establish ALMPs and trying to target services to particular populations:

In Estonia, flexibilisation is occurring through the use of 'case managers' at the employment services.

In Latvia, the State Employment Agency (SEA) has developed a database of job openings. However, the active measures are available only to people who are registered as unemployed. The active labour market measures are as follows: vocational training, re-qualification, temporary public employment, and targeted measures for specific population groups, particularly people aged 15-25, disabled persons, and pre-retirement-age persons with less than 5 years to retirement.

In Cyprus, the role of Public Employment Services (PES) so far has been to refer individuals to the Human Resource Development Agency (HRDA) for training programmes. The eligibility criteria, however, typically mirror employed staff of companies that pay into a payroll scheme. It is therefore likely that the role of PES will be expanded in the near future to accommodate a wider target group.

As an example of mixed policy measures, Greece has provided extensive subsidies to training and support measures for the unemployed, under different programme initiatives. However, the unemployment rate still remains high, particularly for the young, the older age groups and for women.

According to Employment in Europe 2004, the highest expenditure on ALMPs as a % of GDP in the period 1996-2002 were in Denmark (5,2%), NL (4,2%), Finland (3,8%), and Belgium (3,8%). No figures are reported for the EU 10. However, as exemplified in the national reports and the DGVT responses, several of the new member states feel that they are affected by a serious deficit of public investment in comprehensive labour market measures, though they report of reform processes. This again may have negative effects on economic and societal restructuring and may further increase incentives for undeclared work. This indicates a need for careful policy attention in the implementation of the European structural funds in order to balance short-term and medium-term priorities.

As systems reform labour market services, it is important to pay particular attention to the training of placement and guidance counsellors and to learning from best practices. Study visits and EU programmes such as Leonardo can be excellent platforms for this.

The increased use of temporary work could pose a particular challenge to the Lisbon strategy and the balancing of economic goals with inclusion goals, including advancing lifelong learning objectives. The findings of the OECD study stress that partial reforms - if not substantially complemented by improved Active Labour Market Policies (ALMPs) such as guidance, counselling, and training, in the context of lifelong learning - may increase dualities in the labour market. Workers in temporary jobs are at high risk of moving in and out of employment at the fringe of the labour market with less likelihood of training in many instances. Developments in temporary contracts for different labour market groupings (age and skills) should be monitored more closely to assess the degree to which they represent

springboards or function as a labour market trap, as suggested by *Employment in Europe 2004* (page 184).

As the OECD *Employment Outlook 2004* concludes, there is no clear linkage between raising employment levels and a particular balance of EPL and different measures relating to ALMP policies. Some countries appear to have successfully reduced unemployment rates and maintained high employment to population ratios through the combined use of these instruments, according to the study. Others seem to have enhanced labour market performance by reducing both EPL and unemployment benefits, with little use of ALMPs. This seems to support a need to systematically develop an evaluation culture across the range of labour market policies and fiscal policies, and how these are likely to interact with different target groups, as also suggested by *Employment in Europe 2004*. This again would feed into bench learning - the creation of indicators that could guide strategic policy orientation.

The 'road to Lisbon'

Most countries have taken on-board a mix of EPL and ALMP to meet the challenges of the Lisbon Employment Strategy. In Turkey, however, employment policies are just beginning to emerge on the policy agenda. The OECD *Employment Outlook 2004* points to a particular third model between the relatively deregulated Anglo Saxon countries and the more strictly regulated southern European countries. It is called the Danish 'flexicurity' approach. This model is based on a combination of a high degree of job mobility - thanks to a low EPL, social security - through a generous system of unemployment benefits, and active labour market programmes, which also include job placement, and on-the-job training schemes.

While the Danish flexicurity model in many ways meets the challenges of combining labour market needs with personal protection, a study from CASA (2002) shows that parallel to a reduction in unemployment levels in the last half of the 1990s there has been a noticeable exclusion from the labour market that economic growth and the 'Scandinavian welfare model' have not been able to solve. New models are being piloted to combat exclusion of the most marginalised groupings. These show promising results, not least from work with young unemployed and ethnic groups in large European cities. Central to these models is that they have a wide notion of training and learning which bridges inner city development, counselling and training. Typically, initiatives take the point of departure in the individual's life circumstances and the individual's strengths and potentials, and not in a predefined institutional offer.

Concerning in-work transitions, *Employment in Europe 2004* shows that on-the-job training is strongly correlated with the likelihood of moving from temporary employment to permanent employment. However, it should also be noted that temporary employment, particularly for first time entrants into the labour market, may be of a probationary nature with an implicit goal of a move to a permanent contract. Temporary employees with these types of contracts are likely to participate more in formal and non-formal learning than other types of temporary workers. In relation to moving into higher pay brackets, on-the-job-training has a stronger effect on 1-year transitions than training courses, whilst training courses are of more importance for long-term transitions. This is possibly because the latter is likely to lead to qualification. This would argue that a much stronger integration of employment and lifelong learning policies in the member states would be more efficient. It could ensure that training for employment also includes measures and approaches that can lead to qualification. Medium term instruments such as guidance, APL, and financial incentives for the individual can be instruments that support such development.

18.5 Adapting to requirements: progress in lifelong learning?

18.5.1 The challenge of integrating lifelong learning into learning and innovation systems - governance issues

According to the 2003 progress reports on lifelong learning (Implementing lifelong learning strategies in Europe: Acceding and candidate countries, 2003)¹⁰⁶, lifelong learning (LLL) is growing in importance and countries are making progress, particularly with regard to interpreting lifelong learning in a broader context. However, the report states that there is considerable variation in the extent to which lifelong learning is integrated into learning systems. A serious challenge is a lack of coherence in lifelong learning frameworks due to the division of responsibilities between ministries or levels of government. Some countries such as Belgium (Flanders) and the Netherlands report on steps taken to improve inter-ministerial coordination. In Denmark, labour market training and vocational education and training have been merged into a common national qualification framework with extensive crossover options and use of APL. In Malta the Professional Qualification Authority Council, set up in 2000, has been charged with a particular responsibility to bridge IVET and adult learning. In several countries the European Structural Funds have also led to more coordination between the ministries. In the implementation of the Structural Funds in the EU10 it seems particularly important to emphasize demands for inter-ministerial coordination. Given that ALMP and LLL policies are still in the making in the EU10, close inter-ministerial coordination also with regional policies can guarantee greater efficiency and strategic orientation in the use of ESF funding. In countries such as Spain, Greece, Portugal, Denmark, and France, the development of some form of coordination is explicitly linked to the Structural Funds, either at a regional or a national level.

New VET suppliers

In many sectors there is evidence that multinationals and private actors are taking on another and stronger partnership role in VET, most markedly in financing and insurance, but also in the auto supply industry and in the ICT sector.

An example from the ICT sector is the Career Space initiative. Another example comes from Lithuania. Here, the Microsoft Representative Office is involved in a partnership project under the United Nations Development Programme (UNDP) funding targeting upskilling of women in new ICT technologies.

There are other country or sector examples. In Greece, private education at tertiary level is not recognised by the state. Still, there are a number of institutions that operate successfully, for example the Alpine School in the tourism sector and the Athens Laboratory of Business Studies. In Cyprus, a changing competitive environment has led to an increase in training supply from various sectoral associations. The Pancyriot Farmers Association, for instance, has opened a training centre specialising in Common Market regulations and new technologies, and the Association of Cyprus Travel agents have implemented training programmes on e-commerce.

Globalisation of VET- the role of certifications

The use of both vendor-specific and vendor-neutral certification¹⁰⁷ within VET programmes can also be understood as a way to cope with rapid changes in demand relating to specific technical changes while at the same time preserving a broader curriculum foundation with

¹⁰⁶ The lifelong learning progress reports result from a questionnaire sent to EU member States, EFTA countries, and acceding and candidate (ACC) countries, on the follow up to the resolution on lifelong learning from 2001. The reports specifically emphasise that conclusions are tentative given that the level of detail in the country reports varies considerably. Furthermore, reports do not always make it clear to which extent replies refer to post-Council-resolution measures or if they describe previous efforts.

¹⁰⁷ Within the ICT industry, certifications are industry-accepted credentials (granted by professional associations, trade and/or industry associations, firms, or proprietary organizations) that result from a voluntary process whereby an individual's knowledge and/or skill in a particular subject area is verified against a set of predetermined standards by means of an assessment. Vendor-specific certifications are tied to a particular technology provider - for example Cisco, vendor-neutral specifications are not linked to a particular provider, but a technology area - such as security

focus on employability skills. The certifications are perceived as a global industry standard regardless of where a person is trained and certified. In the United States there are several examples of Community Colleges that adopt certifications as part of their ICT curricula to respond to demands from globalised ICT firms. Currently the Metal Union in Denmark is examining the role of vendor-neutral certifications in areas such as IT security and open source to induce more dynamism into the national ICT curriculum. The Union of Commerce and Trade is exploring certification possibilities for call-centre employees. The German KibNet initiative is also an example of using competence-based certifications to bridge vocational education and training with higher education.¹⁰⁸ Several countries - for example the UK, the Netherlands, Ireland, and Italy - have also taken initiatives through different partnership arrangements to create more efficient instruments to bridge supply and demand through vendor-neutral certifications.

However, few DGVTs tend to believe that multinationals and private actors will be the main agents of change in the VET sector. Germany, the UK, Greece and Hungary, tend to favour the private actor view, whereas Sweden is the only country that scores on the other extreme; most country respondents score in the middle or tend to lean towards public actors as the drivers of change.¹⁰⁹

Bridging employment policies and lifelong learning

Different approaches are taken to increase lifelong learning opportunities.

Ireland, for example, has since 1987 had a series of three-year 'national partnership agreements' covering a range of economic and social policy issues interfacing labour market policies and training policies. These agreements have been negotiated by government and the social partners. They do not have any legal standing but are nevertheless important in guiding policy development for training and learning. The last agreement (2000 – 2002) included a specific section on lifelong learning.

In Sweden, the government bill on Adult Learning and the Future Development of Adult Education (2000/2001:72) recommends that parliament adopt goals for adult learning and a strategy for formal adult learning - side-by-side with higher education - in a society characterised by lifelong learning.

In Italy, following an agreement with the Social Partners the Government launched the Joint Multi-Sectoral Funds for Continuing Training in 2002. The funds are financed by a percentage of total wages and are managed by joint bodies for the continuing training of workers. The joint bodies are composed of the Social Partners, and their task is to promote and finance actions and training plans at corporate, sectoral, and local level, based on agreements between the parties. To date, 10 Funds have been launched, 3 for managers and 7 for other workers. They embrace industry, the craft sector, trade, tourism, and the service sector. The largest funds are being distributed at the local level.

In the Czech Republic, stimuli for the development of CVT are set forth in the **Long-Term Plan for Education and the Development of the Education System in the CR**. This includes a clear definition of responsibilities for CVT by means of a law on the division of responsibilities and the development of a law on CVT. These priorities have also been projected to regional long-term plans for education and the development of the education system.

More employment and better employment

The Lisbon agenda is not just about increasing employment but also about better employment. In this context, Finland has taken an interesting initiative to bridge the notion of the high performance workplace with employment creation and employability.

In the Tykes Programme in Finland ('Workplace Development Programme for the Improvement of Productivity and the Quality of Working Life') running from 2004–2009, employment policies are embedded within a wider model of the high-performance company to improve employment and employability. The aim of the TYKES programme is to support employees' vocational development, work ability, and well being at work, in the framework of new work organisation practices. Ultimately, the aim is to improve the ability of employees to remain longer in employment (see Chapter 9 on ageing population). TYKES builds upon the experiences with the former Work Place Development Programme and the National Productivity Programme. The former focused on new work organisation practices, disseminating knowledge on workplace development and strengthening the workplace development structure. The latter aimed to speed-up productivity improvement and to promote Finland's competitive edge.

¹⁰⁸ <http://www.kib-net.de>, <http://www.kib-net.de/fix/profile/index.html>

¹⁰⁹ Question 8 paired statements

The Learndirect national learning advice line (UK) offers information and impartial advice on all learning and career opportunities, funding, and related issues such as childcare. It is available free to all adults across the UK and helps people decide what, where, and how they want to learn. Since February 1998, the helpline has successfully dealt with over 6 million calls. A recent survey of the Learndirect advice line indicated that:

- 93 % of callers agreed that the overall quality of the service was good
- 93 % of callers would recommend the service to a friend
- 79 % of callers to the Learndirect helpline have either already taken up training or learning or plan to do so as a result of the information they received from the helpline.

The challenges of the low-skilled

Many studies have shown a strong correlation between skills levels and motivation to and participation in lifelong learning. In this context an interesting initiative on basic skills has been taken in a joint partnership between the Trades Union Congress (TUC) and the Confederation of British Industry (CBI) in the UK.

Country examples

The TUC and CBI have published a series of case studies on the negative impact that low literacy and numeracy skills have on employment, with examples of how to tackle these challenges effectively. These case studies have been widely disseminated. Together with the government, the TUC and CBI are planning to launch a campaign on basic skills in partnership with high profile employers and union leaders¹¹⁰.

In the Czech Republic, financial incentives are used to get the low skilled to engage in retraining. Unemployed individuals are motivated by financial incentives to take part in retraining. If an individual undergoes retraining, their unemployment benefits are paid at a level of 60% of the previous income; if not, the level is 50% for the first three months and 40% for the following three months.

In France, regulations on unemployment benefits were tightened in 2003. At the same time, France has taken a comprehensive and individualised approach in its active labour market policies comprising both training and counselling. The National Association of Adult Learning (APFA) plays a central role under the initiative 'Personal Action Plan for a New Start'. One of the 2003 targets was that 2.6 million people would benefit from the services and that for example 230,000 people would get assistance in preparing a personal training plan as the basis for qualification.¹¹¹

As the country examples show and as is also confirmed by the OECD study (2003) on adult learning policies and practices, there are a number of features regarding initiatives for the low skilled that could inform policy development:

- Emphasis on core foundation skills such as literacy and numeracy and not just work-specific skills;
- Partnership models and a strong focus on dissemination to signal that it is a problem for many and a joint responsibility to tackle, and to establish a climate of trust;
- Use of different forms of incentives;
- Strong guidance component.

School to work transition and the challenges of youth unemployment

The EU25 are faced with the challenges of youth unemployment. If not dealt with now, the medium-term effect may be an insufficient supply of qualified workers with labour market experience.

¹¹⁰ Source NAP 2003, UK

¹¹¹ Source NAP 2003, France.

Country examples

The national background reports to this analysis from Germany, the Netherlands and Latvia provide exemplary approaches to dealing with youth unemployment.

The future supply of skilled labour is the overall rationale behind recent attempts by the Dutch Federation of Trade Union Movement (FNV). The FNV has recently developed a plan that implies a supply chain approach between sectors, communities, national government, and Europe (European Social Fund). In this way they can offer a subsidy of 17.000 € for each youngster involved in the scheme. For this subsidy an employer can offer three months apprenticeship followed by two years of work-related training. An important success factor in this plan is the fact that the young trainees are paid wages that conform to collective bargaining agreements. Thus they are paid reasonably well while they receive training and practise their craftsmanship. The assumption is that in a few years time, when the older employees are retiring, these youngsters will be ready to enter the labour market full-time.¹¹²

Latvia has also been successful in creating a subsidised work practice scheme for unemployed youth with insufficient work experience. The programme involves some compensation to both the unemployed and their mentors. In 2002, 75% of the participants found a job upon completion.¹¹³

In Germany, since 1999 substantive policy efforts have been put into combating youth unemployment. Within a four-year period the JUMP programme, co-funded by the European Social Fund (ESF), has provided some 600,000 young people with new opportunities. The JUMP programme makes financial means available so that young people can at least finish their school certificate or train with a specific goal in mind. Finding a job is often easier because the JUMP programme can offer employers a wage subsidy of 40 to 60% for up to two years. The programme offers support for promotion of training places, training programmes for job seekers, full dual training programmes outside companies, school leaving certificate courses, work and training preparation, and additional qualifications. In 2003, the programme was extended for another year (JUMP+) to assist another 100,000 young people to acquire a qualification and a job. 30% of active labour market promotion was spent on the under-25-year-olds, in 2002 amounting to 4,4 billion €, 1 billion of which were provided through JUMP. The programme directs a major part of the funds to the municipalities for local activities carried out by 'case managers' who aim at individual solutions for individual problems

In Portugal, several measures have been taken in recent years to fight dropouts generally associated with the integration into the labour market of youth who have not concluded the compulsory education and have no occupational qualifications. However, at this stage these measures have not yet obtained the desired effects, according to the Portuguese DGVT responses. Reasons mentioned are connected to wider labour market factors and social issues including the fact that the Portuguese labour market still employs a low-skills, low-wage strategy in many areas, thus providing an early integration of low-qualified and low-educated young people, penalizing the most qualified youth, according to the DGVT response. Parallel to this, many households have low educational levels and suffer from economic disadvantage, which is a factor in school failure and the early entry of their children into the labour market. The Portuguese government plans to implement a comprehensive set of policy measures to improve the situation.

The Portuguese experiences show how wider social factors may work against intended policy aims and illustrate the necessity of taking a comprehensive approach to VET policies.

¹¹² Bondgenoten Magazine July 2004, p. 28-30

¹¹³ LLL Report 2003

18.6 Summary of the situation in the EU10 and candidate countries

18.6.1 Lifelong learning in the EU10 and candidate countries

A review of the transition processes in the acceding and candidate countries suggests that their efforts to cope with accessions criteria have focused on economic and political dimensions at the expense of comprehensive reforms in the education and training sector in the context of lifelong learning (Fragoulis et al 2004).¹¹⁴ Reforms have mainly been in the initial formal education system, whereas the adaptation of adult skills, not least in the context of industrial restructuring, has received less policy attention, although countries such as the Czech Republic, Estonia, and Slovenia have made more investments as part of their labour market policies, and Malta as part of wider economic policies. Nevertheless, a systematic development of institutionalised and non-institutionalised lifelong learning as a joint effort between enterprises and public policies is lagging behind. Like the rest of Europe, few of the EU10 or EU candidate countries have set targets for investment in lifelong learning. The Czech Republic is an exception, having set the goal that public investments should increase to 6% of the GDP by 2006. Slovenia also aims to increase public investments by a minimum of 6% over the next 16-20 years. However, the report mentions that the new integrated lifelong learning strategies underway are expected in many instances to include financial targets. Other types of indicators mentioned relate to outputs in different ways such as level of educational attainment and/or participation in lifelong learning.

Several countries were preparing or were planning to prepare integrated lifelong learning strategies when the progress report on lifelong learning in the acceding and candidate countries was prepared. At present it is therefore too early to assess the outcomes of these efforts.

18.6.2 Formal versus informal components: lack of balance

One of the central issues according to the progress report is the lack of balance between formal and informal components in the lifelong learning systems. The formal education system continues to receive priority, with adult education as an important component, while there are few examples of efforts to increase non-formal and informal learning, as the national reports for this study illustrate. For developments of informal learning it is, however, promising that most new member state countries are in the process of implementing or have implemented ALP instruments, which could provide the ladder between formal and informal learning. The most significant initiatives have typically taken place in countries that were already the most advanced in VET reforms such as Hungary and Slovenia, as well as in those countries with higher investment levels in education such as Estonia, Lithuania, Cyprus, and Poland, though a regionalisation process in Poland has made an assessment difficult.

Programme and project funding is seen as a central instrument in the strategic change of the systems. EU programmes and project funding play a strategic role in system change, as does the UNDP. The lack of co-ordination between ministries is reported to be a matter that deserves special attention in the EU10 and candidate countries (as in the other EU countries). Many countries are striving to achieve better coordination through different means. The progress report also concludes that references to benchmarks in education and training are absent in all country reports. Few of the country background reports to the Progress Report on Lifelong Learning 2003 mention activities linked explicitly to the Copenhagen process. This finding is, however, not confirmed by the DGTC responses. In particular, the involvement of sectors is reported as implemented, whereas other measures are in the planning phase or in

¹¹⁴ Improving opportunities for Adult Learning in the Acceding and candidate Countries of Central and Eastern Europe. European Journal of Education Vol 39, No. 1 2004. Fragoulis et al.

certain cases implemented. This suggests that progress indeed has occurred since the 2003 reporting on lifelong learning, and that the Copenhagen Declaration and measures within it are also taken on board by the new member states.

18.6.3 Towards regionalisation

Since the Memorandum of 30 October 2000 on lifelong learning, a process of regionalisation has occurred in many countries such as Lithuania, Slovenia, and the Czech Republic, whereas other countries such as Malta and Cyprus have made use of existing regional structures. At a formal level, tripartite committees were set up in all countries as consultative bodies aimed at giving advice to governments and/or ministries on developments in education and training. The follow-up report on Lifelong Learning from ETF concludes that in most cases governments have maintained the leading role in setting the agendas in the governance model; thus the social partners' influence on the policy-making process was reported to be limited, and this is to a large extent confirmed by the national reports. However, some good examples are reported from Estonia and at a local level regarding concrete implementation in the Czech Republic.

18.6.4 Reform of policy design based on systematic assessments

Fragoulis et al (2004) conclude that the below average performance of the EU10 in providing learning opportunities to the adult population seems to be conditioned by three main factors: first, market failures in the area of adult learning seem to be more exacerbated than in the EU15; second, policy design and evaluation capacities are not sufficiently developed at present; third, the social dialogue and partnership practices in particular at sectoral and company levels need to be developed. Against this background it is proposed that future policy making should prioritise the following elements in the EU10 and in the candidate countries:

- Devise more blended policy approaches to address both economic and non-economic barriers to learning. These should be targeted to cope with a heterogeneous population at individual and enterprise level;
- New initiatives should be more integrated and synchronised, with a simultaneous reform of fiscal, social protection, and labour market policies;
- Policy development would need to be based on systematic assessments (ex ante and ex post) of all available options, drawing on international experience and considering in particular the risks of policy failure. Attention should in particular be given to ensuring that measures that aim to foster formal training opportunities do not have a negative effect on informal workplace learning.

The findings of Fragoulis are confirmed by the national reports as well as by DGTV responses. For several of the EU10 there is a particular challenge given the effects of industrial restructuring on the elderly workforce as well as on new labour market entrants. In addition there is the challenge of balancing at times conflicting priorities within the Lisbon strategy given their limited financial resources. Lessons learned on proactive use of the ESF within an integrated lifelong learning/active employment policy agenda might be of particular value for the next phases of development in the EU10. Experiences with the use of the ESF in the EU15 also point to the necessity of developing a genuine learning evaluation culture concerning the use of ESF, so as to strategically prioritise the next stages in the integration process. For countries where policy priorities are defined at a regional level, there are particular challenges in building the capacity to assess and prioritise long-term developments for economic change and in how to balance regional priorities with long-term and possibly broader country concerns, particularly in countries without well-developed strategies for

economic reform. This is a particular lesson drawn from the recent European evaluation of the Structural Funds (Haahr et al 2004)¹¹⁵

18.7 Conclusion

The analysis in this chapter points to several issues and observations:

- There is much evidence that there are new external requirements to VET. Rapid changes in a number of sectors indicate a need for new forms of learning and a growing need for new types of general and personal competencies and abilities - context specific and embedded in new work organisation practices in firms and sectors competing on innovation. There are a number of country or sector examples of new types of approaches to assessing emerging skills needs, particularly building on futures methodologies. At this stage, there is little evidence-based analysis available on what are the systemic effects of futures-oriented approaches to skills identification compared to traditional forecasting methods, and what types of competences are needed for the different actors involved to apply futures thinking in VET.
- For countries, sectors, or social partners that are engaged in new methods for innovations regarding skills demands, Leonardo could provide a platform for further exploiting, analysing, and learning from good practices with particular focus on systemic uptake and effects. The European social dialogue on lifelong learning could also be a framework for addressing more systemic issues relating to the early definition of skills demands and the uptake in national systems supply and delivery methods.
- Most VET systems are currently faced with the dilemma of becoming more efficient and market-led. The European social partner agreement on lifelong learning seems to be a viable framework for addressing the possible negative effects of unintended interconnections of labour market flexibilisation and individuals' lack of possibilities to engage in lifelong learning measures.
- A particular issue of relevance to ALMPs in the context of lifelong learning is how to balance shorter-term concerns of getting individuals back into employment with providing individuals with skills for the long run. Analysis of available data suggests that this is still an area for further comparative research, particularly focusing on the mix of instruments for different target groups in the labour markets. One possible model is a set of mechanisms that can link labour market programmes to later educational opportunities, also through extensive use of APL. This could take the form of a sequence of skills-training that starts in a short-term labour market programme and can then be further developed into an upgrade education programme leading to a qualification at upper secondary level and possibly later continuing with part-time programmes at a tertiary level. Such a programme could enable the unemployed to move not just into relatively unskilled employment - which would make them vulnerable to cyclical changes - but into a vocation with greater stability of employment combined with labour market mobility. Implementation and active use of instruments for assessment of prior learning both in working and educational contexts are central to bridging employment and educational policies. Member States should therefore closely monitor, support, and disseminate good practice concerning the use of APL instruments as part of active labour market and lifelong learning policies.

¹¹⁵ Evaluation of Structural Funds Contribution to the Lisbon Objectives- in final draft. Haahr et al 2004, Technological Institute)

- Implementation of comprehensive qualification frameworks and common reference frameworks across labour market training and vocational education developed within the Copenhagen process can facilitate more integrated approaches to employment within a lifelong learning context. This will require a closer and more effective connection between career-related information, guidance and counselling services shared by both labour market and education programmes.
- Findings from the national evaluations of the Structural Funds seem to suggest that the bulk of evaluation studies measure the proportion of participants found in employment or having left unemployment a certain time after the end of the programme - typically six months. However, this approach to evaluation does not necessarily show 'what works' and whether measures have indeed been cost-effective in the medium term. It is also important to include in the analysis a measure of the net effects on employment and unemployment by estimating substitution and displacement effects – that is, the extent to which individuals trained in labour market programmes are hired in place of workers who then become unemployed. Finally, it is important to measure effects over a long period of time. Evidence shows that short-term benefits of labour market programmes in getting individuals back to work tend to decline over time. A coherent assessment of labour market interventions can guide and strengthen the effects of lifelong learning policies in the member states.
- It could be argued that a knowledge-intensive economy will always be characterised by skills mismatches. Given the time lag between the emergence of substantially different skills requirements and the graduation of a new cohort with the appropriate skills profiles, VET systems are pressured to be able to cope with continuous adaptation and change to meet short-term employment requirements as well as longer-term employability and broader civic requirements. In this changing landscape, certifications included in the VET supply - notably for ICT qualifications - is one type of response; broader competence-based qualification systems and legislative frameworks is another type of response. Given the growing role of private players in vocational education and training, there is a need for a common set of principles and good practice concerning the role and possible use of certifications in VET rather than letting this be played out through market mechanisms, particularly because vendor interests play such a strong role in the overall picture.

Chapter 19

Social partnership and sectoral dialogue: matching qualifications to needs?

19.1 The social partners and the lifelong learning agenda

'Learning for Employment' (Bainbridge et al, 2003) describes how the European social dialogue has evolved over the past decades, how the social dialogue is organised and who the main actors are. In the context of the Lisbon strategy, the Bruges process initiated in 2001 to increase cooperation in VET, defined priorities that were given further impetus by the Copenhagen Declaration (November 2002), involving member states, EEA countries, candidate countries, and the social partners. The social partners were urged to give a high priority to lifelong learning as a core element in the European social model, and to come to agreements on key priorities.

In response, the social partners formed a working group at European level in order to identify actions to promote lifelong learning and skills development. In 2002 they agreed on a Framework of Actions on the lifelong development of competences and qualifications, which lists four priorities:

- Identification and anticipation of competences and qualification needs;
- Recognition and validation of competences and qualifications;
- Information, support, and guidance;
- Resources.

The member organisations of UNICE/UEAPME, CEEP, and ETUC, agreed to promote the framework of actions in member states at all appropriate levels, taking into account the diversity in national practices.

The European Social Partners Framework of Actions is an example of a complementary measure to the European policy framework agreed between the member states and the European Commission and taking into account the different agendas and developments in the social and sectoral dialogue at member state level.

The Framework can be seen as a step towards a more autonomous European social dialogue and as an essential instrument in the development of governance models concerning VET

and employment policies in an enlarged Europe. The fact that the model is based on principles of voluntary dialogue could however mean that the European social dialogue may have little or moderate impact on innovations of national systems (Hofmann et al, 2002). It remains to be seen if the framework agreement on lifelong learning will lead to a more ambitious role for the European social dialogue in developing a European lifelong learning agenda. At this stage there is evidence from some of the national systems that there is not sufficient interaction between efforts at European social partner level and activities at national/regional levels. This is possibly a question of resources and capacity, particularly for smaller countries.

Since the Framework of Actions for the lifelong development of competences and qualifications was presented and agreed by the partners in 2002, the European social partners have published two follow-up reports (Framework of actions for the lifelong development of competences and qualifications, 2003 & 2004). After three annual reports, the social partners plan to evaluate the impact on companies and on employees. This could lead to an update of priorities established in the Framework Agreement. It is also envisaged that the EU10 will be included in the reporting activities from 2005 onwards.

19.1.1 Pilot projects into policies?

An analysis of the second report shows that a number of pilots have been initiated with the involvement of social partners through national funding or through the Structural Funds or the Leonardo programme. The second report demonstrates that a number of initiatives within mainstream policies have been implemented, as well as projects with more of a demonstration and piloting character. The second report, however, provides little evidence of how and to what degree these initiatives impact and interact with national systems and/or sectors in a more systemic way to further innovation.

Very little is said in the national briefs about how these initiatives will be evaluated in order to contribute to the planned evaluation at EU level in 2006. More generally, little is said about what evaluation criteria will be used to assess the successes and possibly changing priorities relating to the framework of actions.

One of the main reasons could be that the social dialogue framework agreement at a European level runs parallel to but is not interacting with national level dialogues, and that feedback mechanisms to generate concurrent policy learning are not sufficiently developed between national, sectoral, and EU levels. Therefore, the level of knowledge about processes being implemented and their effects remains limited. As an example, it is not clear from the reports to what degree sectoral initiatives at EU level interact with national and European initiatives and systems on issues such as certification and qualification frameworks, or if the sectoral initiatives primarily remain as demonstration projects.

The European sector initiatives are in many ways an important contribution the Lisbon objectives in terms of creating better jobs through qualifications in sectors with traditionally little education and training, and in terms of creating qualifications that are oriented towards internationalising labour markets. However, for these initiatives to contribute effectively to a "Europeanisation process" based on inter-sector and cross-national mobility, it is essential that a European joint qualification reference framework be adopted and implemented at national levels.

19.1.2 Differences in models of participation

In the DGVT questionnaires, countries have been asked which model is likely to govern VET policies and decision making in the future. Most countries tend to lean heavily towards social partnership as the model for VET policies and decisions. Only Austria, the UK, Liechtenstein, and Portugal, have taken a middle position. Since very few DGVTs have commented on the scoring of the tables, it is not possible to assess to which degree the strategic orientation towards a social partnership model comprises different levels of centralisation/decentralisation and if the model would primarily built on an advisory function or

would be a genuine tri-partite model. This could impact how VET and lifelong learning policies are reformed and governed, and the broader Europeanisation of lifelong learning.

OECD Employment Outlook from 2003 provides evidence of increased social dialogue in many countries. The study points out that social bargaining in CVT seems most intensive in countries characterised by joint governance of continuing training funds, as these are usually given a framework through bipartite agreements with operational targets often (re)negotiated at sectoral or inter-professional level.

Social partners and lifelong learning - country examples

Continuous training - ways and means to improve it and expand it - plays a role in the 'social pacts' concluded in countries such as Ireland, Portugal, and Italy. In Belgium there is interplay between collective agreements at national and sectoral levels concerning the use of training funds, which targets their use towards disadvantaged groupings. Similar agreements have been concluded in France and Spain at these two levels. In Slovenia it is expected that a growing social dialogue will contribute to a more demand-driven VET system. Likewise, it is expected in the Czech Republic that a stronger involvement of firms and branches during VET school periods will lead to a more integrated VET system.

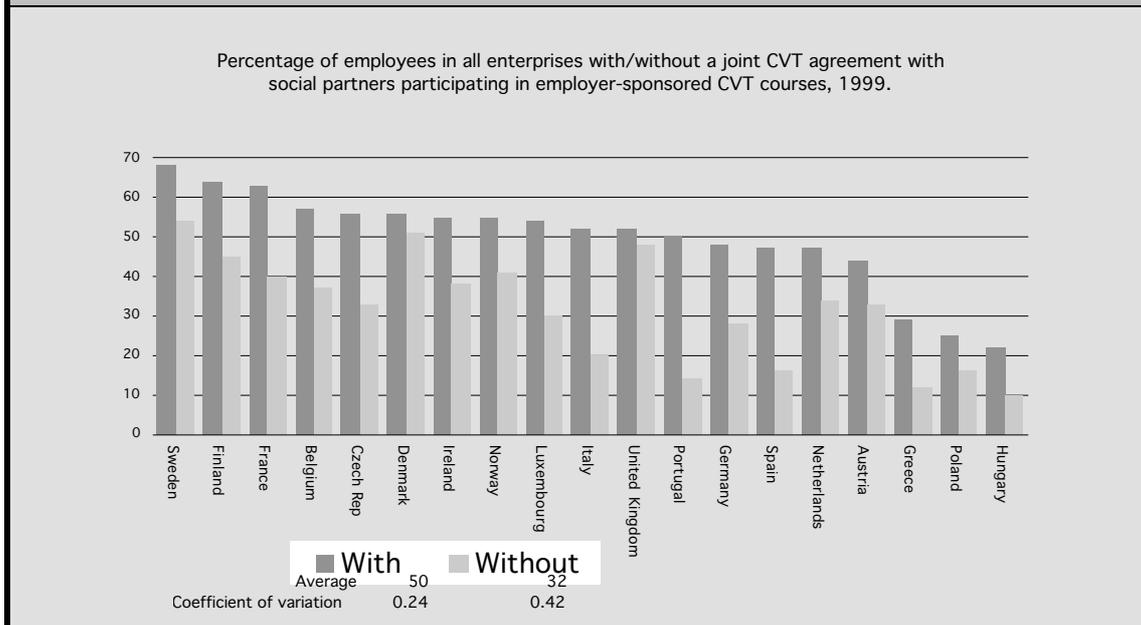
Collective bargaining also plays a role in countries with little steering of continuing training matters. This is particularly true where trade unions pursue "qualitative bargaining strategies" not exclusively centred on wages and working conditions, such as for example in the UK.

19.1.3 Work councils' role in continuing training

A key feature of labour relations in many OECD countries is the existence of indirect or representational participation at a company or workplace level through elected works councils, works committees, or similar bodies. Employment Outlook 2003 seems to suggest that the provision of timely and reliable employee information to employee representative bodies increases efficiency by building trust and facilitating worker co-operation, for example during times of crisis. This is confirmed by more recent studies conducted for the European Monitoring Centre on Change in Dublin as well as by a major cross-country study on the financial and retail sector in Europe (Webster et al., 2001).

According to the OECD study, many of the countries with statutory work councils have followed the same line of argument and defined the introduction of new technologies and provision of continuing training as areas where work councils have participation rights. According to the OECD analysis, this tendency seems particularly strong in Austria, Denmark (where these rights are based on sectoral agreements), Finland, France, Germany, and the Netherlands. The CVTS2 survey strongly demonstrates the relevance of joint agreements to lifelong learning. Though in many countries still low, the level of sponsored training was significantly higher in firms with joint training agreements than in firms without them according to the OECD Employment Outlook 2003. This is illustrated in the following table:

Figure 19.1: Training participation is greater in firms with a joint CVT agreement



Austria, Belgium: estimations include a very small number of non-training enterprises due to missing values.
 Source: OECD Employment Outlook 2003 based on data from CVTSs: Eurostat (New Chronos).

19.1.5 Increase in the number of European Works Councils

At a European level, 36% of the multinational companies covered by the directive of European works councils had (in 2001) established a European work council or equivalent for European level information and consultation (Bainbridge et al, 2004). In implementing the directive, social partners have voluntarily extended the information and consultation rights of many European works councils to include vocational education and training and lifelong learning. According to the Cedefop analysis there is a steady increase in the number of European works councils that include vocational education and training in their remit. A likely reason is that issues of industrial change and introduction of new work practices are issues where the European Works Councils (EWC) have the right to be informed or consulted on, and often these processes will include an aspect of training and competence development. A study on EWC (Hofmann, 2002) based on an extensive literature review concludes that the EWC directive also seems to help establish work councils in countries where there is no legal national basis for such institutions.

As a European institution of industrial relations, EWC may be a catalyst in the Europeanisation/globalisation of collective bargaining. It therefore seems important to establish a closer monitoring system both at national levels and at an EU level to follow concrete impacts of the establishment of EWC, how these conform to the Lisbon agenda and to what extent they forward a European model for competitiveness based on a high skills levels strategy and lifelong learning.

19.1.6 OECD: Considerable potentials in employee involvement on training and skills

The study from 2003 (OECD, 2003, Beyond Rhetoric: Adult Learning Policies and Practices) and OECD Employment Outlook 2003 (OECD, 2003) highlight a number of reasons for considering a more structured involvement of employee representatives and the social partners at various levels of negotiation and dialogue on training and skills as a way forward. Instruments to increase the involvement of social partners and raise levels of training are:

- Since public resources have to be funded mainly through taxes on profits or wages, both employers and employees may resist such policies. The social partners' participation in public policy may help alleviate such resistance;
- Employers and employees are more likely than governments to have in-depth information on current skill needs and thus provide a more flexible management of training systems, particularly with regard to curriculum development and certifications;
- At company level, employee involvement and works-council-type bodies may help increase the efficiency of further training by reducing asymmetric information on costs and benefits and by providing an additional 'early warning system' through joint discussions on further training requirements and training plans from the perspectives of both management and employees;
- The use of payback clauses in collective agreements and individual contracts - whereby a worker leaving the firm within a specified period after the training has to agree to (partially) reimburse the training costs - could help alleviate credit constraints faced by employees as well as possible negative impacts from 'poaching externalities';
- In several OECD countries, social partners run national or sectoral training funds into which firms pay a certain percentage of their payroll and from which they have their own training efforts reimbursed. Collective funds for employee training can be one of the instruments that can further education and training, also in firms that are less likely to invest in their human resources.

19.2 Evolution of the sectoral social dialogue

'Learning for Employment' (2004) provides a detailed account of how the sectoral dialogue has evolved during the past years. In response to needs expressed both by employers and employee organisations at national and European levels, the European Commission modernised the European level sectoral dialogue system in 1998. Following this, 27 sectoral social dialogue committees have been set up at the joint request of the partners and with secretarial support from the Commission. The sectoral social dialogue committees represent comprehensive coverage both in terms of partnership and sectors covered.

An analysis of 213 of the joint sectoral texts shows that the European sectoral dialogue has been an effective instrument in furthering a European dimension to the provision of skills and qualifications.

102 of the joint sectoral texts (48%) include provisions on education and training. Some 23 texts deal solely with vocational education and training matters.

Sectoral dialogue at the European level - some examples:

- The Electricity Sector: Joint statement on lifelong learning
- Metal, Engineering and Technology-based sectors: Joint conference on skills shortages and achieving the Lisbon Goals
- Postal sector: new launch of good practices on training and skills development.

19.2.1 ICT penetration and sectoral convergence

ICT penetration and sectoral convergence is an important driver for a European sectoral approach to skills and qualifications. In a sector like manufacturing which is highly regulated with clear occupational profiles, technological change and especially ICT as a driver of change is eroding existing qualification profiles. In services, developments such as e-commerce also impact on jobs at all levels. In sectors such as ICT a perceived slow response level in public education and training systems has spurred sectoral initiatives.

The European Monitoring Centre on Change has recently commissioned a number of studies in fields such as finance, fishing, media and graphics, textile, and the automobile industry, all of which show the same tendencies. Similarly, Cedefop commissioned in 2002/2003 a series of studies on innovation of qualification profiles and curricula in Europe in ICT user-industries, and the Leonardo da Vinci programme has initiated a number of sectoral projects to develop sectoral training modules, assessment standards, and certificates and diplomas.

Globalisation and bargaining

In countries with a strong tradition of social partnership there is evidence that globalisation combined with growing opportunities to relocate work to countries with lower labour costs and traditions for longer working hours, pose particular challenges to the social partner model in globalised companies. This is particularly the case within the auto and the services industries, and in ICT and electronics. There are several recent examples from Germany, the Netherlands, and France. In Germany, for example, a number of individual plant deals have been agreed, most recently between DaimlerChrysler AG and workers' representatives, to cut 500 million euros in costs through longer working hours and reduced pay level rises.

DaimlerChrysler is joining companies including Siemens AG, Germany's largest engineering company, Robert Bosch in France, SMEAD in the Netherlands, and other major employers, in pushing for pay cuts and longer working hours to improve competitiveness.

The trade-off between employment protection through longer working hours and the risk of relocation of work has recently fuelled debate among social partners and labour market economists. The current debate raises the question whether this trade-off could lead to an erosion of the traditional collective bargaining model.¹¹⁶

Growing levels of off-shoring may not only be driven by access to low-wage qualified labour, but may also be pushed by inflexible labour markets that are not sufficiently geared to a new competitive situation.

In Denmark, as an example, off-shoring is not only seen as a threat, but also as an opportunity and necessity in a high wage economy like the Danish. In general, union representatives and employer organisations do not regard protection as the way forward. Previous experiences with successful outsourcing of textile production, where new employment was created for the former textile workers, has contributed to an initiative, at present in the early stages of preparation, to come to further grasps with how and why certain sectors and companies successfully exploit off-shoring leading to new forms of job creation and innovation.

Although off-shoring can have enormous impact on the types of skills that will be in demand in the future, VET systems and social partners have access to little reliable data about the scope of off-shoring and its implications for employment and new forms of skills demand, which could govern future policy priorities both at national and sectoral levels.

19.2.2 Efforts to intensify cooperation at sectoral level

Part of the Copenhagen process has been a proposal to enhance collaboration and coordination at a European sectoral level. This recognises the accumulated effect of the large number of projects that have been supported under the Leonardo da Vinci programme, where valuable experiences have not been fully exploited and promoted systematically.

Whereas the projects may have had a positive effect on institutional collaboration and internationalisation, their policy influence remains low in many instances. The proposed strategy to intensify cooperation and coordination at sectoral levels consists of measures aimed at analysing the nature of sector initiatives as well as increased monitoring and coordination at a strategic level. However, for these measures to have any impact at national

¹¹⁶ Sources: International Herald Tribune 2004, July 24-25 *Momentum shifts to longer weeks* p. 1+ p. 5: TIME Europe, 02-08-2004 *"Not working"* p. 30-32

levels, investments should be made so that the results of these efforts are readily available at national levels. The national Leonardo committees and the national Leonardo programme administrations may have a role to play in these efforts, in collaboration with the European Commission and Cedefop.

A second, more comprehensive measure will be to intensify efforts to establish a common European qualification reference framework within which sectoral efforts can be situated to ensure transparency and inter-sector mobility. With such a framework in place, sector initiatives could contribute in an important manner to the Europeanisation of VET.

At this stage it is too early to assess to what extent the strategy will be an efficient measure to ensure a stronger dialogue and coordination between sectoral initiatives and national systems.

19.3 Conclusions

- There is plenty of evidence that the European social partner framework agreement on lifelong learning has put lifelong learning on the agenda at a European sector level and resulted in a number of new initiatives. In many of the EU10 it is also evident that a closer collaboration with the social partners and with sector bodies is important in changing the VET systems in a more fundamental way to being more demand-driven. However, many of the initiatives have a project character and inherently risk not sufficiently informing and connecting to innovations and actors within national VET systems. Within the national systems, it is important that the system actors at a strategic level participate actively in programme initiatives as part of their internationalisation efforts. This can ensure that projects indeed mirror policy priorities and concerns and that the results of a European dialogue and collaboration are discussed and disseminated, thereby contributing to system innovation. At present, many EU projects seem to run parallel to system innovation efforts with little direct interaction.
- The sectoral initiatives provide an important contribution to the Lisbon objectives, for example with regard to developing qualifications in sectors where there is little tradition for education and training. Thus, both more and better jobs may be created. However, there is evidence that the many sectoral initiatives may develop with insufficient inter-connection. This could result in frameworks, standards, and certifications that do not allow for cross-sectoral integration and mobility as sectors converge and new occupational profiles develop. It is therefore urgent that a common European qualification reference framework be implemented. With that in place there will be a common instrument that connects to national systems and that allows for horizontal and vertical cross-sectoral mobility.
- The mapping initiative led by Cedefop on sectoral initiatives may be a first important stepping stone, but requires an in-depth analysis if it is to be a tool for understanding the drivers of sectoral developments and how these initiatives can best interconnect with innovation efforts in national systems.
- There is clear evidence that the establishment of work-council type bodies may increase efficiency of further training and a joint focus on the benefits of further training and lifelong learning through joint discussions and collaboration mechanisms; It is important to establish closer monitoring systems to follow concrete impacts of the establishment of EWC; how these conform to the Lisbon agenda, and to what extent they forward a European labour market model for competitiveness based on dialogue, decentralisation and “innovation also from the floor” made possible by a well qualified labour force with transferable skills and work organisation practices that allow for lifelong learning.

Chapter 20: 'Europeanisation' of VET: progress on the Copenhagen Declaration?

The following chapter begins with a discussion of progress made within the context of the Copenhagen Declaration regarding the process itself, transparency, and the recognition of competences and qualifications. Other measures related to the Copenhagen Declaration are covered in sections two and three. The second part of this chapter analyses questions pertaining to mobility in a labour market and educational context.

20.1 The Copenhagen Declaration

As we have emphasized throughout this report, the development of high quality education and training is a central component in the implementation of the Lisbon strategy.

The Copenhagen Declaration authorised increased cooperation in VET, building on the objectives for 2010 set by the Council of Ministers and in line with the action programme on future aims for educational systems in Europe. Furthermore, cooperation was to be based on voluntary and bottom-up principles, acknowledging the differences in organisation and structures in the VET systems and using OMC¹¹⁷ as a means of pursuing the overall objectives in the Lisbon strategy.

The key aims that underpin the Copenhagen Declaration are to establish a basis for increasing mobility and to facilitate access to lifelong learning through mutual trust, transparency, quality measures, increased sectoral cooperation, recognition of competences and qualifications, and improved counselling and guidance.

20.2 The implementation of the Copenhagen Declaration

The responses from DGVTs give an indication as to how the implementation of the Copenhagen Declaration is viewed by national policy actors.

¹¹⁷ OMC = open method of coordination.

20.2.1 Governance models and policy aims of the Copenhagen process - DGVT responses

Not all DGVTs have responded to the question on consultation and collaborative mechanisms. Many countries (Austria, Belgium (Wallonia), Bulgaria, the Czech Republic, Estonia, Spain, France, the UK, Ireland, Italy, Liechtenstein, the Netherlands, Norway, Portugal and Slovenia) emphasise that the driver of the Copenhagen process is a matter of increased co-ordination, dialogue, trust, and developing the proper methodologies to do so (Portugal). This may result in 'bench-learning' at all levels and between all levels - regional, national, and European sectoral - as a precondition to realising the overall policy aims. On the other hand, the Swedish DGVT raises an interesting policy challenge between current tendencies towards deregulation from national to regional levels and the fact that the role and the options for national policy to drive change become more limited. Devolution of governance in VET is also seen as a factor that can slow down decision-making, which the DGVT from Belgium (Flanders) sees as an issue, and which is also confirmed in the recent not yet published evaluation of the structural funds contribution to the Lisbon Objectives (Haahr et al, 2004).

The above countries also mention various forms of the disconnectedness of systems, actors, and policies, as the main factor that could work against the objectives of the Copenhagen process as discussed in Chapter 19.1. The Norwegian DGVT states:

'Divided responsibilities for social security, labour market schemes, and education and training, might impede the need to focus on individual needs'.

The lack of inter-sectoral collaboration on training frameworks is also brought up.

The DGVT from Liechtenstein reflects on the disconnectedness in a similar manner:

'The close collaboration is certainly the aim, but at the moment everybody is eager to develop one part of the puzzle. This bears the risk that the different parts do not fit the complete puzzle'.

The DGVTs from Ireland and the UK mention the problem of duplication and lack of coordination between Directorates and EU agencies. This again influences ongoing work in the different working groups at EU level, which at times lacks clarity in purpose and objectives, according to the two DGVTs. Greece reports a lack of a common strategy on education and training within the country.

The French DGVT (education) sees a problem at an EU level in that far too many overlapping working groups are established with insufficient coherence, and at a national level where disconnectedness exists between IVET and CVT. The French DGVT (labour) reflects on the need to continuously improve information sharing and collaboration between actors at all levels of the system.

The Slovakian DGVT sees a discrepancy between lifelong learning rhetoric and conflicting priorities and thus with financing schemes and priorities within the Lisbon agenda.

The need to create institutional capacity and competences, awareness, and interest, is also an issue for many countries, not least in countries that have recently undergone major reforms in their governance framework (Spain, Romania, Italy, Liechtenstein, Latvia, Hungary, Slovenia and Denmark). Here the Italian notion of bench learning could be appropriate. A common reference framework is also seen as an enabling mechanism (Malta, Bulgaria), as well as participation in European programmes (the Czech Republic). The Greek DGVT specifically mentions *the establishment of a mutual zone of trust* as the way forward.

Summary reflections - governance and the Copenhagen process

The responses from the DGVTs seem to underline that the OMC, which frames the Copenhagen declaration, is not just a formal matter of coordination, but must evolve around a social process of trust and capacity-building among all actors in the system if the strategic objectives of the Copenhagen declaration are to be met.

In a paper on new governance in the EU, Porte et al (2001) remind us that the OMC originally is derived as an instrument for hard coordination relating to fiscal issues, and therefore poses a question about OMC which also seems to be reflected in the responses from several of the DGVTs:

'What is the relationship between policy learning and policy coordination: and how far does the former depend upon agreed objectives for the latter?'

Secondly the paper asks what the implications are for governance. The paper goes on to argue that for cross-national policy learning to be effective it needs to be driven to a substantial degree by the political actors in the individual countries.

- The current tendency towards devolution/regionalisation of VET policies in many of the EU countries, which both Sweden and Belgium (Flanders) raise as an issue, and the disconnectedness of policy realms that several of the DGVTs point to, pose particular challenges to the Copenhagen process;
- If regionalisation of VET policies means that national governments have fewer options to influence and drive the Copenhagen process of Europeanisation, there is a risk that the process may be seen as a push process driven by the European Commission. This is firstly because the Copenhagen process may not involve the multiplicity of actors that are intended to be involved, and secondly because of a possible lack of resource and competence capacity in systems and sub-systems, as some of the EU10 particularly comment.
- For the current Copenhagen process to be successful and be viewed as 'legitimate' by all the different actors involved, it is necessary to balance top-down policy coordination with bottom-up policy learning in the OMC. In addition, as systems gradually reform, the process must reflect relationship building and the subsequent involvement of a broader set of actors both at national and regional levels. Porte et al. (2001) conclude that *'unless such engagement addresses the unequal capacity of such diverse actors to engage with EU policy making, the process will be empty'* - an issue that may be of particular relevance not least in the EU10 and in the candidate countries, given the responses from the DGVTs.
- More interconnected reporting procedures can be a way to ensure closer dialogue and coordination between different policy domains. The policy makers in the member states have a particular responsibility in collaboration with the European Commission to ensure that the objectives behind the Copenhagen Declaration and the steps taken and the results obtained in that direction are disseminated in a way so that it is meaningful and useful, also at an operational level, for the different actors in the national vet systems as part of their internationalisation efforts.

20.2.2 Particular measures relating to the Copenhagen process

Country status - firm and sector involvement

All DGVT responses, except for Cyprus from where no information is provided, report that involvement of firms, industry sectors, and industry branches, to improve the balance between supply and demand is implemented or is in an early stage of implementation.

This could form the basis for a stronger interaction between European social partner and sector initiatives

Summary conclusions - DGVT responses

The responses show that in countries where there is a strong tradition for a multi-actor/social partner collaboration, the initiatives are in most cases multi-actor driven, and the focus is in many cases on revitalising the governance model in order to ensure a better match and dynamism in supply and demand and a more competence-based curriculum.

In many of the EU10 as well as in the candidate countries, the main driver is government. The primary aim is to develop or to strengthen the development of a multi-actor/social partner governance model, also at regional levels.

Valorisation and dissemination

As stated earlier, a number of initiatives have been taken at a European sectoral level concerning developments of qualification frameworks, and as such many of the sector initiatives have been a dynamic aspect of the Copenhagen process. As discussed earlier, a European qualification reference framework could be a bridging instrument to national labour markets and qualification systems, as several DGVT responses point to, thereby contributing to innovations in national VET systems with a European dimension.

Although valorisation efforts have been previously been made within the Leonardo programme, perhaps they have had too much emphasis on outcomes of sectoral initiatives understood as 'training products' rather than on their impact or potential impact on structural and systemic levels of innovation. This is of relevance not least since some of the sectoral initiatives indirectly can be perceived as a response to 'system adaptation failure.' Stronger involvement and prioritisation in Leonardo by system actors could ensure that Leonardo initiatives become a strategic tool in VET innovation. Valorisation and dissemination of the programmes should therefore also take on board a broader interactive learning perspective with focus on system innovation, analysing particular exemplary features that may address current concerns and priorities.

Validation of non-formal and informal learning

An expert group was appointed by the Commission in February 2003, and has presented a number of drafts providing a basis for wider consultation and debate. A proposal for validating informal and non-formal learning was prepared for and adopted at the Ministers of Education Council Meeting 27-28 May, aiming at more coherent and comparable validation practices through voluntary cooperation. It builds on the principles of individual entitlements, obligation of stakeholders, confidence and trust, and credibility and legitimacy.

The main focus is on the following areas of validation:

- Validation of learning taking place in formal education and training settings;
- Validation of learning taking place in relation to the labour market (enterprises, public organisations, and economic sectors);
- Validation of learning taking place in relation to voluntary and civil society activities (exemplified by the activities of youth organisations) as well as in community learning (exemplified by Nordic adult liberal education);

The framework draws particular attention to validation approaches aiming at the (re) integration of individuals into education and training, into the labour market, and into society at large (for example targeting the needs of school drop-outs, the unemployed, and immigrants).

According to the Copenhagen Declaration, the main motivation for developing such principles is to strengthen the comparability (and thus compatibility) of approaches at different levels and in different contexts. Validation methods and systems developed so far have to a large extent been designed and set up in isolation from each other and can not easily be linked and combined (Bjørnavold, 2001). Lack of comparability makes it difficult for individuals to realise lifelong learning by combining qualifications and competences acquired in different settings, at different levels, and in different countries.

The framework contains a set of common European principles for validation organised around a number of common issues

A central element in the validation approach is a differentiation between validation for *summative* purposes and validation for *formative* purposes. Validation for summative purposes leads to a certificate or a diploma. Efforts in this direction could also be essential in

bridging training-for-employment purposes with education and training for qualification, thus enhancing employability for the individual insofar that competences obtained regardless the context can be assessed and can lead to a higher level of formal qualification without following a complete VET programme. Modularisation of VET and qualification frameworks will make it easier to get such instruments to work in practice

Validation for formative purposes, on the other hand, refers to the identification of learning outcomes without formal recognition but which may at a later stage provide the basis for formal recognition. This is particularly relevant in an enterprise context for career and employment purposes as part of efforts by many companies concerning human capital accounting, and can also be an instrument in a more efficient deployment of enterprise investment in CVT.

Validation of formal and informal learning - DGVT responses

Thirteen countries state they are in a process of planning, and 18 countries state that a process for recognition of informal and formal learning has been implemented or is in a process of being implemented (Estonia). It is noticeable that only two of the countries that have responded (Norway, Portugal) provided concrete quantitative indicators of success. Given some of the other responses provided to this question, it is quite evident that many countries are in a very early stage of implementation and there are no or few experiences of the effects. Several countries provide information that could form the basis for the creation of progress indicators for national and European VET and lifelong learning statistics. It is not clear if recognition and validation processes primarily encompass a vocational pathway.

In France the individual has had a legal right to have his/her competences validated since early 2002. The measure is an active part of employment policies, particularly for the low qualified. Personalised counselling is an important part of the measure. By the end of 2003, 23 regions out of 26 had established counselling and information points for informal learning validation with a total of 473 centres.

Portugal has designed the RVCC System, a national system for recognising and formally validating prior non-formal and informal learning in various contexts throughout life and work-life. The system has involved an enlarged body of experts and stakeholders such as tertiary education institutions, AET experts, trade union representatives from employers and employees, and administrative bodies. The process of recognising and validating competences is carried out by the Centres for Recognising, Validating, and Certifying Competences (*RVCC Centres*) which are hosted in duly accredited public and private local bodies. These latter are strongly anchored in the local community to which they belong, comprising for example associations of industrialists and enterprises, local/regional development associations, cultural and municipal associations, municipalities, unions, and public institutions (vocational training centres and basic and secondary schools).

Evaluation phase

As the regulating body, the Directorate General for Vocational Education and Training is entitled to carry out a *Monitoring and Assessment System*. The monitoring of the *RVCC Centres'* practices is assured by national, regional, and local AET teams according to specifically designed guidelines.

Furthermore, a *Guide on Self-assessment for the RVCC Centres* has been recently developed and is actually being implemented, focused on common criteria and indicators for quality in the RVCC process.

In Spain, implementation validation of informal learning is still in a planning phase. The National Catalogue of Occupational Qualifications is used as a reference. Applying the validity, reliability, equity, and feasibility principles, the project has developed a procedure for the evaluation and recognition of competences with a selected group of qualifications related to different occupational sectors/families. This has been experimentally applied and compared in several autonomous regions. A comprehensive analysis of the first phase will inform the next stages of implementation.

Judging from the responses, most of the schemes also seem to have primarily a summative function of giving credit in an educational pathway, with a double purpose of creating system efficiency and widening individuals' participation and motivation to engage in lifelong learning and widening employability through the recognition of competences.

Few of the DGVT responses focus on the formative aspect of validation, except for the French DGVT (labour), which clearly mentions the pressure on companies and labour market services to integrate validation of informal learning to enhance the individual's career prospects. Furthermore, the Norwegian response mentions tools and methods being developed for enterprise purposes. Denmark and Sweden also mention different attempts concerning human capital accounting in enterprise contexts, in Sweden for example in the

insurance company SKANDIA, and in Denmark in a large scale project under the Danish Ministry of Economic Affairs in collaboration with Copenhagen Business School and a number of enterprises.

There also seem to be variations in terms of how far and how comprehensive a system is envisaged, and if it comprises higher education and tertiary education as in Austria, Norway, and Italy, and as planned in Finland.

Summary conclusions - DGVV responses

Validation of formal and informal learning is on the agenda in most countries, but is still at an early stage. Overall frameworks, methodologies, and principles developed within the Copenhagen process can as such function as an enabler to inspire and guide national initiatives. Assessment of prior learning for formative purposes is still under-developed. If lifelong and life-wide learning is to become a reality, it is insufficient to only address assessment of prior learning in educational contexts. Social partners and sector organisations should initiate projects, possibly as a European collaboration effort, to develop and pilot tools and methods for assessment of competences in different types of work-based settings that can inform policies and practices and thus guide implementation.

As an effort to scale and monitor the development of APL practices across Vet and labour market contexts, member states should implement quantitative and qualitative targets and monitoring arrangements for APL as some member states have done. Better monitoring arrangements could also inform EU policies.

20.2.3 Conclusions

- Though the Bologna process is further advanced than the Copenhagen process, it seems important not to await the results of the Bologna process concerning developments of a European qualification framework. The risk of delaying the process is that a European framework then gets locked within a higher education context, and that it thereby will be more difficult to develop an overarching framework encompassing both VET and higher education to enable the development of lifelong learning policies.
- The principles for validation of informal and non-formal learning provide a structure with summative and formative components that makes them highly relevant both in a work and in an educational context. A number of questions remain about usage and perceived validity by individuals, enterprises, educational institutions, and labour market authorities, that could rightly be addressed through bottom-up pilot initiatives, for example within the Leonardo programme. To create knowledge at a system level, it is important that the social partners and sectoral bodies at national levels see this as a priority in the realisation of lifelong learning efforts, and therefore initiate pilots to gather concrete experiences that can inform practice.
- With the Copenhagen Declaration, the sectoral dimension in VET increased in importance. Analyses have shown that the Leonardo programme has provided an important framework for new sectoral initiatives. Although several sectoral initiatives have been taken within Leonardo, the systemic effect may remain limited because there are few links to policy systems and processes. A common qualification reference framework and stronger strategic involvement of social partners could alleviate this.

Chapter 21: Labour market mobility

21.1 Introduction

A central aim of the Copenhagen Declaration has been to pave the way for educational and labour market mobility through information and guidance mechanisms and through different transparency instruments. Mutual recognition, comparability, and transparency, are all initiatives that represent shifts away from a legislative, centralised approach to a more bottom-up approach, taking into account the diversity in national systems and labour markets. The report on the implementation of the Commission's Action Plan for Skills and Mobility¹¹⁸ shows that progress has been made, for example regarding the European Mobility Information Portal and the proposal for decision on a single framework for transparency of qualifications and competences. However, other areas that indirectly affect mobility such as lack of basic skills and lack of access to further education and training as discussed in the previous chapters may limit inter-sector and transnational mobility.

Labour market mobility and migration

One of the key questions of enlargement is the effect accession may have on labour markets and income distribution. One of the assumptions in many of the EU15 has been that mass migration from the new candidate countries could put further pressure on labour markets and social cohesion. This has led several member states to take particular measures in a transition period. Chapter 4 cast doubt on the likelihood of large-scale emigration from the EU10.

An analysis conducted for DG Employment in 2000 (Boeri & Brücker, 2000) concludes that the present stock of foreign residents immigrated from the EU10 to the EU is estimated at some 850,000, while the stock of foreign employees calculated in full time equivalents amounts to about 300,000. The figures account for 0,2% of the population in the EU15 countries and 0,3% of the workforce. Given income disparities, the figures are negligible and reflect the restrictions to labour market mobility that were introduced in the 90s and which in many instances will continue for the next years to come.

Based on a time series model of immigration, the study estimates that the number of foreign residents from the EU10 into the EU15 increased by around 335,000 people immediately after the introduction of free movement. Within a decade this number is estimated to have fallen to 150,000. The peak in the foreign population originating from the EU10 is expected to be reached 30 years later with a 1,1% share of the population in the EU15 with variations between member states (e.g. Germany with 3,5% of the population.) The projections are based on assumptions that per capita incomes between the EU and the EU10 converge 2% annually and that unemployment rates remain constant. The study concludes that the pattern in migration can be tracked to the high transaction costs of migration and to the limited absorptive capacity of the labour markets in the destination countries. Moreover, the impact of

¹¹⁸ COM (2004) 66 final, 6/2/2004

migration might be more widely dispersed across skills groups in the case of immigration from the EU10 than in case of traditional immigration, as formal educational levels are high in many of the EU10.

Migration and mobility in Europe - a threat or a necessity?

Concerns about demographic changes, skills shortages in certain regions, and broad issues of sectoral convergence have fostered a call for greater mobility within Europe, as expressed in the intentions of the Copenhagen Declaration (European Commission 2002a) and in the European Commission's action plan for Skills and Mobility (2002) and its communication from 2001. A study from 2002 on Europeans' mobility and attitudes to mobility within Europe (Fertig and Schmidt 2002) shows that inter-European mobility remains low in the EU. (See also Chapter 4.1.2 on migration).

The study by Fertig and Schmidt, drawing on data from EuroBarometer, concludes that:

'unless information deficits, traces of xenophobic tendencies, and the perception of prohibitively high levels of bureaucratic red tape are overcome, intra-European migration will not play the role it is hoped for.'

The study illustrates the lack of current research on non-migration forms of mobility in Europe and the fact that common perceptions and traditional recording of migration may be inappropriate to current and future population movements and policy aims concerning intra-European mobility for education and training purposes. To provide a more comprehensive view for future policy making, it will be necessary to consider current and future forms of cross-border movements, characteristics of local labour markets and more integrated cross border economies, as well as shorter term job relocations as part of career development. ICT developments may likewise support other forms of virtual work or learning arrangements in other countries - especially in the context of a knowledge economy.

The outflow of migrants from the EU10 has been estimated at between one and four million within the EU over the next fifteen years. A new study by Byrska & Venables (2004) based on data from the European Foundation for the Improvement of Working and Living Conditions concludes that the most probable volume of intended migration from the EU10 within the next five years will equal to about 1% of the population of these countries. Furthermore, data collected by Byrska & Venables (2004) tend to show that migration is likely to be of a short-term nature, but also that the largest migration potential is among the young, well-educated, and mainly unmarried citizens of the EU10.

The study from the European Foundation for the Improvement of Working and Living Conditions (Krieger, 2004) on which Byrska has built her findings points, however, to significant cross-country variations in predicted migration volume from the EU10. According to the Foundation study, the highest migration potential within the EU10 and candidate countries is in Bulgaria and Romania. Turkish respondents are much less likely to be considering a move to the EU15, exhibiting a narrow migration potential of less than half a percent and a wide migration potential of 6%. The figure for all larger acceding countries in the narrow potential band is around 1% in the next five years.

Table 21.1: Various migration intentions in the candidate countries in %

Countries	General Inclination	Basic Intention	Firm Intention
Poland	3,7	1,6	1,0
Bulgaria, Romania	5,0	3,2	2,0
Cyprus, Malta, Slovenia	2,1	0,8	0,7
Turkey	6,2	0,8	0,3
Hungary, Czech Republic, Slovakia	2,4	0,8	0,6
Estonia, Latvia, Lithuania	3,5	2,0	0,8
AC10	3,1	1,3	0,8
AC13	4,6	1,5	0,9

Source. European Foundation for the Improvement of Working and Living Conditions. Drawn from Candidate Countries Eurobarometer, 2002

The study by Krieger (2004) draws up a profile of the typical migrant from the candidate countries. This profile is similar to findings by Byrska & Venables (2004); the typical migrant is young, single, and well educated or studying in tertiary education; an increasing number of migrants are young women.

Based on EuroBarometer data from 2002, Krieger concludes that:

'The sending countries face the prospect of a youth drain of 2-3% of the youngest age category. In Bulgaria and Romania this may lead to an outflow of nearly 10% of the youngest age group. Furthermore, the potential youth drain is combined with a potential brain drain. The sending countries are in potential danger of losing between 3% and 5% of people who have achieved tertiary education, and more than 10% of their students. These figures represent the wider migration potential. Based on the 'firm intention to migrate', there may be a brain-drain of 2-3% among graduates and students in the next five years.'

'Unemployment has an influence on migration, but to a much lesser extent than predicted, and only in a limited number of countries. Overall, 2% (expressing a firm intention) of unemployed people want to migrate. The strongest push due to unemployment is in Turkey, Bulgaria, and Estonia.'

21.2 Mobility in Europe - an educational and training perspective

Many vocational education systems begin to have internationalisation strategies where placement abroad is a central element. Learning for Employment (2004) estimates transnational mobility in vocational education and training as 250,000 per year. Mobility is a major aspect in the programme design, both at bilateral levels and at EU programme level. Although numbers are increasing, the use of placements abroad is still limited and few systems have specific provisions or organisations for accommodating trans-national placements. Denmark, Germany, the UK, and the Netherlands have examples of that - and within the Nordic countries a specific inter-mobility programme has been established.

EU initiatives relating to the Copenhagen process on credit transfer and a common reference level framework are important policy contributions, which in the medium-term are likely to further mobility between VET systems so that transnational mobility becomes a more

integrated system feature. This is particularly stressed by most of the DGTV responses, with many examples of how countries are moving towards more integrated qualification frameworks.

At the end of the year it is expected that the proposal on a single framework for the transparency of qualifications and competences will be adopted and launched at the Maastricht Conference. This currently incorporates five existing documents: personal and vocational skills (the European CV), language skills (the European Language Portfolio), experience of transnational mobility (the MobiliPass, which replaces the Europass-Training, already used by more than 50 000 persons), vocational qualifications (the Certificate Supplement), and higher education diplomas (the Diploma Supplement).

The national reports and DGVTV responses provide several reports on the current stage of successful Europass usage that can guide future practices concerning the implementation of the new single framework. Still, transnational mobility is not part of a system feature in VET.

Country Examples: Europass implementation

Austria was the first country to implement an on-line information for Europass. Almost all young people who have undergone training abroad have a Europass.

In spring 2004, the **Flemish Educational Council** published a recommendation on how to implement Europass successfully. First of all, they suggest that a distinction should be made between the results of the learning trajectories and self-assessments. Europass should be clear and easy to use. Privacy should be guaranteed. The certificate supplement should be part of a standard procedure, just like the diploma-supplement in higher education. With regard to implementation they question who will be involved in the determination of the content of the certificate supplement.

In the Netherlands The Education Council advises ¹¹⁹ to develop a so called 'Europe-competence,' giving proof of the student's ability to function and participate in Europe. To stimulate mobility, the Education Council advises to implement clear objectives within vocational education.

In Ireland most Europasses have been issued for a stay of three weeks. Most of the courses followed (though not all) were service-based (e.g. tourism, leisure, hospitality, catering). The take up level of Europass is not particularly high. This is possibly, according to the national report, because students do not see it as something desirable or important for their future career.

Finland provides an interesting example of how an LDV project *Pro Europass* has promoted apprenticeship training in Europe through Europass Training and the establishment of a transnational network. The contractor of the project is the Apprenticeship Training Centre of the City of Helsinki, Finland. Partner organisations include companies, training institutions, apprenticeship training offices, chambers, trade unions, labour unions, and research institutes from Austria, Denmark, Finland, Germany, and Norway. The project addresses the need for improving the apprenticeship training and apprenticeship trainees' 'euro-qualifications'. In the metal, electro-technical, electrical, and telecommunications industries, there is a clear need to provide new, easily accessible, and attractive pathways leading to international professional qualifications.

UK. Between 2000 and the present, 6000 Europass documents have been issued in the UK. The majority have been issued as part of a Leonardo Da Vinci programme with only one or two percent issued for other European programmes. Germany, France, and Spain, have proved to be the most popular destinations, and many of the participants have been involved in the catering, leisure, and hospitality sectors. Whilst Europass doesn't formally accredit experience and skills learnt in conjunction with Leonardo Da Vinci, the Europass document has served as a record of training that has helped holders' progression. With the advent of the new Europass a National Europass Centre will be set up which will be responsible for administering Europass and other European education-mobility documents. It has not yet been decided who will run this, though the centre will be responsible to DfES.

For the new member state countries, evidence shows that Europass is on the agenda but that few measures so far have been taken to introduce mobility within a vocational educational context.

In the Learning for Employment report from 2004, two different perspectives of educational mobility are defined: internationalisation and employability.

¹¹⁹ Advice Education and Europe : European influences in the Netherlands. The Hague, Education Council, June, 2004.

According to the analysis, the most likely result of the internationalisation perspective is that the most able students will participate. In Austria and Germany, according to the report, such mobility will be enabled by a special financing scheme (Begabtenförderung). In Denmark a new initiative is also under way, as part of the general VET financing scheme, which will provide the same type of financial incentives to VET schools as is in place for universities under the ERASMUS scheme.

Work placements concerning employability can have different perspectives depending upon the specific target groups. For the more able young people it might mean an expansion of career options, whereas for the more disadvantaged groupings the stay abroad may be used pedagogically to develop wider life skills and self-confidence. Germany, Sweden, and France provide examples of such initiatives.

There are a number of examples emerging of how internationalisation and mobility both from a combined employability and an internationalisation perspective are actively encouraged.

From Finland there is an interesting example of internationalisation of apprenticeship training with a sectoral focus in the metal, electrical, and telecommunications industries. The aim is to provide trainees with 'Euroqualifications'. The purpose of the initiative is dual. On one hand the aim is to attract and motivate talented young employees by offering them an opportunity to follow a pathway that leads to international professional qualifications. On the other hand the project develops practical guidelines for companies to facilitate and encourage their involvement in international mobility. www.amiedu.net.europass.

The Netherlands also presents interesting branch level instruments. They have been developed to increase transparency of qualifications in an international perspective - for example in the metal sector through the 'EMU Berufspass', which is recognised by the sector in a number of countries.

The European graphical sector network - EGIN - with participation of employers, employee organisations, and VET institutions, is currently working on adapting a Europass particularly for their sector.

As companies and sectors internationalise, there are nevertheless still relatively few examples and little data on how short-term work-placement mobility may be used to further a vocational career path, and how VET systems can best be designed to support mobility of their young students and graduates and with which type of employment and employability effects. Finally, whereas many universities' internationalisation strategies also include the use of virtual mobility for both students and teachers, it doesn't seem to be a strong feature of current VET systems.

21.3 Summary conclusions - mobility as a strategic orientation

The overall volume of expected inward migration after enlargement and from the remaining candidate countries is much less than predicted in the public debate and policy rhetoric in many member states.

Looking at the profile of potential migrants, the expected flows could improve the socio-economic base in the receiving countries of the EU. On the other hand, migration could slow down economic restructuring in the EU10 and the candidate countries because the tendency is for the best-qualified and younger people being most motivated to migrate. Investments in adequate lifelong learning options as part of employment policies and firms' competition strategies in the new member countries could reduce these unintended negative effects.

Krieger (2004) points out that quality of life and better economic prospects are the main drivers for migration among young and better-qualified people. EU mobility policies should focus on and expand options for short-term educational work and study mobility, through European grant schemes for young people from the EU10 and the candidate countries and through financial incentives for sending and receiving institutions. These programmes could strengthen the development of a European knowledge space. This might give the most talented students better options once they return to their home countries.

The analysis illustrates that better statistics and indicators could help to further understanding of mobility more appropriate to current policy priorities.

Neither the DGVT reports nor the national reports provide much information as to whether vocational education institutions at this stage have or are in the process of formulating institutional strategies for internationalisation. Without institutional strategies for internationalisation, mobility easily becomes an effort of the few and is easily seen as a cost and an administrative burden. Best practice European and national cases about institutional internationalisation strategies and their benefits seen from student, teacher, employee, and employer perspectives could contribute to a strategic orientation of internationalisation in VET institutions.

If mobility is to become an option for a much wider group of VET students, then it must be defined in broader terms than is the case in many instances today:

Mobility at a system level and at an institutional level should comprise:

- study visits and actual placements for school leaders, students, teachers, social partners, and new VET graduates;
- guest teachers from other VET systems;
- courses offered in a language other than the native language and with an international dimension in the curriculum including comprehensive opportunities for language and inter-cultural training;
- financial incentives for school administrations to offer mobility schemes;
- virtual mobility whereby students can follow modules or collaborate with VET students on joint projects, or whereby VET teachers can share/develop curriculum and practices.

The instruments associated with mobility also have to be known and understood at an operational level. The member states have a particular responsibility to ensure that Europass is launched and actually implemented at an operational level. Monitoring and feed back mechanisms should be set up at member state level to measure progress and learn from experience, so as to feed into the future orientation of the Copenhagen process and into measures on mobility and transparency.

Section 5

Analysis and conclusions

Chapter 22: The potential of VET

This concluding section draws on the analysis contained in the previous four sections, reaches conclusions and identifies emerging messages. It is divided into four chapters. These are:

- The potential of VET
- The current state of play with VET: progress and conclusions
- Indicators and data for VET
- The quest to optimise VET in Europe: emerging messages

Current expectations

VET is commonly expected to contribute to positive economic, labour market, social and individual outcomes in the drive to achieve a high-skills economy and learning societies in Europe, and to achieve the Lisbon goal. For many young people in Europe VET is the way to progress from schooling to the labour market or, increasingly, to further education or training. For many older people it is – or has the potential to be – the most accessible way to improve performance and progression at work, or to provide second chances for those who have been less successful in compulsory schooling for whatever reason. For people living in a new country it may be the chance to get a job and to be included in a working community. For enterprises it is often a means of raising skills levels of workers, modernising work practices and cementing a relationship of trust with employees. Governments see VET as a means of increasing competitiveness, employment levels and growth through an enhanced skills base, and also as a means of raising levels of education and social cohesion more generally.

The contexts in which VET operates differ markedly; both initial and continuing VET operate in multiple ways even in the same sector or country – governance, funding and provision are organised differently across a range of providers from the public, voluntary and private sectors. VET is intended to provide for the full range of skills levels; equally, in different settings the ways in which people learn varies between the formal, informal and non-formal, and this has implications for ways of valuing and recognising what is learnt both in educational and labour market contexts. The content of learning encompasses technical and job-specific skills alongside, increasingly, the acquisition of key competences. People have different learning needs according to their current job, personal development and career aspirations. An important feature of VET is how it is designed to meet these different needs and how it can be structured to offer equality of opportunity for lifelong learning to people in very different personal circumstances.

The workplace is – or has the potential to be – a dynamic learning site for most people. This means that when VET works well, it can be both adaptive to need and circumstances and dynamic and formative on its sphere of operation. The modern criteria for judging effective VET would thus focus strongly on the needs of specific users, notably individuals and the managers of enterprises, as opposed to providing institutions and would give added weight to flexible organisation of kinds of learning that sometimes redefine the nature of VET learning, instruction, evaluation and the learning context. Modern VET programmes are described in terms of competences that can go beyond the narrow expression of technical knowledge and skills and cover wider competences associated with professional behaviour.

Pressures for divergence

Analysis shows that VET systems in countries – or even in sectors – are unlikely to be drawn into convergence through the European process, which a DGVT described as best seen as a kind of ‘bench learning’ which can be understood as an evaluation of VET developments in other countries and a selection of those aspects with potential for practical enhancement in the national context. Indeed, when the DGVTs were asked to anticipate where their country’s system of VET was likely to be headed in ten years time, the responses suggested a variety of outcomes, rather than conformity. Most (not all) would rely on a social partnership approach; some accentuate the economic goals of VET, while others accentuate the social and personal goals. There is an even spread between those who anticipate that VET will concentrate on providing a strong start for young people and those who anticipate that VET will prioritise meeting the needs of older learners.

Country interest in increasing the flexibility and attractiveness of VET is evident. By understanding better the needs of learners and responding to these needs, new norms for VET structures are emerging such as modularised programmes. If VET is to become more flexible, these new norms are unlikely to reduce the scope of providers locally to respond to other needs of learners. Governance of VET systems are also diverse and coordination processes within and between countries are challenging. Additionally there is evidence of increasing decentralisation of a proportion of VET curricula that formerly were devised at national level. Thus there may be some convergence arising from common underlying pressures but national, regional and sectoral contextual aspects of VET are likely to drive national VET systems in different directions.

The role of VET in general secondary education programmes is expanding, the inclusion of employment-related curricula attempt to match the needs of learners to those of enterprises, the labour market and the economy more generally by modernisation of the content of programmes, extension of the range of subjects available (or sectors involved) or by improvements to pedagogy and assessment including a greater focus on learning outcomes than is normally associated with school programmes. Once again a common development is implemented in diverse ways with relatively high levels of local or regional autonomy in programme design and content.

The growing importance of VET in education and training systems seems to be at odds with the weight of evidence that, relative to general or academic education, VET has lower status. This report contains a solid analysis of how VET may be made more attractive to stakeholders and develop in ways that enhance fitness for purpose and efficient use of resources. This analysis is useful at all levels in VET and can form the basis of a new higher status for VET programmes. Once again it is likely that steps to enhance the attractiveness of VET will contain significant local diversity.

Coherent actions

At the European level, the developments since the adoption of the Lisbon goal in 2000 and the Copenhagen Declaration in 2002 attempt to harness innovative aspects of VET and to develop a bottom-up process of mutual learning in order both to quicken the pace of progress and continue to recognise the principle of subsidiarity. Notwithstanding all the forces for increased diversity outlined above, at this point it appears that the countries covered by this study perceive a considerable extent of coherence between the European and national policies for VET, as an extract from our report on the DGVT questionnaire shows.

Coherence between national and EU VET policies

Two thirds of the countries (BE-WA, BG, CZ, DK, DE, EE, FI, FR, HU, IS, IE, IT, LV, LT, LU, NL, PT, RO, SP, SL, SW, UK) assess that there is coherence between the EU and their national policies for VET. One third of the countries (AT, BE-FL, CY, GR, LI, MT, NO, PL, SK, TR) assess that the Copenhagen or Lisbon processes do not directly influence national policies, but are, nevertheless, broadly compatible. None of the countries assesses their national priorities and policies divergent with the Lisbon and Copenhagen priorities.

Source: DGVT Reports

The open method of coordination is a new policy tool in its application to education and training. Given the range of countries and stakeholders involved, it is still not possible to be clear how the process will develop. Four scenarios for training and lifelong learning developed through a Cedefop/ETF project help to identify possible outcomes, and these are shown in the table below. The scenarios suggest several plausible outcomes of European efforts to develop a more collaborative European approach and lifelong learning, in a context in which countries continue, of course, to develop their own strategies and implement particular programmes for VET.

Table 22.1: Scenarios for lifelong learning and VET in Europe in 5-10 years time

Systemic divergence or convergence		Socio-economic development	
		Competition rather than cooperation	Socio-economic cohesion
Liberalisation, decentralisation and individualisation	1. Competing systems 'Divided Europe' Systemic divergences within and between countries remain. Education/training systems and providers are in strong competition. This is associated with increasing polarisation between member states	2. Unity in diversity 'Pick and Mix Europe' The social and innovative role of education and training is recognised. Countries prefer that no wider system development is taking place. European cooperation develops only slowly towards mutual compatibility and transparency	
	3. Convergence without much coherence 'Learning Europe' Led by the Commission, common actions in education and VET are developing. Links between the public and private sector are patchy. Overall, efforts to develop compatible frameworks at European level contribute little to increasing mobility and innovation, as European matters are seen as peripheral.	4. Convergence and coherence 'Co-operating Europe' Closer socio-economic cooperation supports active cooperation in education and training involving most or all member states. Education and VET provision are becoming more compatible.	
Increasing convergence and mutual learning			

Source: Adapted from Matrix 4 p 53. Sellin, Burkart (Ed). *Scenarios and strategies for vocational education and lifelong learning in Europe: Summary of findings and conclusions of the joint Cedefop/zETF project (1998-2002)*. Cedefop Panorama series; 40. Luxembourg 2002. ISBN 92-896-0153-1.

Scenario 1 has plausible characteristics embedded in economic competition and economic performance. Some countries need to commit resources to sectoral development and at this stage can offer limited resources for VET infrastructure development. Scenario 2 is a highly plausible situation that fully respects all the local regional and national initiatives that are currently in place. Scenario 3 reflects all the issues related to building coherent systems of European VET and captures progress so far arising from the concrete actions. Scenario 4 represents a destination that is in sight as the actions at European level begin to provide for increased cooperation.

The evidence gathered for this report points to scenario 1 being a backwards step. The report points to progress in scenario 2 towards compatibility and transparency. It seems likely that the current position of VET in Europe is within scenario 3 but moving towards the characteristics of scenario 4 with greater levels of cooperation developing.

Synergy in policy domains

Lifelong learning is an extremely rich domain in which VET plays a significant role. The breadth of the lifelong learning domain demands interaction between policy areas so that particular areas of policy and practice do not hold lifelong learning back. It is also possible

that the desire to meet lifelong learning goals becomes a force for change. Thus it is clear that there needs to be a synergy between different policy domains regionally, nationally and internationally.

Driving the Labour market?

A question that this report has addressed is the extent to which VET can contribute to the development of European labour markets. Clearly, VET has a significant role through mechanisms such as measures for the recognition of skills and qualifications across sectoral and national boundaries, the European Qualifications Framework, quality assurance measures, and through the sectoral and social inclusion policies being developed through the activity of the social partners. The evidence points to the conclusions both that the enlarged EU is likely to register relatively low levels of migration and to be characterised until long after 2010 by marked differences between countries in terms of productivity, wages and living standards. Add to this the strong cultural, language, family and other bonds that help to form the identity of many Europeans, and a realistic conclusion is that VET can ease frictions and barriers to mobility. Thus it can facilitate more movement in the labour market. VET has an important role to play, but is unlikely to drive the emergence of a genuine European labour market. In the short term, one-way movement of highly educated and skilled people from the EU10 may benefit the individuals and the receiving country, but at some cost to the country of origin.

In a European economy based on knowledge and high skills, VET will inevitably be required to continue to adjust its functions of knowledge transmission and qualification delivery. It will interact with national systems of production, characterised by a growing integration of knowledge produced by research, and as a place of specific, applied knowledge production. VET must lose part of its traditional function of knowledge transmission, and become the place where various forms knowledge are harmonised. Additionally, through measures designed to deliver life long learning that is accessible to everyone, the articulation between IVET and CVT will need to be developed further so that learning is optimal for the individual and of immediate value to enterprises and communities.

Chapter 23:

The current state of play with VET: progress and conclusions

Here we summarise the contribution that initial and continuing VET is making across Europe in pursuit of the Lisbon goal. We have developed our analysis on the basis of self-assessment reports from countries, independent country reports prepared by expert analysts and by examining a wide range of published reports. We report here the evidence directly related to indicators of progress towards the Lisbon goals.

It should be noted that enlargement of the EU took place during the time this study was being conducted. Enlargement brings new opportunities and challenges. It also means that policy makers and stakeholders at all levels are still forming their perceptions of what the change means for education and training policies and their development across the enlarged European Union.

We first identify the extent to which VET is contributing to the achievement of the Lisbon priority indicators for education and training for 2010. This is followed by a summary of the state of play in European countries for each of the specific areas now being developed in the follow-up to the Copenhagen Declaration. (The Commission has already taken stock of activities¹²⁰ at the European level.) For each of these Copenhagen concrete outputs, we reach a number of conclusions. As well as appraising the current situation, we give an indication of areas where innovation is taking place in VET and where barriers to development appear to exist.

This chapter also reports on two other issues that should be given attention in the next phase of development of VET initiatives at the European level. We report on the current paucity of reliable information and data for the indicators that are of basic importance to understand progress for VET systems on a comparative basis and over time. We have been surprised by how little reliable data is available for comparing basic aspects of expenditure on, participation in and outcomes of initial and continuing VET. In our view, the first priority in this respect is to get the data collection for the basic indicators right. Extending the indicators to various other categories should be undertaken later, but is not the immediate priority. We suggest ways that basic data collection for VET should be improved. We also report - as far as we have succeeded in gathering information - on current developments in VET teaching and learning. This is an aspect that the Copenhagen follow-up and the OMC have paid little attention to. In our view, this is a rich vein of innovation. Stronger international collaboration in this respect would bring benefits. It would both improve collaboration at the practitioner level and impact directly on learners.

¹²⁰ (European Commission, DG Education and Culture Enhanced Cooperation in Vocational Education and Training: Stocktaking report of the Copenhagen Coordination Group. October 2003)

23.1 The priority indicators: contribution of VET

23.1.1 Reduce the numbers of early school leavers

The agreed target is that by 2010, an average EU rate of no more than 10% of a cohort should leave school early. The European Commission concludes that achieving this benchmark for education as a whole will require substantial political action and sustained commitment, even though in most countries the early school-leaving rate has declined compared with 1996 and 1999. (Education and training 2010, the success of the Lisbon strategy hinges on urgent reforms).

Initial VET and low early school dropout: a robust link

Analysis shows that most of the European countries that have high levels of participation in vocational programmes in Europe have low levels of early school drop out. The correlation between high proportions of students in initial VET and low numbers of young people dropping out before completing upper secondary education is strong and has grown increasingly robust.

Sixteen out of the 19 countries that have 50% or more students in vocational programmes at ISCED 3 have low levels of early school leavers. This includes both school-based and apprenticeship-based systems. The exceptions are Bulgaria, Italy and Romania, which have high levels of students in initial VET (a preponderance of pre-vocational courses in the case of Italy) and high levels of early school leaving. Countries with less than 40% of upper secondary students in vocational programmes vary much more. Iceland, Malta, Portugal and Spain have low levels of IVET participation and high levels of early leavers, while the Baltic States, Cyprus, Greece and Ireland have low levels of vocational IVET and low levels of early school leavers. Across Europe, a higher proportion of males leave school early, with Luxembourg, Germany, Austria and the Czech Republic being the exception to this rule.

For governments, the implication of this finding is that sound, high quality IVET that leads to good lifelong learning and labour market outcomes for individuals is likely to be an effective way to counter early school dropout. Indeed, most European countries that have well-developed IVET systems have already reduced early school drop to relatively low levels. The factors and innovations that make initial VET attractive and flexible are covered under the next priority benchmark.

High quality VET and active labour market policies

For young people who have dropped out of school or training at an early age, well developed and targeted active labour market policies are proving to be an effective measure for raising skill levels. However, policies in many countries are limited to immediate employability, and this may well undermine the prospects for integration into the labour market. Training should be supported in active labour market policies and should lead to real and sustainable future employment possibilities.

23.1.2 Increase levels of completion in upper secondary education

Target within reach

The agreed target is that by 2010 at least 85% of 22 year olds in the EU should have completed upper secondary education on average. If present trends persist, the European Union benchmark for the completion of upper secondary education can be reached or exceeded by 2010. The EU10 has higher levels of upper secondary attainment than the EU15 on average, and this further improves this positive outlook. VET as a qualification and progression route at upper secondary level has a much greater role in Europe than it does in competitor systems in North America and Asia.

In the past in most countries educational attainment of women was lower than that of men, today the opposite holds true in most of the countries. In EU25, youth education attainment level of females is around 5 percentage points higher than that of males.

The evidence suggests that ensuring a good supply of good quality vocational programmes at ISCED level 3 is an effective measure to foster graduation from upper secondary level.

Raising the status of VET

Many DGVTs report that VET is still regarded as second rate compared to general education programmes at upper secondary level. All countries report the introduction of measures to raise the attractiveness of VET and to make provision more flexible. One aspect of flexibility is making higher education accessible for VET students; the creation of occupationally oriented programmes at higher education level are prominent among current reforms. A common response is to broaden IVET programmes by introducing general education elements or integrate vocational education in the general education programmes. By making these changes more open and flexible pathways develop for VET students including options for higher education. A second rate status for VET also exists in the USA¹²¹ and similar measures to those outlined above are being introduced to address the issue. Raising the quality of VET programmes is a challenge for some countries. In particular, high graduation rates at level 3 in VET pathways in some instances in the EU10 conceals an underlying issue of quality: some VET programmes are perceived not to be of high quality and lack relevance to the labour market.

Breadth and more options

Whilst broader programmes containing strong elements of general education may raise parity of esteem in the wider society, there is at the same time evidence that it may have a negative impact on those with different types of motivational or learning difficulties. Opportunities to exit from VET pathways at different levels with certificates, and to have different pathways and opportunities open increases the first and second chances available to potentially excluded groups. Increasing provision and access to VET courses in tertiary education raises the status of VET, provides pathways for learners, and helps to establish high-skills entrants to the labour market. Modularisation is a development identified by several DGVTs that enables VET systems to become more flexible and also more interrelated with general education.

Measures to establish or improve guidance and counselling systems are strongly associated with all these changes (see also 23.2.2).

Data issues

We sound a cautionary note on the data on which all analysis in relation to this target is based. There is inconsistency as to what counts as an ISCED Level 3 qualification in different countries included in the OECD and Eurostat data. We return to this theme later in this chapter. (See 24.4 and also Annex 1.4 on indicators and data for VET.)

23.1.3 Improve basic skills/key competences

Second chance through VET

VET has a role to play in ensuring people have a second chance to learn basic skills and key competences if they have left school education without confidence in these skills. Stakeholders and governments place increasing importance on workers and learners acquiring key competences as well as technical skills. One version of competence includes generic or key skills that are independent of context. The second model sees real-work experience as a vital component of vocational education, leading to occupational competences stemming from learners' engagement with co workers' practices and the solution of occupational core problems. Investment in raising the knowledge, skills and

¹²¹ reference: US Department of Education, Office of the Under Secretary, Policy and Program Studies Service, *National Assessment of Vocational Education: Final Report to Congress*, Washington, D.C., 2004

competences of the low skilled has returns as high as HR investment of highly skilled and educated groups.

Reading literacy is covered in the PISA survey and this indicator is taken as a proxy for basic skills or for key competences. The agreed EU target is that by 2010 the percentage of low-achieving 15 year olds in reading literacy in the EU (currently an average of 17.2%) should have decreased by 20% compared to 2000. The European Commission concludes that 'the EU still has a long way to go to be able to reach the objective set by the member states' (ibid p19). Of the countries that participated in the PISA survey, Austria, Ireland, Finland, the Netherlands, Sweden and UK have reached the agreed EU target. Germany, Greece, Hungary, Latvia, Liechtenstein, Luxembourg, Portugal and Poland have over 20% of young people lacking basic skills on this indicator; Bulgaria and Romania over 40%. The comparable figure for the US is 19.9%¹²².

New survey needed

No data is available to form a judgement concerning the contribution of VET in fostering basic skills and key competences in IVET. The PISA survey covers several countries that differentiate young people into general and vocational tracks, but the number of vocational students included is regarded for the most part not large enough to reach robust conclusions. It is therefore not possible to be confident in making conclusions about the role of VET in contributing to this indicator. As VET is a common feature of upper secondary schooling in many countries and the level of participation in IVET is growing, being able to establish the contribution of VET programmes to further basic skills development is important. There are already initiatives to carry out a PISA style survey covering VET students (e.g. in Germany at national level) and the broadening of such surveys to include a wider range of countries and VET systems should be encouraged by the Commission.

VET needs to adapt

VET, with its multiple functions and its more open links to occupations and the labour market, has to accommodate new practices based on development of generic skills, whilst maintaining the core notion of qualifications linked to work practice and occupations; in other words, learning in context. One of the future challenges for VET is therefore to be sufficiently flexible to be able to offer different apprenticeship models, work experience and on-the-job learning that can meet the needs of a wide range of learners and work organisations.

A new feature

Entrepreneurship has been defined as a set of active skills, predispositions and attitudes. Entrepreneurship in this sense is becoming more of a feature of national education and training policy and a number of countries are developing a framework for entrepreneurial education as a key competence. This development is most common in IVET systems and while there are many opportunities in all countries for people to learn business start up skills, most formal VET concentrates on learners becoming employees, not self employed or starting a business: this is an issue for development in the national education systems.

23.1.4 Increase higher education participation in maths, sciences, technology, while at the same time addressing the gender imbalance

The agreed target is that by 2010 the total number of graduates in these areas should increase by 15%, while at the same time the gender imbalance should decrease. The European Commission (Commission Staff Working Paper 21.01.04, p 39/40) concludes that on current trends the 2010 benchmark for increasing the numbers of graduates in science, maths and technology should be attainable, but that addressing the gender imbalance is likely to be a bigger challenge.

¹²² Source: OECD Education at a Glance (2004)

VET and higher education

Given that this priority refers to university graduates at ISCED levels 5A, 5B and 6, it appears at first sight to have little relevance to VET. However, such a separation of VET and higher education is no longer sustainable. The opening up of more pathways into higher education for VET students and others intending to achieve technological and professional qualifications makes the distinction between VET and higher education an increasingly hazy one. In particular, several DGVT reports identify as key innovations the development of shorter VET courses at higher education level meet identified labour market needs for high-skills sectors of the economy. This reform also serves to revise traditional conceptions of upper secondary, vocational and higher education. The emphasis placed at the European level on the links between higher education and VET since the Dublin Conference in the spring of 2004 recognises that an important shift should take place towards a transparent and coherent single qualifications system.

A high-skills learning place

Furthermore, the target of increasing university graduation in these technical areas could be facilitated more effectively if the full potential of the workplace as a source of opportunity for high level skills and knowledge development and of cutting edge innovation is recognised, for example through further development of higher education institution - enterprise partnerships or regional or sectoral partnerships of enterprises.

23.1.5 Increase participation in lifelong learning

A difficult target

The agreed target is that by 2010 an average level of 12.5 % of the adult working age population participates in lifelong learning (in a period of 4 weeks prior to the Labour Force survey, on which this indicator depends). It is highly unlikely that this target can be reached, even though some EU countries already reach or exceed it, and reaching the benchmark by 2010 *'poses a significant challenge for many European countries'* (Progress towards the common objectives in education and training, Indicators and Benchmarks, p. 6). In 2002, the EU-15 average was 8.5% with only Denmark, Finland, the Netherlands, Sweden, and United Kingdom above the benchmark, while the average for the EU10 was only 5.0%. During the period 1999-2002, the participation rate in the low performing EU15 countries has risen by only 0.3 percentage points. In most of the member states women have a higher participation rate than men. The indicator is based mostly on episodes of formal training, this is likely to lead to an underestimation of the extent of lifelong learning taking place as it is clear that vocational learning can take place informally in workplaces.

Inequity of distribution

Across Europe, adult learning reinforces skill differences resulting from unequal participation in initial education and training. For those with a high education level, the participation rate in 2002 is more than 6 times higher in CVT than for those with a low level of education. Younger employees are more likely to participate in training than older ones. Participation also varies sharply by sectors. When low sectoral participation rates are combined with low country participation rates, the opportunities for some groups to engage in training in Europe hardly exist. Member states, social partners and other stakeholders must address this issue if VET is to make a serious contribution to the lifelong learning ambitions of the Lisbon strategy. As a first step there needs to be a deconstruction of the global indicator by age. Later further subdivisions might be useful, for example gender.

New approaches

Improved involvement in CVT will update workforce skills and competences and, improve basic skills, not least basic literacy and numeracy. DGVTs and social partners variously report innovative approaches. Numerous innovations in key aspects of CVT strategies are to be found across Europe. These include cooperation between social partners/companies including SMEs, strengthening partnerships between regional education and training centres and local companies, financial incentives, innovative training work/life balance schemes for older employees, generating and recognising informal and non-formal learning as part of HR

development, fostering counselling and guidance services for learners, training provided by non-traditional sources so as to overcome barriers to learning, and support and advisory services for companies. In many cases there are high barriers to overcome on the part of employers, individuals and public authorities.

23.1.6 Making best use of resources

Worthwhile investment

As the European policy dialogue for education and training has developed, making best use of resources has become a clear objective, and in the dialogue the emphasis has shifted from increasing investment in human resources to investing efficiently. Evidence suggests that there are high returns to education and training for the individual, the employers and society as a whole. It also indicates that targeting investing in lifelong learning of those who are most in need (low skilled, lacking basic skills) is worthwhile on grounds of equity and social outcomes, as well as from an economic point of view. Responses from country reports propose that a strong evaluation culture should be developed in order to better assess what works for which type of target groups in the short and medium term, in order to target investment most efficiently.

Large numbers of European citizens claim not to be prepared to invest in learning, while many companies see training as a cost, not an investment. Governments may be unwilling to increase public per capita expenditure in the face of a shortage of funds and competing policy priorities, and be uncertain how to attract funding from other sources.

For most of the countries there was an increase in public educational expenditure as a share of total public expenditure from 1995 to 2001. However, there is not yet a clear picture as to public educational expenditure trends since 2001. Unfortunately, available comparative data on public expenditure does not distinguish between general and vocational education across the EU.

Evidence of efficiency

Regarding the question of efficiency of VET, well-founded answers are still rare. The DGVT reports indicate a variety of measures and policies aiming at improving efficiency at national level. These follow different approaches:

- Reform of management in education, allowing for flexibility at a lower level through decentralisation policies;
- Involving social partners in the development of VET (e.g. to support the improvement of training quality or to enhance responsiveness to labour market needs);
- Stimulating private investments (on the part of companies and individuals) through incentives, for example, tax relief with the aim of enhancing the budget for training and by issuing guidance that helps users consider their training needs more carefully;
- Funding arrangements with obligatory or voluntary adherence and levies, based on collective agreement or law;
- Sharing of facilities, co-operation or merger of schools, creation of 'training clusters'.

Source: DGVT Reports

Making best use of private and public funding, so as to improve the efficiency and effectiveness of VET

Only one country mentions an overall increase in general expenditure on education in terms of GDP share (Bulgaria). Mentioned are more efficient spending of VET budgets (Latvia) and an increase of private funding in VET (Bulgaria and Estonia). Decentralising VET budgets and responsibilities to regions or to schools is furthermore a trend (Austria, Hungary, Lithuania, Luxembourg, Poland). Other measures that increase school autonomy are allowing schools to specialise in certain areas and to develop their own specific profiles to meet local/regional needs (Austria), or to introduce a detailed model for the division of public funds according to different needs of different school-types (Iceland). Specific measures include:

- Public funding of adult vocational training within the annual state budget combined with user payment (Denmark);
- Making innovation a joint activity of social partners and schools, with joint financial commitment (Netherlands);
- Courses provided at publicly-maintained upper secondary schools or training establishments are free of charge and state funded (Norway);
- Investigation on possibilities to contract out upper secondary education (Sweden).

Additional investment needed

In the light of ambitions to develop and implement effective strategies for lifelong learning in Europe - for example through increasing participation in CVT through cost effective training and recognition for target groups such as older workers, low-skilled and socially excluded groups - the conclusion has to be reached that increased levels of expenditure on VET will be required. This might be achieved by redistribution of resources such as when, for example, demographic changes require lower expenditure on initial training. This has implications for governments and the public sector, work organisations and the social partners, and for individuals.

23.2. The concrete actions following on from the Copenhagen Declaration

It is only two years since the Copenhagen Declaration on enhanced European cooperation in vocational education and training was put in place. The declaration identifies four priorities for enhanced cooperation in VET across Europe and links several concrete actions with each of these priorities. This report introduced these priorities in Chapter 2, and they have been analysed throughout the report. The priorities are:

- Strengthening the European dimension;
- Improving transparency, information and guidance systems;
- Recognition of competences and qualifications;
- Promoting quality assurance.

The report has attempted to make the progress visible for each of the actions, in particular at a national and sector level. Given the character of subsidiarity and the model of the open method of coordination selected for education and training, it is to be expected that different countries and sectors will progress the concrete actions at their own pace and according to their own local priorities. As appropriate, we indicate where there are opportunities and barriers to achieve progress in the identified actions.

Concrete actions well targeted

During the course of the research for this report the evidence has come to light suggests that the set of concrete actions is a well-targeted combination. With the exception of paying added attention to the professional development of VET teachers and trainers by taking note of local and national developments, sharing good practice and involving a wide range of stakeholders (including learners) the evidence suggests the focus of actions is right for aiding the development of VET as a tool for achieving the Lisbon goals.

Here we summarise the state of play for each priority and the associated concrete actions. Strengthening the European dimension is an overarching priority. Each of the identified concrete actions is intended to contribute to this priority.

23.2.1 Strengthening the European dimension

All of the concrete actions flowing from the Copenhagen Declaration are intended to 'raise the game' so far as mobility for learners and workers in Europe is concerned.

Reducing friction

So far as mobility of labour is concerned, our key conclusion is that all of the actions being developed following on from the Copenhagen Declaration are relevant and purposeful, but are of themselves unlikely to be the major driver of mobility, except perhaps in the case of local cross-border mobility. However, as Europe develops towards a more open and international labour market, VET can ease 'frictions' that currently inhibit mobility of workers and learners and can therefore facilitate mobility. See 24.3 below.

Increasing opportunity

So far as access for mobility for learning purposes is concerned, it is clear that programmes such as Leonardo (e.g. exchanges and study visits) and Socrates have created increased opportunities for study, training and work experience in other countries. These are augmented by bilateral arrangements between for example countries, localities and schools.

Increasing equity

The ambition of Education and Training 2010 is now to 'mainstream' the routes to mobility around Europe - and to overcome barriers and achieve greater equality of opportunity for groups that are not well represented in study abroad at present – this is called mainstreaming-plus (European Commission, DG Education and Culture, 2004). These ambitions are welcome, and implementation will both place demands and bring benefits at the European, national and more localised and sectoral levels. The proposed quality charter for educational mobility should help to ensure quality and avoid the pitfalls of poorly organised study in other countries. This development is entirely consistent with the final conclusions of this study. See key messages 2 and 8 at the end of this final section of the report.

23.2.2 Improvement of transparency, information and guidance systems

The associated actions are implementing Europass and strengthening policies, systems and practice for lifelong guidance.

Implementing Europass

Flexibility in VET across Europe is an issue that interests countries, and the agreement to implement Europass attests to this. The European Parliament and Council support the implementation of Europass. The new Europass framework for the transparency of qualifications and competencies will be launched in Maastricht in December 2004. Europass should become operational and available to all citizens shortly afterwards in 2005, and to this end a national unit is being set up in each country.

At present the uptake of Europass Training seems to vary greatly between countries. On the one hand Austria reports that all VET students travelling abroad as part of their studies

complete the previous Europass Training. On the other hand, some countries report a low take up, and that neither students nor employers value the previous system.

The EU15 have worked with the Europass Training for several years, though with different degrees of pro-activity. In Germany, 35,000 Europasses had been issued by 2003; 5,000 in France; 2,500 in Finland and just over 250 in Ireland. For the new Europass, almost all of the EU10 (and Bulgaria) indicate that they are planning how to implement Europass. Campaigns to make information available and promote Europass will be needed if it is to gain wide recognition and usage.

Europass has strong possibilities for further development. It should be developed to include other types of document awarded as proof of qualification or certification. It could eventually be used to document sectoral qualifications and validation of non-formal and informal learning. This way, Europass will connect both with national and European developments in skills and qualifications recognition.

Evaluation needed

Now that Europass is to be implemented, an impact assessment of the added value it brings to the various stakeholders should be undertaken.

Lifelong guidance, strengthening policies, systems and practice

Different functions

With regard to guidance and counselling two distinctions are important. The first concerns the difference between guidance and counselling in VET and guidance and counselling in the labour market context. The second concerns the difference between guidance and counselling as such and information provision, which is not the same as guidance and counselling. The difference needs to be appreciated and connections made between different initiatives. Often, existing systems need to be developed – rather than necessarily developing new systems.

A vital service

An OECD study covering 14 countries (OECD Employment Outlook, 2004) supplemented by a large survey by Cedefop, confirmed that effective information and guidance systems are essential to support the implementation of lifelong learning policies. Flexibility in preparation for working life and lifelong learning in an uncertain economic and labour market context calls for adequate guidance and counselling to support young people and adults in making optimal training and career choices. This implies that guidance services should be more responsive to individual needs, and that information systems should be comprehensive. In other words, an effective guidance system appears to be a pre-requisite for any successful system.

At the European level progress has been made on several fronts including: cooperation between various international organisations (OECD, Cedefop, ETF and the World Bank); the publication of a career guidance handbook for policy makers; the development of a draft set of quality criteria for guidance services; the identification of key features of lifelong guidance systems and a study on indicators and benchmarks for guidance. The Ploteus portal on European learning opportunities provides access to information about jobs and living conditions across Europe, and went live in 2003.

Capacity issues

There are large gaps between the policy goals and the capacity of national career guidance systems. At present, services are available largely to a limited numbers of groups, at fixed points in life and are focused on immediate decisions. In practice guidance and counselling are often focused on provision within the formal education and training system.

Good practices

Information provision using ICT can be found in Belgium FI. (the DIVA data base) and the UK (learnDirect). Examples of separate guidance and counselling services that have been implemented or are going to be implemented can be found in some of the EU10, for instance the Czech Republic (guidance and counselling system), or Latvia (national centre of career

choice), and also in Liechtenstein (career guidance office). These services, however, seem to be more linked to the labour market system than the VET system. The Finnish NOSTE reform provides adults in the workplace with the entitlement to guidance as part of the new competence-based adult skills recognition system. Other examples of guidance and counselling are the inclusion of specific subjects or lessons.

Denmark provides a good example of a strong guidance and counselling function within the VET system through the personal development plans each student draws up together with the teaching staff. In the curriculum of lower secondary education, a first orientation on careers and the world of work is intended to help students in their later choices (e.g.: Czech Republic, Hungary, Liechtenstein). Guidance in active labour market measures are often directed towards employment, but also in some cases towards training and raising education levels.

Robust strategies

The complexity of education and VET pathways and systems, and of labour markets, is a reason for having effective guidance systems. These systems need to extend beyond school-learning and become part of lifelong-learning guidance provision. Developing effective information and guidance systems is a 'robust' strategy, spanning all modern education, training and labour markets – particularly where futures are uncertain. However 'Guidance linked to social security' is not a good message for guidance.

Information systems are often fragmented: information about initial VET and study opportunities is broadly available but information about CVT is incomplete. Information about labour market qualification needs is not fully developed, and anticipating tools for future labour market demands could be improved.

Guidance and counselling as a profession can have low respect. It is worth placing emphasis on developing the profession (this includes the training of guidance workers) alongside other VET professions and the role of social partners and sector organisations in guidance measures.

23.2.3 Recognition of competences and qualifications

The associated actions are developing common principles for validation of non-formal and informal learning, a European system of credit transfer for VET and the development of qualifications and competences at a sectoral level. Developing a European Qualifications Framework is now added as a concrete action.

A European system of credit transfer for VET

Cautious advance

At the European level a draft model and a set of principles has been produced for converting units of competences, skills and knowledge between national systems. Credit transfer systems or measures for credit accumulation can, in the context of qualification frameworks, be a tool to further enhance horizontal and vertical mobility.

Flexibility in VET across Europe is an issue that interests countries and this could indicate willingness to develop a European credit transfer system. However, if the assumption holds that the existence of national credit transfer systems is a prerequisite for the realisation of a European credit transfer model, the picture is less optimistic. Only a small number of countries mention explicitly in the DGVT and country reports that a credit transfer system is at the stage of planning or implementation. This is often related to a national qualification framework. The countries are Denmark, Estonia, Germany (only for access into HE), Hungary (very preliminary), Ireland, Malta, the Netherlands, Slovenia (for higher education), Spain and the UK, in particular Scotland and England. Several countries also mention Europass in this context. Like reference levels the construct now needs testing in different situations (inter-sector, cross border, developing systems).

Limits and consequences

A credit transfer framework needs to be built on the foundations of an effective VET system. The introduction of credit transfer processes are unlikely to address such issues as training that is not fully responding to employment needs or weak guidance systems. However introducing credit transfer process does have the potential to bring increased coherence to VET systems.

In addition to clear benefits of further development of ECVT such as better articulation between the outcomes of VET provision, there may also be unintended negative consequences such as the fragmentation of programmes designed to add extra value by being treated as a whole, integrated programme of education and training.

Higher education has worked with credit, but in a limited way. OMC and subsidiarity limit how strongly the policy can be enacted. There may be sectors and countries where credit transfer is not a priority.

Common principles for validation of non-formal and informal learning

The Council conclusions on the identification and validation of non-formal and informal learning have been adopted in May 2004, indicating progress at the European level. The work undertaken has led to agreement on the identification of common principles for recognising non-formal and informal learning in Europe.

A common issue

This is an issue that is on the policy agenda of nearly all European countries and a number of countries are in the process of implementing more concrete measures. Countries are either planning measures in this area (one third; Belgium-FI, Bulgaria, Czech Republic, Finland, Greece, Iceland, Liechtenstein, Latvia, Malta, Poland, Romania, Slovak Republic), or are currently implementing measures to recognise informal and non-formal learning (two thirds; Austria, Belgium-Fr, Denmark, Estonia, France, Germany, Hungary, Ireland, Italy, Lithuania, Luxembourg, Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Turkey, the UK). Two countries (Cyprus, Slovak Republic) have not yet specific policy on this issue.

Implementation under way

Many of these innovations are at an early stage of implementation, and only two countries (Norway, Portugal) provide quantitative indicators of success. Most of the schemes seem to have primarily a summative function of giving credit in an educational pathway, with a double purpose of creating system efficiency and widening individuals' participation and motivation to engage in lifelong learning.

Variations are occurring in terms of how broad and how comprehensive a system is envisaged. From the information we have, it is unclear whether recognition and validation processes encompass vocational pathways, higher education and CVT.

Recognition of non-formal and informal learning as a measure to improve the national VET system.

- Access for all to validation of prior learning in initial VET and adult vocational training (Denmark);
- A systematic procedure for recognising informal and non-formal learning and competences (France) ;
- Pilot-project developing a "Profilpass" for guided documentation of informal and non-formal learning (Germany);
- Guidelines and rules for recognition of formal and non formal learning are under construction (Iceland);
- Outcomes-based awards system; accreditation, irrespective of learning site (Ireland);
- Definition and dissemination of shared formats and methodologies (descriptor standards) (Italy);
- Establish and maintain a framework for the development, recognition and award of professional qualifications based on standards of knowledge, skill or competence to be acquired by learners (Malta);
- Making a system of accreditation of prior learning (APL) and establishment of a knowledge centre on Accreditation of Prior Learning (Netherlands);
- A competence reform which had a central part in giving adults the right to document their "realkompetanse" without having to take the path of traditional exams. Current regulations will be examined in order to ensure a more uniform practice with regard to the rules for the validation of formal, non-formal and informal competence, *inter alia* for trainees. (Norway);
- RVCC System - National system for recognising and formally validating prior learning non-formal and informally acquired in various contexts through one's life/work experience (Portugal).

Action research required

Clearly, validation of informal and non-formal learning is a central component of an innovative lifelong and life-wide learning strategy. The debate on common principles leading up to the adoption of the Council conclusions has demonstrated the need for common principles in this field. The debate has also illustrated that the particular needs of enterprises in this field are too weakly covered by the principles in their current form. Therefore, this work needs to continue with the support of the social partners. The construct needs testing in different situations.

Recognition can have a summative and/or formative component. The second of these makes it particularly relevant in both a working context and educational context. Appropriate methods and pilots are still needed with regard to the formative component.

Development of qualifications and competences at a sectoral level

With the Copenhagen Declaration, the sectoral dimension in VET increased in importance. The European social partners now play an active role as a platform for communication and cooperation, and Cedefop is mapping sectoral initiatives. The Leonardo programme has provided an important framework for new sectoral initiatives across national borders in Europe.

Positive action

A number of initiatives are being taken at a European sectoral level concerning developments of professional profiles, competences and qualifications, and sector initiatives are a dynamic aspect of the Copenhagen process. Examples are found in the transport, textile sectors and also in ICT, where 11 international companies collaborated to develop generic job profiles and associated curriculum guidelines, albeit mainly at higher education level.¹²³

Involvement or strengthening the involvement of social partners and branches of industry in VET is a common priority in most countries.

Enhancing the involvement of firms, sectors and branches of industry in order to improve VET system's ability to develop skills and qualifications

Initiatives to strengthen the role of social partners and sectors include: implementation of occupational councils (Iceland), committees of Vocational Training (Liechtenstein); the establishment of the regional VET councils (Slovakia); promotion of partnerships between training providers, companies and local/regional social partners (Portugal) and renewed cooperation between social partners, national and regional education authorities (Norway); setting up Sector Skills Councils (Skills for business network) to encourage employers to take ownership of skills issues and develop sector strategies to address specific productivity issues and associated skills needs (UK). Two countries mention that this issue is legally regulated: legal regulations provide for an advisory committee at school level with representatives from local employers and social partner organisations (Austria) and a system of field expert groups which is confirmed in the new education law (Czech Republic).

Specific measures include:

- Permanent process of evaluation and further development of training regulations (for training at enterprises) resp. framework curricula (VET-schools) for about 350 accredited professions (Germany);
- The involvement of branches of industry or firms for industrial placement of pupils and teachers (Cyprus);
- The involvement of social partners in the traineeship of VET teachers and practical placement of VET students (Latvia);
- The promotion of partnerships between training providers, companies and local/regional social partners (Denmark);
- Three countries have developed ways to assess regional labour market needs; a methodology to identify employers' needs for specific labour force (Bulgaria) and a project steering on regional ambitions (Netherlands) and observatories (France).

Source: DGVET Report

¹²³ Jens Bjørnavold's background paper's findings for the October EU conference to be added

Other initiatives for forecasting and anticipating labour market needs may be one-off exercises or part of an integrated system.

Forecasting and anticipating future labour market needs for skills

- Qualifications barometer - a joint initiative of the Austrian labour market service and a private consultancy agency; provides information about anticipated qualification trends in occupational areas (Austria);
- Monitoring of the labour market (quantitative & qualitative) (Belgium, Flanders);
- ISA: Information system on school graduates eligibility on the labour market (Czech Republic);
- A policy framework exists for systematic forecasting and anticipating future labour market needs. In the area of VET forecasting and anticipation of future needs is an integrated part of planning, development and the overall provision of VET and adult vocational training (Denmark);
- Research network: "Early identification of qualification needs" (Germany);
- Operation of a data-base for labour market needs (Hungary);
- Building a competence-based qualification structure (Netherlands);
- Quantitative planning based on pupil's choices, forecasts from the National Labour Market Administration (Sweden);
- Skills Strategy - 21st Century Skills: role of national and regional partners in meeting future skill needs (UK).

Source: DGVT Report

Next steps

Development of sector qualifications will benefit from continued involvement of sector experts and research across clusters of sectors/occupations – a 'hands-on' component. Cross-sectoral learning is also important and measures to facilitate interaction are likely to yield benefits.

Early identification of future skills needs is a priority, and needs innovative approaches, given that it is difficult to predict the future skills scenario that will prevail. Otherwise, there is a danger of passing on skills that are no longer relevant.

Some risks

For individuals, personal career development opportunities do not necessarily follow sector hierarchies.

There is a reluctance of many employers and employee organisations to become involved in training issues in several EU member states, including the EU10. This links to a lack of funding for training in some countries and low current levels of participation in many sectors.

Sectoral initiatives (locally or EU funded) have a relatively modest impact in some countries, because initiatives may have 'project' character without sufficient plans for a structural uptake.

A European Qualifications Framework

Developing a European Qualifications Framework (EQF) is now added as a concrete action. It is too early for our enquiry to have gathered information on this new initiative from countries. However, this has the potential to be an important initiative.

Reference levels

A draft of a reference levels framework that has the potential to link VET and Higher Education (HE) qualifications is being considered at the Maastricht conference. This development underpins developments aimed at linking different systems of recognising learning, for example by relating national qualifications frameworks or creating levels for assigning value to credit. Such a reference levels framework now requires contextualising in national systems as a test of its robustness and to pinpoint where accommodation of key national requirements will demand revision. The European Qualifications Framework can act

as a useful template to ensure that even though different countries and sectors develop their own VET reforms at their own pace, developments in countries and sectors are compatible.

Linking developments

The ECVT infrastructure should build on the reference level framework. The latter should maintain a lifelong learning perspective and be accepted from an economic perspective

Though the Bologna process is further advanced than the Copenhagen process, there is a risk in the process for VET falling behind. An overarching framework needs to encompass both VET and higher education, to generate the development of lifelong learning policies.

23.2.4 Promoting quality assurance

The action here is to develop common criteria and principles for quality in VET.

Common criteria and principles for quality in VET

A 'Common Quality Assurance Framework' (CQAF) has been developed and was endorsed by the Council in May 2004. The CQAF is designed to help member states to develop, improve, monitor and evaluate their own systems and practices, supported by a common reference system. The CQAF provides: a model to facilitate planning, implementation, and review of systems; a methodology for review; the possibility of monitoring by an external body at national or regional level; and, measurement tools to help member states to monitor and evaluate their own systems. The Council conclusions invite the Member States and the Commission to promote the CQAF on a voluntary basis.

A key development

The DGVT questionnaires disclose that quality assurance is an issue that is on the political agenda of all European countries. Many have just entered the state of planning; others have implemented quality assurance systems (e.g. Austria, Belgium-Flanders and Ireland). Unfortunately, in most cases it still remains unclear as to which means of quality assurance are in use. The country reports indicate that it is very common for vocational schools to be subject of Education Inspectorates conducted by the respective Ministries of Education. Assessment of quality through the participation of stakeholders also exists: for example social partners involvement in VET design, assessment and certification. It seems likely that some countries will need to place reliance on adapting externally developed mechanisms for quality assurance.

Scope for review

A review of national and sectoral criteria used to judge the performance of vocational schools could inform criteria for a European quality assurance process. Quality assurance can be summative or formative. The role and function of quality assurance hinges on the use of external assessment and the extent to which judgement is based on self-assessment. In addition, instruments and tools should be developed to ensure scaling-up of innovative vocational education practices across Europe.

How to extend quality assurance for training providers who are outside the influence of the state is an issue to address. Not least, as concerns those who - increasingly for e-learning as well as different forms of private certification (for example in IT) - are located outside national boundaries. This may eventually imply a role for consumer organisations.

Giving attention to the learning needs of teachers and trainers within VET

The Copenhagen Declaration identified a second action for promoting quality assurance: to give attention to the learning needs of teachers and trainers within all forms of VET. Although this is covered by one of the OMC expert working groups, there is no concrete action following this through.

23.3. VET: Innovations in teaching and learning

A tough challenge

Innovation in teaching and learning is a difficult topic to research, but an important one if VET is to make its contribution to the achievement of the Lisbon goal. The evidence suggests that European countries continue to take a wide variety of approaches to tackle the challenges they encounter with regard to their national objectives and reforms in VET teaching and learning.

The fragmented situation with regard to the education, training and recruitment of VET professionals is an obstacle to innovation in teaching and learning. This fragmentation could be partly overcome by a closer co-operation between institutions of VET teacher and trainer education and training across Europe as well as a closer connection between the 'community of practice' of VET professionals, researchers and policy makers. The need to improve the professionalism and skills of VET teachers is recognised in almost all the DGVT reports, some of which indicate reforms that are taking place.

Measures to improve the professionalisation and competence levels of VET teachers and trainers

Almost all DGVTs mention means of developing or strengthening continuous education and training for VET teachers. More specific measures include:

- Re-establishing the prestige of the teacher's profession (Bulgaria);
- Enterprise experience for VET teachers during their careers (France-edu);
- 70% state funding for 'AFPA' training courses for trainers (France-empl);
- Introduction of VET Teacher Training Certificate (Malta);
- A project of making teaching more attractive (Sweden);
- Special teacher training for teachers lacking qualifications (Sweden);

A comprehensive policy for training trainers should meet the needs of the diversity of teaching, training and guidance professionals, the range of the target groups whose needs they serve and the shifts of emphasis that this report concentrates on – ICT and key competences, and learning situated in the particular context.

A new concrete action?

Given the importance of innovation in teaching in learning, this theme could be included more specifically in future actions at the European level especially with consideration to the following:

- Closer co-operation could be encouraged between local R&D and VET agencies;
- In the long-term, self-sustaining innovation structures are needed to develop an innovative and reflective teaching and training workforce;
- The sectoral approach and ECVT could benefit from applied research and development projects targeted at innovation in teaching and learning in specific sectors;
- Instruments and tools could be developed to initiate or scale-up innovative vocational education practices across Europe. The education and training 2010 process would be strengthened by specific actions to support and implement innovation in vocational teaching and learning;
- Use of ICT and e-learning in VET learning contexts should be encouraged, and should take an integrated view of learning, work and technology as far as possible.

More specifically:

- Entrepreneurship, defined as a set of active skills, predispositions and attitudes, is becoming more of a feature of the European education and training systems, at least at the level of national policies. A greater number of countries are developing a framework for entrepreneurial education as a key competence. This development is most common in IVET systems and least common in primary education systems. Countries will need to set up support measures to bring about effective change. Progress is recorded, but much remains to be done;
- The role of ICT in the economy at all levels of manufacturing and services reflects the aspiration to transform Europe into a knowledge-driven economy. Consequently, VET systems have to embrace ICT, and particularly the integration of ICT into modern work processes. A broad conception how to implement ICT and e-learning is important, rather than a concentration on the technological side;
- The development of competencies is a major driver of VET reform in terms of content and purpose of the VET system;
- Workplace and other forms of learning partnerships provide promising new forms of learning, with the possibility of making comprehensive learning opportunities available;
- The encouragement and recognition of informal and non-formal learning has strong potential in this respect, if problems associated with the accreditation of prior learning can be solved.

A shift of focus

Communication technologies are often seen as having the potential to modernise VET. However, more important is the shift from the view that technical skills should be acquired through VET to the view that it is by defining the competences that people need to cope effectively in changing labour markets and communities that could lead to the biggest change in the modernisation of VET teaching and learning. It is this second view that will blur traditional relationships between general, higher and vocational education. The shift calls for forms of teaching and learning that enable people to be more highly skilled and versatile workers in the labour market. It also calls for innovative approaches to making learning available to those with low skills level, so that they can perform in the new circumstances.

23.4 Issues with quantitative data

It is self-evident that adequate indicators and reliable data are a prerequisite for measuring progress in VET. The current indicators do not give a well-balanced coverage for VET, the indicators are not well related to one another and there is a lack of easy access to existing data. Furthermore, monitoring trends encounters further problems because of methodological and technological changes in the surveys over time. Equally clearly, there is a need (and possibility) for improving information on VET (both IVET and CVT) so as to have a clearer picture of comparative and historical trends for VET across European countries.

While these data collection issues may seem technical, they have a major bearing on cross-country comparisons and comparisons over time, and hamper policy makers' ability to evaluate their efforts and to track progress.

In this research we have been able to compensate for this lack of specific data for VET by drawing on the wide range of qualitative data, from the DGVT responses to the questionnaire, reports from independent country experts and through published national, European and international literature.

The next chapter summarises the extent of the data issues and makes proposals to improve data for VET.

Chapter 24:

Indicators and data for VET

A crucial element

We have chosen not to reach conclusions on the whole range of quantitative data collection exercises that the various expert working groups have called for. Important as each of these may be in its own right, we are sure that improving the data collection for the basic indicators for VET is the first priority. We focus on five issues that are already included in the reporting processes. These are fundamental to assessing the progress of VET towards the Lisbon goal. These issues are: the indicators and data relating to expenditure on VET, basic skills and key competences, the role of VET in upper secondary education, indicators on lifelong learning, and methodological changes in surveys and their consequences.

Expenditure on VET

Information about financial input is a prerequisite to assess efficiency of VET and to measure changes in investment in human resources in this area. There is very little information on expenditure for initial vocational education and training at European level, and what we have is not satisfactory. In particular:

- The data collected by UOE¹²⁴ (Unesco, OECD, Eurostat). These rely on counts of enrolments and graduates provided by the countries' administrations. Expenditure on VET is not shown separately (as a percentage of GDP and of total public spending);
- Private expenditure on IVET is included in private expenditure on educational institutions, and this should be shown separately. Estimating educational expenditure at the workplace is difficult and current data collection should be improved;
- CVTS shows information on companies' expenditure on CVT, and this can be improved to give a more accurate and representative picture. For instance: information on other forms of CVT outside internal/external courses needs more methodical development, and the survey should include small firms;
- Private expenditure on VET is underestimated. Regarding companies' expenditure, only IVET is taken into account, CVT in companies is excluded. There is not much information on expenditure of participants and their families on IVET/CVT available. Inclusion of these issues in the upcoming AES would provide better information on private households' investment in adult education.

¹²⁴ Abbreviation for: UIS/UNESCO (United Nations Educational, Scientific, and Cultural Organisation Institute for Statistics), OECD (the Organisation for Economic Co-operation and Development), EUROSTAT: (Statistical Office of the European Union).

Basic skills and key competences

At national and international level there are several programmes assessing outcomes of educational systems (e.g. PISA, TIMSS), but currently there is no way to assess the outcome of VET (compared to general education) pathways. PISA is an internationally standardised assessment of 15-year old students, most of whom are in general, not vocational education. Students in vocational programmes have been included in PISA. Analysis of this subgroup would be useful to ascertain outcomes from VET, although this would require over-sampling of this subgroup. Nor does assessment of the performance of the adult population (IALS, ALL) specify the contribution of VET in relation to general education, at least not at international level.

VET in upper secondary education

In the absence of performance indicators for those graduating from vocational programmes other indicators of outcomes have to be used. It is confusing that the Lisbon reporting processes use several indicators that refer to the completion of educational programmes: they duplicate one another and results are inconsistent. Monitoring of developments on upper secondary education mainly relies on two data sources:

- The data collected by UOE¹²⁵ (Unesco, OECD, Eurostat). They rely on counts of enrolments and graduates provided by the countries' administrations.
- Data recorded in surveys. Information on educational attainment is provided through the Labour Force Survey on the basis of interviews or proxy interviews of samples.

The indicator on highest successfully completed level of education has been in the Labour Force Survey (LFS) for a very long time. There have been major revisions of the variables on education and training, with a complete restructuring in 1998. The first shortcoming is that the information is not recorded according to general or vocational programmes (which it could be), so that at present we cannot make best use of this data. The second problem relates to the mapping of qualifications. The whole mapping process lacks transparency: a way should be found to make the mapping of qualifications more transparent to ensure that programmes are mapped at levels which reflect the actual levels of complexity rather than by describing the institutional and temporal arrangements for education and training.

UOE is the basic source of information on attainment in VET. The main advantage of these graduation rates is the differentiation according to strand of education, providing graduation from general, vocational and pre-vocational programmes. Data collected by UOE face different problems. Namely:

- It is difficult to avoid double counting where, as is increasingly the trend, young people come out of upper secondary education with double qualifications. In some countries it is deemed to be impossible to provide unduplicated numbers;
- Graduation rates for all graduates – regardless of age – are calculated as a percentage of “population of typical age”. Some young people graduate later than the typical age (repetition of years, interrupting then resuming education). In some countries this introduces considerable bias. Demographic changes and varying sizes of age cohorts add another element contributing to bias.

Unfortunately, the two sources of information on educational attainment lack comparability. There are major discrepancies when comparing UOE indicator ‘Upper secondary graduation rates at typical age’ with youth educational attainment based on LFS (See Annex 1.4). These

¹²⁵ Abbreviation for: UIS/UNESCO (United Nations Educational, Scientific, and Cultural Organisation Institute for Statistics), OECD (the Organisation for Economic Co-operation and Development), EUROSTAT: (Statistical Office of the European Union).

differences accrue to some 18 percentage points or more in some countries. (UOE 2001 higher than LFS). When ranking countries according to these indicators, results vary substantially.

The problem of apparent contradictions needs to be addressed in more detail.

Introducing separate treatment of graduation from general vs. vocational and prevocational programmes in the LFS indicator on educational attainment would be a great advantage.

Lifelong Learning

Currently, participation in lifelong learning (LLL) is covered regularly by the LFS and the CVTS; the new AES should provide additional information.

LFS provides information on LLL on a yearly basis, and allows analysis of those participating. Unfortunately, in the LFS participation in LLL only refers to a period of four weeks prior to the survey. Almost certainly, this has the effect of underestimating the extent of adult participation. Expanding the LFS reference period for participation in LLL could be a remedy.

CVTS is restricted to company-provided continuing training, and it is restricted to the employed. At present, coverage is restricted to companies with at least 10 employees. Given the fact that a substantial share of work force is employed in small firms, with an expected upward trend in future, this is a real hiatus. Furthermore, CVTS focuses only on private enterprises thus excluding the public sector. Some other industries are also excluded because of difficulties with data collection. CVTS did not collect any information on individual characteristics of participants in 1999, with the exception of gender. Even given these shortcomings, and in order to allow for a monitoring of progress in achieving identified targets, it would clearly be advantageous to collect information on some individual characteristics of those receiving company provided CVT in the future CVTS. Priority should be given to occupational status and age.

Since much work-related learning is informal or non-formal in character, it is important to develop ways of extending data on CVT beyond participation in formal VET courses. Although tools have not yet been found to develop international comparisons for many areas of competence (entrepreneurship, collaborative working, etc), some country initiatives at least try to assess the impact of these less formal aspects of learning (e.g. Norway – measures of the learning conduciveness of work; UK and Austria– the IIP standard).

The consequences of methodological changes

Early school leavers and life-long learning are two of the longer list of 35 structural indicators chosen for assessment of the progress made in achieving the Lisbon goal. Both structural indicators are calculated using data from the European Labour Force Survey (EU-LFS), which is obligatory in all EU-member states. In the attempt to achieve input harmonisation across member countries, a number of modifications have been adopted over the last few years. With reference to early school leavers and life-long learning, the latest adjustment concerns the reference year of 2003. While this is rational in the longer term, two problems occur in the short run. First, a comparison over time is difficult due to breaks in series caused through technological and methodological changes. Second, comparisons between countries face the problem that, due to different stages of the implementation process, some countries have already implemented the change while others have not.

For the analysis contained in this report, these issues have created major difficulties in ensuring that we have compared 'like with like'. For both indicators, and for 2003 in particular, cross-country comparisons are problematic.

In recent years, other modifications in the national LFS also have to be taken into account when comparing data of the two structural indicators over time and across countries. For example, in 2003 France adjusted the reference period for participating in education or

training from initially one week to four weeks common in all other EU-member states: the participation in lifelong learning more than doubled. Apart from these modifications and their effects, Eurostat publishes additional breaks for several countries, warning against comparing the subsequent data with former years.

A fundamental problem

All in all, there is a fundamental problem when employing indicators for life-long learning, graduation at level 3 and early school leavers to assess the role of VET in progress towards achieving the Lisbon goal. Policy conclusions based on data referring to recent years have to bear in mind the difficulties resulting from the current data collection process. The changes to data collection methods suggested above are a priority, and should put the data on to a sounder footing. While these data collection issues may seem technical, they have a major bearing on cross-country comparisons and comparisons over time, and hamper policy makers' ability to evaluate their efforts and to track progress.

Chapter 25:

The quest to optimise VET in Europe: key messages

The Consortium identifies nine clear messages from the study. Each message has implications for the EU member states, the social partners, the Commission, its agencies and for professionals in the VET field. These messages relate to the shaping of future policies. We describe the messages in a way that will raise debate among stakeholders who seek to advance the role of VET in European policy.

Cooperation based on well grounded values

1. European VET as a whole has distinctive characteristics. Crucially it builds on the values, priorities and infrastructures of national, sectoral and local systems of VET. Increasing levels of co-operation at the European level is providing support and leadership for building VET systems for optimal economic and social performance.

Levels of co-operation between member states across Europe is growing as Europe strives towards the Lisbon goal. Yet the indications are also that countries and sectors will continue to develop reforms that are most appropriate to their own traditions, circumstances, challenges and aims. This means that member states will progress the Copenhagen actions according to rather varying sets of priorities. A 'one track' synchronised development is unlikely. In some cases, inadequate funding will prove to be a barrier to reform. In other cases, agreed priorities such as developing credit frameworks, are less likely to be high on the innovation agenda of some member states, in the face of other pressing priorities, such as sector development or improving quality in VET. Furthermore, sectoral developments, while innovative, are also likely to proceed at different speeds and with somewhat different priorities. A method of peer review similar to those used in the field of the European Employment Strategy could be a useful tool that will continue to build cooperation whilst respecting important traditions and local priorities.

Larger member states will need to remain aware to the priorities of smaller member states, including the EU10, if all the member states are to be full partners in a process of 'bench learning'. The co-ordinating role of the Commission provides leadership in a scenario where 'bottom-up' will remain the dominant method of cooperation.

Member states and the social partners should take care to avoid developments at the national and sectoral levels that are divergent when viewed from the European perspective. That many responsibilities for VET development are decentralised to a local level makes this a challenging responsibility. The European Qualifications Framework (EQF) and the Common Quality Assurance Framework (CQAF) have the potential to become powerful tools to ensure that there is compatibility between the diverse developments that are taking place in different spheres.

Many of the bottom-up levers will come through the public sector and supply side: collaboration on the demand side, e.g., through local employer organisations and employee representatives, may prove to be more difficult. This lends weight to the role of the national and European social partner organisations as generators of innovation.

Strengthening the blend of actions

2. The Copenhagen actions are important levers that will generate a more active role for VET in developing lifelong learning policies. But they are incomplete as they now stand. Although promoted by the Leonardo da Vinci Programme, innovation in teaching and learning is missing from the current Copenhagen priorities as a concrete action that underpins most VET developments and reforms.

Each of the identified priorities of strengthening the European dimension, improving transparency, recognition of competences and qualifications, promoting quality assurance and the associated concrete actions continue to have an important role in furthering the contribution of VET to achieving the Lisbon goal. Strong systems and practices for lifelong guidance are, for example, a prerequisite for flexible systems of VET and lifelong learning that are able to meet future skills needs that are often difficult to identify in situations of rapid labour market and technological change. A similarly positive conclusion can be reached for each of the concrete actions being developed.

Innovation in teaching and learning for VET is not given sufficient priority or visibility in the follow up to the Copenhagen Declaration, nor in the OMC process for education and training. This action has the potential to enhance collaboration between the policy, research and practitioner communities at all levels. This also provides the opportunity to draw communities of practitioners into VET activity at the EU or inter-country level.

Other than the omission from current actions of cooperation in innovation in teaching and learning as a major action, the evidence (in particular from DGVTs responses) is that the blend of current actions is appropriate.

Quality IVET means developing a new linkages

3. For initial VET the issue is quality. Participation rates are already high in most member states. The challenge is to improve quality, to make provision attractive to stakeholder and client groups, and to provide better linkages between pathways, and with general and higher education.

Many EU member states have high levels of participation in initial VET, and in most of these member states this is contributing to the priority indicator of achieving high levels of completion in upper secondary education. Therefore, further progress has less to do, at least in most countries, with increasing the numbers of young people in initial VET, and much more to do with a range of measures centring on the quality, flexibility and attractiveness of initial VET. Successful initial VET provides an experience-based route into working life, and hinges increasingly on the acquisition of key competences or contextualised occupational competences as complement to the traditional approach to the teaching and learning of technical skills.

Successful VET is also characterised by successful and appropriate insertion into the labour market and links into general and higher education. The emphasis of reforms is to open up a range of options enabling VET learners to progress into further training and into other forms of education, including higher education, and to open up their chances in working life rather than to limit them. **Effective guidance, credit frameworks, recognition of non-formal and informal learning, clear qualifications frameworks, and measures to promote and guarantee quality in VET all have an important role in setting up sound opportunities for insertion and progression. Most if not all of these measures apply equally to initial and continuing VET.**

Education for entrepreneurship, both as a key competence and as a more specific preparation for business start up merits a more prominent role in VET. This has the potential

to broaden VET programmes generally and help them become more responsive to the needs of employment and individuals.

The majority of European countries consider that by 2010 ICT in vocational learning will be embedded in work and business processes, rather than mainly involving simulated activities or distance learning. E-learning clearly has the potential to stimulate learning networks and new forms of training organisation. The basic principle of good pedagogy remains that the design of the whole learning process (possibly supported by e-learning) is the decisive factor for the learner's success. Therefore, European countries' e-learning related measures should not be limited to questions of hard- and software, but rather focus on pedagogy and e-learning in work processes.

A challenge is how to conceptualise the role for VET in providing for the inclusion of (potentially) excluded groups who are unsuccessful in general education without undermining the main role for VET which is delivering work related learning in a full range of levels of knowledge, skills and competences. This raises issues of both policy and funding.

A question for the member states and the European Commission is how to take forward the concrete actions associated with the Copenhagen Declaration, now that the step of developing principles has been undertaken for most of these areas. The Commission could consider adopting the practice of working with groups of 'pathfinders'. These pathfinders can also explore ways to increase synergy between Lisbon and Copenhagen related actions so that the overall effect of development is more than the sum of the individual actions. To this end, it is to be welcomed that European programmes are to be more clearly tied to specific concrete actions.

Accelerating participation in CVT

4. Current low levels of participation in CVT must be addressed as a matter of urgency in most countries and in most sectors if the priority of developing effective and inclusive lifelong learning strategies is to be achieved.

The driving forces for better CVT include ageing populations, global economic competition, changes in work organisation and skills needs, rapid technological change and the role of ICT. These all point to the conclusion that continuing workplace learning is an essential aspect of lifelong learning provision. However, the existing surveys indicate clearly that in almost all European countries and across most sectors, levels of participation in CVT are at a very low level for many target groups: inequality of access to CVT is a serious issue not just in terms of people not in work (and hence excluded from work based learning) but also in terms of people in work with little opportunity to learn through work. The importance of addressing this deficit has clear and major implications for developing and implementing effective and inclusive lifelong learning policies.

Workplace learning makes a dynamic contribution to lifelong learning. Work practice and work experience is often a leading edge for innovation and for learning, although the dynamic and innovative character of much workplace experience and learning is often under-recognised. This deserves stronger recognition in the drive to achieve the Lisbon goal. The evidence is that learning opportunities are maximised when they are routinely part of the work process, and where organisational structures and the quality of work are good.

An unfortunate effect of current adult learning is that it tends to reinforce skill differences resulting from unequal participation in initial education – the "Matthew-effect". Those with lower levels of educational attainment have a very low rate of participation in continued education and training. This issue has been raised many times in evidence used in our report and it also demands urgent attention by national and sector bodies.

On the other hand, sectoral and national initiatives provide instances of the effective uptake of continuing VET, and people with a high educational level in more senior jobs in some sectors in some countries have a high chance of engaging in CVT.

Countries report on a range of initiatives intended to raise the opportunity and take up of continuing VET. Prominent among these are: funding incentives, the recognition of informal and non-formal learning, provision of learning opportunities in non-traditional ways. The social partners take the leading role in many initiatives for both high- and low-skilled workers.

VET has to place emphasis on tackling the basic skills deficit in the adult population through early needs detection and follow up of disadvantaged groups in the workforce and those seeking entry to the labour market. **The evidence is that the impact for individuals and firms of training for the low skilled is as high as the impact for the highly educated, though many of the disadvantaged and employers are unaware of this.** Although special programmes for young people at risk are reported by the DGVTs in about two-thirds of the countries investigated, we have not seen convincing examples of comprehensive strategies to tackle this issue among disadvantaged and adult populations. **As populations age, the urgency of addressing basic skills deficits becomes greater.**

The recognition of prior learning can be a catalyst to make VET more receptive to the learning needs of all learners. Validation of all prior learning, whether formal, non-formal or informal (and thus including work place learning) is a central component of an innovative lifelong and life-wide learning strategy. It can, if used formatively, have a high impact on a working life, can encourage individuals to take up learning again and make VET more receptive to the needs of adult learners.

Generating and sustaining innovation is a question of stimulating partnerships between higher education, work organisations and public agencies, often at a regional level, rather than of concentrating on single institutions. The Irish EU presidency contribution to strengthening the links between higher education and VET is valuable in this respect.

For countries and sectors, it is a matter of finding ways to maximise funding from a range of sources, and also of setting up strategies and mechanisms to overcome barriers. A question for the European Commission is how best it can encourage member states to invest in CVT. The careful use of the ESF, regional and consolidation funds with a priority of improving CVT for specific target groups is one mechanism. Sharing best practice on tools to anticipate future needs for individuals, sectors and labour markets is one way of improving the analysis of how skills needs are changing, and raising the awareness of the social partners.

Funding VET

5. The conclusion that increased levels of expenditure will be required is inescapable. This has implications for governments and the public sector, work organisations and the social partners, and for individuals.

The Lisbon European Summit called for a substantial annual increase in the per capita investment in human resources. For the last year when comparative figures are available, 2001, an increase has taken place, especially in the EU10, but public expenditure on education varies greatly between countries, with the Nordic countries spending the highest shares of GDP on education. The EU stands at parity with the US regarding public expenditure on education and spends a considerably larger share of GDP than Japan.

The most recent comparative data at European level for companies' expenditure on continuing VET is for 1999 when companies' spending on CVT varied greatly between countries. Companies' expenditure on continuing training courses probably represents about 1% of GDP.

Research evidence shows that training generates performance effects for individuals and companies and that economic growth will not be fostered significantly if investment is limited to any elite group. Raising the basic skills of low performers produces relatively large economic and productivity gains. Thus the impact of investment in education and training on national economic growth is positive and significant.

Despite the evidence from comparative international research showing that skills and competencies of the workforce are often an important element for companies' performance,

companies often regard expenditure on training as an immediate cost, not as a longer-term investment.

Increased levels of expenditure will be required if VET is to play its part in achieving the Lisbon goal. This has implications for governments and the public sector, work organisations and the social partners, and for individuals.

Data coherence demands attention

6. The lack of adequate data on input as well as on outcomes of VET is a severe problem that hampers strategic planning. The deficit has to be addressed urgently.

We are keenly aware of the expectations from various expert committees dealing with the follow-up from Lisbon for education and training for benchmarking data. Currently the indicators and data relating to the basic topics for VET have major weaknesses. In particular the indicators on expenditure on VET, basic skills and key competences, the role of VET in upper secondary education and indicators on lifelong learning through CVT are problematic and we have laid out in full the deficiencies and suggested remedies. These issues should be addressed before longer-term plans are put in place to provide data on a range of new indicators. Notwithstanding this issue of data supply, fortunately the qualitative data supplied by DGVTs and by country analysts, and other published sources, provide a rich source of evidence relating to the key issues in the contribution of VET to lifelong learning and the Lisbon goals.

Optimising coordination and communication through the OMC

7. It would be beneficial to make OMC reporting processes for education and training at the country and European level more coherent, and to improve the links with the reporting processes for employment and social inclusion associated with the Lisbon goal.

Different policy areas are connected to VET knowledge and learning, and making the connections is a prerequisite for innovation. As DGVT reports indicate, **coordination at the national level between linked policy strands is frequently less than optimal. A challenge for governance is to connect education and training, labour market, innovation and inclusion policies.**

At the European level, fewer and better-integrated reporting procedures could play an important role. This could also provide the basis for member states to use the different reporting procedures more effectively for dissemination and awareness purposes than is currently the case. The single integrated Education and Training 2010 reporting process, anticipated in the Joint Interim Report, should lead to a more strategic approach.

Self-assessment of VET systems by DGVTs has proved to be a useful tool if the survey instrument itself is designed in particular ways. For example, using a template for responses and rather than asking for detailed descriptions, we asked DGVTs for such items as key areas of current reform and indicators of success. Feedback from DGVTs has been positive. This may open up avenues for a reporting process that is closer in nature to self-evaluation or, eventually, impact evaluation than to the lengthy descriptive reporting of system details.

Cedefop's ReferNet is now in a strong position to be developed as an agency for reporting processes to improve the knowledge and understanding of the situation in the member states and other participating countries through the description, analysis, evaluation and close monitoring of policies. This would mean that governments would not be asked to report on the detail for VET, but on strategic and evaluative aspects.

In the longer term, broader initiatives, involving several national ministries or European DGs may be called for, on the theme of innovation of learning systems.

A key ingredient for a European Labour market

8. As Europe develops towards a more open and international labour market, VET can reduce barriers and ease frictions that currently inhibit mobility of workers and learners. VET has a contribution to make towards a European labour market, but it is not the major driver for creating greater migration of people.

The power of VET to support the development of a European labour market should be estimated carefully as unrealistic expectations can arise. We have, been able to find little research concerning local cross border mobility, for example between EU15 and EU10 neighbouring countries. In these cases, formal and informal VET recognition between systems may have considerable impact in creating 'zones of mutual trust' in the labour market.

In particular, sectoral development across borders adds value. However there is a risk attached that sectors working independently create their own isolated effect, and that these single initiatives are not sustained and integrated into a coherent VET infrastructure.

The initiatives that have begun to encourage 'bottom up' rather than 'blanket' recognition of skills and qualifications across boundaries and sectors are to be welcomed. The 'zones of mutual trust' exploration is likely to identify openings for more trans-national recognition, and also barriers that will need to be tackled.

There is scope to explore the potential of credit transfer processes to facilitate cross border mobility. Whilst sectoral and national initiatives involving transfer of credit for learning suffer from the drawbacks of isolated systems, they have a contribution to make to wider development of effective credit transfer systems. Such initiatives need to be fostered and networked across Europe.

If mobility is to become an option for a much wider group of VET students, then mobility must be defined in a broader manner than it is in many instances today. **Mobility should at a system level and at an institutional level comprise several elements.** This should include: study visits and actual placements for school leaders, learners, teachers, social partners, and new VET graduates; guest teachers from other VET systems; courses offered in languages other than the native language and with an international dimension in the curriculum including comprehensive opportunities for language and inter-cultural training; financial incentives for school administrations to offer mobility schemes; virtual mobility whereby students can follow modules or collaborate with VET students on joint projects, or whereby VET teachers can share/develop curriculum and practices.

Extending the reach of the European message

9. Future developments of OMC and associated European cooperation in VET should involve a wider public, including wider communities of policy makers, researchers and practitioners.

Member states and the social partners should consider how they could encourage greater participation in European cooperation in VET, involving wider communities of policy makers, researchers and in particular practitioners.

Agencies such as Cedefop and ETF should be enabled to develop new networks that involve far larger numbers of participants including more practitioners than has been the case up till now. This will require communication tools that will enable innovative collaboration to take place between practitioners on a larger scale than is presently the case. EU regional policies and networks could nurture this expanding involvement.