

# Zooming in on 2010

Reassessing vocational  
education and training





# Zooming in on 2010

Reassessing  
vocational education  
and training

Patrycja Lipinska  
Eleonora Schmid  
Manfred Tessaring

Cedefop

Luxembourg: Office for Official Publications of the European Communities, 2007



A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (<http://europa.eu>).

Cataloguing data can be found at the end of this publication.

Luxembourg:  
Office for Official Publications of the European Communities, 2007

ISBN 92-896-0458-1

© European Centre for the Development of Vocational Training, 2007  
Reproduction is authorised provided the source is acknowledged.

*Designed by Colibri Ltd. - Greece  
Printed in Greece*

The **European Centre for the Development of Vocational Training** (Cedefop) is the European Union's reference centre for vocational education and training. We provide information on and analyses of vocational education and training systems, policies, research and practice. Cedefop was established in 1975 by Council Regulation (EEC) No 337/75.

Europe 123  
GR-570 01 Thessaloniki (Pylea)

Postal address: PO Box 22427  
GR-551 02 Thessaloniki

Tel. (30) 23 10 49 01 11, Fax (30) 23 10 49 00 49

E-mail: [info@cedefop.europa.eu](mailto:info@cedefop.europa.eu)

Homepage: [www.cedefop.europa.eu](http://www.cedefop.europa.eu)

Interactive website: [www.trainingvillage.gr](http://www.trainingvillage.gr)

**Edited by:** Cedefop

Patrycja Lipinska, Eleonora Schmid,  
Manfred Tessaring, *Project managers*

Published under the responsibility of:

Aviana Bulgarelli, *Director*

Christian Lettmayr, *Deputy Director*

# Foreword

European countries, social partners and the European Commission are working closer than ever towards a shared policy agenda, to inspire developments, reforms, and common concepts and tools for vocational education and training (VET). However, to cope with Europe's socioeconomic challenges and make the vision of highly-skilled citizens come true, more remains to be done. Education and training needs to provide the right skills for both younger and older generations in time to prevent future skill shortages. Hence, the priorities set to modernise VET and make it more attractive as a tool for excellence and social inclusion, remain valid. It is important to keep the focus.

This was Cedefop's main message at the education ministerial meeting in December 2006, confirmed by the Helsinki communiqué. The Helsinki meeting was the second review of the Copenhagen process, which aims at developing European VET systems to make Europe socially cohesive and more competitive. In Helsinki and at the follow-up Agora conference it organised in April 2007, Cedefop presented the progress achieved at national level since the Maastricht communiqué (2004) based on the main findings of this report.

The biggest policy shift is evident. Work on national qualification frameworks, sparked off by a proposal for a European qualifications framework (EQF) has brought to the fore related trends such as basing qualifications on learning outcomes and ensuring quality to generate trust among countries, learners and employers. Increasingly, countries understand that validating work-experience or other forms of non-formal learning are important ways to improve employability. Apprenticeships are no longer targeted only at young, non-academic learners but at everyone, including the adult unemployed and students in higher education. Access to learning for the low-qualified, migrants and people beyond the age of 40, is becoming key, but still needs more attention. This is where guidance becomes more important as a lifelong accompaniment to learning. Raising the proportion of highly-skilled workers requires both higher education and continuing vocational training. Anticipating the skills needed is a prerequisite. All parties involved must see education and training as an investment in their and Europe's future.

To design comprehensive strategies and effective policies, it is important to understand socioeconomic developments and challenges and consider the interplay between different policy areas. This report is not simply an inventory of progress in VET. It offers a more holistic view, reflecting VET as an interface between education, innovation, employment, economic and social developments and policies. To support policy-makers in their decision-making, statistical data and research findings underpin the conclusions of this report and examples from non-EU countries illustrate the status and role some of Europe's competitor countries assign to VET.

This report constitutes another element in Cedefop's wide range of activities to support the Copenhagen process, whether through expertise and assistance to develop common tools and principles (the European qualifications framework, the European credit transfer system for VET, Europass, the common quality assurance framework, guidance and counselling, etc.) or its contributions to clusters and peer learning (teachers and trainers, financing, etc). In addition to other opportunities for policy-learning, reports on VET development and progress can assist countries in gauging their own progress to adjust measures and pace, thus complementing their self-assessments.

The views of Member States as to their own progress in implementing VET priorities is a major element of this report. Cedefop would therefore like to thank the Directors-General for VET for their valuable contributions. The Helsinki communiqué has given Cedefop the mandate to monitor policy developments and progress for the next review of the Copenhagen-Maastricht-Helsinki process in 2008. Cedefop is ready to embark on this interesting task as follow-up to the reports prepared in the first phase of VET's way towards the Lisbon goals. In cooperation with the French Presidency, European Commission, ETF, our reference network (ReferNet), social partners and various stakeholders, in particular Directors-General for VET, Cedefop will collate and analyse data from its sources and partners inside and outside the EU.

Aviana Bulgarelli  
*Director*

## **Acknowledgements**

We would like gratefully to acknowledge the contributions, information or advice of Cedefop project managers Tina Bertzeletou, Jens Bjørnåvold, Mara Brugia, Rocio de la Torre, Koen Bois d'Enghien, Pascaline Descy, Sarah Elson-Rogers, Jose Manuel Galvin Arribas, Karsten Krüger, Katja Nestler, Olga Strietska-Illina, Philippe Tissot, Alena Zukersteinova and their secretarial staff.

We are particularly grateful to Anelia Miteva, who contributed substantially to the analysis and the drafting process, and Anastasia Adami for her valuable contribution to the final phase of this exercise. Our thanks also go to Alex Best, Anja Wegertseder, Marena Zoppi and our editing, translation and publications service.

Finally, we thank Martina Ni Cheallaigh in the European Commission, the European Training Foundation for valuable comments, Directors-General for vocational education and training for their responses to our survey in 2006, and, last but not least, the Finnish presidency for their tremendous support in exchanging and stimulating ideas.

# Table of contents

<b>1. Executive summary: from Lisbon via Copenhagen and Maastricht to Helsinki</b>	<b>7</b>
1.1. Looking back	7
1.2. Facing Europe's socioeconomic challenges	9
1.3. Taking stock of progress in vocational education and training	10
1.4. Setting the framework to:	10
1.5. Improving quality, transparency and recognition	12
1.6. Meeting the skill needs of individuals and the labour market	14
1.6.1. Those who drive change and promote learning	14
1.6.2. Identifying and providing the skills needed	14
1.6.3. Learning and working by leaving	16
1.7. Concluding and looking ahead	16
1.7.1. What has worked	17
1.7.2. What has proved a challenge	18
1.7.3. Stay focused	18
<b>2. Lisbon-Copenhagen-Maastricht-Helsinki: looking back to see ahead</b>	<b>19</b>
2.1. How to become world-class	19
2.2. VET – A key to the future	21
<b>3. Challenges</b>	<b>25</b>
3.1. How competitive is Europe today?	25
3.2. Demographic change – not just a threat	26
3.2.1. Conclusions	28
3.3. Sectoral and occupational change – risks and opportunities	28
3.4. Skills and employment	31
3.4.1. Educational attainment of adults	31
3.4.2. Challenge: low-skilled people	32
3.4.3. Employment and unemployment	33
3.4.4. Conclusions	35
<b>4. Lisbon-Copenhagen-Maastricht-Helsinki: taking stock of progress at national level - Setting the framework</b>	<b>36</b>
4.1. Progress – in brief	37
4.2. Image matters	39
4.2.1. How European citizens rate initial VET	40
4.2.2. How European citizens rate continuing training	41
4.2.3. How non-EU countries rate initial VET	42



5.2.4. Quality assurance in validation of non-formal and informal learning	76
5.3. Boosting quality in VET	76
5.3.1. A common understanding on quality assurance	77
5.3.2. Quality, learning outcomes approach and qualifications frameworks go hand in hand	78
5.3.3. Conclusions	80
5.4. Information, guidance	81
<b>6. Meeting the skill needs of individuals and the labour market</b>	<b>85</b>
6.1. Teachers and trainers in VET: the forgotten change agents?	85
6.1.1. A complex family	85
6.1.2. The invisible majority	85
6.1.3. High demands – low esteem?	87
6.1.4. Developing competence in service	89
6.1.5. Common challenges	90
6.2. Labour market skill needs	92
6.2.1. Current skill needs and skill shortages	92
6.2.2. Future prospects	92
6.2.3. Solutions	93
6.2.4. Integrating learning with working	94
6.2.5. Revitalising apprenticeships	94
6.3. Addressing the lifelong learning divide through VET is high on the agenda	95
6.3.1. Those with little formal education and training	95
6.3.2. Senior workers	98
6.3.3. Conclusions	99
6.3.4. Those with migrant backgrounds	99
6.3.5. Conclusions	101
6.3.6. Those leaving education and training early	101
6.3.7. How countries cater for those who risk losing out	101
6.3.8. Tailoring VET to tap the potential of those at risk	103
6.4. Making learners and workers mobile	104
6.4.1. Learning by leaving	104
6.4.2. Mobility barriers and benefits	105
6.4.3. Quantity or quality?	106
6.4.4. Accumulating learning and making it portable	107
6.4.5. Credits	109
6.4.6. Leaving to match jobs and skills or to make a living	110
6.4.7. Supporting mobility wisely	112
<b>List of abbreviations</b>	<b>114</b>
<b>References</b>	<b>116</b>



12. Students in general and (pre)vocational programmes as a percentage of all students at ISCED 3, 2004 (%)	39
13. What citizens would recommend to a young person finishing compulsory or secondary education	40
14. Total public expenditure on education and training as % of GDP, 2000, 2003	52
15. Total public expenditure on education and training at secondary level, by programme orientation, as % of GDP, 2003	52
16. Quality assurance - a prerequisite for mutual trust	70
17. Forgotten change agents?	91
18. Low-skilled as a percentage of the population aged 25-64, by age groups (EU-27)	96
19. Participants in non-formal education/training, by educational attainment (%), 2003	96
20. Participants in informal learning, by educational attainment (%), 2003	97
21. Participation in non-formal learning by educational attainment and working status, %, (EU-25, 2003)	98
22. Percentage of the population aged 25-64 participating in lifelong learning, by age groups (EU-27, 2005)	99

## Boxes

1. International Standard Classification of Occupations	29
2. Elementary occupations (ISCO88, 9)	30
3. Strategic approaches for VET – selected country examples	38
4. What hampers progress	38
5. Raising the image of VET in Australia	42
6. Strategies for VET and lifelong learning in non-European countries	43
7. Ingredients for smoother progression from VET to higher education	46
8. Ministerial collaboration – selected country examples	48
9. Cooperation at different levels – selected country examples	49
10. Involvement of stakeholders – selected country examples	50
11. Measures intended to improve efficiency – selected country examples	53
12. Measures intended to raise additional resources – selected country examples	55
13. Measures intended to raise additional resources – selected non-European countries	56
14. Measures intended to increase equity – selected country examples	59
15. Effects of training on firm productivity – recent empirical findings in Europe	61
16. Estimated wage growth due to training	62
17. Social benefits of equity in education	63
18. Individual and non-monetary benefits of VET	64











Motivating European citizens to take up continuing training, however, requires more than putting access routes and programmes in place. They need to know which skills they might need. Time made available during working hours and financial support or incentives as well as guidance could encourage them to undertake more training.

**(b) ensure cooperative governance**

Policy responses to the challenges comprise manifold measures, but there is a trend towards more strategic approaches and policy packages. In some cases they are part of lifelong learning strategies or national reform programmes and regional development plans. Only a few countries set quantitative or qualitative targets and indicators to assess the effectiveness of their policies. Several countries are strengthening cooperation between ministries, in particular education and employment, and administrative bodies at different levels. Policies should be comprehensive and combine different policy areas to address multidimensional challenges (for instance, education and training issues linked to welfare and employment). However, strategies that cover more than two areas are scarce.

With increasing decentralisation and autonomy, a broader range of stakeholders can take an active role in shaping VET, for instance in content, financing, recruitment of staff: notably the social partners, as well as teachers and trainers, learners and parents. Strong social dialogue, generally understood as key to develop and implement successful VET policies, however, still remains a challenge. Hence, cooperation needs to improve further. Several policies specifically aim at improving the modes of governance as well as public and private investment.

**(c) improve funding and financing mechanisms**

Implementing VET reforms requires adequate resources. As data available for the first time show, countries spend between 0.3 and 1.1 % of GDP on (pre)vocational programmes at secondary level. Generally, this is less than on general education. Facing budgetary constraints, countries seek ways to allocate and manage funds more efficiently, for instance through decentralised or performance-based funding or partnerships to pool and make best use of resources. Training funds, vouchers or individual learning accounts are initiatives used to raise additional private resources, i.e. from enterprises and individuals. As







improve information on skill shortages and future skill needs. Cedefop's network 'Skillsnet' has embarked on developing a European skill needs forecasting system to devise a common approach to complement national and sectoral initiatives.

Current employment and demographic trends generate labour shortages in both highly skill-intensive and elementary occupations. However, technological change and innovation raises demand for higher-skilled people across all occupations. Apart from technical, language or ICT skills, social and personal skills are increasingly required on the labour market. None the less, only some countries reported on their initiatives to develop key competences in VET, mainly entrepreneurship. Workplace learning is key for skills and competence development. Of European employees, 71 % think they acquire new knowledge at work. It also seems particularly suitable for small and medium-sized enterprises (SMEs). Several countries are reintroducing or expanding apprenticeship or are developing it further into new forms of alternating learning, for adults and the unemployed as well. Internships and other company-based learning models in cooperation with industry are also used in higher education. Workplace learning therefore supports the pursuit of both excellence and inclusion.

As low-skilled people have fewer opportunities to participate in further learning, upskilling and reducing the number of school drop-outs require targeted measures. Learners from migrant backgrounds are more likely than their native peers to leave education and training without the necessary skills for successful transition into the labour market. This calls for reinforced actions to ensure adequate (language) support. Shrinking younger age cohorts requires developing the skills and competences of older workers to improve their employability and counteract their discrimination on the labour market, which many experience as early as from 40 to 45. To avoid wasting people's talents and ensure skilled migrants are adequately integrated into the labour market, it is necessary to validate and recognise their skills. Countries have stepped up their measures to improve retention rates in education and training and increase access to training for (disadvantaged) adults. They range from basic skills provision to specific CVET programmes or targeted training, often linked to guidance and counselling and skills validation. The general trend is to include these measures in (C)VET reforms, lifelong learning strategies or national reform programmes for growth and jobs. VET policies should be designed to tap and develop people's potential. To this end, it is essential to have a clearer understanding of the target groups and their specific needs.

















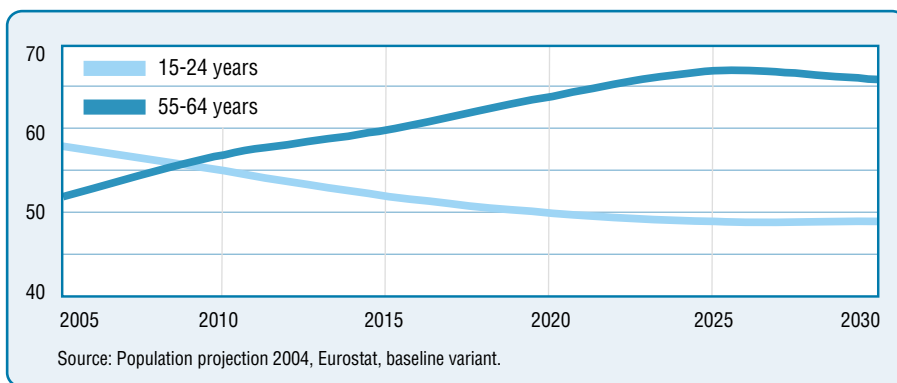






According to the 2004 Eurostat population projection (baseline variant), the number of young people aged 15 to 24 in EU-25 will fall below those aged 55 to 64 by 2009 (Figure 7 below) By 2030, the number of younger people (15 to 24 years) will fall by 9 million (by 11 million for EU-27).

Figure 7. **Population in EU-25 aged 15 to 24 and 55 to 64, 2005-30 (in million)**



If participation rates do not change, the number of younger people in VET at upper, post-secondary and tertiary levels (ISCED 3-5) will decrease by more than two million in this period. In addition, extended education and training will delay the entry of young people into the labour market. These changes will also have implications on the number and type of training places as well as teachers and trainers needed.

This development will change the labour market profoundly. It will become much more dependent on older workers, migrants and women returning to work. If education and training does not provide in-time the right skills both for younger and older generations, skill shortages will continue to occur or even be reinforced. Prosperous economic sectors, for instance in the field of new technologies, are likely to suffer particularly from a shortage of young talents.

Policies should be designed to serve this change and provide more education and training opportunities for these target groups. Similarly, ensuring that shrinking labour markets can meet skill needs of employers will require additional policy attention. Lower numbers of young people in education and training should release the capital needed for adequate policy responses to harness the human capital of all the working age population.

















## CHAPTER 4

# Lisbon-Copenhagen-Maastricht-Helsinki: taking stock of progress at national level – Setting the framework

Given the economic and social developments and challenges Europe faces, it is crucial to ensure VET fulfils its role as a major pillar of lifelong learning and contributes effectively to the Education and training 2010 work programme and the Lisbon agenda. While some of the education and training benchmarks (see Figure 1) are also relevant to VET, its complexity and the nature of the commonly agreed priorities require more comprehensive information to be able to evaluate progress.

To take stock, Cedefop undertook its own national surveys (see Chapter 2) and used findings of other stock-taking activities and studies carried out to support the Copenhagen process. Countries were asked to: highlight up to five policy areas where they had progressed since Copenhagen; explain how they ensured close collaboration between the different policy areas related to VET, for instance economic, social, employment and youth policies. Another set of questions was linked to Europass, EQF and countries' expenditure on education and training. The main section of the questionnaire focused on the state-of-play in addressing the Maastricht priorities. To underpin the analysis and complement the information, various data from other Cedefop activities, different EU and international sources were used (see Chapter 2). The Maastricht priorities formed the basis for the data collection and the structure of this analysis. Examples from non-European countries are included to outline objectives, policies and challenges that EU countries share with their competitors.





































**Box 12. Measures intended to raise additional resources – selected country examples**

Country	Policy/measure
<b>Poland</b>	Introduction of a training fund instrument (2004), based on employers' voluntary contributions of at least 0.25 % of the payroll; State support is available through reimbursement of: 50 % of the training costs for employees threatened with redundancy; 80 % of the training costs of employees on training leave for more than three weeks; salary of the unemployed person replacing an employee on training leave (up to 40 % of the average monthly salary); training allowance (non-obligatory), paid to the redundant employee during his/her training, up to six months.
<b>Italy</b>	Creating multisectoral training funds (10 established in 2003, two established recently); mandatory employer contribution: 0.3 % of the payroll; association with a fund is voluntary.
<b>France</b>	Increase in employers' mandatory contributions to finance training (levy scheme) – change in calculation method; current obligation: 1.6 % of total payroll for companies with 20 or more employees; 1.05 % for those with 10-19 employees; 0.55 % for those with less than 10 employees.
<b>Austria</b>	Creating additional apprenticeship places in companies and training facilities through lump-sum payments to cover training costs (2004/05). First year of apprenticeship: EUR 400; second: EUR 200; third: EUR 100 per month.
<b>Belgium (Flanders and Wallonia)</b>	Training vouchers for employers; in Flanders since 2002, in Wallonia since 1998; instrument addressed to all companies but aimed to stimulate training in SMEs; value: EUR 30, 50 % paid by government and 50 % by employer; maximum number of vouchers per year per company: 400 in Wallonia, 200 in Flanders; employers must inform the work council or trade union delegation of the number and value of the vouchers purchased. Training costs are to be included in the review of the company's social measures.
<b>Netherlands</b>	Individual learning accounts (ILA); two experiments during 2001-03; targeted at employees and job-seekers; 2 750 individuals, 100 companies involved; government contribution: EUR 450, other stakeholders might contribute; savings to be used only for training purposes; next experiment: 2006-08; contributions from government and branches: EUR 500 each.
<b>UK (Scotland)</b>	Individual learning account (ILA); those with a yearly income of GBP 15 000 or less can receive up to GBP 200 a year; those with an income above GBP 15 000 can claim up to GBP 100; learners have to contribute GBP 10 and follow a course delivered by a provider approved by ILA Scotland;



























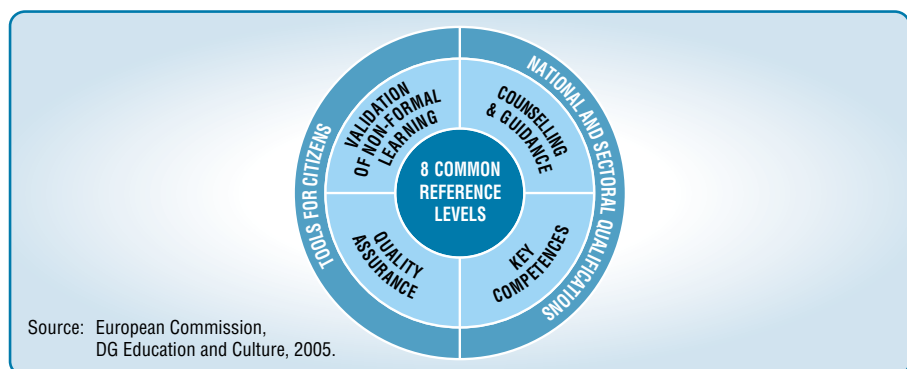
with special needs, employability; socioeconomic outcomes and the education/training process. The Centre for Research on Lifelong Learning (CRELL) at the Joint Research Centre (JRC) of the Commission support this work focusing on the coherence of indicators and benchmarks and the construction of composite indicators.

## CHAPTER 5

# Implementing tools and common principles at national level

The joint effort to develop a European qualifications framework (EQF) which is based on learning outcomes and which will make it easier to compare and transfer qualifications in different sectors across Europe, has had a significant impact on national VET policies. Increasingly, countries are using the common principles and tools developed at European level to support their policy development. Analyses of countries' progress areas, they increasingly devise qualifications structures and frameworks, and develop standards and quality assurance systems. More and more countries recognise validation of non-formal learning as important to making their systems more flexible, and the need to strengthen guidance and counselling services, in particular for people who have less access to lifelong learning.

Figure 16. **Quality assurance - a prerequisite for mutual trust**







<b>Country</b>	<b>Stage of development</b>
<b>Hungary</b>	Commitment to develop NQF; part of a national development plan 2007-13.
<b>Iceland</b>	Commitment to develop NQF for higher education; question of overarching NQF yet to be addressed.
<b>Ireland</b>	NQF in place.
<b>Italy</b>	Work on NQF started.
<b>Latvia</b>	Proposal to integrate existing VET (5 levels) and higher education (3 levels) levels into one structure.
<b>Lithuania</b>	Work on NQF with 8 level structure started (2006); pilot phase planned in 2007.
<b>Luxembourg</b>	NQF under discussion.
<b>Malta</b>	The basic elements of NQF in place by establishing of a National Qualifications Council, October 2005.
<b>Netherlands</b>	No plan to develop and introduce an overarching NQF.
<b>Norway</b>	Preparatory work on a possible overarching NQF started, autumn 2006; working groups (including VET, higher education, adult learning) set up; preliminary report produced, October 2006.
<b>Poland</b>	Readiness to undertake work on NQF; work to be linked to the national reform plan 2005-07, start in 2006.
<b>Portugal</b>	Formal decision on the establishment of NQF taken (2006); development of NQF expected to take 3-5 years.
<b>Romania</b>	Development plan for NQF prepared; 5-8 estimated to implement proposal.
<b>Slovak Republic</b>	Development of NQF expected to take 3-4 years.
<b>Slovenia</b>	Positive towards the development of NQF.
<b>Spain</b>	A NQF of 5 levels for VET in place.
<b>Sweden</b>	NQF under discussion, 2006-07.
<b>Turkey</b>	The main elements of NQF in place; development of NQF expected to take 3-5 years.
<b>UK</b>	NQFs in place.

Source: based on Bjørnåvold and Coles (forthcoming).







































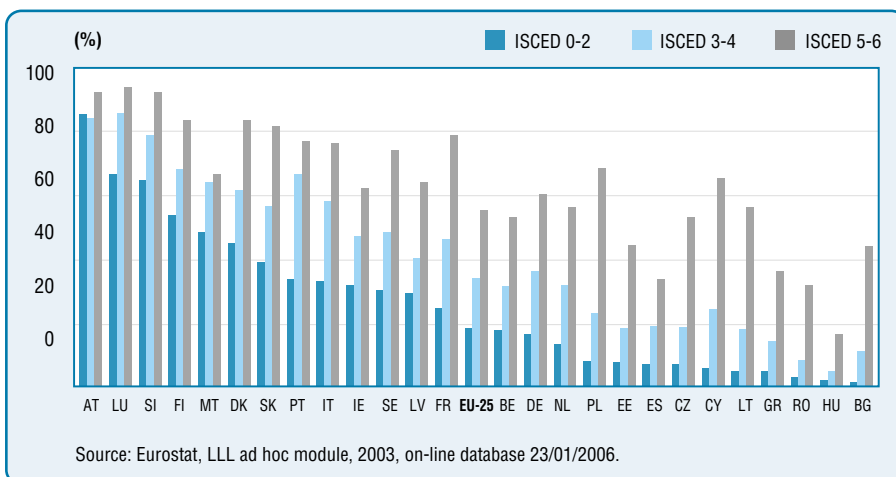








Figure 20. **Participants in informal learning, by educational attainment (%), 2003**



The two figures above clearly confirm that previous levels of educational attainment is linked to inequality in access to continuing education and training. For people with low levels of education, opportunities for informal learning seem to be better. Whether this sufficiently broadens their knowledge and skills to enhance employability and reduce the risk of unemployment, remains questionable.

Low-skilled workers, too, are increasingly required to be ICT literate, have learning skills and decision-making capacities, be able to work in teams, and display entrepreneurship and leadership. In certain sectors, low qualified workers need to meet high security requirements and be able to extract relevant information from large documentation manuals under time constraints. Just-in-time production systems demand the capacity to innovate and solve problems (OECD, 2006a).

When comparing participation in non-formal learning by working status, it is among those in employment where previous education and training levels cause the most marked differences.





















































































