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IDENTIFIERS \*European Union

#### **ABSTRACT**

This book provides key quantitative and qualitative data on vocational education and training (VET) in the European Union. Among the topics on which data are provided are the following: demographic trends, educational attainment, and the labor market (aging of the population and labor force, changes in educational attainment over time, impacts of educational attainment and VET on employment opportunities); initial VET and training programs (relative importance of VET and general education, participation rates, program duration, certification, funding); continuing vocational training in enterprises (availability, forms, and costs of training; participation rates and patterns); participation of self-employed individuals in training in a 4-week period (economic importance of self-employment and training of self-employed individuals compared to that of other employees); and European Community programs and initiatives (the European Social Fund and the Leonardo da Vinci program). Included in the appendixes is information about the document's data sources (demographic statistics, the European Union Labour Force Survey, vocational education and training data collection, and the Continuing Vocational Training Survey in Enterprises) and the categories included in the Statistical Classification of Economic Activities and the internal Standard Classification of Occupations. The document contains 25 references and 52 graphs. (MN)

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# Key Data

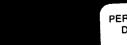
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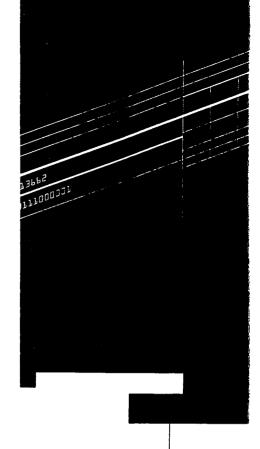


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legend overleaf applies to graphs B2 and B6



10 6

Demographic Trends, Educational Attainment and the Labour Market



Initial Vocational Education and Training Programmes



Continuing Vocational Training in Enterprises



Self-Employed: Participation in Training in the Past Four Weeks



The European Community
Programmes and Initiatives



# Initial Vocational Education and Training Programmes -Introductory Note and common legend to Graphs B2

The following diagrams show the distribution of participants to the main vocational education and training programmes offered to young people in the various Member States. The diagrams are used for statistical purposes and were provided by the relevant representative in the statistical working group on initial vocational education and training for each Member State.

#### Key to the diagrams

The following information is shown on the diagrams:

- · the name of the programme in the country's official language;
- an age range from 14 to 25 years with the red figure showing the age at which compulsory education ends;
- the different initial vocational education and training programme options ordered by theoretical starting age;
- the size of the boxes gives an indication of the relative proportion of participants in the programme;
- the duration: Normal duration Possible extension
- where the tuition of the programme takes place using the following colour scheme:

#### In an education/training institution

(includes all types of establishments providing vocational educaton and training): 90% or more of the training hours spent in a school / college, a training centre, or combination of both.

# Mainly in an education/training institution with some time spent at the workplace:

between 75% and less than 90% of the training hours spent in a school / college or a training centre, and the rest of the time spent in a working environment (enterprise or other).

Time shared between an education/training institution and the workplace: i.e. less than 75% of the training time is spent in a school / college or a training centre, the rest of the time spent in a working environment or vice-versa.

Mainly at the workplace with some time spent in an education/training institution:

between 75% and less than 90% of the training hours spent in a working environment (enterprise or other), the rest of the time spent in a school/college or a training centre.

At the workplace: 90% and more of the training time spent in a working environment (enterprise or other).

The percentage shown next to each programme corresponds to the number of participants in that programme divided by the total number of people enrolled in initial vocational education and training in the country.



# **Key Data**

on Vocational Training in the European Union



# Key Data on Vocational Training in the European Union

#### Acknowledgements

This publication is a result of co-operation between the European Commissions - Directorate-General XXII, responsible for Education, Training and Youth - ,

Eurostat - the Statistical Office of the European Union - and

CEDEFOP (European Centre for the Development of Vocational Training).

It pooled resources and experiences within the three organisations. Contributions from the Member States via the relevant statistics working groups were also essential.

A special thank to Pascaline Descy, Severine Jacquemart and Anne-France Mossoux from the University of Liège who prepared chapter B, Walther Schwab and Norman Davis of the University of Sheffield for their contributions to chapter C and their revision of the whole publication.

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.int)

Cataloguing data can be found at the end of this publication

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# **Foreword**

As we APPROACH THE DAWN OF THE THIRD MILLENIUM, the major changes occurring in our society - globalization of the economy, the information society, and the unceasing acceleration of scientific and technical progress - are posing challenges which have not been faced by enterprises since the beginning of the industrial revolution.

Many of the ideas and practices which until now allowed us to address the problems facing our enterprises need a major re-focus. In this regard, vocational training also needs to be addressed.

Such is the thinking which lies behind the analysis and objectives of the White paper - "Teaching and Learning - towards the learning society". New work methods are appearing in business. These require that different knowledge and skills be taught in schools. Almost everywhere, and in a multitude of ways, our daily lives are being transformed by these changes. We must now draw upon our imagination and our creativity if we wish to preserve and enrich the European social model.

The education and training of women and men has always been at the heart of this model. Now more than ever, they constitute the principal key to our individual and collective development.

As a consequence, we need as much information as possible on existing systems and their content, so as to have a constantly updated and broad-based source of knowledge for the political decision-makers as well as for enterprises, teachers, social partners, and the general public.

Following the completion of a major survey launched under the Leonardo da Vinci programme, we are able for the first time, to present a broad overview of the diversity of training in Europe. This complements another publication of the Commission - "Key Data on Education in the European Union".



This current publication highlights a number of important issues. It points in particular to the close link between employment opportunities and the level of education, especially among young people. It brings out the relationship between education and vocational training, which represents for many young people the key to sustainable participation in active life, and which today affects 29% of the population aged from 15 to 19 years. At the same time, the publication underlines the increasing interest taken by enterprises in continuing vocational training: almost 60% of the enterprises of the European Union, which have 10 or more employees, carried out some form of continuing vocational training in 1993, with the chances of participating in such training increasing with the size of the company.

This overview of training in Europe aims to provide essential elements of analysis, both quantitative and qualitative, with a view to supporting our strategy for employment, in particular within the framework of the Confidence Pact which the European Commission is endeavouring to implement.



E. Cresson

Member of the Commission
responsible for Research, Innovation,
Education, Training and Youth



Y.T. de Silguy Member of the Commission responsible for Economic, Monetary and Financial Affairs and the Statistical Office



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## Symbols Used

- data not available
- zero
- ${f 0}$  less than half the unit used
- provisional or estimated datanot applicable

#### Country abbreviations

- **B** Belgium
- **DK** Denmark
- D Germany
- EL Greece
- E Spain
- F France
- IRL Ireland
- l . Italy
- L Luxembourg
- L Netherlands
- A Austria
- P Portugal
- FIN Finland
- **S** Sweden
- UK United-Kingdom

# Introduction

THIS IS THE FIRST REPORT ON KEY DATA ON VOCATIONAL TRAINING in the European Union. It has been produced in response to the growing awareness of the important role to be played by vocational training in helping to improve the competitiveness of the EU and its Member States, in relation to their major trading partners, and to promote internal social cohesion within the Union. This message was highlighted in the White Paper Growth, Competitiveness and Employment.

This awareness and the continuing debate on how to achieve these economic and social goals needs to be informed by high quality, comparable information available to policy makers at all levels within the Union.

In this respect it is fair to say that good indicators on vocational training at Community level are less developed than those on other key economic and social variables. This has been, in part, due to the diversity of systems and training cultures within the Community and also, in part, due to the absence of common concepts and definitions that can be applied uniformly across the Community. This situation is being remedied, at the level of the Union, by EUROSTAT and DG XXII.

Within the Leonardo da Vinci Programme, Strand III.2.b provides for Community support to be given for the exchange of comparable data in the field of vocational training including the continuation and consolidation of existing Community surveys on the basis of an annual programme prepared in co-operation with EUROSTAT. Initiatives under the current programme range from exploiting the use of existing Community surveys for collecting data on training and improving ways of harnessing data already existing in Member States to developing appropriate concepts, definitions and classifications in important new areas of training statistics.

This report is able to draw on the results of some of these new initiatives as well as using data from existing sources. Future editions of the report will be able to build further on the work now under way and still to be launched. It remains the case, however, that statistics on vocational training must be used with caution for the reasons mentioned above. This is particularly so when data from different sources are used. This is one of the reasons why this report is structured in a way that each chapter refers mainly to information from only one source.



The report is divided into five chapters. The first, Chapter A, looks at the demographic and labour market situation to which developments in vocational education and training are having to respond. It provides indicators of how success in the labour market and rates of unemployment are related to the levels of education and training attained by the work force. Data in this chapter are drawn mainly from demographic statistics and the results of the Community Labour Force Survey carried out in all Member States.

Chapter B provides a statistical description of the initial vocational training programmes in place in each of the Member States. The length of the programmes are shown together with the number of participants taking part in them. The certification and funding arrangements in Member States are described. This chapter draws on a new initiative, the Vocational Education and Training Data Collection (VET), launched in 1994 by EUROSTAT and DG XXII.

The continuing vocational training provided by enterprises for their employees is the subject of Chapter C. The indicators in this chapter include information on the number and proportions of enterprises offering training, the type of training they offer, the subjects taught in training courses, the participants in training and the length and costs of training. Analyses are presented showing comparisons between countries, between enterprises of different size and between different sectors of the economy. The data, which relate to 1993, are based on a survey of enterprises (CVTS), with 10 or more employees, carried out in 1994 by all the then Member States as part of the FORCE Programme and co-ordinated by EUROSTAT.

Very small enterprises were not covered by the CVTS and neither, therefore were the self-employed. This latter group of workers has been growing in importance in recent years and is the subject of Chapter D. The training experiences of the self employed are compared to those of employees by Member State and having regard to their levels of educational attainment, occupation and the sectors in which they are employed. The data for this chapter are drawn from the Labour Force Survey.

This report does not cover the issue of training provided to the unemployed, as currently available data are fragmentary and risk to be misleading. Work is presently in train to address this issue.

Finally, Chapter E presents information on the European Community programmes and initiatives financed through the European Social Fund (ESF) and the Leonardo da Vinci Programme in order to promote vocational training.





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and the

Demographic Trends, Educational Attainment Labour Market

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# Introduction

DEMOGRAPHIC TRENDS, changes in the levels of educational attainment and changes in the labour market all have important implications for the development of vocational education and training both for employees and for employers.

An ageing labour force is having to adapt to rapid changes in the labour market and in work organisation which demand a more highly qualified work force. This places greater significance on high quality initial vocational education and training providing transferable skills that are the basis for lifelong learning. Continuing to adapt and update skills is essential. Concerning those who are currently in the work force, efforts must concentrate on continuing training and lifelong learning. The skilled and most highly qualified have better employment opportunities; for those with few skills or qualifications employment is increasingly hard to find.

The chapter provides information on:

- the ageing of the population and the labour force (graphs A1 and A2);
- how educational attainment levels have risen over time (graph A3);
- how employment opportunities are improved with increasing levels of education (graphs A4 and A5);
- the impact of vocational education and training on the employment prospects of young people (graphs A6, A7, A8 and A9).

The data in this chapter are drawn mainly from the Eurostat European Labour Force Survey (LFS) conducted in 1995.



The European Labour Force Survey (LFS)

The European Labour Force Survey (LFS) is the leading source of data on employment and unemployment in the European Union (EU). It covers the whole EU population living in private households. The LFS has been held every year since 1983 and includes two sets of questions on education and training received and on current education and training. Data on the new Member States are collected since 1995. For more details, refer to annex 2.



# **Demographic trends**

Because of declining birth rates and increasing life-expectancy, the EU population is getting older, as shown by the trends in the median age. As a consequence the age structure of the labour force could be affected.

In 1960 half of the population was younger than 32 years old. In 1995, half of the population was over 35 years of age. However, this trend is supposed to accelerate in the coming years. Eurostat baseline scenario suggest that by the year 2030, half the population could be over 44 years of age.

The ageing of the population inevitably affects the structure of the population of working age, namely, the population between 15 and 64 years old. Whereas in 1960 young people between 15 and 24 years old accounted for 22.5 %, the proportion decreased to 20.2% in 1995, and it is projected (baseline scenario) that by 2030 they could account for only 17.3%. Concurrently, the proportion of people between 55 and 64 is expected to increase from 16.3% in 1995 to 23.3% in 2030.

With fewer young people entering the labour market in the coming years more continuing vocational education and training will be needed in order to update and adapt the skills of the existing working population. However, it will be equally important that the foundation for lifelong learning is laid by high quality initial vocational education and training.

Eurostat's long term population scenarios

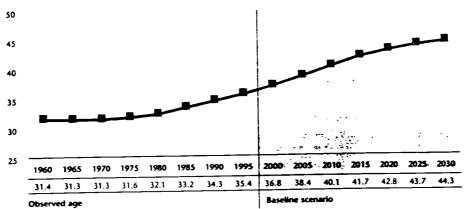
The long term population scenarios are based on key assumptions for fertility, life expectancy, and migration. These three factors determine the demographic trend in each country.

Five scenarios have been drawn up:

baseline scenario: medium projection for each factor
low scenario: low projection for each factor
high scenario: high projection for each factor
young scenario: high projection for fertility and migration, low for life expectancy
old scenario: high projection for life expectancy, low for fertility and migration
For more details, please refer to annex 1.

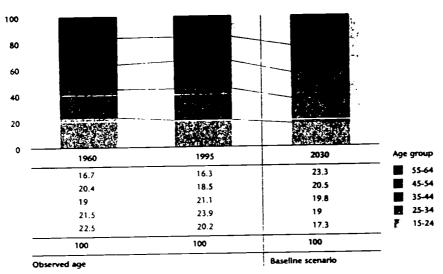


Graph A1 | Median Age of the Population: Past Trend and Scenario - EUR 15 - 1960-2030



Source: Demographic Statistics, Eurostat

Graph A2 Age Structure of the Population of Working Age, 15-64 years old - EUR 15 - 1960, 1995, 2030 - %



Source: Demographic Statistics, Eurostat

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The median age of a population is the age that splits the population into two parts of equal size: half of the population is younger than the median age and half of the population is older than the median age



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# ey Data on Vocational Training in the European Union

# For a desription of the ISCED International Standard Classification for Education see inside flap of back cover.

# Rise in Educational Attainment in the European Union

The overall level of educational attainment in the European Union is rising due to a number of factors. These include increases in the compulsory school leaving age, a more competitive labour market requiring more highly qualified people and the increase in unemployment particularly for the young population. These aspects incite young people to stay longer in the education and training systems after compulsory education.

Comparisons are made for two groups: the population having successfully completed upper secondary education (which in most countries implies post-compulsory education), and those having successfully completed higher education. Taking into account that no time series is available to analyse the evolution of those two groups over a long period, comparison of attainment levels of different age-groups of the population are proposed. Age groups compared do not include young people 25-29 years old, because those in higher education need a longer time to finish their studies. These comparisons are made using the International Standard Classification for Education (ISCED).

In 1995, in the EU, 66% of those aged 30 to 34 had an educational level corresponding to at least upper-secondary level education (ISCED level 3 or more), compared to 43% of those aged between 55 and 59, who presumably finished their education 20 years before. This is a significant development as educational attainment to at least upper-secondary level is achieved usually by those who have stayed on in the education and training system beyond the minimum school leaving age. Furthermore, the number of people who have successfully completed post-secondary or higher education (ISCED levels 5,6,7) in these two generations, has almost doubled - from 12% of those aged between 55 and 59 to 21% of those aged 30 to 34.

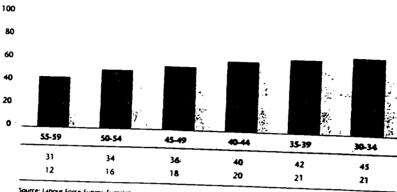
# Rise in Educational Attainment in the Member States

This improvement in the overall level of education attained is observed in all the EU Member States but it is particularly noticed when comparing those from different generations who have successfully completed upper-secondary level education (ISCED level 3). Comparisons have been made only for ISCED level 3 because it is at this level that most relevant vocational education and training programmes take place for most Member States (see graph B8).

The rate of increase in educational attainment at upper-secondary education level differs between the Member States. The major increase has been in those countries where educational levels were low. In Spain, Italy and Portugal, the proportion of those aged between 30 and 34 having successfully completed upper-secondary education is at least three times that of those aged between 55 and 59. In Greece, Ireland and Finland the proportion has more than doubled.



Graph A3 a | Educational Attainment by Age Groups - EUR 15 - 1995 - %

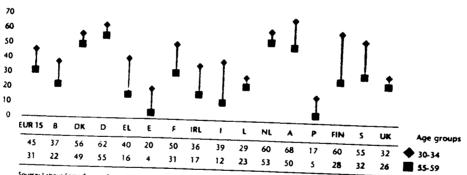


Source: Labour Force Survey, Eurostat

ISCED: see inside flap of back cover

ISCED 3 ISCED 5,6,7

Rise in Educational Attainment at Upper-Secondary Level (ISCED 3) -Graph A3 b Comparison of Two Age Groups - 1995 - %



Source: Labour Force Survey, Eurostat

ISCED: see inside flap of back cover

Data was calculated by allocating all school-based vocational education and all school- and work-based vocationaleducation (including the dual-system) to ISCED 3, due to the fact that information on the exact ISCED levels 2 or 3 for vocational education is not provided. Training taking place exclusively in enterprises has been allocated to

This method slightly overestimates the number of people having attained ISCED 3 in countries in which a certainproportion of work-based vocational education and training is provided on ISCED level 2 (Denmark, Germany, France and particularly in the Netherlands).

At the same time the method slightly underestimates the number of people having attained ISCED 3 in countri in which a certain proportion of work-based vocational education and training is provided on ISCED level 3 (pa ticularly in the United Kingdom).



# The Labour Market and Educational Attainment

The European labour market is undergoing a profound change which impacts directly on vocational education and training systems seeking to equip the work force to meet the challenges of the future. To cope effectively, the work force needs to be adaptable and flexible. The provision of broad, transferable skills will improve the longer-term flexibility and mobility of workers, whereas equipping them with specific skills has a positive impact on their immediate productivity and strengthens short-term labour prospects. Finding the right balance between imparting more general and more specific skills is a major challenge for European education and training systems.

Employment growth in the eighties ended abruptly in the early nineties with the loss of about 5 million jobs in the EU between 1991 and 1994. Since then employment has increased slightly, but not enough to reduce significantly the high levels of unemployment in the European Union. Employment in the EU is forecast to grow moderately by 0.9% during 1998, and the increase is expected to be highest in Ireland and Luxembourg, with significant increases above the average in Finland, Spain and the Netherlands.\*

More flexible working arrangements have become increasingly important throughout Europe. Part-time work has been growing to different degrees in almost all Member States. Some 16% of employed people were working part-time in 1995, with women accounting for 81% of them. In the same year about 71% of net additional jobs for men and 85% of those for women were part time\*. Similarly, there is a clear trend towards temporary employment. This now accounts for about 12% of total employment and for the entire recent increase of male employment and just under half of the job expansion for women\*.

Changing work organisation in modern industries requires more and more employees to be team-workers, to be more autonomous decision-makers, to have greater responsibility and to develop personal initiative across a broader range of tasks. Work is increasingly characterised by the use of interdisciplinary knowledge and skills. Physical labour is disappearing in favour of more abstract knowledge-based work, where information and technology play a crucial role.

Furthermore, the possession of adequate skills is a very important asset in finding a job. According to a survey carried out in 1994 among small- and medium-sized enterprises (in this case defined as those with less than 200 employees), 41% of the interviewed managers found that the difficulty in finding workers with the adequate skills was an important obstacle to recruitment\*\*.

Moreover, employment in agriculture and in manufacturing has fallen in the past decades in favour of the service sector. Business and production related services, health, social and recreational services, tourism and leisure as well as education services are expected to generate an substantial share of future jobs. Employment expansion at a more moderate level is expected in the public administration, in the banking and insurance sector, the transport and communication industry, wholesale and retail trade and the construction sector. All growing sectors have in common the need for a work force with high skills acquired through initial training and permanently updated by continuing training throughout life.

Source: EC Economic

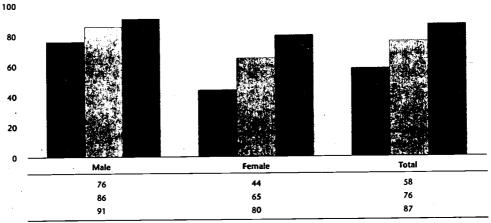
Data Pocket Book N6 1997, European

Commission, Eurostat

\*\* Source: European
Economy, Reports and
Studies "Performance of
the European Union
labour market", Nr.3,
1995, European
Commission,
Directorate General
for Economic and
Financial Affairs



Graph A4 a | Employment Rates by Educational Attainment and Sex - 30 to 59 year olds - EUR 15 - 1995 - %



87 ISCED 5,6,7

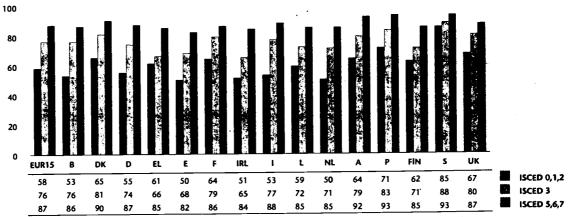
ISCED: see inside flap of back cover

ISCED 0,1,2

ISCED 3

Source: Labour Force Survey, Eurostat

4 b | Employment Rates by Educational Attainment - 30 to 59 year olds - 1995 - %



Source: Labour Force Survey, Eurostat

ISCED: see inside flap of back cover

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Employment rate is the number of people who are in employment (employees and self-employed) divided by the total population in the same age group.

The age group 30-59 years old has been chosen because of the availability of data on educational attainment. Detailed data for the age group 20-29 years old are presented in the "Young People at Risk" section of this chapter.





The links between employment rates and education levels are not simple: sector of employment, occupation and education levels all play a part in explaining employment rates. Nevertheless, people with higher education and training levels seem to have a better chance of integrating and advancing in the labour market. Almost nine out of ten Europeans between 30 and 59 years old and holding a post-secondary qualification (ISCED levels 5,6,7) are in employment. This compares to slightly less than six in ten of the same age group having an education level equivalent to compulsory education (ISCED levels 0,1,2).

Employment rates for women are lower than those for men at all educational levels. Although this is partly due to the higher inactivity rates for women, this gap however lessens among those with higher educational attainment levels.

The positive correlation between employment and educational attainment is seen in all Member States. Nevertheless, the differences between the employment rates vary from one country to another. Germany, Spain, Ireland, Italy and the Netherlands have differences of more than 30 percentage points between the highest and lowest qualified groups. In Greece and Ireland there is a difference of 19 percentage points between people with higher education (ISCED levels 5,6,7) and those with upper-secondary level education (ISCED level 3). The correlation between employment and qualification levels is the weakest in Sweden, which also has the highest employment rates in Europe at all education levels.

High unemployment is a persistent problem for the EU and its Member States. From a peak of 18.5 million people (11.1% of the active population) in 1994\*, the unemployment rate in the EU fell slightly to 10.9% in 1996. It is expected to stabilise in the near future, but trends vary in the Member States. Falls in unemployment are forecast in Denmark, Spain, Ireland, the Netherlands, Finland, and the UK. Long-term unemployment is also high. About half of those becoming unemployed stay jobless for more than one year.\*\*

People with lower educational levels are more likely to be unemployed. The unemployment rate in the EU among those who left the education system early (ISCED 0-2) is more than twice as high as the rate of those having successfully completed education at post-secondary level.

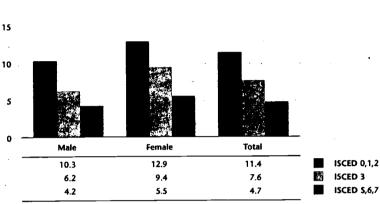
Women are still more likely to be unemployed than men. Although the number of women entering employment is increasing in comparison to men, their unemployment rate remains at a higher level, in particular at the intermediate and the lower education levels.

Work force mobility and flexibility are growing features of employment. Lifetime jobs in a sector or enterprise are no longer guaranteed. Recent figures show that one in eight of those employed was not working in the same sector in the previous year, whilst one in six was not working in the same enterprise. Job turnover is significantly higher in sectors with lower skill requirements than in those employing more highly qualified workers, and people with lower educational levels are more likely to lose their jobs\*\*.

- For people aged between 30 and 59 years old, the unemployment rate was 9% in 1994.
  Source: "Employment in Europe", 1996, European Commission, Directorate General for Employment, Industrial Relations and Social Affairs
- \*\* Source: "Employment in Europe", 1996, European Commission, Directorate General for Employment, Industrial Relations and Social Affairs



Graph A5 Unemployment Rates by Educational Attainment and Sex - 30 to 59 year olds - EUR 15 - 1995 - %



Source: Labour Force Survey, Eurostat

20

ISCED: see inside flap of back cover

The unemployment rate is the number of unemployed divided by the active population or labour force. The active population is the total of people in employment and those unemployed.

The age group 30-59 years old has been chosen because of the availability of data on educational attainment. Detailed data for the age group 20-29 years old are presented in the "Young People at Risk" section of this chapter.



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# Young People at Risk

Given the relationship between levels of educational attainment and the risks of becoming unemployed, those who have completed only basic compulsory schooling are most at risk of unemployment and social exclusion. However, there remains a sizeable proportion of young people who are not participating in post-compulsory general or vocational education and training. Furthermore, the employment situation is generally less favourable for young people who have completed only basic compulsory education, compared to those who have completed post-compulsory vocational education and training.

On average in the EU, 18% of young people between 16 and 18 years of age were not participating in general or vocational education in 1994-1995. Whilst some young people not in education were being trained in the workplace, there remains a sizeable proportion of young people entering a competitive labour market having only completed education before the age of 16-18. This group is increasingly at risk of unemployment and social exclusion, given in addition to having more difficulties to find a job, they will have automatically fewer possibilities to be involved in continuing training than those already in employment.

The proportion of young people not in education varies considerably in the Member States. To some extent the duration of compulsory schooling explains this fact: in those countries such as Belgium, Germany and the Netherlands, where part-time compulsory schooling ends at 18 years of age, the proportion of young people not in education is very low with 3%, 8% and 9% respectively. In those countries where compulsory school ends at 14 or 15 years of age, the proportion of young people not in education is high, as in Portugal 35% and Greece 34%. Nevertheless, a very low proportion of young people not in education is found in France, 9% and Sweden, 6%, where compulsory school ends in both countries at 16 years of age, whereas a relatively high proportion is found in Denmark, 18% and Austria, 19% where school leaving age is 16 and 17 respectively. This all tends to indicate that a number of factors such as the school system, the size of youth unemployment and policy measures implemented to combat unemployment, combine and play an important part.

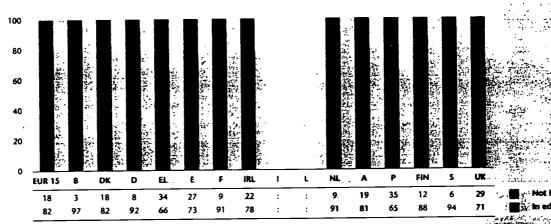
Most young people in the EU who go on to post-compulsory education or training up to ISCED level 3 will have completed their studies by the time they are 20 years of age. For this young population, who normally have not or only a very limited working experience, the educational attainment level is a crucial factor in the search for an employment.

In the EU as a whole in 1995, the unemployment rate of young people aged between 20 and 29 was 16.5%, almost double that of those between 30 and 59 years of age (8.4%). However, unemployment rates for those aged between 20 and 29, as for other age groups, vary according to their level of educational attainment. More than one in five people (22.2%) between 20 and 29 years of age who have completed only compulsory education (ISCED levels 0,1,2) were unemployed in 1995. This compares to less than one in seven (14.1%) for those who completed upper-secondary level education (ISCED level 3).

Unemployment rates for young women are higher than those for young men in both groups: nearly 4 percentage points higher for those having successfully completed upper-secondary education and just over 4 percentage points for those having a maximum education level of ISCED 2.

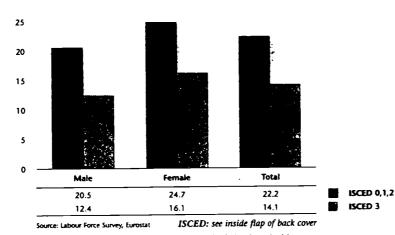


Young People between 16 and 18 Years Old in Education (or not in education) - 1994-1995



The Unesco/OECD/Eurostat (UOE) questionnaire collects annually information on education in schools and universities: pupils/students, entrants, graduates, personnel, institutions and finance. Training taking place exclusively in the workplace is not covered. For this reason, the proportion of young people in education is slightly underestimated particularly in the United Kingdom, the Netherlands, Luxembourg and Spain.

Unemployment Rates by Educational Attainment and Sex -Graph A7 20 to 29 year olds, EUR 15, 1995 - %



The unemployment rate is the number of unemployed divided by the active population or labour force. The active population is the total of people in employment and unemployed. Detailed data fot the age group 30-59 years old are presented in the «Labour market and educational attainment» section of this chapter.



A more detailed analysis of those between 20 to 29 years old can be made comparing young people who have completed only basic education (ISCED 0,1,2) and those who have completed additional vocational education and training (ISCED 0,1,2 plus additional VET).

In the EU as a whole the unemployment rate of those between 20 and 29 years old who have completed additional vocational education and training (ISCEP 0,1,2 plus additional VET) is less than half that for those who have completed only basic education (ISCED 0,1,2), 11.5% compared to 23.5%.

Among Member States, however, different patterns emerge. In Denmark, Germany, France and the Netherlands those with only basic education are twice as likely to be unemployed than those who have completed additional vocational education and training. In Finland and in the UK unemployment amongst those with only basic education is around a third higher.

In Greece, Spain and Portugal, however, the unemployment rate is higher for those with an additional vocational qualification, although in Spain the difference is small.

In addition to being more likely to find employment, those completing additional vocational education and training appear to have greater job security than those with only basic education. An analysis can be made of unemployed young people between 20 and 29 years old who declare that they were working in the previous year, but who have lost their job due to redundancy, termination of their post, or because they reached the end of a fixed-term contract. This shows that, in all the Member States for which data can be used, those with additional vocational qualifications were less vulnerable to losing their jobs.

Graph C15 Average Time Spent on CVT Courses by Occupation - EUR 12 excluding France and the Netherlands - 1993 - hours

Managers and Scientific Staff

Associate Professional and Technical Staff

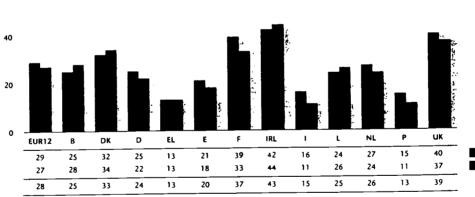
Clerical, Secretarial, Service and Shop Workers

Craft and Trade Workers, Operatives and Elementary Occupations

10 20 30

Source: CVTS, Eurostat

Graph C16 | Participants (Male and Female) in CVT courses - 1993 - %



Source: CVTS, Eurostat

60

The International Standard Classification of Occupations (ISCO-88) is used by countries and international agencies as a means of compiling internationally comparable statistics on occupations.

For this analysis the ISCO classification has been regrouped as follows:

Managers and Scientific Staff (ISCO groups 1 and 2)

Associate Professional and Technical Staff (ISCO group 3)

Clerical, Secretarial, Service and Shop Workers (ISCO groups 4 and 5)

Craft and Trade Workers, Operatives and Elementary Occupations (ISCO groups 7, 8 and 9)

More details on the classification can be found in Annexe 6.

The average time spent is calculated by dividing the total number of hours spent on CVT courses by the number of participants.

The percentage of participants is calculated by dividing the number of participants in CVT courses by the number of employees in all enterprises covered by the survey.





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Initial Vocational Education Training Programmes (1993-94)

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# Introduction

IN A PERIOD WHEN PARTICULAR IMPORTANCE is attributed to the acquisition of adequate and appropriate skills for the successful integration of young people in the labour market, reliable, comprehensive, detailed and comparable information on vocational education and training is a prerequisite for policy makers in order to successfully design, monitor and evaluate their training policies.

Chapter B is designed to present comparable information on several characteristics describing the main routes for initial vocational training existing in the Member States.

The chapter provides information on:

- The relative importance of vocational education and training compared to general education (graph B1)
- Distribution of participants into initial vocational education and training programmes (graph B2)
- Participation rates in initial vocational education and training (graph B3)
- Distribution of participants by age group and by sex (graphs B4 and B5)
- Vocational training programmes according to place of training (graph B6)
- Duration of the programmes, their level and possible access provided to further education or training opportunities (graphs B7, B8 and B9)
- Certification and funding arrangements of initial vocational education and training programmes (graph B10)

The data in this chapter are drawn from the Vocational Education and Training data collection (VET), launched in 1994.

The Vocational Education and Training Data Collection (VET)

The Vocational Education and Training data collection (VET) is the *first* statistical exercise aimed at improving the information base in the area of initial vocational education and training at European level. The project was launched by Eurostat in co-operation with DGXXII, in July 1994 and the data collection was made on a programme-by-programme basis. The data covers vocational education and training programmes defined as "any structured activity which aims to provide (especially young) people with the skills, the attitudes and broad and more specific knowledge necessary for an occupation or family of occupations and leads to a recognised qualification".

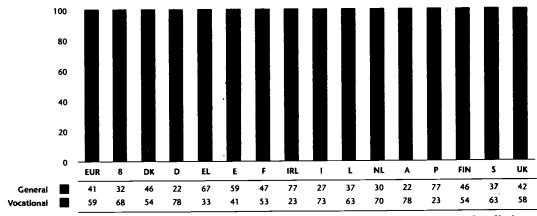




# Vocational Education and Training versus General Education

In the European Union as a whole, vocational education is predominant at the upper secondary level: in eleven Member States there are more pupils following vocational education than general education routes. This is particularly the case in Germany and Austria with 78% of their upper secondary education students, in Italy, the Netherlands and in Belgium with 73%, 70% and 68% respectively. But it is also the case in Denmark, France, Luxembourg, Finland, Sweden and the United Kingdom with more than 50% of their ISCED3 level students attending vocational education programmes. General education predominates in Spain, Greece, Ireland and Portugal with respectively 41%, 33%, 23% and 23% of their upper secondary education students participating in vocational education.

Graph B1 | Proportion of Students in Vocational Education, ISCED3 - 1993-94 - %



Source: UOE Questionnaire, 1993/94

ISCED: see inside flap of back cover

The Unesco/OECD/Eurostat (UOE) questionnaire collects annually information on education in schools and universities. Training taking place exclusively in the workplace is not covered. For this reason, the proportion of young people in vocational education is slightly underestimated particularly in the United Kingdom, the Netherlands, Luxembourg and Spain.



# Initial Vocational Education and Training Programmes -Introductory Note and common legend to Graphs B2

The following diagrams show the distribution of participants in the main vocational education and training programmes offered to young people in the various Member States. The diagrams are used for statistical purposes and were provided by the relevant representative in the statistical working group on initial vocational education and training for each Member State.

#### Key to the diagrams

The following information is shown on the diagrams:

- the name of the programme in the country's official language;
- an age range from 14 to 25 years with the red figure showing the age at which compulsory education ends;
- the different initial vocational education and training programme options ordered by theoretical starting age;
- the size of the boxes gives an indication of the relative proportion of participants in the programme;
- the duration: Normal duration Possible extension
- where the tuition of the programme takes place using the following colour scheme:

#### In an education/training institution

(includes all types of establishments providing vocational educaton and training): 90% or more of the training hours spent in a school / college, a training centre, or combination of both.

# Mainly in an education/training institution

with some time spent at the workplace:

between 75% and less than 90% of the training hours spent in a school / college or a training centre, and the rest of the time spent in a working environment (enterprise or other).

# Time shared between an education/training institution and the workplace:

i.e. less than 75% of the training time is spent in a school / college or a training centre, the rest of the time spent in a working environment or vice-versa.

# Mainly at the workplace with some time spent

in an education/training institution:

between 75% and less than 90% of the training hours spent in a working environment (enterprise or other), the rest of the time spent in a school/college or a training centre.

At the workplace: 90% and more of the training time spent in a working environment (enterprise or other).

The percentage shown next to each programme corresponds to the number of participants in that programme divided by the total number of people enrolled in initial vocational education and training in the country.





# (B-F) Belgium

In the French-speaking Community of Belgium, the majority of participants in initial vocational education and training, 78.2%, are enrolled in five main programmes, Enseignement secondaire technique - formation courte et formation longue (9.4 and 12.3%), Enseignement secondaire professionnel - formation courte et formation longue (16.0 and 13.6%) and Enseignement supérieur de type court (26.9% of participants). These five main programmes are equivalent to those of the Flemish Community of Belgium.

Some 66% of participants attend programmes in an educational / training institution. The rest attend programmes that combine (in various proportions) time spent in an educational / training institution with time spent at the workplace.

The theoretical starting age for the different programmes ranges between 14 and 18 years. Almost 40% of participants are enrolled in initial vocational education and training programmes theoretically starting at 14 years of age. Compulsory education ends at 18 years of age. However, from 16 years of age, compulsory education can be attended on a part-time basis.

The durations of the programmes range from 2 to 4 or 5 years but most participants attend programmes lasting 3 years (33.0% of participants), 2 years (27.7%) and 2 or 3 years (27.4%).

## (B-Vl) Belgium

In the Flemish Community of Belgium, the majority of participants in initial vocational education and training, 89.3%, are divided between five main programmes, *Technisch secundair onderwijs 2de graad* and *3de graad* (18.1 and 16.5%), *Beroepssecundair onderwijs 2de graad* and *3de graad* (13.5 and 16.1%), and *Hoger onderwijs buiten de universiteit - korte type* (24.2%). These five main programmes are equivalent to those of the French-speaking Community of Belgium.

Some 36% of participants attend programmes in an education / training institution. The rest attend programmes that combine in various proportions time spent in an education / training institution with time spent at the workplace.

The theoretical starting age for the different programmes ranges between 14 and 18 years. Some 35% of participants are enrolled in initial vocational education and training programmes theoretically starting at 14 years of age. Compulsory education ends at 18 years of age. However, from 16 years of age, compulsory education can be attended on a part-time basis.

The durations of the programmes range from 2 to 4 or 5 years but most participants attend programmes lasting 2 or 3 years (35.1% of participants), 2 years (32.5%) and 3 years (30.5%).



## (DK) Denmark

In Denmark, *Ehrvervsuddannelser (EUD)* is the main initial vocational education and training route, with 83.5% of participants.

All the initial vocational education and training programmes are on-and-off-the-job programmes in which theoretical and practical education in an education / training institution alternates (in various proportions) with practical training at the workplace.

The theoretical starting age for the different programmes ranges between 16 and 20 years. Some 85% are enrolled in initial vocational education and training programmes theoretically starting at 16 years of age, which coincides with the end of compulsory education.

The durations of the programmes range from 1 to 3 or 4 years. The large majority of participants (83.5%) attend programmes lasting between 3 and 4 years.

# (D) Germany

In Germany, the *Duales System* is the main initial vocational education and training route, with 63.1% of participants.

Around 65% of participants attend programmes that combine time spent at the work-place with time spent in an education / training institution. The tuition of all the other programmes takes place (almost) entirely in an education / training institution.

The theoretical starting age for the different programmes ranges between 16 and 23 years. Some 82% of participants are enrolled in initial vocational education and training programmes theoretically starting at 16 years of age. Compulsory education ends at 18 years of age. However, from 16 years of age, compulsory education can be attended on a part-time basis.

The duration of the programmes ranges from 1 to 3 or 4 years. Most participants (around 66%) are enrolled in programmes lasting 3 years.

## (EL) Greece

In Greece, *TEL* (*Technika Epagelmatika Likia*) is the main initial vocational education and training route with 49.7% of participants.

Some 92% of all participants attend programmes taking place in an education / training institution. The rest attend programmes that combine (in various proportions) time spent in an education / training institution with time spent at the workplace.

The theoretical starting age for the different programmes ranges between 14.5 and 18.5 years. Some 77% of participants are enrolled in initial vocational education and training programmes theoretically starting at 14.5 years of age, at the end of compulsory education at the end of compulsory education.

The durations of the programmes range from 1 to 4 years. The largest proportion of participants (almost 50%) are enrolled in programmes lasting 3 to 4 years.



## (E) Spain

In Spain, the two programmes of *Formación profesional* are the main initial vocational education and training routes. They account for 41.0% (*primer grado*) and 44.2% (*segundo grado*) of the participants in initial vocational education and training.

Some 93% of the participants attend programmes in an educational / training institution. The rest attend either programmes taking place entirely at the workplace or combining time spent in an education / training institution and time spent at the workplace.

The theoretical starting age for the different programmes ranges between 14 and 18 years. Some 48% of participants attend initial vocational education and training programmes theoretically starting at 14 years of age. Some 50% are enrolled in programmes theoretically starting at 16 years of age, which coincides with the end of compulsory education in the new Spanish educational system.

The durations of programmes range from 1 to 4 or 5 years. Almost half of the participants (some 46%) are in programmes lasting 2 years.

#### (F) France

In France, the main initial vocational education and training route is the *Brevet d'enseignement professionnel (BEP)* with 33.7% of the participants.

Nearly all participants, around 93%, attend programmes that combine (in various proportions) time spent in an educational / training institution with time spent at the workplace. Some 70% spend most of their time in an education / training institution and some 22% spend their time in on-and-off-the-job training.

The theoretical starting age for the different programmes ranges between 14 and 19 years. Half of the participants are enrolled in initial vocational education and training programmes theoretically starting at 16 years of age, which coincides with the end of compulsory education.

The normal durations of the programmes range between 1 to 3 years. Most participants (94%) are enrolled in programmes lasting 2 years.

#### (IRL) Ireland

In Ireland, the main initial vocational education and training route is the *Middle Level Technician and Higher Technical Business Skills* with 46.7% of participants.

Some 65% of participants attend programmes in an education / training institution, while 34% are enrolled in programmes that combine in different proportions time spent in an education / training institution and time spent at the workplace.

The theoretical starting age for the different programmes ranges between 16 and 18 years. Some 87% of participants are enrolled in initial vocational education and training programmes theoretically starting at 18 years of age. Compulsory education in Ireland ends at 15 years of age, but a significant proportion of the young people between 15 and 18 years of age stay longer in school and complete an upper secundary general programme.

The durations of the programmes range from 1 to 4 years. Almost half of the participants (48.1%) attend programmes lasting for 2 years.



# (I) Italy

In Italy, the main education and training route is the *Istituti tecnici*, with 41.1% of participants in initial vocational education and training.

About 68% of participants attend programmes taking place (almost) entirely in an education / training institution, while 26% attend programmes taking place (almost) entirely at the workplace.

The theoretical starting age for the different programmes ranges between 14 and 17 years. Some 83% of participants are enrolled in initial vocational education and training programmes theoretically starting at 14 years of age, which coincides with the end of compulsory education.

The durations of the programmes range from 6 months to 5 years. The largest proportion (41.8%) of participants are enrolled in programmes lasting 5 years.

# (L) Luxembourg

The six programmes of the Enseignement secondaire technique (EST: Apprentissage à deux degrés, Régime professionnel C.C.M., Régime professionnel concomitant et mixte, Régime professionnel plein temps, Régime technique, Régime de la formation de technicien) constitute the main initial vocational education and training route in Luxembourg with some 84% of participants.

Some 75% of participants attend initial vocational education and training programmes in an education / training institution.

The theoretical starting age for the different programmes ranges between 15 and 19 years. Some 84% of participants are enrolled in initial vocational education and training programmes theoretically starting at 15 years of age, which coincides with the end of compulsory education.

The durations of the programmes range from 3 to 6 years. The largest proportion (47.7%) of participants are enrolled in programmes lasting 3 years.



## (NL) Netherlands

In the Netherlands, the majority of participants in initial vocational education and training, 67.0%, are enrolled in programmes of the Middelbaar Beroepsonderwijs (MBO lang opleidingen is the main route with 49.3% of participants, MBO korte opleidingen with 7.4%, MBO tussen opleidingen with 1.7% and MBO deeltijd with 8.6%). The second in importance is the programme for apprenticeship Leerlingwezen, either voortgezet or primair training (27.7%).

Most participants (some 58%) are enrolled in programmes taking place mainly in an education / training institution with some time at the workplace. Around 28% attend apprenticeship programmes which mainly take place at the workplace with some time in an education / training institution (*Leerlingwezen*).

The theoretical starting age for the different programmes ranges between 16 and 18 years. Some 86% of participants are enrolled in initial vocational education and training programmes theoretically starting at 16 years of age. Compulsory education ends at 18 years of age. However, from 16 years of age, compulsory education can be attended on a part-time basis.

The durations of the programmes range from 1 to 4 or 5 years. The majority of participants (about 60%) are enrolled in programmes lasting 3 to 4 or 5 years.

#### (A) Austria

In Austria, the apprenticeship or *Lehre* (with 45.0% of the participants) is the main initial vocational education and training route, followed by the *Höhere berufsbildende und lehrerbildende Schulen* (31.3%).

Some 50% of participants attend programmes taking place in education/training institutions. Around 48% attend programmes which combine (in different proportions) time spent mainly at the workplace with some time spent in an education / training institution.

The theoretical starting age for the different programmes ranges between 14 and 18 years. Some 45% of participants are enrolled in initial vocational education and training theoretically starting at 15 years of age, which coincides with the end of compulsory education.

The durations of programmes range from 1 to 5 years. The largest proportion of participants (almost 59%) are enrolled in programmes lasting 3 to 4 years.

# (P) Portugal

In Portugal, the majority of participants in initial vocational education and training programmes, 57.2%, are divided between three main programmes *Cursos tecnológicos* (21.8% of participants), *Cursos técnico-profissionais* (19.1%) (which are being progressively replaced by the *Cursos tecnologicos*), and *Escolas profissionais* (16.3%).

More than 90% of participants attend programmes in an education/training institution. The rest attend in on-and-off-the-job programmes.



The theoretical starting age for the different programmes ranges between 14 and 17 years. Some 75% of participants are enrolled in initial vocational education and training programmes theoretically starting at 15 years of age, which coincides with the end of compulsory education.

The durations of the programmes range from 1 to 3 years. An overwhelming majority of participants (85%) are enrolled in programmes lasting 3 years.

## (FIN) Finland

In Finland, there are two initial vocational education and training routes: *Kouluasteen koulutus* (with 73.7% of participants in initial vocational education and training) and *Opistoasteen koulutus* (with 26.3% of participants).

Both programmes take place (almost) entirely in an education / training institution.

The theoretical starting age for Kouluasteen koulutus is 16 years, which coincides with the end of compulsory education. The theoretical starting age for the other programme is 18.

Some three-quarters of participants are enrolled in *Kouluasteen koulutus* which lasts from 1 to 3 years. The rest are enrolled in *Opistoasteen koulutus* which lasts 3 to 4.5 years.

## (S) Sweden

In Sweden, the *Gymnasieskolan: yrkesförberedande program* covers all participants in initial vocational education and training.

The programme takes place mainly in an education / training institution with some time spent at the workplace.

The theoretical starting age is 16 years, which coincides with the end of compulsory education.

The programme lasts 3 years.

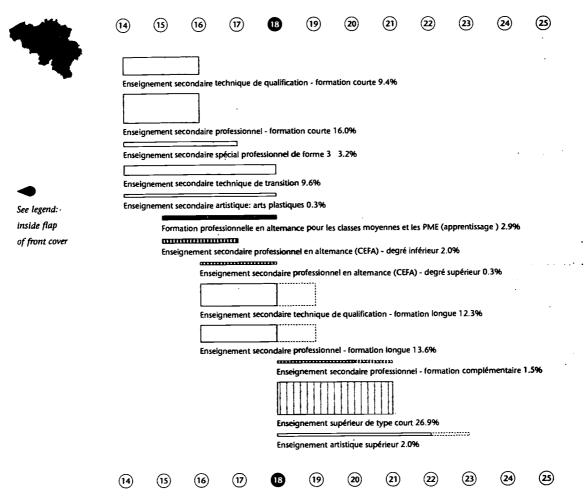
## (UK) United-Kingdom

In the UK, the majority of the participants in initial vocational education and training (some 82%) are divided between three main programmes: Full-Time Study for Vocational Qualifications in Colleges (35.7%), Employer-Supported Training (24.1%) and Youth Training (22%).

Some 53.9% of participants attend programmes that take place in an education / training institution. The rest attend programmes which combine time spent in an education / training institution with time spent at the workplace.

Programmes theoretically start at 16, which coincides with the end of compulsory education. It is possible to start vocational training earlier, but this is relatively rare.





Source: VET / 100% = 190 000 participants

## Enseignement secondaire technique de qualification - formation courte

This 2-year programme is intended for the school-age population having successfully completed the first 2-year cycle of secondary school. It aims at enabling entry into working life but it also provides an opportunity for further education and training.

## Enseignement secondaire professionnel - formation courte

This 2-year programme is intended for the school-age population having successfully completed the first 2-year cycle of secondary school. Its main aim is to enable entry into working life but it also provides an opportunity for further education and training. The Enseignement secondaire professionnel includes fewer general or theoretical courses than the enseignement secondaire technique.

## Enseignement secondaire spécial professionnel de forme 3

This 3-year programme meets the needs of children with physical, sensorial, psychological or intellectual disabilities. It provides regular vocational education and training and leads to a certificate equivalent to that delivered after Enseignement secondaire professionnel - formation courte.



### Enseignement secondaire technique de transition

This 4-year programme is intended for the school-age population having successfully completed the first 2-year cycle of secondary school. Its main aim is to prepare for higher education but it also provides an opportunity to enter working life. The Enseignement secondaire technique de transition includes less general or theoretical courses than the enseignement secondaire technique de qualification - formation courte.

#### Enseignement secondaire artistique: arts plastiques

This artistically oriented programme is intended for the school-age population having successfully completed the first 2-year cycle of secondary school. Its main aim is the entry into working life, but it also provides an opportunity for further training.

## Formation professionnelle en alternance pour les classes moyennes et les PME (apprentissage)

This programme is intended for students facing school difficulties in the regular system. Training periods take place in small- and medium-size enterprises (SME) and the programme can be continued by further education or training.

## Enseignement secondaire professionnel en alternance (CEFA) - degré inférieur

This programme, organised by the CEFA, is also intended for students facing school difficulties in the regular system from the age of 15-16 years. Half of the education and training time is spent in an enterprise.

## Enseignement secondaire professionnel en alternance (CEFA) - degré supérieur

This programme, organised by the CEFA, is also intended for students facing school difficulties in the regular system. Half of the education and training time is spent in an enterprise. It is intended for pupils who have attended successfully the first 2-year cycle of secondary school.

## Enseignement secondaire technique de qualification - formation longue.

This programme is intended for the school-age population and continues the programme *Enseignement secondaire technique de qualification - formation courte* for two years, the total duration of the programmes is 4 years. It can be continued with a one-year specialisation.

### Enseignement secondaire professionnel - formation longue

This programme is intended for the school-age population and continues the programme *Enseignement secondaire professionnel - formation courte* for two years, the total duration of the programmes is 4 years. It can be continued with a one-year specialisation.

## Enseignement secondaire professionnel - formation complémentaire

This programme is intended for the school-age population who have successfully completed the 6-year secondary education but does not provide a higher education diploma. It prepares for a limited number of jobs, mainly nursing. It is a continuation of regular secondary education.

## Enseignement supérieur de type court

This programme is offered to students who have successfully completed secondary education. It includes teacher-training (from nursery schools to the lower level of secondary education) and education and training preparing for jobs in numerous fields: social work, psychology, engineering, informatics, marketing, secretarial work, paramedical jobs (nursing, laboratory assistants,...), biology, chemistry, etc.

## Enseignement artistique supérieur

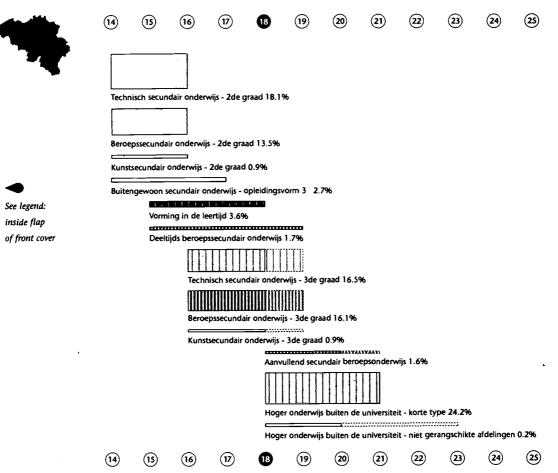
This artistically oriented programme offers different subjects: music, speech production, broadcasting techniques (cinema, television,...), plastic arts.

CEFA Centres d'Education et de Formation en Alternance (Alternate Education and Training Centres)









Source: VET / 100% = 252 000 participants

## Technisch secundair onderwijs - 2de graad

This programme is mainly oriented towards general and technical-theory. Practical courses have been introduced. It takes place entirely in an education / training institution. It prepares for the *Technisch secundair onderwijs - 3de graad*. Participants having completed *Technisch secundair onderwijs* can enter the labour market or go on to higher education/training programmes.

#### Beroepssecundair onderwijs - 2de graad

This programme is a practical education and training programme in which youngsters acquire specific skills and simultaneously receive general education. It takes place entirely in an education / training institution. It prepares for the *Beroepssecundair onderwijs* - 3de graad. Participants having completed *Beroepssecundair onderwijs* can enter the labour market or under certain conditions have access to higher non-university education.

## Kunstsecundair onderwijs - 2de graad

In this artistically oriented programme, a general and broad education is mixed to the active practice of arts. It takes place entirely in an education / training institution. It prepares for the Kunstsecundair onderwijs - 3de graad. Participants having completed Kunstsecundair onderwijs can enter the labour market or go on to higher education/training programmes.

## Buitengewoon secundair onderwijs - opleidingsvorm 3

This programme is designed for students with physical or mental disabilities who are not able to attend regular education and training. It is adapted to their skills and prepares them to integrate into the labour market.

### Vorming in de leertijd

In this programme, young participants can sign an apprenticeship contract with a manager/trainer from 15 or 16 years of age. Apprentices attends an education/training institution one day a week and, during the 4 other days of the week, they attend practical training in an enterprise.

## Deeltijds beroepssecundair onderwijs

This programme is designed for young people in part-time compulsory schooling and gives them the opportunity to continue compulsory education until 18 as an alternative to full-time compulsory schooling. The specific target group is drop-outs and pupils wishing to work part-time and to attend very practical training.

## Technisch secundair onderwijs - 3de graad

This programme is the continuation of the *Technisch secundair onderwijs - 2de graad* and is more specific. As the *2de graad*, it is mainly oriented towards general and technical-theory. Practical courses have been introduced. It takes place mainly in an education / training institution with some time spent in a working environment. Participants having completed *Technisch secundair onderwijs* can enter the labour market or go on to higher education/training programmes, especially to the programme *Hoger onderwijs buiten de universiteit*.

## Beroepssecundair onderwijs - 3de graad

This programme is the continuation of the *Beroepssecundair* onderwijs - 2de graad and is more specific. As the 2de graad, it is a practical education and training programme in which youngsters acquire specific skills and simultaneously receive general education. Training time is shared between education/training institution and workplace. This programme prepares to enter the labour market and under certain conditions, transition towards higher (non-university) education is possible.

## Kunstsecundair onderwijs - 3de graad

This artistically oriented programme is the continuation of *Kunstsecundair* onderwijs - 2de graad and is more specialised. As for the 2de graad, a general and broad education is mixed to the active practice of arts. It takes place entirely in an education / training institution. Participants having completed *Kunstsecundair* onderwijs can enter the labour market or go on to higher education/training programmes (non-university higher level vocational education and training, especially artistical programmes).

## Aanvullend secundair beroepsonderwijs

This programme is designed for 18-year-old people and provides intensive preparation for immediate entry into labour market.

#### Hoger onderwijs buiten de universiteit - korte type

This higher-education programme leads to the acquisition of vocational skills. Special attention is given to practical application of science, autonomous thinking and development of vocational skills. Training contains a theoretical part and practical courses, work in laboratories and training periods. It generally leads to definite functions or jobs.

## Hoger onderwijs buiten de universiteit - niet gerangschikte afdelingen

In this higher-education programme, participants can choose among three education and training options: interior design, industrial design/ product design or machines.

























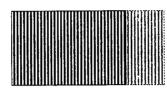




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of front cover



Erhvervsuddannelser (EUD) 83.5%

Ehrvervsfaglig grunduddannelse (EGU) 0.4%

CHARLES HAVE A STREET

Landbrugs-, gartner-, og skovbrugsuddannelser 2.1%

Husholdnings- og håndarbejdsskolekurser 0.7%

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Grundlaeggende social- og sundhedsuddannelser (SOSU) 6.8%

Eksamensuddannelser, diverse (soefart) 0.3%

Videregående teknikeruddannelser 6.2%



















23)



Source: VET / 100% = 129 000 participants



#### Erhvervsuddannelser (EUD)

This programme constitutes the core of vocationally oriented youth programmes. There are 86 different courses in trade and technical fields, and more than 200 specialities. It provides students with solid professional qualifications recognised on the labour market. Its duration normally ranges between 3 and 4 years (but other durations ranging from 2.5 to 5 years are possible).

## Erhvervsfaglig grunduddannelse (EGU)

This vocational basic education and training programme is an individual programme primarily aimed at personal development but it provides formal qualifications enabling access to the labour market. It normally lasts 2 years and may be extended by a further year. The programme is not directed towards a specific trade or profession, but may consist of elements from one or more individual subjects mainly from EUD programmes. The student is required to enter a training plan, i.e. an EGU-agreement, with the local authority or the vocational education/training institution.

## Landbrugs-, gartner- og skovbrugsuddannelser

This programme provides specialisation in agriculture, horticulture and forestry. Its duration normally ranges from 1 to 2 years. An example of agricultural programmes is the programme which leads to the "green certificate" for farmers.

### Husholdnings- og håndarbejdsskolekurser

This programme provides specialisation in home economics and needlework, craft and textile skills. It normally lasts 1 year (but other durations are possible). Most of the courses provide qualifications enabling access to the labour market.

## Grundlaeggende social- og sundhedsuddannelser (SOSU)

This programme providing specialisation in social and health skills is an on-and-off-the-job programme. Its duration is normally 2 years and the advanced programme leading to the qualification of social and health service assistant takes 3.5 years including an introductory year. The requirement for admission is a contract with the local authority or county.

### Eksamensuddannelser, diverse (soefart)

This programme providing specialisation in the maritime skills is an upper-secondary vocational programme. Its duration is normally 2.5 years. Examples of maritime programmes are those leading to qualifications of qualified seamen or telegraph operators.

### Videregående teknikeruddannelser

This short-term higher programme leads to qualifications such as building technicians or electronic technicians and most often comes after an upper secondary vocational education and training qualification. It takes place mainly in an education / training institution and its normal duration is 2 years.







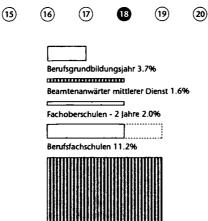
## (D) Germany

## Graph B2 | Initial Vocational Education and Training Programmes - 1993-94



(14)

See legend: inside flap of front cover



Fachgymnasien 3.2%

Duales System 63.1%

Kollegschulen\* 3.0%

Fachoberschulen - 1 Jahr 1.0%

**\_\_\_\_\_** 

(21)

(23)

25)

Berufsaufbauschulen 0.2%

Fachakademien\*\* 0.3%

(20)

Schulen des Gesundheitswesens 4.3%

Berufs-/Technische Oberschulen\*\*\* 0.2%

(22)

Berufsakademien\*\*\*\* 0.03%

Fachschulen 6.2%

(24)

(25)

(14) (15) (16) (17)

Source: VET / 100% = 2 SS8 000 participants

- \* Kollegschulen: only provided in Northrhine-Westphalia
- \*\* Fachakademien: only provided in Bavaria
- ••• Berufs-/Technische Oberschulen: only provided in Baden-Württemberg and Bavaria
- \*\*\*\* Berufsakademien: only provided in Schleswig-Holstein

## Berufsgrundbildungsjahr

This programme provides students with both a general and an occupational field-related basic education. The successful completion of this programme leads to a reduction of the duration of training in the *Duales System*.

## Beamtenanwärter mittlerer Dienst

The future middle grade civil servants are trained both in institutions of public administration at all regional levels (Bund, Länder, Regierungsbezirke, Kreise, Gemeinden) and in special schools for public administration. This programme requires the intermediate school certificate or a recognised equivalent.

## Fachoberschulen - 2 Jahre

This 2-year programme requires the intermediate school certificate or a recognized equivalent. Successful completion entitles leavers to take up studies at a Fachhochschule, i.e. Technical college, at university level.

#### Berufsfachschulen

This programme can be entered after completion of compulsory full-time schooling. It prepares for an occupation or provides full vocational training for students who have not already completed a practical vocational education and training. In the Federal Länder there are a multitude of types of Berufsfachschulen with different levels of qualifications.

#### **Duales System**

This programme is a special form of apprenticeship which is provided both at an education/training institution and in an enterprise. There are training regulations for each occupational field of training. It constitutes the core of vocational education and training in Germany.

#### **Fachgymnasien**

This programme consists of vocational education and training in vocational grammar schools. Admittance requires a school certificate or equivalent. The final certificate entitles leavers to take up studies at university level.

### Kollegschulen

This programme, which only exists in Northrhine-Westphalia, offers all certificates which can be obtained at the different education/training institutions and at the upper secondary level of grammar schools. A speciality of Kollegschulen is the possibility to get a double qualification. That means that both a general and a vocational qualification can be obtained either simultaneously or one after another by attending only one programme.

#### Fachoberschulen - 1 Jahr

The 1-year programme at Fachoberschulen requires both the intermediate school certificate or a recognised equivalent and the completion of vocational training in the Duales System. Successful completion entitles leavers to take up studies at a Fachhochschule, i.e. Technical College, at university level.

#### Berufsaufbauschulen

his programme is attended by young people who are at the same time undergoing vocational training and pursuing an occupation. On successful completion, students receive a certificate equivalent to the intermediate school certificate.

#### **Fachakademien**

This programme, which only exists in Bavaria, requires the intermediate school certificate or a recognised equivalent. After the completion of a vocational training or practical vocational experience which served the vocational target of the student it prepares for entry into a superior vocational career.

#### Schulen des Gesundheitswesens

This programme consists of vocational education and training in health sector schools (for nurses, midwives, medical assistants, etc.). It provides education and training for non-academic health sector occupations. In terms of organisation and location, many of these schools are associated with hospitals where training is provided in theory and practice.

### Berufs-/Technische Oberschulen

This programme, which only exists in Baden-Württemberg and Bavaria, consists of full-time vocational education and training and requires the intermediate school certificate or a recognised equivalent. Students also have to prove the completion of vocational training in the *Duales System* or a sufficient vocational experience. Successful completion entitles leavers to take up studies at university.

#### Berufsakademien

This programme, which only exists in Schleswig-Holstein, consists of vocational education and training in institutions for students who already hold a university entrance qualification. Students receive a science- and practice-related vocational education and training during 3 years.

#### **Fachschulen**

This programme offers two different types of education and training. The first type provides initial vocational education and training comparable to programmes at Berufsfachschule (e.g. for occupations in the social sector like Kindergarten teachers, social workers, nursing of old people, etc.). The second type is normally attended after completion of vocational training in the Duales System and after several years of work experience. Admittance sometimes is also possible on proof of ability. This type of programme provides advanced education and training in a wide range of occupations.

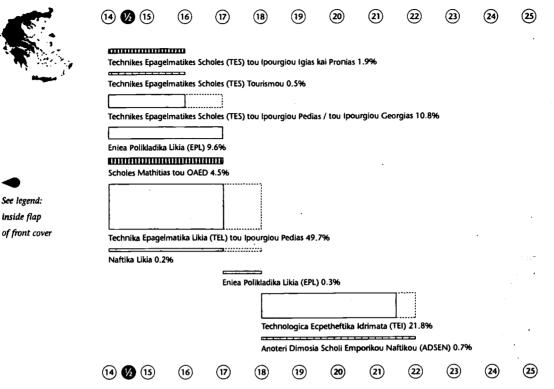






## (EL) Greece

## Graph B2 | Initial Vocational Education and Training Programmes - 1992-93



Source: VET / 100% = 227 000 participants

### Technikes Epagelmatikes Scholes (TES) tou Ipourgiou Igias kai Pronias

After completion of lower secondary education, students can enter this education/training programme preparing them for jobs in the social and health sectors. It normally lasts 2 years.

## Technikes Epagelmatikes Scholes (TES) Tourismou

Students having completed lower secondary education, graduates of lower technical schools or pupils of any class or type of general or technical vocational Lycea can enter this education/training programme to become for instance hotel chefs or to work in a tourist office. It normally lasts 2 years.

## Technikes Epagelmatikes Scholes (TES) tou Ipourgiou Pedias/ tou Ipourgiou Georgias

Students having completed lower secondary education, graduates of lower technical school or pupils of any class and type of general and technical vocational Lycea can enter this education/training programme to specialise in different sectors (e.g. mechanics, electricity, gardening or hairdressing). It normally lasts between 2 and 3 years. It enables the participants to have direct access to general education of a higher level.

#### Eniea Polikladika Likia (EPL)

After completion of lower secondary education, students can enter this education/training programme preparing them for jobs in administrative and secretarial fields. It normally lasts 3 years and enables the participants to have access to general education of a higher level after an exam.

#### Scholes Mathitias tou OAED\*

After completion of lower secondary education, students can enter this education and training programme to specialise in different crafts such as pottery, goldsmith, bakery, plumbing, carpentry, etc. It normally lasts 3 years and gives the participants access to general education of a higher level.

#### Technika Epagelmatika Likia (TEL) tou Ipourgiou Pedias

After completing lower secondary education, students can enrol in this education/training programme to specialise in different fields, for instance in mechanics, electricity, chemistry, civil engineering, weaving, etc. It lasts between 3 and 4 years and enables them to go on to third grade education, which corresponds to ISCED 5 or 6.

#### Naftika Likia

After completing lower secondary education, students can enrol in this vocational/training programme which prepares them for jobs in the marine field (e.g. ship captains, engineers of the merchant marine). It lasts between 3 and 4 years and and enables them to go on to third grade education, which corresponds to ISCED 5 or 6.

### Eniea Polikladika Likia (EPL)

After completion of higher secondary education, students can enter this education/training programme preparing them for different jobs, e.g. mechanics, electricians, administrative or economic officials and agriculturists etc. It normally lasts 1 year.

#### Technologica Ecpetheftika Idrimata (TEI)

75% of participants come from the higher cycle of secondary education and have passed exams to be admitted. The remaining 25% entering TEI come from TEL and are selected according to their marks. Students in TEI can opt for management and economics, health and welfare, personnel training, technical applications, agriculture technology, etc. This programme normally lasts between 3.5 and 4 years.

## Anoteri Dimosia Scholi Emporikou Naftikou (ADSEN)

After completion of higher secondary education, students can enter this education/training programme, which prepares them for jobs in different fields of the merchant marine (e.g. captains of a ship or engineeers of a higher school). The programme lasts 4-years.

\* OAED - Organismos Aspascholisseos Ergatikou Dynamikou (Manpower Employment Organisation)

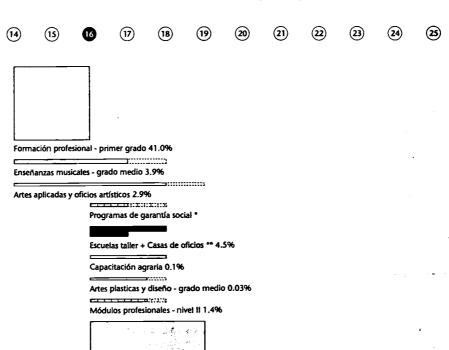




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of front cover

## Graph B2 | Initial Vocational Education and Training Programmes - 1993-94



Formación profesional - segundo grado 44.2%

Módulos profesionales - nivel III 1.4%

Enseñanza militar suboficiales 0.3%

Artes plásticas y diseño - grado superior 0.1%

(14

(15)



















Source: VET / 100% = 993 000 participants

## Formación profesional - primer grado

This programme is aimed at students who have completed compulsory schooling. It teaches them the skills of different trades and continues their general education. Following the reform of the Spanish educational system, this programme will dissapear progressively and will be replaced by the Ciclos Formativos de Formacian Profesional.

## Enseñanzas musicales - grado medio

This intermediate level education and training programme aims at professional qualifications in music, leading to the Titulo profesional de Música (vocational diploma in music). It also prepares for advanced music studies.

## Artes aplicadas y oficios artísticos

This programme provides full qualifications for work in the world of art and fine arts, the various aspects of design and drawing, and in restoration and conservation.

### Programas de garantía social

This specific basic and vocational training programme is targeted at students who failed to achieve the objectives of compulsory education. The aim is to permit them to enter either working life, or one or other of the various forms of education. It is part of the new educational system.

<sup>\*</sup> Programos de garantía social was experimental in school year 1993-94: no statistical information can be provided.

<sup>\*\*</sup> Statistical data cannot be broken down between Escuelas taller and Casas de oficios.

#### Escuelas taller + Casas de oficios

These two programmes are intended for the unemployed aged under 25 and aims to provide them with a vocational qualification in order to make their entry into the labour market easier. Both take place at the workplace. The programme Escuelas taller is oriented toward the restoration and rehabilitation of the cultural, historical and natural heritage and the restoration of publicly-owned infrastructures. The programme Casas de oficios is directed at the care and maintenance of the urban and natural environment, and the restoration of traditional and craft trade workshops with the incorporation of new technologies.

#### Capacitación agraria

This programme provides agricultural education and training and practical experience for those preparing for a career in agriculture.

## Artes plasticas y diseño - grado medio

This programme provides complete education and training for occupations in the art world requiring technical skills and craftsmanship in art. It provides intermediate level courses.

## Módulos profesionales - nivel II

This programme provides structured education and training in a range of skills and knowledge for specific occupations, at technical level.

## Formación profesional - segundo grado

Admission to this programme requires the baccalaureate or successful completion of initial vocational education and training. The programme trains the participants in the skills of different trades and continues their general education. Following the reform of the Spanish educational system, this programme will dissapear progressively and will be replaced by the Ciclos Formativos de Formacion Profesional.

#### Módulos profesionales nivel III

This programme provides structured education and training in a range of skills and knowledge for a specific occupation, at senior technician level.

## Enseñanza militar suboficiales

This programme provides education and training to individuals entering the basic ranks of the army.

## Artes plásticas y diseño - grado superior

This programme provides complete education and training for occupations in the art world requiring technical skills and craftsmanship in art. It qualifies for work involving the design, coordination and implementation of technical and artistic projects. It provides advanced level courses.



## (F) France

## Graph B2 | Initial Vocational Education and Training Programmes - 1993-94



See legend:

inside flap

of front cover

14)





















Formation professionnelle de l'enseignement adapté 4.9%



Brevet d'enseignement professionnel (BEP) 33.7%

....

Apprentissage BEP 1.5%



Apprentissage CAP 10.9%

Certificat d'aptitude professionnelle (CAP) 5.3%

Brevet de technicien 2.6%

Formation aux professions de la santé - niveau enseignement secondaire 1.2%

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Formation aux professions sociales - niveau enseignement secondaire 0.8%

Mentions complémentaires (CAP - BEP) 0.3%

Mentions complémentaires (Apprentissage) 0.3%

Bac professionnel 9.7%

ac professionner 2.7 70

Bac professionnel par apprentissage 0.7%

Brevet professionnel ou de maîtrise (Apprentissage ) 1.0%

Brevet de technnicien supérieur (BTS) 15.0%

.....

Brevet de technicien supérieur (Apprentissage) 0.4%

Formation aux professions sociales - niveau enseignement supérieur 1.0%

Diplâme universitaire de technologie 6

Diplôme universitaire de technologie 6.2%

Formation aux professions de la santé - niveau enseignement supérieur 4.5%

14

(15)



(17)

(18)

(21)

(22

(23)

(25)

Source: VET / 100% = 1 494 000 participants

## Formation professionnelle de l'enseignement adapté

This programme is provided in special institutions and intended for pupils with slight disabilities. It prepares for vocational diplomas provided by the Ministry of Education.

## Brevet d'Enseignement Professionnel (BEP)

This programme prepares for an intermediate vocational diploma leading to a job or to further vocational education and training. It is mainly provided in an education/training institution but includes training periods in an enterprise.

## Apprentissage BEP

This apprenticeship programme prepares for a vocational diploma enabling entry into working life as well as further education and training, under a work contract. Tuition time is shared between an education/training institution and an enterprise, where the apprentice works under the responsibility of a training master.

#### Apprentissage CAP

This apprenticeship programme prepares for a basic traditional vocational diploma under work contract. Tuition time is shared between an education/ training institution and an enterprise, where the apprentice works under the responsibility of a master.

## Certificat d'Aptitude Professionnelle (CAP)

This programme prepares for a basic traditional vocational diploma. It is mainly provided in an education/training institution but includes training periods in an enterprise.

#### Brevet de technicien

This programme prepares for a technical diploma specialised in a specific job. It takes place entirely in an education/training institution.

## Formation aux professions de la santé - niveau enseignement secondaire

This programme prepares for jobs in the health sector (nurses, paediatric nurses)

#### Formation aux professions sociales - niveau enseignement secondaire

This programme prepares for jobs as assistants in social services (home assistant, instructors, etc.)

## Mentions complémentaires (CAP - BEP)

This programme is intended for holders of a vocational diploma wishing to specialise in a specific field on top of the qualification already gained.

#### Mentions complémentaires (Apprentissage)

This programme is intended for holders of a vocational diploma wishing to specialise under training contract in a specific field on top of the qualification already gained.

## **Bac professionnel**

This programme prepares for a vocational 'baccalauréat'. It takes place mainly in an education/training institution but includes training periods in an enterprise and aims at helping participants to enter working life. Access to the programme is given to holders of a certificate from the BEP.

### Bac professionnel par apprentissage

This apprenticeship programme, under a work contract, prepares for a vocational 'baccalauréat' aimed at entry into the labour market. Tuition time is shared between an education/ training institution and an entreprise, where the apprentice works under the responsibility of a training master. Access to the programme is given to holders of a certificate from the BEP.

### Brevet professionnel ou de maîtrise (Apprentissage)

This programme, under a work contract, prepares for a certificate providing a high qualification in certain vocational activities or providing access to some regulated jobs, generally in the craft sector.

## Brevet de technicien supérieur (BTS)

This programme prepares for a higher technician diploma (engineers, training supervisors). It is mainly provided in an education/training institution but includes training periods in an enterprise. Access to the programme is given to holders of a baccalauréat.

## Brevet de technicien supérieur (Apprentissage)

This apprenticeship programme, under a work contract, enables access to higher technician or supervisory functions. Tuition time is shared between an education/training institution and an enterprise, where the apprentice works under the responsibility of a training master.

### Formation aux professions sociales - niveau enseignement supérieur

This programme prepares for jobs in social services (e.g. social workers, specialised instructors, etc.).

## Diplôme universitaire de technologie

This programme prepares for a higher technician diploma, enabling the exercise of supervisory functions in a family of jobs. It is mainly provided in an education/training institution but includes training periods in an enterprise. Access to the programme is given to holders of a baccalauréat.

## Formation aux professions de la santé - niveau enseignement supérieur

This programme prepares for a national diploma in the health sector (e.g. nurses, medical radiologists, physiotherapists, paediatric nurses, midwives).





## <sub>Graph B2</sub> | Initial Vocational Education and Training Programmes - 1993-94 14) (17) (21) (22) (23) (25) Apprenticeship 11.2% Teacher Training 0.1% **Business Studies Courses 1.4%** Specific Skills Training 13.2% See legend: **Business/Technical/Secretarial Courses 1.8%** inside flap of front cover Vocational Preparation and Training II 16.7% ATTALTMENT THE STREET **CERT Craft Courses 2.1%**

Hotel Management Courses/Trainee Manager Development Programme 0.1%

18)

Certificate in Farming 1.7%

Farm Apprenticeship Scheme 0.2%

Source: VET / 100% = 105 000 participants

16)

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25)

Middle Level Technician and Higher Technical Business Skills 46.7%

21)

22

23)

Student/Probationer Education/Training Programme 1.4%

General Nurse Education and Training Programme 3.4%

#### **Apprenticeship**

This programme is the way in which young persons acquire craft qualifications. It is primarily focused in engineering, construction, printing and the motor trades.

#### Teacher Training

This programme is run by the non-aided sector (private and privately funded institutions). The majority of students participating in it are pursuing a qualification in Montessori education, while a minority are pursuing a qualification in a teacher-training institution for Religious education.

#### **Business Studies Courses**

This programme is also run by the non-aided sector (private and privately funded institutions). The majority of students participating in it are pursuing a qualification in Business Studies/Marketing, while some students are pursuing a course in Hotel and Catering Management and a few are pursuing a qualication in Art (fine art and design).

#### Specific Skills Training

This programme, run by FAS\*, comprises a range of 200 separate vocational training courses leading to employment in industry and services. It is primarily intended for young people and provides initial vocational education and training qualifications.

## **Business / Technical / Secretarial Courses**

This programme provides initial vocational education and training in private education / training institutions. It offers a variety of subjects.

## Vocational Preparation and Training II

This programme provides a range of vocational education and training programmes for people after the completion of secondary education.

#### **CERT Craft Courses**

This programme is the principal way young people acquire initial vocational education and training qualifications for the catering/ tourism industry.

## Middle Level Technician and Higher Technical Business Skills

This programme provides a range of 2-year courses at third-level institutions leading to certificate or diploma qualifications. The programme is run by the public education system.

## Student/Probationer Education/Training Programme

This programme provides vocational education and training for people becoming gardai (police).

## General Nurse Education and Training Programme

This is the recognised training programme for the initial vocational education and training of nurses in Ireland.

## Certificate in Farming

This programme is the main education and training programme for young people who seek a career in farming.

## Farm Apprenticeship Scheme

This 3-year programme leads to the award of a Certificate in Farm Management and is taken by people after having successfully completed at least a 1-year agricultural education course.

## Hotel Management Courses/Trainee Manager Development Programme

This programme provides initial vocational education and training for people seeking to take up management positions in the catering/tourism business.

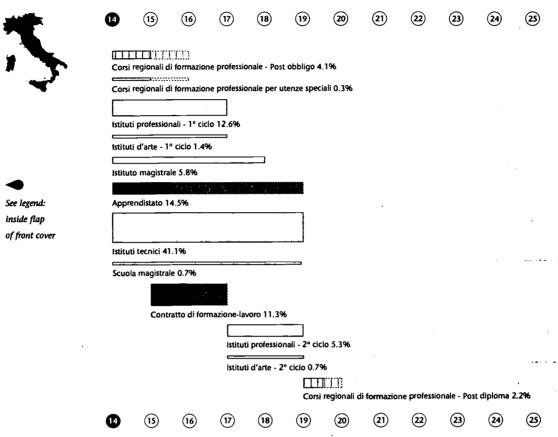
\* FAS - An Foras Aiseanna Saothair - The Training and Employment Authority





## (i) Italy

## Graph B2 | Initial Vocational Education and Training Programmes - 1993-94



Source: VET / 100% = 2 942 000 participants

## Corsi regionali di formazione professionale - Post obligo

This programme provides a basic qualification following compulsory education for skilled workers and operational personnel for the various sectors of the economy. It takes place mainly in an education/training institution but may include periods of training or practical work in an enterprise. Each Region is in charge of setting the objectives and designing the programme. It has a variable duration but the theoretical duration ranges from 1 to 2 years. The programme provides a vocational qualification or a certificate of attendance.

### Corsi regionali di formazione professionale per utenze speciali

This programme provides initial training for specific disavantaged groups: immigrants, people with mental or physical disabilities, long-term unemployed, etc. Each Region is in charge of setting the objectives and designing the programme. It has a variable duration but the theoretical duration ranges from 1 to 2 years. It provides a vocational qualification or a certificate of attendance.

## Istituti professionali - 1° ciclo

This programme aims to provide short-term education and training for skilled workers and operational personnel for the various sectors of the economy. Tuition takes place almost entirely in an education/training institution. It generally lasts 3 years and, after an examination, provides a vocational education and training qualification. The completion of the programme provides access to the *Istituti professionali - 2° ciclo*.



(I)

#### Istituti d'arte - 1° ciclo

This programme provides short-term education and training in the various sectors of the applied arts. Tuition takes place almost entirely in an education/training institution. It generally lasts 3 years and, after an examination, provides a vocational qualification. The completion of the programme provides access to the *Istituti d'arte - 2° ciclo*.

#### Istituto magistrale

This programme trains primary-school teachers. It generally lasts 4 years (there is, also, an experimental course that lasts five years) and provides a certificate that is a valid qualification for entry to the faculty of education and to some degree courses (foreign languages and literature). Students with a certificate from *Istituto magistrale* who have attended a one-year qualifying course can register for any degree course.

#### **Apprendistato**

This programme has a special relationship to employment. Employers are obliged to impart or to arrange to impart, the training needed to allow the apprentices they have employed to acquire the technical skills needed to become qualified workers. Tuition takes place almost entirely at the workplace. The apprenticeship formula is nowadays used predominantly in craft trades. The programme is intended for young people who have completed compulsory education and have no vocational qualification.

#### Istituti tecnici

This programme prepares students for medium-level technical and administrative occupations in the fields of agriculture, industry, commerce and tourism. At the end of the 5-year programme students take an examination and if successful, they receive the corresponding certificate and can then start the particular occupation.

## Scuola magistrale

This programme trains nursery-school teachers and has variable durations. The experimental programme lasts 5 years and provides access to university.

#### Contratto di formazione-lavoro

This programme is essentially a measure to promote youth employment; employers are entitled to recruit young people aged between 15 and 32 years under fixed-term contracts (maximum length 2 years) having education and training aims. Training plans do not need to be submitted except in the case of employers intending to apply for financial grants from the Region. The programme is intended for young people looking for their first job.

## Instituti professionali - 2° ciclo

Students who have completed *Istituti professionali* - 1° ciclo, can go on to this second cycle; this programme lasts 2 years and provides a vocational qualification involving upper-level skills. Final-year students take the upper secondary vocational examination and if successful can go on to university.

## Istituti d'arte - 2° ciclo

Students who have completed *Istituti d'arte - 1° cicl*o can go on to this second cycle; this programme lasts 2 years and provides a vocational qualification involving upper level skills in the field of applied arts. Final-year students take the upper secondary vocational examination and if successful can go on to university.

### Corsi regionali di formazione professionale - Post diploma

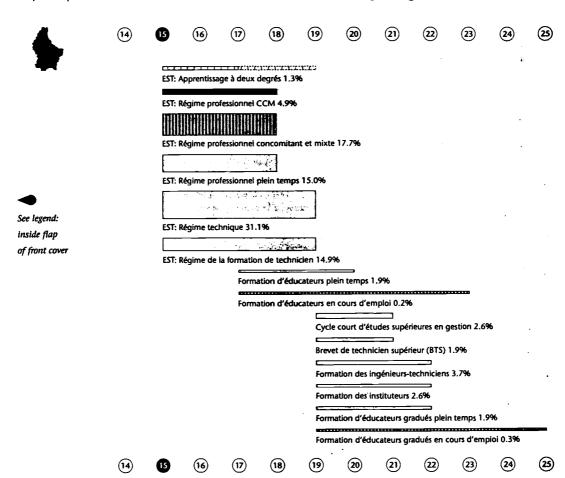
This programme is intended to provide a qualification following on from upper secondary education for skilled jobs in the various sectors of the economy. It takes place mainly in an education/training institution but may include periods of training or practical work in an enterprise. Each Region is in charge of setting the objectives and designing the programme. It has a variable duration but the theoretical duration ranges from six to nine months. At the end, the programme provides a vocational qualification or a certificate of attendance. The programme is intended for young people who have completed the upper secondary school.





## (L) Luxembourg

## Graph B2 | Initial Vocational Education and Training Programmes - 1993-94



Source: VET / 100% = 9000 participants

## EST: Apprentissage à deux degrés

For some occupations, the students can attend a two-cycle education and training programme. This first cycle leads to a certificate called CITP (Certificat d'Initiation Technique et Professionnelle). Students who have completed the first cycle can go on to the second cycle which leads to a certificate called CATP (Certificat d'Aptitude Technique et Professionnelle).

### EST: Régime professionnel CCM

This programme leads to a certificate called CCM (Certificat de Capacité Manuelle), delivered to the students who have satisfied the requirements of the programme.

## EST: Régime professionnel concomitant et mixte

The 3-year programme include practical education and training on the workplace (in different proportions). The CATP (Certificat d'Aptitude Technique et Professionnelle) is delivered to the participants who have passed the final examinations.

### EST: Régime professionnel plein temps

This programme takes place entirely in an education/ training institution. The CATP (Certificat d'Aptitude Technique et Professionnelle) is delivered to the participants who have passed the final examinations.



## EST: Régime technique

This programme aims at teaching how to perform a job and at preparing its participants for education and training of a higher level. At the end of the programme, the participants have to take a national examination and, if successful, receive a technical secondary education and training diploma specifying the branches of the training and the speciality.

#### EST: Régime de la formation de technicien

This programme aims at teaching how to perform a job and at preparing its participants for education and training of a higher level. At the end of the programme, the participants have to take a national examination and, if successful, receive a technician diploma specifying the branches of the training and the speciality.

## Formation d'éducateurs plein temps

This full-time programme organised by the IEES prepares students to become teachers. A diploma ('diplôme d'éducateur') is delivered by the MENFP to the participants who have passed the examinations.

## Formation d'éducateurs en cours d'emploi

This programme organised by the IEES prepares employed people to become teachers. A diploma ('diplôme d'éducateur') is delivered by the MENFP to the participants who have passed the final examinations.

## Cycle court d'études supérieures en gestion

This programme aims to meet the education and training needs in the services sector in Luxembourg (banks, insurance companies, fiduciary companies, trade, computer engineering). A diploma (diplôme d'études supérieures de gestion) is delivered to the participants who have passed the final examinations.

## Brevet de technicien supérieur (BTS)

Generally speaking, it aims at providing the participants with higher education in different fields (accountancy, secretarial work, office work, marketing). It leads to a certificate called BTS (Brevet de Technicien Supérieur).

## Formation des ingénieurs - techniciens

This higher education programme prepares for the job of technical supervisor in production, applied research and services. A diploma ('diplôme d'ingénieur-technicien') is delivered by the IST to the participants who have passed the examinations at the end of the programme.

## Formation des instituteurs

This programme organized by ISERP aims to provide the participants with basic teacher education and training and continuous education and training. A certificate (certificat d'études pédagogiques) is delivered by the MENFP to the participants who have passed the examinations at the end of the programme.

## Formation d'educateurs gradués plein temps

This full-time programme organised by IEES prepares students for the job of graduate teachers. A diploma ('diplôme d'éducateur gradué') is delivered by the MENFP to the participants who have passed the final examinations.

#### Formation d'educateurs gradués en cours d'emploi

This programme organised by IEES prepares people with a job for the job of graduate teachers. A diploma ('diplôme d'éducateur gradué') is delivered by the MENFP to the participants who have passed the final examinations.

- EST Enseignement Secondaire Technique (technical secondary education and training)
- IEES Institut d'Etudes Educatives et Sociales (institution in charge of studies in the field of social and education sciences)
- IST Institut Supérieur de Technologie (institution for higher studies in technology)
- ISERP Institut Supérieur d'Etudes et de Recherches Pédagogiques (institution for higher studies and research in education)
- MENFP Ministère de l'Education Nationale et de la Formation Professionnelle

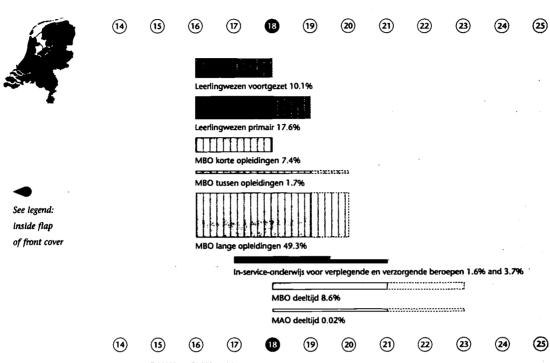
(Ministry of Education and Vocational Education and Training)





## (NL) The Netherlands

## Graph B2 | Initial Vocational Education and Training Programmes - 1993-94



Source: VET / 100% = 476 000 participants

MBO: Middelbaar Beroepsonderwijs
MAO: Middelbaar Agrarisch Onderwijs

### Leerlingwezen voortgezet

This programme comprises on-the-job education and training combined with part-time related theory and general subjects in an education/training institution one day per week. Students are trained to work as independent workers.

## Leerlingwezen primair

This programme comprises on-the-job education and training combined with part-time related theory and general subjects in an education/training institution one day per week. Students are trained to a level which allows them to take junior positions.

#### MBO korte opleidingen

This programme trains students for junior positions. It takes place mainly in an education/training institution with some time at the workplace. Admission is open to young people leaving the first cycle of secondary education without qualifications.

## MBO tussen opleidingen

This programme trains students to work as independent workers. Admission is open to young people who have a pre-vocational (VBO) or a junior general secondary education (MAVO) diploma.

#### MBO lange opleidingen

This programme trains students for jobs in middle management and leads to related programmes in higher vocational education. Entry qualifications are a VBO or MAVO diploma.

## In-service-onderwijs voor verplegende en verzorgende beroepen

These programmes train young people to work as nurses. The students are employed by the institution in which they are trained. Its duration is either about 2.5 years or about 4 years.

#### **MBO** deeltiid

This part-time programme offers adults the possibility to attend MBO programmes. Most students who pursue part-time education do not aim at obtaining a MBO-diploma but at obtaining one or more certificates in separate subjects.

#### MAO deeltijd

This part-time programme offers adults the possibility to attend MAO programmes. Most students who pursue part-time education do not aim at obtaining a MAO-diploma, rather at obtaining one or more certificates in separate subjects.

MBO Middelbaar Beroepsonderwijs (intermediate vocational education and training)

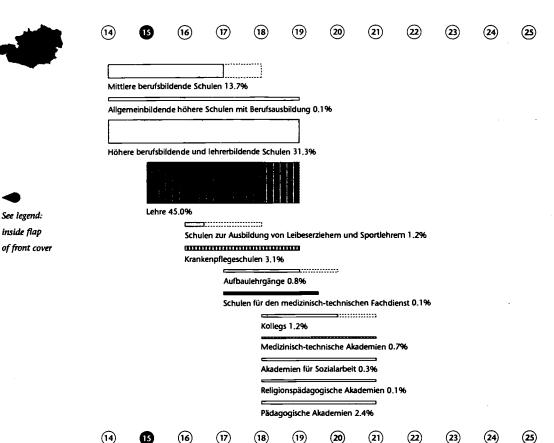
MAO Middelbaar Agrarisch Onderwijs (intermediate education and training in agriculture)

VBO Voorbereidend Beroepsonderwijs (pre-vocational education and training)

MAVO Middelbaar Algemeen Vormend Onderwijs (intermediate general education)







Source: VET / 100% = 300 000 participants

Data does not include initial vocational education and training in vocational school for working people, programmes leading to the qualification of *Meister* or *Werkmeister* or the *Berufpädagogische Akademien*.

### Mittlere berufsbildende Schulen

This programme consists of full-time education and training in an education/training institution providing complete vocational education and training in occupations of the technical field and the crafts as well as in trade and services or agriculture. The first year usually corresponds to the last year of compulsory school attendance. There are exceptions in the field of agriculture and forestry.

## Allgemeinbildende höhere Schulen mit Berufsausbildung

This programme is a special form of secondary academic education qualifying for university entrance and, at the same time, conveying vocational education and training in craft subjects; it is one year longer than most of the other secondary academic schools.

## Höhere berufsbildende und lehrerbildende Schulen

This programme consists of full-time education and training in an education/training institution completed by a school-leaving examination qualifying for general university entrance and, at the same time, for employment in the higher levels of the technical, commercial, agricultural or paedagogical work area and in a craft ("Reifeund Diplomprüfung" resp. "Reife- und Befähigungsprüfung").



This programme consists of education and training in individual occupations in the technical and commercial fields, in crafts, trade and services as well as in agriculture and forestry, taking place both at the workplace and in an education/training institution (dual system). Apprenticeship training is based on indentures and on training regulations. Attendance at a vocational school for supplementary instruction is obligatory.

## Schulen zur Ausbildung von Leibeserziehern und Sportlehrern

This programme provides the qualifications of a physical education teacher in certain types of secondary education and of a sports instructor. It normally lasts for 2 years. In addition, shorter courses leading to a trainerqualification are held.

## Krankenpflegeschulen

This programme consists of practical and theoretical training in nursing ending up with a diploma. Its normal duration is 3 years on condition that the tenth grade was successfully completed at the beginning of the training.

## Aufbaulehrgänge

This programme prepares those who have attended secondary technical and vocational schools or have finished their apprenticeship (after a successfully completed preparatory course) for the school-leaving certificate of a secondary technical and vocational college ("Reife- und Diplomprüfung") in a related field of study; it takes place entirely in education/training institution.

## Schulen für den medizinisch-technischen Fachdienst

This programme prepares for employment as a qualified paramedical assistant. The first year of instruction corresponds to the tenth grade, nevertheless, students must have reached the age of 17 when entering it.

This programme aims to supply graduates of a secondary academic school or a technical and vocational education college (especially those coming from general education) with the professional qualifications of a secondary technical and vocational college. It ends up with a diploma.

## Medizinisch-technische Akademien

This programme consists of education and training for employment in the higher levels of the paramedical service. It is open to graduates of secondary academic schools or technical and vocational education colleges and of intermediate schools teaching a related field of study (e.g. nursing school); studies are completed with a diploma.

## Akademien für Sozialarbeit

This programme provides qualifications for higher employment in the area of social work. The entrance requirement is the successful completion of a secondary academic school or a technical and vocational education college ("Reifeprüfung" or "Reife- und Diplomprüfung"); a diploma can be obtained.

## Religionspädagogische Akademien

This programme consists of education and training providing the qualifications of a religious education teacher working in compulsory schools. The entrance requirement is the certificate of a secondary academic school or a technical and vocational education college (" Reifeprüfung " or, " Reife- und Diplomprüfung "); training is completed by a teaching examination corresponding to the course of studies.

## Pädagogische Akademien

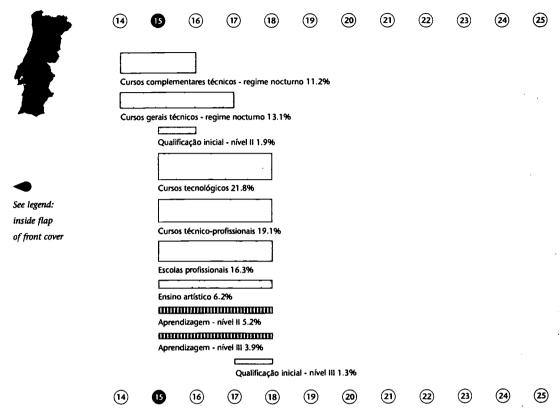
This programme consists of teacher education and training providing the qualifications to teach in compulsory schools; training in the field of special education is possible. Entrance requirement is the school-leaving certificate of a secondary academic school or a secondary technical and vocational college (technical and vocational education college) ("Reifeprüfung" or "Reife- und Diplomprüfung").





## (P) Portugal

## <sub>Graph B2</sub> | Initial Vocational Education and Training Programmes - 1993-94



Source: VET / 100% = 136 000 participants

## Cursos complementares técnicos - regime nocturno

This programme consisting of evening-class supplementary technical education and training, offers courses providing a qualification in the fields of industry, services and applied arts. It is designed for students wishing to get a vocational qualification level 3 and who are too old to attend full-time education and training and for students aged 18 years and over with a job. It is gradually being phased out.

#### Cursos gerais técnicos - regime nocturno

This programme consists of evening-class general and technical training in the fields of industry, services or applied arts. It is designed for students wishing to get a vocational qualification (level 2) and who are too old to attend full-time training and for students aged 18 and over who have a job. It is gradually being phased out.

#### Qualificação inicial - nível II

This programme corresponds to a comprehensive qualification for a specific skill involving the use of relevant instruments and techniques. It prepares for work which can be performed independently within the limits of the relevant jobs. To enter this programme, participants have to have completed successfully 9 years of compulsory schooling.

#### Cursos tecnológicos

This programme aims to help students enter working life. It includes general education, specific education and technological training. It provides secondary education leaving diploma and a technological training diploma.

#### Cursos técnico-profissionais

This programme was the previous form of *Cursos tecnológicos* before the educational system was reformed; it is gradually being phased out.

### **Escolas profissionais**

This programme aims at providing participants with a set of general and technical competences in specific fields of local interest. It provides a vocational diploma equivalent to that achieved at the end of secondary education.

### Ensino artístico

This programme provides more advanced general and artistic education and training. It is designed for the school-age population at the end of compulsory schooling.

### Aprendizagem - nível II

This programme corresponds to a comprehensive qualification for specific activities involving the use of relevant instruments and techniques. It prepares for technical work which can be performed independently within the limits of the relevant jobs. To enter this programme, participants have to be holders of a basic education diploma.

## Aprendizagem - nível III

This programme corresponds to a comprehensive qualification for carrying out an activity. It prepares for technical work that can be performed independently and/or involves supervision and coordination responsibilities. To enter this programme, participants must have completed successfully 9 years of compulsory schooling.

## Qualificação inicial - nível III

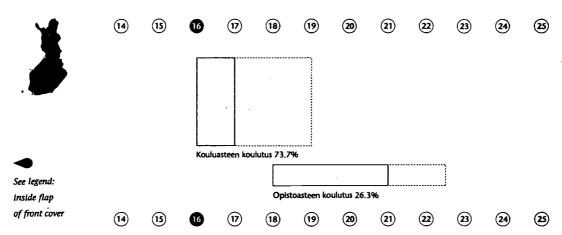
This programme implies more technical knowledge than *Qualificação inicial - nível II.* It prepares for technical work that can be performed independently and/or involves supervision and coordination responsibilities. To enter this programme, participants must have completed successfully 11 years of compulsory schooling.



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Source: VET / 100% = 172 000 participants

## Kouluasteen koulutus

This programme consists of schooling subsequent to compulsory education giving, in addition to vocational qualifications, eligibility to attend *Opistoasteen koulutus*.

## Opistoasteen koulutus

This programme is based on the curriculum of *Kouluasteen koulutus* or upper-secondary school. It offers, in addition to vocational qualifications, eligibility to continue to study at a higher level of vocational education and training or at university, depending on the field.

(5) 16 (7) 18 (9) 20 21 (22 23 24 25)

Gymnasieskolan: yrkesförberedande program 100%

(14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25)

See legend: inside flap of front cover

Gymnasieskolan: yrkesförberedande program

Source: VET / 100% = 207 000 participants

14)

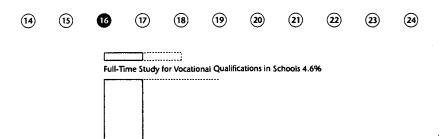
This upper-secondary programme is intended for young people who have completed compulsory schooling. It aims at providing a full set of skills required to enter a job.







See legend: inside flap of front cover



(25)

(25)

Full-Time Study for Vocational Qualifications in Colleges 35.7%



Youth Training 22.0%



Employer-Supported Training Leading to a Vocational Qualification Including Apprenticeship and Other Forms of Training 24.1%



Part-Time Study in Colleges of Further Education and Full-Time Study in Independent Colleges towards Vocational Qualifications 13.6%

- Source: VET / 100% = 1 280 000 participants (+): some training is work-based, some alternate
- (\*): duration very variable
- (\*\*): duration not known

As the durations of most programmes could not be specified, it is not the volume of the boxes but only their height which reflects the proportion of participants.

(23)

## Full-Time Study for Vocational Qualifications in Schools

This programme consists of full-time education aimed at providing vocational qualifications on any one of a wide range of courses in schools. It is intended for young people over 16, who have completed compulsory schooling.

## Full-Time Study for Vocational Qualifications in Colleges

This programme consists of full-time education aimed at providing vocational qualifications on any one of a wide range of courses in colleges. It is intended for young people over 16, who have completed compulsory schooling or for students who have completed their advanced academic education.

## **Youth Training**

This programme provides training mainly for 16 and 17 year-olds, who are guaranteed a place on the programme if they want one. Trainees learn initial occupational skills and are trained to a minimum of NVQ Level 2. Study under *Youth Training* may be full-time at the workplace or part-time in the workplace and part-time in a college. The relatively small number of people on *Youth Training* in full-time education / training have been included under full-time study in colleges.

# Employer-Supported Training Leading to a Vocational Qualification Including Apprenticeship and Other Forms of Training

This programme covers a range of employer-supported education and training through apprenticeship and other programmes of vocational education and training. It is aimed mainly at young school leavers and covers a wide variety of well structured, workplace-based training schemes which offer a supportive environment in which many study for vocational qualifications and which may include study at a college. Other employer-supported training programmes are very varied, ranging from highly structured training leading to professional qualifications, such as Nurse training, to more *ad hoc* training, addressing the specific requirements of individual employees. Tuition may take place either on or off the job. Study towards a qualification may be at a college or at employers premises.

# Part-Time Study in Colleges of Further Education and Full-Time Study in Independent Colleges towards Vocational Qualifications

This is a programme undertaken by young people that leads to vocational qualifications but which are not funded by employers. It includes those on courses of part-time vocational education in public colleges and those in full-time education and training in independent colleges. Many of the part-time courses are directly equivalent to full-time courses but, because they are part-time, have a longer duration.

The flexible nature of the training opportunities in the UK makes the collection of statistical data difficult. Data is not collected on a programme's attainment basis but on the basis of vocational qualifications. Therefore data had to be estimated. Data cannot be provided by programme and is collected on the basis of vocational qualifications.

The above programmes of study are the main routes to vocational qualifications and they are aimed at the attainment of three main types of qualification: General National Vocational Qualifications (GNVQs), National Vocational Qualifications (NVQs) and other vocational qualifications. A brief description of these is given below.

## General National Vocational Qualifications (GNVQs)

GNVQs are targeted mainly at young people in schools and colleges. They were introduced in 1992 but are rapidly becoming more important. GNVQs are available at three levels of difficulty: Foundation level; Intermediate level and Advanced level. Each of these is equivalent to levels of academic attainment. All three levels are unit-based and do not have a strict time limit.

#### National Vocational Qualifications (NVQs)

NVQs are employment-based qualifications, which concentrate on accrediting evidence of competence, deriving largely from performance at the workplace. They are designed to be highly flexible with no prescribed curricula or methods of study. There are also no constraints on duration or location of study. There are five levels, ranging from the basic level 1 to the most advanced level 5. Qualifications at level 5 are at a higher ISCED level and have been excluded from this exercise.

## Other vocational qualifications

These cover a wide variety of vocational qualifications at a number of levels. They cover a wide range of subject areas, ranging from training of nurses to building and craft trades. Because of the range of subjects included, there is no single set mode of study for these qualifications.



## Participation Rates in Initial Vocational Education and Training

In the EU, young people are generally required to choose between general education and initial vocational education and training between the age of 14 and 16 years (see graph B2). Those who opt for the vocational route must also choose which type of programme is appropriate for them.

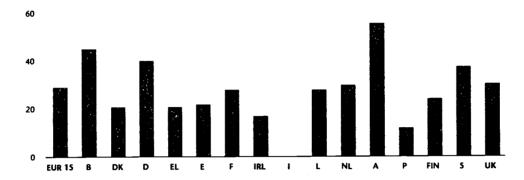
In the EU as a whole, around 29% of young people aged between 15 and 19 years participate in initial vocational education and training programmes, although participation rates in the Member States vary considerably. In Austria, some 55% of the 15-19 year old population enrol in initial vocational education and training programmes. In Belgium, Germany and Sweden the participation rates are around 40%. In Denmark, Greece, Spain, France, Luxembourg, the Netherlands, Finland and the UK participation rates of 15-19 year olds in initial vocational education and training programmes range between 20 and 30%. These are followed by Ireland, with 17% of 15-19 year olds, and Portugal, with 12%.

Beyond 20 years of age, participation in initial vocational education and training falls significantly. In most EU countries, the participation rates of 20-24 year olds are about one third, or even fewer, of those of 15-19 year olds (except in Denmark, Ireland and Finland). Again the rates vary considerably between the Member States ranging from 17% in Finland to less than 5% in Austria, Portugal and Sweden.

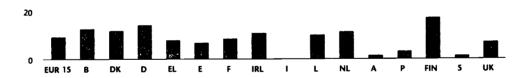
For those in the age group 25-29, participation in initial vocational education and training is obviously much lower. The EU average participation rate for this age group is 1.6%, ranging from 4.4% in Finland, to 0.2% in Spain and Austria.



Graph B3 a Participation Rates among the 15-19 Year Old Population - 1993-94 - % of population in initial vocational education and training



Graph B3 b Participation Rates among the 20-24 Year Old Population
1993-94 - % of population in initial vocational education and training



EUR 15	В	DK	D	EL	E	F	IRL	ı	L	NL	A	P	FIN	5	UK
28.9	44.7	20.6	39.7	20.6	21.6	27.7	16.8	:	27.6	29.5	55.1	11.8	23.9	37.1	30.0
9.2	12.6	11.8	14.1	7.9	6.8	8.5	10.8	:	10.0	11.3	1.5	3.2	17.1	1.4	7.0
1.6	0.3	1.8	1.8	1.0	0.2	0.6	1.8	:	0.4	2.1	0.2	1.1	4.4	0.3	3.2

15-19 years old 20-24 years old 25-29 years old

Source: VE

60

40

EUR 15: rates of EUR 15 without Italy

EL: data covering academic year 1992-1993

I: data are not available by age

FIN and UK: rates for 16-19 year olds and not 15-19

L: The fact that students attend education/training in neighbouring countries may influence these rates



The graphs show the participation rates of the principal age groups in initial vocational education and training as a proportion of the total population of that age group. Data have been estimated on the basis of programmes covering 90% of participants.

## Distribution by Age Group

Despite the fact that in every EU country, the majority of participants in initial vocational education and training are between 15 and 19 years of age, the age structure of the participants is quite different between Member States. Participants in initial vocational education and training are youngest in Austria and Sweden with 96.1% and 93.4% respectively aged under 20. On the other extreme Finland and to a lesser degree also Denmark, Ireland and the Netherlands have important proportions of participants older than 20 years (over 40%) or even older than 25 years (over 10%).

The 20-24 year olds are still quite well represented, accounting for almost 25% of all participants in initial vocational education and training in the EU. In seven Member States this age group accounts for more than a quarter of all participants: in Denmark (34.0%), Ireland (32.9%), Finland (30.5%), Luxembourg (30.2%), Germany (29.8%), the Netherlands (28.7%) and Greece (26.3%).

Participation by 25-29 year olds in initial vocational education and training is generally much lower than for the younger age groups, averaging 4.7% across the EU as a whole. However, in the UK the level of participation for 25-29 year olds is more than double the average with 12.0% of all participants. Participation by this age group is also relatively high in Finland (9.5%), Portugal (6.2%) and Denmark (5.9%).

The age group 30 years old and over is as well quite important in Finland (14%), and much less important but still significant in Denmark, Ireland, and the Netherlands accounting for 6 to 8% of the participants

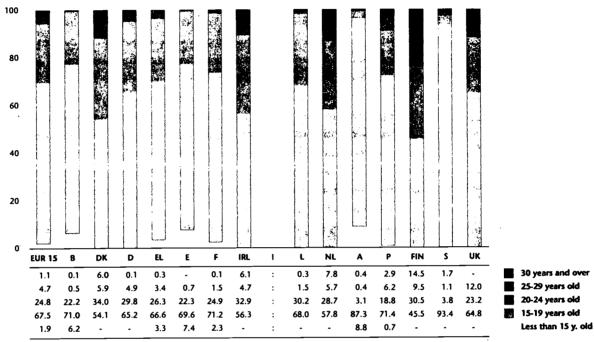
## Distribution by Gender

Achieving equal opportunities for men and women is one of the European Commission's priority aims. Community action has been particularly aimed at supporting and supplementing measures taken by Member States to enable young women to participate, on an equal basis, in all vocational education and training programmes. These joint efforts probably had already some effect, since from VET data, only a slight male dominance can be observed.

Across the EU as a whole, 55.2% of participants in initial vocational education and training are men and 44.8% are women. Most Member States are very close to the European average. Notable exceptions are Belgium and Ireland with almost equal participation of men and women in initial vocational education and training, and Finland with more women than men enrolled in these programmes (56.1%).



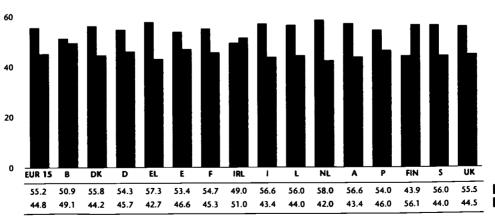
Distribution by Age Group -Graph B4 1993-94 - % of participants in initial vocational education and training



Source: VET

EUR15; distribution for EUR15 without Italy - EL: data covering academic year 1992-1993 - I: data not available by age - FIN and UK: 16-19 year olds and not 15-19

Graph B5 | Distribution by Gender -1993-94 - % of participants in initial vocational education and training



EL: data covering academic year 1992-1993

Source: VET

Male

Female

## Where Initial Vocational Education and Training Takes Place

The initial vocational education and training systems in the Member States all aim to provide young people with a combination of theoretical knowledge and practical skills. Through this combination of skills, young people are being equipped to carry out the range of tasks required in a particular occupation to a required standard and to be able to integrate more generally into the world of work.

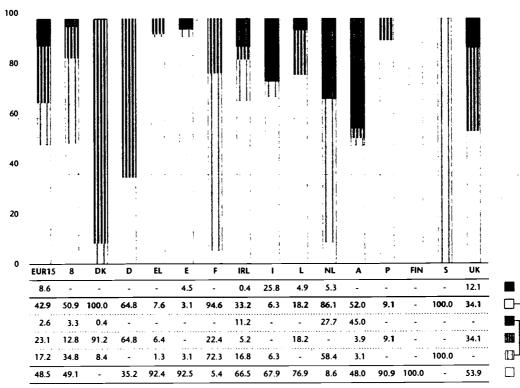
The Member States in the EU have adopted different approaches to initial vocational education and training systems and programmes. These approaches lie between the two broad extremes of initial vocational education and training taking place entirely in an education/training institution or taking place entirely at the workplace.

In the EU as a whole, the most frequent scheme in initial vocational education and training are programmes that take place entirely or almost entirely in an education/training institution (accounting for 48.5% of all participants). Particularly school-based initial vocational education and training systems are found in Greece, Spain, Portugal and Finland with more than 90% of the participants enrolled in a school-based programme. Ireland, Italy and Luxembourg also focus strongly on school-based programmes which cater for more than two thirds of the participants.

With the exception of the United Kingdom, all other Member States concentrate on alternate programmes, the importance of which is ranging from 50.9% of the participants in Belgium to 100% of all initial vocational education and training participants in Denmark and Sweden. Whithin these alternate programmes, the educational institution and work-place elements do not have the same weight in all Member States. Whereas the accent is on educational institutions in Belgium, the Netherlands, France and above all in Sweden, Austria focuses clearly on training at the workplace. Only in Germany and in Denmark is time shared more or less equally betwen the two locations.

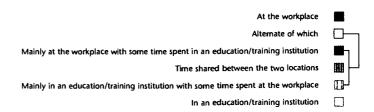
Less than 9% of all participants in the EU participate in programmes taking place entirely or almost entirely at the workplace. Only in the UK and particularly in Italy, can this type of programme be considered as important with 12,1% and 25.8% of participants respectively.

Graph B6 Where Initial Vocational Education and Training Takes Place - 1993-94 - % of participants in initial vocational education and training



Source: VET

EL: data covering academic year 1992-1993



See legend: inside flap of front cover





### **Duration of Initial Vocational Education and Training Programmes**

Initial vocational education and training programmes are shortest in France, Ireland and Finland, where the large majority of participants is enrolled in programmes of one or two years duration. Two year programmes are important as well in Belgium and Spain with more than 45% of participants.

In eight Member States, more than 40% of participants in initial vocational education and training attend programmes of three-years duration. This is the case in Belgium, Denmark, Greece, Spain, Luxembourg, and more particularly in Germany, Portugal and Sweden where participation in 3-year programmes ranges from 73% to all participants.

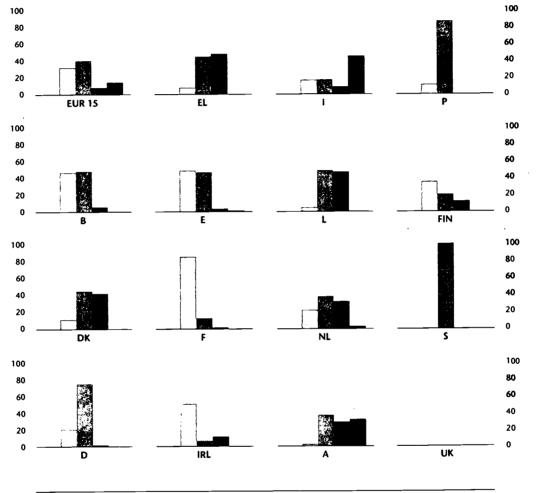
Long programmes lasting 4 years or more, are important in Denmark, Greece and Luxembourg with more than 40% of participants and also in the Netherlands and Austria with around 30% of participants. The longest duration programmes, 5 years or more, are important in Italy and Austria, with 44.7% and 31.4% of participants respectively.

Some programmes have a varying duration, depending for example on the subject or occupation studied, or on the type of qualification sought. When the duration varies (e.g. from 2 to 5 years), participants have been split between the relevant categories (e.g. in the case of "2 to 5 years", participants have been split between the categories 2, 3, 4 and 5 years).

In some countries, the different levels of one programme which provided a certificate have been split into different programmes.



Graph B7 Duration of Initial Vocational Education and Training Programmes - 1993-94 - % of participants in initial vocational education and training



EUR15	В	DK	D	EL	E	F	IRL	- 1	L	NL	Α	P	FIN	S	UK
6.3		2.4	4.9	0.3	0.7	1.0	32.7	13.0	-	5.0	1.6	3.2	33.0	-	٠
31.7	46.4	11.3	20.1	7.8	48.3	84.9	49.8	16.7	4.9	22.0	2.3	11.2	35.0	-	•
39.8	47.5	44.6	73.5	44.4	46.2	12.5	6.3	16.9	48.1	38.0	36.4	85.6	20.0	100.0	•
8.0	5.7	41.7	1.5	47.5	3.4	1.6	11.2	8.7	46.6	32.1	28.3	-	12.0	-	•
14.2	0.4	-	-	-	1.4	-	-	44.7	0.4	2.9	31.4	-	-	-	•

Source: VET

EL: data covering academic year 1992-1993

UK: the flexible nature of the training opportunities in the United Kingdom makes the collection of statistical data on duration difficult.



4 years 5 years or more

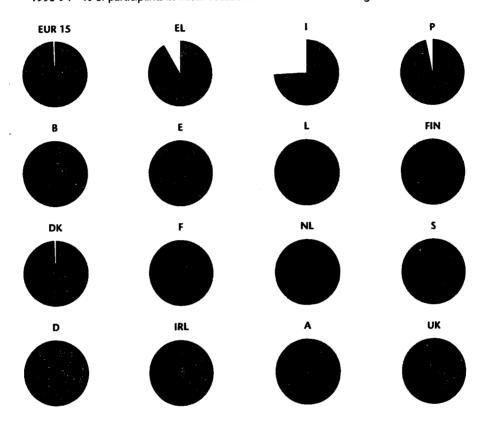
# Distribution by ISCED (International Standard Classification for Education) Level

The table below indicates in broad terms the ISCED levels of initial vocational education and training programmes in the Member States. It shows that, with the exception of Ireland, around 70% or more of participants in initial vocational education and training in the Member States are in programmes at ISCED level 3. In Spain, the Netherlands, Sweden and the UK, this is so for nearly 100% of the participants.

Portugal is the only country that has initial vocational education and training programmes at ISCED level 2. In four Member States around a quarter of participants are in programmes equivalent to ISCED level 5, Belgium (26.3%), Greece (21.8%), France (27.2%) and Finland (25.4%). This proportion of participants in programmes equivalent to ISCED level 5 however rises to 53.3% in Ireland.



Graph B8 Distribution by ISCED level 1993-94 - % of participants in initial vocational education and training



	UK	S	FIN	P	A	NL	L	1	IRL	F	E	EL	D	DK	В	EUR15
Ľ	-	-	-	13.0	-	-		-			-	-			-	0.2
•	100.0	100.0	74.6	83.8	95.2	100.0	87.1	72.0	46.7	72.8	98.3	69.9	89.3	93.1	73.7	83.9
ŧ	-	-	25.4	-	4.7	-	12.9	2.2	53.3	27.2	1.7	21.8	10.7	6.2	26.3	9.2
1	-	-	-	3.2	0.1	-	-	25.8	-	-	_	8.3	_	0.7	_	6.8

Source: VE

ISCED: see inside flap of back cover

EL: data covering academic year 1992-1993

UK: in the UK, a relatively small amount of initial vocational education and training is at ISCED level 5 but separate figures have not been produced.



### Access to Further Education and Training Opportunities

The graphs below look at the opportunities offered to those participating in initial vocational education and training programmes to go on to other programmes of either general or vocational education at a higher level.

In all EU Member States, except Italy and Luxembourg over 80% of participants have access to programmes at a higher level. The average in the EU is almost 87%.

Although the large majority of participants in initial vocational education and training programmes have access to programmes at a higher level, the type of programmes that they can go on to differs between the Member States. The degree of flexibility between the vocational and general education streams also varies. This in turn affects the options open to participants in initial vocational education and training programmes as to whether they want to continue vocational studies or switch to more general education.

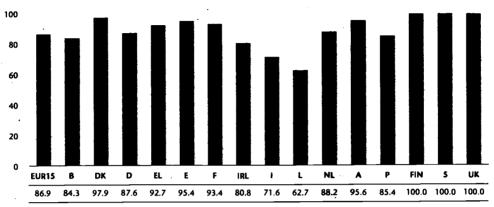
In the EU as a whole, 87% of participants in initial vocational education and training programmes have access to vocational or general studies at a higher level, of which some 36% have access to both vocational and general education studies at a higher level, 18% have access to general higher level studies only and 33% have access to higher level studies in the vocational stream only. The remaining 13% have no access to further education and training programmes.

In Belgium, Denmark, Greece, France, Ireland, Finland, Sweden and the UK, around 60% or more of participants in vocational education and training have the possibility to go on to both higher level vocational or general education studies. In Luxembourg the majority of the participants who are able to go on to higher level studies, can opt for vocational or general education / training. Spain follows a pattern broadly similar to the EU as a whole: a significant proportion (44.3%), have access to only vocational studies at a higher level, whilst an almost identical proportion (44.2%), have access to both vocational and general education at a higher level. In Italy and Portugal the majority of participants in initial vocational education and training programmes have access to higher studies in the general education stream only.

In Germany, the Netherlands and Austria, the majority of participants in initial vocational and education programmes can only access higher level studies in the vocational stream. It is worth noting that these countries have a strong tradition of work based or on-and-off-the-job vocational education and training (see indicator B.6.).

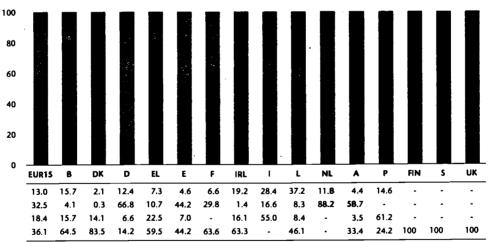


Graph B9 a Theoretical Access to Programmes of a Higher Level
1993-94 - % of participants in initial vocational education and training



EL: data covering academic year 1992-1993

Graph B9 b Type of Access to Programmes at a Higher Level - 1993-94 - % of participants in initial vocational education and training



EL: data covering academic year 1992-1993

No access to programmes of a higher level

Access to vocational programmes of a higher level

Access to general programmes of a higher level

Both access to vocational and general programmes of a higher level

The percentage of participants to vocational education and training courses is computed as a ratio between the number of participants in courses which offer access to further education/training and the total number of participants to training courses. Therefore, these indicators show theoretical possible access to further education and training programmes and not the actual rates of access.

It should be noted that higher level means programmes which, in the context of the national system, are more advanced than the programme in which the student or trainee is currently enrolled.



### Certification and Funding of Initial Vocational Education and Training

The two maps below illustrate which type of organisations have the responsibility for the certification of the initial vocational education and training undertaken, and which fund the initial vocational education and training programmes. They aim to show the different degree to which these responsibilities are shared between national and regional/local organisations.

Certification is the recognition of the skills and competencies of the individuals through the award of a formal qualification. The allocation of the responsibility for certification is important given that it is essential to ensure that the skills and competencies certified are relevant to the occupation concerned, and to the needs of the labour market.

Graph B.10a shows that in the majority of EU Member States, certification is carried out by organisations at national level. However, the type of national organisation differs.

In Denmark, Greece, Spain, France, Ireland, Luxembourg, the Netherlands, Austria, Portugal, Finland and Sweden, certification is the responsibility of the appropriate central government authority. This is often done in consultation with other organisations at national level, for example, the social partners, voluntary organisations and representatives of private sector employers. In the UK, certification is responsibility of independent national *Awarding Bodies* covering different occupations. In Belgium and Germany, certification is the responsibility respectively of the Communities and the the Länder. In Germany, the Länder also consult with the social partners at this level.

In Italy, the central government authorities are responsible for the certification for most of the initial vocational education and training programmes, again in consultation with social partners and representatives of the private sector at national level. However, some vocational education and training programmes are carried out and certified by the regions themselves. In addition, some programmes are carried out entirely within, and certified by, the private sector.

Graph B.10b shows the involvement of organisations, at different levels, in the funding of initial vocational education and training programmes. It should be noted that this represents the sources of funding for the initial vocational education and training programmes, and not the amount contributed by organisations at different levels. The map shows therefore "who pays" and not "how much".

In contrast to the arrangements for certification, organisations at regional level play a more prominent role as sources of finance for initial vocational education and training. However, although regional organisations play an active role as sources of finance, their funds may be allocated to them by central government authorities.



Graph B10 a Level (National/Regional/Local) of Certification - 1993-94

EL: data covering academic year 1992-1993

- Certified at a national level
- Responsibilities for certification shared between national level and regional/local level
- Certified at a regional / local level

Graph B10 b | Level (National/Regional/Local) of Funding - 1993-94.



EL: data covering academic year 1992-1993

- Sources of funding mainly at a national level
- Sources of funding from both national level and regional/local level
- Sources of funding mainly at a regional / local level

In Belgium and Sweden, the principal sources of finance are local public authorities (Communities in Belgium). In Germany, most of the training undertaken is financed jointly by the public authorities and the private sector at a regional level. In the UK, central funds are allocated to local bodies to fund initial vocational education and training programmes, with local employers also making a significant contribution.

In France, Spain, Italy, Austria, Finland and the UK, organisations at both national and regional level act as sources of finance for initial vocational education and training programmes.

In Denmark, Greece, Ireland, Luxembourg, the Netherlands and Portugal, national organisations including central public authorities, social partners and representatives of private sector are the principal sources of funding for initial vocational education and training programmes.

Whereas data on expenditure on general education is available, no expenditure data on vocational education and training is available.







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Continuing Vocational Training Enterprises



## Introduction

FOR REASONS MENTIONED IN CHAPTER A, particularly the demographic developments and the pace of technological and organisational change, lifelong learning and continuing training in particular have greater importance in developing the skills and competitiveness of the labour force.

This was recognised by the EU with the Council Decision of 29 May 1990 to launch the FORCE Programme (FORmation Continue en Europe). One of the requirements of the FORCE Programme was that a survey of enterprises should be carried out to measure the volume, type and costs of the continuing training offered by enterprises for their employees.

This chapter provides information on:

- the percentage of enterprises offering CVT by Member State, by enterprise size and across sectors (graphs C1 - C3);
- the forms of CVT offered and the subjects followed (graphs C4 C5);
- the types of institutes which provided external training (graph C 6);
- the costs of CVT courses and the cost per participant (graph C 7);
- participation rates and time spent on CVT courses by enterprise size,
   by sector, by Member State and by occupation (graphs C8 C15);
- percentage of participants, male and female, in CVT courses (graph C16)

The Continuing Vocational Training Survey (CVTS)

The Continuing Vocational Training Survey (CVTS) was carried out in 1994 and asked about the training offered by enterprises in 1993. Data were collected in the then 12 Member States of the EU from a representative sample of enterprises with 10 or more employees. The samples were structured so as to provide results for 6 size groups of enterprises and for 20 sectors of the economy. The survey excluded the agriculture, forestry and fishing sector and also public administration and the health and education sectors.

In total some 50,000 enterprises throughout the EU took part in the survey. These represent nearly 900,000 enterprises employing 55 million workers. Although general guidelines for carrying out the survey had been agreed with Eurostat, Member States were free to adapt these according to national circumstances and practices. As a result, different sample sizes and methods were used and these affected the comparability of the data. Small differences between countries which may not be significant therefore, should be interpreted with care.

Details of the survey's concepts, definitions and methods, and other related publications can be found in annex 4.





# Enterprises Offering Continuing Vocational Training (CVT)

In 1993, nearly 60% of enterprises employing 10 or more people offered some form of continuing vocational training (CVT) for their employees. The highest proportion of enterprises offering such training were found in Denmark, Germany, the UK and Ireland where more than three quarters of all enterprises carried out training. Additionally, more than half of the enterprises in France, Luxembourg and the Netherlands carried out CVT and nearly a half in Belgium did so. In the remaining Member States, between 13% and 27% of enterprises offered CVT.

### Continuing Vocational Training (CVT) and Enterprise Size

The overall number of enterprises offering CVT, does not give a full impression of what types of enterprises are involved.

Nearly 900,000 enterprises were represented by the CVT Survey but, of these, over 80% had only 10-49 employees. The overall percentages of enterprises offering training therefore are heavily influenced by the proportion of these small enterprises that offer training to their employees.

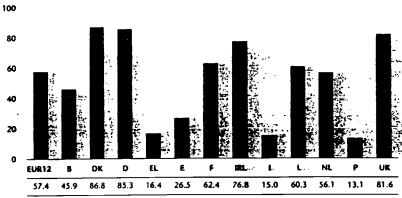
It had been expected that the larger the enterprises the more likely they are to offer CVT. This was confirmed by the survey. Only a little over a half of all enterprises employing 10 to 49 people offered some form of CVT in 1993. This proportion increased to three quarters among those employing between 50 and 99 people and continued to rise as the size of the enterprise increased with virtually all of the largest enterprises offering some CVT in 1993.

Employees in small and medium sized enterprises are therefore at a disadvantage compared with workers in large enterprises in the opportunities available to them for developing their skills.



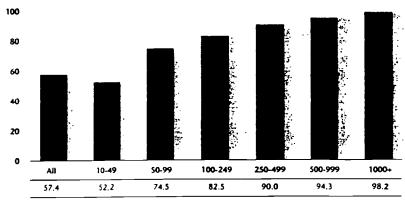
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Graph C1 | Enterprises Offering Continuing Vocational Training - 1993 - %



Source: CVTS, Eurostat

Graph C2 | Enterprises Offering Continuing Vocational Training by Enterprise Size - EUR 12 - 1993 - %



Source: CVTS, Eurostat

Number of employees-

8





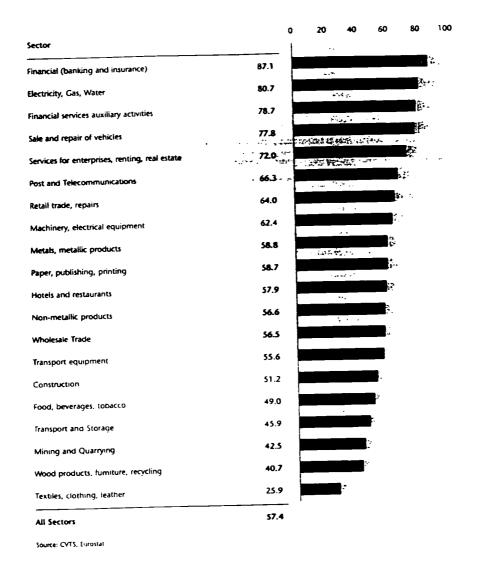
# Continuing Vocational Training Across Different Industrial and Service Sectors

There were marked differences between sectors at the EUR 12 level in their proportion of enterprises offering training - from 26% in the textiles, clothing and leather manufacturing sector to 87% in the banking and insurance sector. Differences are found also between sectors within each Member State. However, some of the variation at EUR 12 level can be explained also by the relative concentration of some sectors in certain groups of Member States. For example, two-thirds of all textile, clothing and leather manufacturing enterprises within EU12 were found in Italy, Greece, Spain and Portugal, countries in which the proportions of enterprises offering training were low. In contrast, nearly two-thirds of enterprises in the banking and insurance sector were in Germany, the UK and Denmark, the three countries in which the highest proportion of enterprises offered training.

Although the size distribution of the enterprises varies from sector to sector, at the EUR 12 level this does not appear to be a main determinant of the different levels of training offered. However, it would appear that enterprises in the older more traditional sectors are less likely to offer CVT when compared to those sectors experiencing rapid technological and organisational change. It is possible that the older sectors are able to rely more on the skills obtained through initial training which were not covered by the survey.



## Graph C3 | Enterprises Offering Continuing Vocational Training by Sector - EUR 12 - 1993 - %



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The Statistical Classification of Economic Activities (NACE Rev 1) is used by countries and international agencies as a means of compiling internationally comparable statistics on sectors. For more details of the classification refer to Annexe 5.



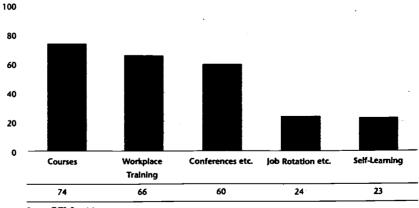
### The Forms of Continuing Vocational Training (CVT) Offered

Developing the skills of workers can be done in different ways. In the Continuing Vocational Training Survey, enterprises were asked whether they assisted their employees to take part in one or more of six types of training. These were: externally and internally managed courses, training at the workplace, training at conferences, seminars, or workshops, and through job rotation, exchange or through quality circles. Training also took place through self-learning by employees themselves.

Among those enterprises that offered some form of CVT in 1993, nearly three-quarters offered training courses (either external or internal or both). Training at the workplace was offered by two-thirds of enterprises although they were not always the same enterprises as those that offered courses. Nearly 60% of the enterprises offered training through conferences, seminars, workshops, etc..

Job rotation, exchanges and quality circles, when they were planned in advance to develop the knowledge and skills of the workers concerned, were used by nearly a quarter of enterprises offering CVT. A similar proportion indicated that CVT was offered though self-learning opportunities, where the employee manages the training time and the place where the training takes place.

Graph C4 Enterprises Offering Continuing Vocational Training by Forms of Continuing Vocational Training - EUR 12 - 1993 - %



Source: CVTS, Eurostat

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#### 1 Training Courses

Courses are events designed solely to provide vocational training. They take place away from the place of work, for example in a classroom or training centre in which a group of people receives instruction from teachers/tutors/lecturers for a period of time specified in advance by those organising the course. Training or vocational education provided by flexible or distance learning methods at a place and for a period determined by the trainee is not to be counted as a course but is a category of its own considered separately in the survey.

#### Two types of course are distinguished:

#### a External training courses

These are designed and managed by organisations that are not a part of the enterprise in question. The determining feature is not the place where the course takes place. It could be held on the premises of the enterprise in question.

#### b internal training courses

These are courses designed and managed by the enterprise itself, even if held outside the enterprise, for instance in hotel conference rooms.

#### 2 Training at the workplace

This means planned periods of training, coaching, instruction or practical experience, using the usual tools of work, either at the immediate place of work or in the work situation.

The work situation may also mean that the training takes place in an environment largely resembling the usual place of work with he usual tools of work available. If necessary, normal output can continue to be produced during the training activity. In detail, this form of continuing training may be characterised as follows:

- it often includes practical "hands on" experience using the normal tools of work
- it is often highly specific to the current or future everyday tasks of the individual receiving it
- it is often, but not always, delivered on a one to one basis by a superior or a colleague and more rarely, by a full-time staff trainer
- it is important that the primary purpose of the activity is the development or improvement of skills and not the contribution to the enterprise's output
- if this activity does contribute to the enterprise's output, it should nevertheless be included so long as the main objective is training

### 3 Conferences, seminars, workshops, etc.

Attendance at conferences, workshops and seminars should be counted as training only when the primary purpose of the employee attending them is to extend or update his knowledge.

#### 4 Job rotation, exchanges, quality circles, etc.

Such actions were to be included only if they were planned in advance to develop the knowledge and skills of the workers concerned. Normal transfers of workers from one job to another which are not part of a planned development programme were to be excluded.

5 Self-learning (open and distance learning courses, video/audio tapes, correspondance courses, computer-based methods or the use of a Learning resources Centre)

The feature of this type of training is that it is the trainee/learner himself who manages the training time and the place at which the learning takes place.





### **Subjects of Continuing Vocational Training**

Enterprises which offered training courses were asked about the number of hours of training given on these courses. They were also asked the subjects in which the courses were given.

Overall, and in nearly all sectors, the main subject of training related to production techniques for goods and services and this accounted for 24% of all time spent on training courses (external and internal). This subject included the operation and maintenance of automated systems, quality control and the development of new materials, products and services. Training in data processing also featured prominently at 13%. Other identified subjects each accounted for between 5 and 10 percent of training time.

However, this overall picture conceals considerable differences between sectors which undoubtedly reflect their commercial and legal requirements. Perhaps predictably training in job and environment safety features strongly in the mining and quarrying and the hotels and restaurant sectors - accounting for around 20% of all training in these sectors - and in the food manufacturing and construction sectors.

Training in data processing is given more emphasis in many service sectors but is also high in paper, publishing and printing - an indication of the importance of information technology in the sector.

In addition to wholesale and retail trade, marketing also has above average importance in the banking and insurance sector. Language training is given above average weight in a number of manufacturing sectors as well as in wholesale trade.

### What type of institutes provide external training

An efficient and responsive training market requires a range training providers. In order to obtain an indication of where enterprises buy their training requirements from, those offering external courses were asked to allocate the total number of hours of training on such courses to the type of training provider used.

Overall, in the EU, by far the greatest amount of external training (nearly a half) was provided by Commercial Organisations. Other institutions/organisations each supplied between 6 and 12 percent.

Much larger differences were found within Member States which reflect their historical and institutional traditions and the way in which training providers are financed. Thus in Denmark and the UK, further education colleges are important suppliers of training for employees.

The importance of other types of training providers varies between the Member States. Thus in Germany, Ireland, Denmark and the Netherlands, non-profit making organisations provide over one-fifth of training. A similar proportion in Italy and Luxembourg is provided by producers and suppliers of equipment. In Luxembourg and Portugal, the parent company is an important provider of training.

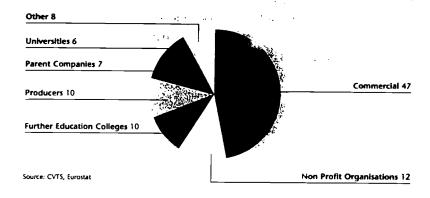


Graph C5 | Training Time by Subjects of Continuing Vocational Training - EUR 12 - 1993 - %



These calculations are based on the volume of training hours of CVT courses (external and internal) in the subject

Graph C6 External Training Hours by Type of Training Provider - EUR 12 - 1993 - %



These calculations are based on the volume of training hours of external CVT.





### Costs of CVT Courses for Enterprises

The cost of training as a percentage of total labour costs provides a relative measure of investment made by enterprises in developing the skills of their labour force. Because of the difficulties that would be encountered in asking enterprises to estimate the costs of the different types of training offered, the CVTS tried to obtain estimates only of the costs of training courses (internal and external) offered to their employees.

To the extent that certain types of training, for which cost estimates were not obtained, may feature more prominently in some countries and in some sectors, the costs of training courses only do not fully illustrate differences in cost ratios. Also, the way in which training courses are funded may affect the direct cost to enterprises. Thus, in some countries, employees' training may be financed out of general taxation arrangements which the employer does not record as a training cost. Training cost for the enterprises are also lower in cases in which employees undertake training in their own time, since the component of labour cost of trainees while away from work for training is nil in this case. While the data obtained do provide a general indication of the cost to enterprises of offering CVT courses which can then be expressed as a percentage of total labour costs, the interpretation of the results should be treated with some caution.

For EUR 12 as a whole, some 1.6% of total labour costs were devoted to offering CVT courses. Countries in which the percentage was significantly above the EUR 12 average were the UK, the Netherlands and France, while lower than the average percentages were found in Italy and Portugal. This variation reflects the different intensity of continuing training courses in the various Member States, as well as differences in the cost of training and differences in the other costs of manpower. For instance, the particularly high proportion of training costs in the United Kingdom (2.7%) could be due to the low incidence of taxes and social contribution in the manpower cost.

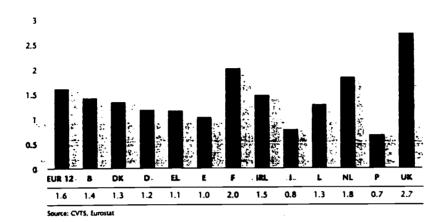
The figures in Graph C.7a in part reflect the differences in the number of participants who attended courses and their duration, as well as variations in their costs.

Another way of looking at the costs of training is to consider the costs per participant. These figures cannot be compared directly if they are based on national currencies. Also because standards of living vary between countries, the purchasing power of the different currencies varies even when converted into a common financial unit such as the ECU. For this reason the figures in Graph C.7b are expressed in Purchasing Power Standard units. These take into account the relative cost of living in each country.

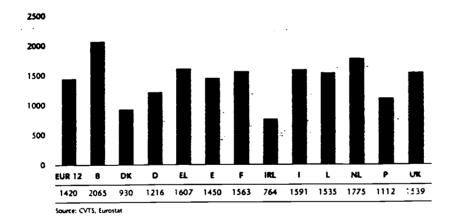
On this measure, it can be seen that investment in training per participant is highest in Belgian enterprises and lowest in Irish ones.



Graph C7.a Costs of CVT Courses as a Percentage of Total Labour Costs of Enterprises - 1993



Graph C7.b | Average Cost per Participant in Purchasing Power Standards - 1993



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The labour costs relate to those of all enterprises covered by the survey.

Here only the costs of CVTS courses are included, not the costs of other forms of CVT such as job rotation and conferences.

In order to allow comparisons on the level of the 12 Member States that participated in the CVT Survey, costs were quoted in Purchasing Power Standards (PPS). Their purpose was to eliminate the difference in price level and the variations in exchange rates, to improve the companson of volumes. Yearly averages for the purchasing power standard in 1993 were as follows:

Belglum	40.25	BEF	treland 0.71	IEP
Denmark	9.49	DKK	Italy 655.00	m.
Germany	2.27	DEM	Luxembourg 42.75	
Greece	198.91	GRD	The Netherlands 2.30	NLG
Spain	126.19		Political 26.17	PTE
France	7.09	FRE	United Kingdom 0.69	GBP



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### Participation Rates in Continuing Vocational Training Courses and Size of Enterprise

It has been shown that the larger the enterprise was, the more likely it was to offer training in 1993.

Another measure of the opportunities for training available to employees is the extent to which employees receive training i.e. their participation rates and the duration of the training they received. These data are available from the survey for those who participated in courses (internal and external).

Concerning participation rates, these may be calculated using either the total number of employees in the size class as the denominator or only those employees in the enterprises that offered training courses. The two sets of figures are shown in Graph C 8.

Among enterprises that offered CVT courses, for example, 24% of employees in enterprises with 10-49 employees took part in them compared with 44% in enterprises with 1000 or more employees.

Taken together, the figures show that employees in small enterprises are not only less likely to work in enterprises offering training but also that within enterprises offering training, they are also less likely to receive training.

### Time Spent on CVT Courses by Enterprise Size

The average time spent on CVT courses in the EUR 12 during 1993 was 45 hours per participant. The differences by enterprise size were not large but the longest durations are found in enterprises with 10 - 49 employees and those with 1000 or more employees. So while employees of smaller enterprises have a lower chance of participating in CVT courses than those of larger enterprises, when they do participate, the duration of their training is very similar.



Participation Rates in CVT Courses by Enterprise Size all Enterprises and Enterprises Offering CVT Courses - EUR 12 - 1993 - %

40 20 50-99 100-249 250-499 500-999 1000+ All sizes 10-49

18.5 23.6 30.5 43.5 28.4 13.2 35.4 28.7 34.0 37.4 43.9 23.5 24.9 34.7

All Enterprises

Enterprises offering CVT courses

### Graph C9 | Average Time Spent on CVT Courses by Enterprise Size - EUR 12 - 1993 - hours

50 30 20 10

All sizes	10-49	50-99	100-249	250-299	500-999	1000+
45.2	47.5	40.5	42.9	39.0	41.5	47.8

Source: CVTS, Eurostat

0

Source: CVTS, Eurostat

80

60



The participation rates are calculated by dividing the number of participants in CVT courses by the total number of employees of all enterprises, and by the number of employees of enterprises which offered CVT courses.

The average time spent is calculated by dividing the total number of hours spent on CVT courses by the total number of participants on courses.



# Participation Rates in Continuing Vocational Training Courses by Sector

Participation in CVT courses (internal and/or external) varies considerably between sectors and follows a similar pattern to that shown by the analysis by size groups. In general, enterprises in sectors with the highest proportions offering training also had the highest participation rates (e.g. banking and insurance) and vice versa (e.g. textiles, clothing and leather manufacture).

However, there are exceptions. In the mining and quarrying sector a relatively small proportion of enterprises offers CVT courses (31.5%) but the employee participation rate in this sector is above the Community average (33%). This does not mean that a particularly high proportion of employees of the enterprises which offer training in this sector participate in CVT courses. In fact, in this sector, in spite of a low proportion of enterprises offering training, a large proportion (84.2%) of employees work for enterprise offering training. This is due to a very heterogeneous enterprise size structure of the sector, which contains several small firms along with few very large ones.



## Graph C10 | Participation Rates in CVT Courses by Sector - EUR 12 - 1993

. :

Sector	Participation Rates (All Enterprises)	0	20	40	60
Financial (banking and insurance)	55.9			a	÷,
Post and Telecommunications	54.0				• • •
Electricity, Gas, Water	48.5				: -
inancial services auxiliary activities	39.8			<b>*</b>	:4
Non-metallic products	35.0			ř	
Aining and Quarrying	32.9			-	
ervices for enterprises, renting, real estate	32.9			, <del>-</del>	
ransport equipment	32.8			1	
fachinery, electrical equipment	. 30,2			₽ <b>?</b> •	 78
Fransport and Storage	30.0				:
Sale and repair of vehicles	28.9			<b>)</b> -	
Retail trade, repairs	27.1			પ	٠.
Hotels and Restaurants	23.7		•		
Food, beverages, tobacco	23.5				
Wholesale trade	20.8				
Paper, Publishing, Printing	20.7				
Metals, metallic products	19.7				
Construction	15.0		•		
Wood products, furniture, recycling	9.9				
Textiles, clothing, leather	7.8				

Source: CVTS, Eurostat

The Statistical Classification of Economic Activities (NACE Rev 1) is used by countries and international agencies as a means of compiling internationally comparable statistics on sectors. (For more details of the classification refer to Annexe 5).

The participation rate is calculated by dividing the number of participants in CVT courses by the total number of employees in the sector.



### Time Spent in Continuing Vocational Training Courses by Sector

Although the Textile, Clothing and Leather sector has the lowest participation rate in CVT courses of all the sectors, the average duration of their training was the highest at over 60 hours during 1993 (see Graph C 11).

In contrast, in the mining and quarrying sector with a participation rate above the EUR 12 average, participants spent less than 30 hours on training courses during the year.

Such differences in the duration of courses, as with participation rates also, may reflect the different skill needs of the sectors and the subjects of the courses provided. In the textiles, clothing and leather manufacturing sector, for example, over 50% of training time was on production techniques - more than twice the importance attached to the subject on average in EUR 12.



Graph C11 | Average Time Spent by Participants on CVT Courses by Sector EUR 12 excluding France and the Netherlands - 1993 - in hours per participant

	Sector	Average Time Spent	0	10	20	30	40	50	60	70 '
		on CVT Courses	ŀ						*	٠٠,
	Textiles, clothing, leather	63	1							
	Transport equipment	54								
	Post and Telecommunications	53	[							
4.4.3	Financial (banking and insurance)	48								
	Electricity, Gas and Water	47								
	Machinery, electrical equipment	44								
	Wood products, furniture, recycling	44	ľ							
	Services for enterprises, renting, real estate	42								
	Hotels and Restaurants	41								
	Non-metallic products	, <b>38</b>	À							
	Construction	38								
	Metals, metallic products	37								
	Financial services auxiliary activities	37								
	Sale and repair of vehicles	37								
	Transport and storage	36			٠.					
	Food, beverages, tobacco	35								
	Paper, publishing and printing	33								
	Wholesale trade	32 30		c						
	Retail trade, repairs	27								
	Mining and Quarrying		l							

Source: CVTS, Eurostat

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The Statistical Classification of Economic Activities (NACE Rev 1) is used by countries and international agencies as a means of compiling internationally comparable statistics on sectors. (For more details of the classification refer to Annexe 5).

The average duration is calculated by dividing the total number of hours spent on CVT courses by the total number of participants.



### Participation in CVT Courses by Member State

The highest participation rates of employees on CVT courses in 1993 (around 40 percent) were found in Ireland, France and the UK. In Greece, Italy and Portugal in which relatively few enterprises offered training courses, the overall participation rates were much lower - 13% - 15%.

# Time Spent on Continuing Vocational Training Courses by Member State

Graph C 12 shows that Greece and Portugal had the lowest rates of participation in CVT courses in the twelve Member States covered by the CVT Survey, while Ireland had the highest. However, in terms of the average time spent by participants on CVT courses, these positions are reversed.

Both Greece and Portugal have the highest average duration of CVT courses being nearly 4 and 2 times respectively greater than the EUR 12 average of 45 hours. At the other extreme, Ireland has the lowest average duration being a little over half that for EUR 12.

These differences will again reflect in part the type and purpose of the training given and the funding support available - such as that provided by the EC. In other Member States, with the exception of the long duration of courses seen in the Netherlands, the average time spent on CVT courses is close to that for EUR 12 as a whole.

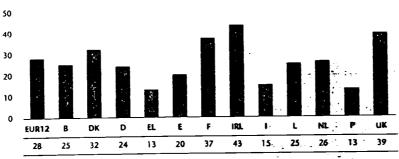
# Participation in Continuing Vocational Training Courses and Occupation

More managerial, professional and technical employees participate in CVT courses (close to 45%) than other occupations. The rate at which they receive training through courses in 1993 was nearly a third higher than the rate for clerical, service and shop employees and was more than double that of craft and trade workers.

This pattern is in line with that shown by other sources and confirms that those most highly skilled and educated through the initial education and training system are more likely to receive further training throughout their working lives.



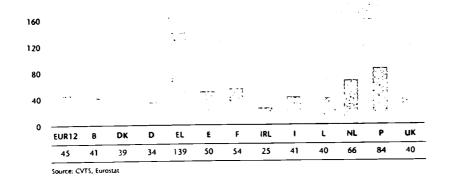
Graph C12 | Employees Participating in CVT Courses - 1993 - %



Source: CVTS, Eurostat

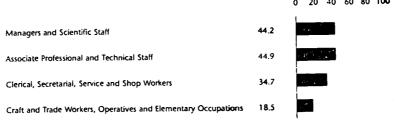
The participation rate is calculated by dividing the number of participants in CVT courses by the total number of employees in all enterprises covered by the survey.

Graph C13 | Average Time per Participant Spent on CVT Courses - 1993 - in hours



on CVT courses is calculated by dividing the total number of hours spent on CVT courses by the number of participants. 5

Graph C14 | Participants in CVT Courses by Occupation in all Enterprises - EUR 12 excluding NL - 1993 - %



Source: CVTS, Eurostat

The International Standard Classification of Occupations (ISCO-88) is used by countries and international agencies as a means of compiling internationally comparable statistics on occupations.

For this analysis the ISCO classification has been regrouped as follows: Managers and Scientific Staff (iSCO groups 1 and 2) Associate Professional and Technical Staff (ISCO group 3) Clerical, Secretarial, Service and Shop Workers (ISCO groups 4 and 5) Craft and Trade Workers, Operatives and Elementary Occupations (ISCO groups 7, 8 and 9) More details on the classification can be found in Annexe 6.



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# Time Spent on Continuing Vocational Training Courses by Occupation

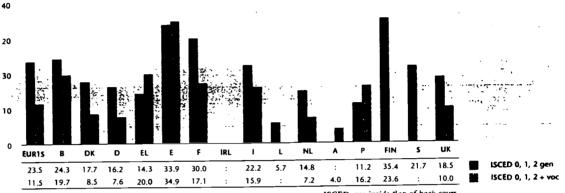
Although there are large differences in the extent to which different occupation groups participated in training courses offered by enterprises in 1993, the differences between the average time spent on such courses by participants in each occupational category, as shown in Graph C 15 are quite small.

# Percentage of Men and Women on Continuing Vocational Training Courses

Differences between male and female participation rates on CVT courses are not substantial. This is so for EUR 12 as a whole and within each Member State.



Unemployment Rates Between those with Only Basic Education and Graph A8 those with Additional Vocational Education - 20 to 29 year olds - 1995 - %

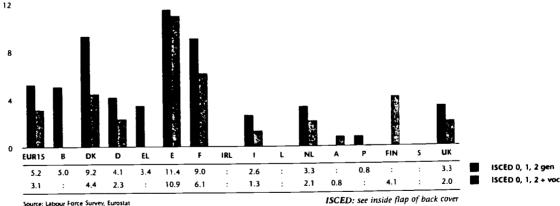


Source: Labour Force Survey, Eurostai

ISCED: see inside flap of back cover

IRL, L. A. S: The sample size is too small to provide valid data, but the data is used for the calcu ISCED 0,1,2 general covers people who have successfully completed general education of ISCED level 0, 1 or 2. ISCED 0,1,2 plus vocational covers people who additionally to their general education of ISCED level 0,1 or 2, have successfully completed some vocational education or training on ISCED levels 2 or 3.

Vulnerability to Unemployment Between those with only Basic Education and those with Additional Vocational Education - 20 to 29 year olds - 1995 - %



Source: Labour Force Survey, Eurostat

B, EL, IRL, L, A, P, FIN, S: The sample size is too small to extract valid data for individual countries.

but the data is used for the calculation of Europe 15

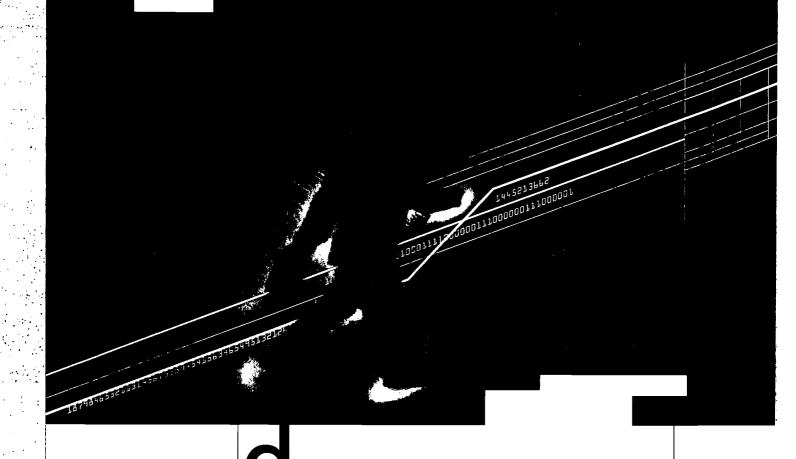
The unemployment rate is the number of unemployed divided by the active population or labour force. The active population is the total of people in employment and unemployed.

Vulnerability is defined as the percentage of those people working in the previous year who have lost their job due to redundancy, termination of their post or because they reached the end of a fixed-term contract.

Detailed data for the age group 30-59 years old are presented in the "Labour market and educational attainment" section of this chapter.



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chapter

in in the Self-Employed: **Participation** Training Past Four Weeks

## Introduction

SELF-EMPLOYMENT forms an important part of the economy in the European Union, and in recent years it saw employment growth in the non-agricultural sector, in particular in some Member States. In many Member States unemployed people are supported to move into self-employment. There is evidence that as labour market flexibility increases employees are also moving into self-employment. Access to training is a big issue for the self-employed. It is often difficult for them to take time off for training, and the training costs to the business are high in relative terms. The CVTS showed that participation in training was lower for the smaller enterprises and the self-employed without employees are the smallest enterprises of all.

Labour Force Survey data is used to look at the characteristics of those who have recently received training. Participation rates are calculated to compare self-employed and employees according to different characteristics.

This chapter provides information on:

- The importance of self-employment in the economy (graphs D1, D2, D3).
- Training of the self-employed compared to that of employees:
  - by Member State (graph D4);
  - by educational attainment, (graph D5);
  - by occupation, (graph D6);
  - by age, (graph D7);
  - by gender (graph D8).



2.





In this chapter, self-employed with no employees are considered. They are those persons who work for themselves for the purpose of earning a profit, and who do not employ any other person.

For the calculation of participation rates, those aged 30-59 are considered. This group was chosen to try to exclude individuals participating in full-time initial vocational training so that the focus would be on continuing vocational training.

#### The European Labour Force Survey (LFS)

- The LFS is a household survey and collects a wide range of information on the individuals living in private households. This allows analysis comparing sub-groups with different characteristics.
- The contents of the survey are regularly reviewed as priorities and important issues change. The last major changes occurred in 1992 to take into account a number of developments in the labour market. For the purposes of this chapter the key change was that education and training attainment is more precisely categorised than previously, in recognition of the fundamental importance of this characteristic in defining the shape of the present and future labour force.
- The Labour Force Survey asks if the individual received any education or training in the previous four weeks.
   The information collected should relate only to education and vocational training which is relevant for the current or foreseeable future job of the respondent.
- Labour Force Survey data is useful for comparing the training received by certain groups of individuals. These
  data are not available from any other source at this time for the EU as a whole.

#### LFS and CVTS as alternative sources

The results on training participation from the LFS differ from those of the CVTS in the previous chapter, due to important differences in the design and coverage of the surveys:

CVTS concerns training occurring throughout one year, while the LFS asks only about training which occurred in the four weeks prior to the interview and thus, the LFS cannot be used to provide estimates of the total number of people receiving education and training in a year;

CVTS, on the other hand, does not cover the whole economy: enterprises with less than 10 employees and sectors such as Agriculture, Public Administration, Education and Health are not included;

furthermore, CVTS asked employers about the training that they had paid for, while in the LFS individuals are asked about training they have received. Individuals may have a different perception from employers as to what constitutes training.

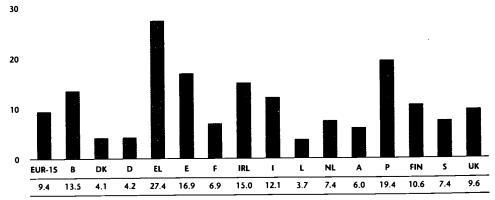


### The Importance of Self-Employment

Overall in 1995, 14 million people, i.e. 9.4% of those in employment, were self-employed with no employees. There are important differences between Member States: In Greece, Spain, Ireland, and Portugal between 15.0% and 27,4% of those in employment were self-employed with no employees. In contrast, in Denmark, Germany, and Luxembourg, less than 5% of the those in employment were self-employed with no employees.

The differences in the importance of self-employment are in part accounted for by the scale of employment in the agriculture sector throughout the Union and by the existence of a traditional family business culture. Moreover, in recent years, a number of countries have started to encourage self-employment as an active means of combating unemployment and because the self-employed might create more jobs in the future.

Graph D1. | Self-Employed with no employees as a Proportion of All Persons in Employment - 1995 - %



Source: EUROSTAT, Labour Force Survey

The proportion of self-employed has been calculated by dividing the number of self-employed with no employees by the total number of persons in employment



### Distribution of Self-Employed and Employees by Sector...

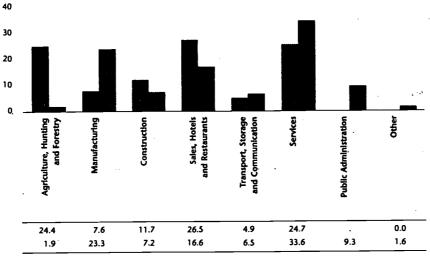
The relative importance of self-employed and employees by sector differs strongly in the agricultural and in the manufacturing sectors. Whereas nearly a quarter (24,4%) of the self-employed work in the agricultural sector, only less than 2% of the employees do. In contrast, nearly a quarter (23,3%) of the employees work in the manufacturing sector, compared to less than 8% of the self-employed. The importance of the agricultural sector for the self-employed may explain, in part, the differences found in the next section of this chapter between the participation rates in training for the two groups.

### ...and by Occupation

The main difference found between the occupations of the self-employed and those of employees concerns agricultural occupations, presenting 22,3% of self-employed and only 1,1% of employees. Self-employed are also over-represented in the occupational group covering professional workers and managers, although to a much lesser degree (27.5% of self-employed versus 17.6% of employed). In this context, it is worth noting that while the term "professional" refers to a similar occupation in both groups, the term "manager" may have different meanings when referring to employees or to self-employed. For the self-employed it is likely to refer to the management of very small businesses such as 'corner' shops and other small family businesses, whereas for the employees the term often refers to the management of companies of fair to large size. On the other hand, the self-employed are under-represented in the occupational groups of "Technicians and associate professionals", "Craft and plant operators" and above all among "Clerks and service workers".



Graph D2 | Distribution of Self-Employed with no employees and Employees by Sector - EUR 15 - 1995 - %

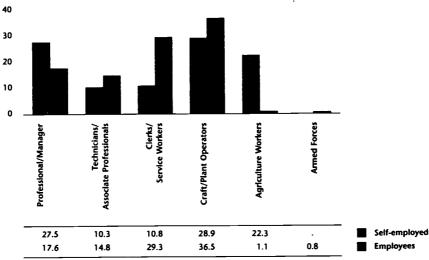


The Statistical
Classification of
Economic Activities
(NACE Rev 1) is used
for compiling
internationally
comparable statistics
on economic sectors.
For details on
subsectors included in
each group, refer to
the Annex 5.

Self-employed
Employees

Source: EUROSTAT, Labour Force Survey

Graph D3 Distribution of Self-Employed with no employees and Employees by Occupation - EUR15 (1) - 1995 - %



The occupations are made comparable by the International Standard Classification of Occupations (ISCO-88) which is used for compiling internationally comparable statistics on occupations. For details on groups, refer to annex 6.

Source: EUROSTAT Labour Force Survey

(1) Excludes data for Finland and Sweden where information on occupations was not collected in the Labour Force Survey in 1995.

For this analysis the ISCO classification has been regrouped as follows:

Professionals and Managers (ISCO groups 1 and 2)

Technicians and Associate professionals (ISCO group 3)

Clerical, Secretarial, service and shop workers (ISCO groups 4 and 5)

Craft and trade workers and operatives and elementary occupations (ISCO groups 7, 8 and 9)

Skilled Agricultural workers (ISCO group 6).

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#### Training in the Past Four Weeks: Participation by Member State...

The self-employed with no employees form a specific group in the economy and have particular problems in participating in training. It is difficult for them to take time off for training, and the costs to the business of training are high in relative terms. In the European Union, participation rates in training for the self-employed are less than half the rates for employees in most countries, apart from Belgium and Germany where both groups are very close, with even slightly higher rates for self-employed with no employees. Differences between the rates for the self-employed and for employees are particularly high in Sweden, where the chances of participation of employees are almost five times as high as those of the self-employed with no employees.

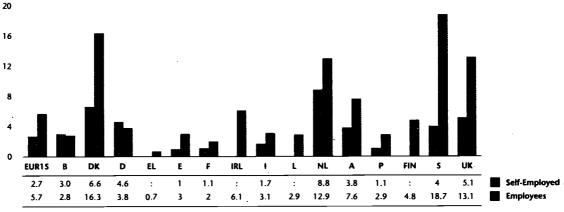
It appears that the self-employed are less likely to have recently participated in training than employees. A number of factors will influence this result. The self-employed have less opportunity to participate in training courses as no-one else can look after the business while they are in training. The self-employed may also suffer from a basic lack of finance for training and may have problems identifying their skill needs. Thus, they may often be reluctant to invest in training unless there is an immediate business problem or a legal requirement. This can lead to a lack of a long-term strategy for developing skills in the business.

#### ...and by Education Level

Individuals with higher qualifications are more likely to participate in additional training. This holds for both the self-employed and employees although the effect is slightly stronger for self-employed. Those persons with ISCED 0, 1, 2 level of education have a training participation rate of less than 1% if they are self-employed and less than 3% if they are employees, whereas those with ISCED 5, 6, 7 level show a participation rate of 7,5% for self-employed and 11,5% for employees. The results indicate that it is the least qualified, and therefore those most vulnerable to technological and structural change who are least likely to receive training.



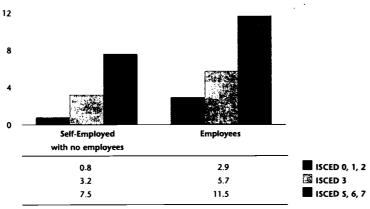
Graph D4 Training in the Past Four Weeks - Participation Rates of Employees and Self-Employed with no employees - 30-59 years old - 1995 - %



Source: EUROSTAT, Labour Force Survey

Note: Oata on participation of the self-employed for EL, IRL, L and FIN is not available due to small sample sizes

Graph D5 Training in the Past Four Weeks - Participation Rates
by Educational Attainment - 30-59 year olds - EUR 15 - 1995 - %



Source: EUROSTAT, Labour Force Survey, 1995. ISCED: see inside flap of back cover

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The participation rate in training is calculated by dividing the number of participants in each of the two groups by the total number of employees or self-employed respectively.



#### Training in the Past Four Weeks: Participation by Occupation...

In general, those occupations requiring higher entry levels of education, have higher rates of participation in training. The employees in the professional and managerial are the most likely to participate in training (11,5%). However, among the self-employed in this occupational category, the training participation rate is only 4.4% and this is explained by the specific reality of the self-employed in this group outlined in the previous sections. For the self-employed, the highest participation rate in training is found among technicians. In this group, both employees (7%) and self-employed (6.5%), have very similar participation rates. Employees in clerical, sales and services occupations have twice the participation rate in training (5%) of the self-employed (2.4%). The lowest training participation rates for both employees and the self-employed are found among craft and plant workers and in agricultural occupations. In this last sector, as it was illustrated in graph D2, the proportion of self-employed is very high.

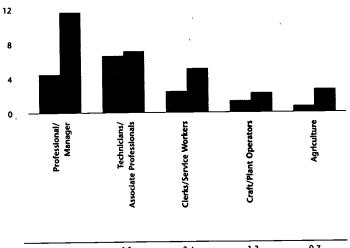
#### ...by Age...

For both the self-employed and employees the rates of participation decline with age, although at different levels. Among those 30-39 years of age, the rate at which the self-employed participate in training (4.0%) is a little over half that for employees (7.5%). For the 40-49 age group, the participation rate among the self-employed is even less than a half of the participation rate of employees (2.4% versus 5.9%). The same pattern holds for the age group 50-59, in which both categories of workers participate the least (1.6% for self-employed and 3.8% for employees).

This pattern, however, may change in the future as lifelong learning becomes more important due to technology changes and employers' increasing high level skill demand. This will mean that retraining is likely to become more important throughout the working life and workers will be less and less able to rely solely on their initial training.



Graph D6 | Training in the Past Four Weeks - Participation Rates by Occupation -30-59 year-olds - EUR 15 (1) - 1995 - %



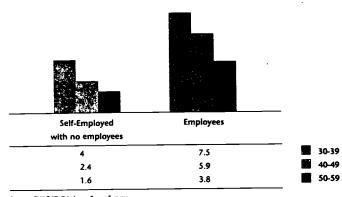
The occupations are made comparable by the International Standard Classification of Occupations (ISCO-88) which is used for compiling internationally comparable statistics on occupations. For details on groups, refer to annex 6.

Self-Employed with no employees 1.3 0.7 4.4 6.5 2.4 **Employees** 2.6 2.2 11.5

Source: EUROSTAT, Labour Force Survey

(1) Excludes data for Finland and Sweden where information on occupations was not collected in the Labour Force Survey in 1995.

Training in the Past Four Weeks - Participation Rates by Age -Graph D7 30-59 year-olds - EUR 15 - 1995 - %



Source: EUROSTAT Labour Force Survey

For this analysis the ISCO classification has been regrouped as follows: Professionals and Managers (ISCO groups 1 and 2) Technicians and Associate professionals (ISCO group 3) Clerical, Secretarial, service and shop workers (ISCO groups 4 and S) Craft and trade workers and operatives and elementary occupations (ISCO groups 7, 8 and 9) Skilled Agricultural workers (ISCO group 6).

The training participation rate is calculated by dividing the number of participants in each of the two groups by the total number of employees or salf-employed respectively.



#### ...and by Sex

Women are more likely to have participated in training in the past four weeks, whether they are employed or self-employed. For the self-employed, 3.9% of women and 2.2% of men participated in training in the past four weeks. Among employees the rates were 6.7% for women and 5.5% for men.

One reason for this pattern could be that men and women are concentrated in different sectors which have different training needs. For example, a higher proportion of women work in the health and education sectors in which the need to regularly up-date the skills is greater than in some other sectors.

Graph D8 | Training in the Past Four Weeks - Participation Rates by Sex - 30-59 year-oids - EUR 15 - 1995 - %



The training participation rate is calculated by dividing the number of participants in each of the two groups by the total number of employed or self-employed respectively.





chapter

The

and

European Community Programmes Initiatives

#### Introduction

COMMUNITY PROGRAMMES AND INITIATIVES in the field of Vocational Training offer financial support measures to the investment in and development of human resources throughout the European Union. Some of the programmes focus on less favoured regions, such as rural, declining and/or border areas, some on specific target groups, such as the unemployed, young people, women.

The Member States of the Union are called upon to participate in these initiatives by co-financing and/or by taking part in the phase of selection of the proposed projects and in the follow up of their implementation.

This chapter provides information on:

- ESF funds for training in the various Member States (graph E1);
- Funds from the Leonardo da Vinci programme and its predecessors by year 1987-1996 (graph E2);
- Leonardo da Vinci 1995/96 funds by field of training and type of activity (graph E3)

The data come from administrative sources.





#### The European Social Fund (ESF)

The objective of the European Social Fund is to combat unemployment, to facilitate access to the labour market for young people and persons exposed to exclusion, to help workers adapt to industrial change and changes in production systems, and to promote equal opportunities. The total of 41,575 Million ECU of the ESF for the period 1994-1999 is supplemented by funds from Member States and public and private co-funding.

The ESF is spread across a number of areas defined in terms of Objectives. Its programmes are being implemented for the period 1994-1999, and encompass a number of specific initiatives aimed at improving the employment prospects in the European Union. The Employment Community Initiative (with a contribution 1,400 million ECU from the ESF over the period 1994-1999), aims at the development of human resources through its three objectives of promoting equal opportunities for women on the labour market, enhancing employment prospects for disabled people and other disadvantaged groups and fostering the integration of young people into the labour market. The ADAPT Community Initiative, (with a contribution 1,400 million ECU from the ESF over the period 1994-1999), seeks to help the workforce to adapt to industrial change and to improve the functioning of the labour market with a view to boosting growth, employment and competitiveness; to forestall unemployment by improving the qualifications of the workforce; to facilitate the creation of new jobs and the development of new activities.

Additionally, ESF funding occurs within initiatives under other objective areas, in particular with regard to their human resources dimension. The main difference between ESF funding under the ADAPT and Employment initiatives and the mainstream ESF funding under other initiatives is that the former must be transnational and innovative.

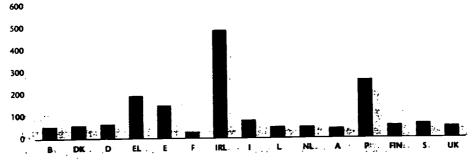
Overall, a major field of ESF financing is vocational training, including pre-training and skills upgrading. In particular, initiatives are financed to improve the access to education and improvement of education quality and to systematically develop continuing training to help workers adapt to industrial change.

The graph E1 displays the ESF committed funds in the field of vocational training for the period 1994-1999, at fixed 1994 prices. The amounts indicated will be slightly modified by extra funds which may be added, and because of changes in the cost of living, which will entail adaptations of the budget. The Member States always co-finance the training measures of the programmes supported by the ESF. This co-financing provided by the Member States varies substantially from around 26% for Portugal to 70% for Finland and is on average around 50%.

Data broken down by Initial and Continuing training is not provided by Member States. The highest per capita allocation of ESF funds in the field of training is in Ireland, and the lowest is in France, with a more than ten-fold difference between these two extremes. This variation reflects the relative importance of ESF intervention in the various European Union countries, which is higher in Member States at the geographical boundaries of the Union. It also shows the differences in the relative share of the allocation to training measures in relation to the different kinds of measures that are supported (1- training, 2- employment, 3- technical assistance and 4- others), which is highest in Denmark, with 93% of the ESF funds, and lowest in France, with only 36%. In France other support measures are favoured.



Graph E1 Committed European Social Fund Amounts for Training - 1994-1999 - ECU per Inhabitant



Source: European-Commission - European Social Fund Administration

	Total ESF Funds	Funds i	n Training	Population	Funds per Inhabitan
	Million Ecu	%	Million Ecu	x 000	Ecus
EUR15	41558	74	30697	371031	83
В	722	80	580	10121	57
DK	345	93	321	5205	62
D	6953	79	5497	81418	68
EL	2646	79	2084	10420	200
 E	8993	67	6024	3 <b>9223</b>	154
F	4760	36	1716	57 <b>903</b>	30
IRL	2016	89	1799	357 <b>1</b>	504
1	5288	90	4783	57252	84
Ĺ	25	83	21	399	52
В	1277	62	795	15381	52
A	563	63	356	7980	45
P	3248	82	2654	9840	270
FIN	537	56	300	5088	59
S	647	93	601	8810	68
UK	3539	89	3166	58420	54







#### The Leonardo da Vinci programme

The Leonardo da Vinci is an action programme for pilot studies, exchanges and surveys and analyses designed to propose innovative training practices and improve training systems. The programme implements a vocational training policy in Europe intended to promote quality and innovation in national vocational training systems, to make best use of that innovation and to encourage technological development in vocational training. Moreover, it aims to increase language skills, to promote equal opportunities in training for men and women and to combat exclusion by offering disadvantaged persons a second chance.

This five-year programme, encompassing initial and continuing vocational training and life-long learning, will run until 1999 and is the follow-up to previous programmes launched from 1987 onwards.

The growing importance of vocational training is underlined by an increasingly intensive effort at Community level. As the need for a policy on vocational training becomes increasingly evident, programmes for supporting initiatives from schools, universities, enterprises and administrations from the Member States are gaining ground.

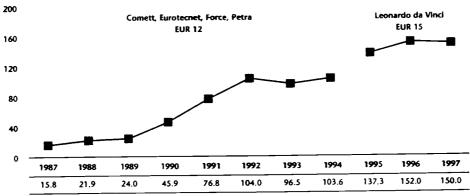
The Leonardo da Vinci programme also includes Iceland, Liechtenstein, and Norway and the possibility of an extension to some other applicant countries (Cyprus and the Central and Eastern European Countries) is under negotiation. The data in graph E2 shows the budget for the part relative to the European Union Member States only and excludes the additional funds relative to the participation of the Associated States (Iceland, Liechtenstein and Norway). Since Leonardo da Vinci projects are transnational, involving partnerships among institutions from several European Union countries, data on funding broken down by Member States would make little sense.

In 1995 and 1996 a total of 1542 proposals were selected for Community co-financing, for a total spending of 200.9 Mio ECU. Graph E3 shows the breakdown of Leonardo da Vinci funding by field and type of action.

The majority of pilot project funding falls within the field of continuing training. The large majority of placements and exchanges occur within the field of initial vocational training.

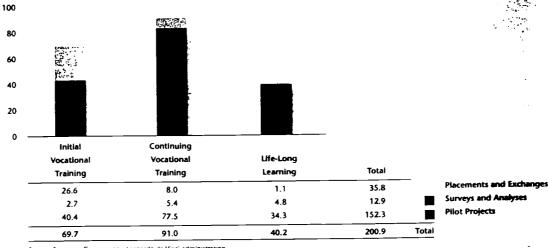


Graph E2 | Leonardo da Vinci Programme and its Predecessors -Annual Budget - 1987-94: EUR12 - 1995-97: EUR15 - million ECU



Source: European Commission - Leonardo da Vinci administration

Leonardo da Vinci Funded Projects - 1995 and 1996 - EUR15 + 3" - million ECU



Source: European Commission - Leonardo da Vinci administration

\* EUR 15 + Iceland, Liechtenstein and Norway





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#### **Demographic Statistics - Scenarios**

#### Eurostat's new long-term population scenarios - technical explanation

National population projections by sex and age are produced by the National Statistical Institutes (regularly and irregularly), United Nations (every 2 years) and Eurostat (every 3-5 years).

The first two agencies basically aim to make population forecasts or the 'best guess' for the next 10-15 years, usually supplemented with uncertainty variants. Eurostat produces various population scenarios for the next 5-6 decades, which attempt to explore realistic boundaries of demographic change in the long run.

The new long-term population scenarios of Eurostat, in 1996 compiled with the assistance of Statistics Netherlands, concern the 18 countries of the European Economic Area (EEA). The scenarios cover the period 1995-2050 and project the population at 1 January by sex and single years of age up to the age group of 90+. Five scenarios were prepared: baseline, low, high, young and old.

The low and high scenario can be considered as plausible extremes with respect to population growth. The low scenario describes a demographic future in which current fertility levels of around 1.45 children per woman will persist, life expectancies will hardly increase and total net immigration for the EEA will drop from 600,000 to 250,000 persons a year. The high scenario assumes a slight recovery of fertility to levels of around 1.95 children per woman, life expectancies will continue to increase strongly in all countries and total net inflow of migrants will increase to a level of 800,000 persons a year.

The young and old scenarios can be interpreted as plausible extremes with respect to population ageing. In the young scenario, high fertility and high net immigration assumptions are combined with low life expectancies, whereas in the old scenario high life expectancies are combined with low fertility and net immigration.

The baseline scenario describes the 'average development' and can therefore be used as a reference. This scenario is generally rather close to the latest population forecasts made by the national statistical institutes.

The assumptions underlying the five scenarios are summarized in the following scheme:

			Scenarios		
	Baseline	Low	High	Young	Old
Fertility Life expectancy Net migration	medium medium medium	low low low	high high high	high Iow high	low high low



# The European Union labour force Survey Methods and Definitions - 1996

#### Technical features of the EU Labour Force Survey

#### Field of the Survey

The survey is intended to cover the whole of the resident population, i.e. all persons whose usual place of residence is in the territory of the Member States of the European Union.

It does not cover persons who, although having links with the household under survey:

- a) usually live in another household;
- b) live in collective households
- c) have emigrated.

#### Reference period

The labour force characteristics of each person interviewed refer to their situation in a particular week. While this reference week falls in Spring in all countries, the national statistical institutes determine the exact week(s) according to the particular situation in each country.

#### Units of measurement

The main units of measurement for which results are obtained from the survey are individuals and households.

#### Comparability of results between countries

Perfect comparability among 15 countries is difficult to achieve, even were it to be by means of a single direct survey, i.e. a survey carried out at the same time, using the same questionnaire and a single method of recording.

Nevertheless, the degree of comparability of the EU Labour Force Survey results is considerably higher than that of any other existing set of statistics on employment or unemployment available for Member States..



#### Basic concepts and definitions

The main statistical objectives of the Labour Force Survey is to divide the population of working age (15 years and above) into three mutually exclusive and exhaustive groups - persons in employment, unemployed persons and inactive persons - and to provide descriptive and explanatory data on each of these categories.

The definitions of employment and unemployment used in the Community Labour Force Survey closely follow those adopted by the 13th International Conference of Labour Statisticians.

The relevant parts of these 'ILO definitions' are:

#### **Employment**

The employed comprise all persons above a specified age who during a specified brief period, either one week or one day, were in the following categories:

- a "paid employment":
- b "self-employment":

#### Unemployment

The "unemployed" comprise all persons above a specified age who, during the reference period, were:

- a "without work",
- b "currently available for work",
- c "seeking work",

#### Labour force

The labour force comprises persons in employment and unemployed persons.

#### Inactive persons

All persons who are not classified as employed or unemployed are defined as inactive.

#### The highest level of education and training attained

The LFS includes a question on the level of general education and one on the level of higher education and training completed. Eurostat has defined a single variable "Level of education or training attained" which combines these two headings. This variable corresponds to three different values which come close to the levels defined in the International Standard Classification of Education (ISCED).

ISCED level 0,1,2 is assigned to people who have completed at the most the first level of secondary education. ISCED level 3 includes people who have completed the second cycle of secondary education. ISCED level 5,6,7 corresponds to people who have a higher education degree.

For a description of the ISCED classification, see the inside flap of the back cover.





#### Vocational Education and Training Data Collection (VET)

The "Vocational Education and Training data collection" (VET), is the first attempt made by Eurostat, in co-operation with DGXXII and Cedefop to improve the information base in the area of vocational education and training. The data collection was launched in July 1994, collecting data from 93/94. In all Member States, the units which are competent for providing Vocational Training Statistics, including either the Ministries or the Public Institutions responsible for Vocational Training, collaborated with Eurostat in this first data collection.

The data collection procedure, using only administrative sources, had a new approach in comparison with common practice at international level: data was collected on a programme-by-programme basis without pre-defined categories in which programmes and data should be allocated. Thus, it was possible to collect detailed data on participation in vocational education and training, as well as on a number of characteristics of each programme and flexibly allocate them, at a later stage, to alternative classification categories.

#### Aim

The first objective of this project was to collect detailed data on participation in vocational education and training, and present them on the basis of common categories.

The information collected, has permitted Eurostat, in agreement with the Member States delegates:

- to establish a category of initial vocational training and education programmes,
- to elaborate descriptive pictures of the initial training systems,

#### Coverage

The data collection covers vocational education and training programmes, defined as any structured learning activity which:

- 1 has as objective to provide (especially young) people with the skills, the attitudes and broad and more specific knowledge necessary for an occupation or family of occupations,
- 2 leads to a qualification recognised by any competent authority of the State,
- 3 leads to low, middle and higher level of qualifications but lower than a university degree or equivalent (ISCED levels 2, 3 and 5).
- 4 have a minimum duration of at least 600 hours.

#### Unit

Taking into account that characteristics of programmes, differ greatly according to national organisation of vocational training, the unit used for establishing comparisons is the volume of training measured by the number of participants and not the number of programmes.

#### Limits of the data collection

Vocational education and training programmes presented in this book, respond to the above definition. Programmes aimed at "disadvantaged groups", such as low school-achievers, unemployed or long-term unemployed, which are shorter in duration, or do not provide any formal qualification, have therefore not been taken into account. Vocational education and training programmes at ISCED level 6 have not been included for the same reason in the present book.





# Continuing Vocational Training Survey in Enterprises (CVTS). 1994

#### Methods and Definitions

#### 1 Continuing vocational training within the meaning of the CVTS

For CVTS purposes, continuing vocational training covered all vocational training activities for employees except for the initial training of apprentices and trainees with a special training contract.

The activities had to be planned in advance and be wholly or partly funded by the enterprise (directly or indirectly).

For the purpose of this survey, the following continuing training activities were covered:

#### a External and internal CVT courses

- external courses: designed and managed by a provider not part of the enterprise
- internal courses: designed and managed by the enterprise itself.

#### b CVT at the workplace

- staff participating in planned learning over a predetermined period in order to acquire know-how and gain practical experience at the workplace or in the work situation using the usual work tools.

#### c Other forms of CVT

- instruction at conferences, workshops, lectures and seminars, where the primary purpose is training;
- planned learning through job rotation, exchanges, secondments and quality circles;
- self-learning through open and distance learning, video/audio tapes, correspondence courses, computer-based methods or the use of Learning Resource Centres.

The initial training of new recruits should be shown separately under training at the workplace.

#### 2 Survey unit

The CVTS survey unit was the enterprise. It was defined according to the rules laid down in the Community Regulation on company statistics. <sup>1</sup>

The decision to prefer the enterprise to the local unit (establishment) as the survey unit was taken after the sampling frames available at national level for the sample survey had been determined. Deciding on the local unit would also have entailed the risk of losing information on CVT activities undertaken centrally, since they are known only at enterprise level.



<sup>1</sup> Definition according to Council Regulation (EEC) No 696/93 of 15 March 1993 on the statistical units for the observation and analysis of the production system in the Community: "The enterprise is the smallest combination of legal units that is an organizational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. An enterprise carries out one or more activities at one or more locations. An enterprise may be a sole legal unit."

#### 3 Economic activities

The enterprises consulted were categorized according to their principal economic activity in accordance with the NACE Rev 1 nomenclature <sup>2</sup>.

The following NACE Rev 1 activities were excluded from the CVTS:

Sections A and B

Agriculture, forestry and fishing

Sections L, M and N

Public administration, health and education

Section P

Households employing domestic staff

Section Q Extra-territorial bodies

In order to satisfy the Community's need for information, the common framework called for the possibility of making analyses classified according to 20 sectors of activity.

#### 4 Size categories

The survey covered all enterprises with a workforce of 10 or more.

The selection of enterprises had to be structured in such a way that the survey permitted certain analyses for the following enterprise size categories:

Number of employees:	10	to	49
	50	to	99
	100	to	249
	250	to	499
	500	to	999
	1000	and	over

The enterprise size was determined by the number of employees working in establishments on the territory of the respective Member State.

#### 5 Reference period

The 1993 calendar year was taken as the reference period. Where information had to be given as at a reporting date, that date was 31 December 1993; if there were high seasonal fluctuations, annual averages were to be given as well.

<sup>2</sup> See Council Regulation (EEC) No 3037/90 of 9 October 1990 on the statistical classification of economic activities in the European Community (Official Journal of the European Communities, L 293, 24 October 1990).



## Statistical Classification of Economic Activities (NACE Rev.1) - obligatory from 1993 onwards

Section A	<del></del> _	30	Manufacture of office machinery
	Agriculture, hunting and forestry		and computers
01	Agriculture, hunting and	31	Manufacture of electrical machinery
	related service activities		and apparatus n.e.c.
02	Forestry, logging and	32	Manufacture of radio, television and
	related service activities		communication equipment and apparatus
		33	Manufacture of medical, precision and
Section B	F	24	optical instruments, watches and clocks
	Fishing	34	Manufacture of motor vehicles,
05	Fishing, operation of fish hatcheries		trailers and semi-trailers
	and fish farms; service activities	35	Manufacture of other transport
	incidental to fishing	20	equipment
c		36	Manufacture of furniture;
Section C	NATURE AND ADMINISTRATION	25	manufacturing n.e.c.
	Mining and quarrying	3/	Recycling
10	Mining of coal and lignite;		
	extraction of peat	Section E	Fl. Addr. and december
- 11	Extraction of crude petroleum and	40	Electricity, gas and water supply
	natural gas; service activities incidental to	40	Electricity, gas, steam
	oil and gas extraction excluding surveying	,,	and hot water supply
	Mining of uranium and thorium ores	41	Collection, purification and
	Mining of metal ores		distribution of water
14	Other mining and quarrying	5	
D		Section F	C
Section D	N. de a conferencia de	/5	Construction
15	Manufacturing	45	Construction
15	Manufacture of food products	Section G	
16	and beverages  Manufacture of tobacco products	Section G	Wholesale and retail trade;
	Manufacture of textiles		repair of motor vehicles, motorcycles
	Manufacture of vearing apparel;		and personal and household goods
10	dressing and dyeing of fur	50	Sale, maintenance and repair of
10	Tanning and dressing of leather;	30	motor vehicles and motorcycles;
	manufacture of luggage, handbags,		retail sale of automotive fuel
	saddlery, harness and footwear	51	Wholesale trade and commission trade,
20	Manufacture of wood and	•	except of motor vehicles and motorcycles
	of products of wood and cork,	52	Retail trade, except of motor vehicles and
	except furniture; manufacture of articles	•	motorcycles; repair of personal and
	of straw and plaiting materials		household goods
21	Manufacture of pulp,		• •
	paper and paper products	Section H	
22	Publishing, printing and reproduction		Hotels and restaurants
	of recorded media	55	Hotels and restaurants
23	Manufacture of coke, refined petroleum		
	products and nuclear fuel	Section I	
24	Manufacture of chemicals		Transport, storage and communication
	and chemical products	60	Land transport; transport via pipelines
25	Manufacture of rubber	61	Water transport
	and plastic products	62	Air transport
26	Manufacture of other non-metallic		Supporting and auxiliary transport
	mineral products		activities; activities of travel agencies
27	Manufacture of basic metals	64	Post and telecommunications
28	Manufacture of fabricated metal products,		
	except machinery and equipment		
29	Manufacture of machinery and		
	aguinment n.a.c		



equipment n.e.c.

Section	J	
---------	---	--

Financial intermediation

- 65 Financial intermediation, except insurance and pension funding
- 66 Insurance and pension funding, except compulsory social security
- 67 Activities auxiliary to financial intermediation

#### Section K

Real estate, renting and business activities

- 70 Real estate activities
- 71 Renting of machinery and equipment without operator and of personal and household goods
- 72 Computer and related activities
- 73 Research and development
- 74 Other business activities

#### Section L

Public administration and defence; compulsory social security

75 Public administration and defence; compulsory social security

#### Section M

**Education** 

80 Education

#### Section N

Health and social work

85 Health and social work

#### Section O

Other community, social and personal service activities

- 90 Sewage and refuse disposal, sanitation and similar activities
- 91 Activities of membership organization n.e.c.
- 92 Recreational, cultural and sporting activities
- 93 Other service activities

#### Section P

Private households with employed persons

95 Private households with employed persons

#### Section Q

Extra-territorial organizations and bodies

99 Extra-territorial organizations and bodies

# . .



#### International Standard Classification of Occupations

(ISCO-88 (COM))

100	Legislators, senior	officials
	and managers	

- 110 Legislators, senior officials and managers
- 111 Legislators and senior government officials
- 114 Senior officials of special-interest organisations
- 120 Corporate managers
- 121 Directors and chief executives
- 122 Production and operations managers
- 123 Other specialist managers
- 130 Managers of small enterprises
- 131 Managers of small enterprises

#### 200 Professionals

- 210 Physical, mathematical and engineering science professionals
- 211 Physicists, chemists and related professionals
- 212 Mathematicians, statisticians and related professionals
- 213 Computing professionals
- 214 Architects, engineers and related professionals
- 220 Life science and health professionals
- 221 Life science professionals
- 222 Health professionals (except nursing)
- 223 Nursing and midwifery professionals

#### 230 Teaching professionals

- 231 College, university and higher education teaching professionals
- 232 Secondary education teaching professionals
- 233 Primary and pre-primary education teaching professionals
- 234 Special education teaching professionals
- 235 Other teaching professionals
- 240 Other professionals
- 241 Business professionals
- 242 Legal professionals
- 243 Archivists, librarians and related information professionals
- 244 Social science and related professionals
- 245 Writers and creative or performing artists
- 246 Religious professionals
- 247 Public service administrative professionals

### 300 Technicians and associate professionals

- 310 Physical and engineering science associate professionals
- 311 Physical and engineering science technicians
- 312 Computer associate professionals
- 313 Optical and electronic equipment operators
- 314 Ship and aircraft controllers and technicians
- 315 Safety and quality inspectors

### 320 Life science and health associate professionals

- 321 Life science technicians and related associate professionals
- 322 Health associate professionals (except nursing)
- 323 Nursing and midwifery associate professionals

#### 330 Teaching associate professionals

- 331 Primary education teaching associate professionals
- 332 Pre-primary education teaching associate professionals
- 333 Special education teaching associate professionals
- 334 Other teaching associate professionals

#### 340 Other associate professionals

- 341 Finance and sales associate professionals
- 342 Business services agents and trade brokers
- 343 Administrative associate professionals
- 344 Customs, tax and related government associate professionals
- 345 Police inspectors and detectives
- 346 Social work associate professionals
- 347 Artistic, entertainment and sports associate rofessionals
- 348 Religious associate professionals

#### 400 Clerks

- 410 Office clerks
- 411 Secretaries and keyboard-operating clerks
- 412 Numerical clerks
- 413 Material-recording and transport clerks
- 414 Library, mail and related clerks
- 419 Other office clerks
- 420 Customer services clerks
- 421 Cashiers, tellers and related clerks
- 422 Client information clerks



### 500 Service workers and shop and market sales workers

- 510 Personal and protective services workers
- 511 Travel attendants and related workers
- 512 Housekeeping and restaurant services workers
- 513 Personal care and related workers
- 514 Other personal services workers
- 516 Protective services workers
- 520 Models, salespersons and demonstrators
- 521 Fashion and other models
- 522 Shop, stall and market salespersons and demonstrators

### 600 Skilled agricultural and fishery workers

- 610 Skilled agricultural and fishery workers
- 611 Market gardeners and crop growers
- 612 Animal producers and related workers
- 613 Crop and animal producers
- 614 Forestry and related workers
- 615 Fishery workers, hunters and trappers

#### 700 Craft and related trades workers

- 710 Extraction and building trades workers
- 711 Miners, shotfirers, stone cutters and carvers
- 712 Building frame and related trades workers
- 713 Building finishers and related trades workers
- 714 Painters, building structure cleaners and related trades workers

### 720 Metal. machinery and related trades workers

- 721 Metal moulders, welders, sheet-metal workers, structural-metal preparers, and related trades workers
- 722 Blacksmiths, tool-makers and related trades workers
- 723 Machinery mechanics and fitters
- 724 Electrical and electronic equipment mechanics and fitters
- 730 Precision, handicraft, craft printing and related trades workers
- 731 Precision workers in metal and related materials
- 732 Potters, glass-makers and related trades workers
- 733 Handicraft workers in wood, textile, leather and related materials
- 734 Craft printing and related trades workers
- 740 Other craft and related trades workers
- 741 Food processing and related trades workers
- 742 Wood treaters, cabinet-makers and related trades workers
- 743 Textile, garment and related trades workers
- 744 Pelt, leather and shoemaking trades workers

#### 800 Plant and machine operators and assemblers

- 810 Stationary-plant and related operators
- 810 Mining and mineral-processing-plant operators
- 812 Metal-processing plant operators
- 813 Glass, ceramics and related plant operators
- 814 Wood-processing- and papermaking-plant perators
- 815 Chemical-processing-plant operators
- 816 Power-production and related plant operators
- 817 Industrial robot operators

#### 820 Machine operators and assemblers

- 821 Metal- and mineral-products machine operators
- 822 Chemical-products machine operators
- 823 Rubber- and plastic-products machine perators
- 824 Wood-products machine operators
- 825 Printing-, binding- and paper-products machine operators
- 826 Textile-, fur- and leather-products machine operators
- 827 Food and related products machine operators
- 828 Assemblers
- 829 Other machine operators not elsewhere classified

#### 830 Drivers and mobile plant operators

- 831 Locomotive engine drivers and related workers
- 832 Motor vehicle drivers
- 833 Agricultural and other mobile plant operators
- 834 Ships' deck crews and related workers

#### 900 Elementary occupations

- 910 Sales and services elementary occupations
- 911 Street vendors and related workers
- 912 Shoe cleaning and other street services elementary occupations
- 913 Domestic and related helpers, cleaners and launderers
- 914 Building caretakers, window and related cleaners
- 915 Messengers, porters, doorkeepers and related workers
- 916 Garbage collectors and related labourers
- 920 Agricultural, fishery and related labourers
- 921 Agricultural, fishery and related labourers
- 930 Labourers in mining, construction, manufacturing and transport
- 931 Mining and construction labourers
- 932 Manufacturing labourers
- 933 Transport labourers and freight handlers

#### 000 Armed forces

- 010 Armed forces
- 011 Armed forces



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### **ISCED**

#### International Standard Classification of Education

In order to facilitate comparison between countries, data on education in each Member State are allocated to the various level categories of the International Standard Classification of Education (ISCED). However, in making international comparisons, it is important to take account of the numerous differences in the national education and training systems. Moreover, ISCED no longer adequately covers the changing structure of the education and training systems. Work on the revision of ISCED is ongoing and should be completed within the next year.

#### A brief description of the ISCED levels is presented in the table below:

#### ISCED 0 (pre-primary education)

Education preceding primary education. In the vast majority of cases, it is not compulsory.

#### ISCED 1 (primary education)

Begins between the ages of four and seven, is compulsory in all cases and lasts five or six years as a rule.

#### ISCED 2 (lower secondary education)

Compulsory schooling in all EU countries. The end of this level corresponds often to the end of full-time compulsory schooling.

#### ISCED 3 (upper secondary education)

Begins around the age of 14 or 15 and refers to either general, technical or vocational education. It may lead to the standard required for admission to higher education or it may be "terminal", as is sometimes the case with vocational education and training.

#### ISCED 5, 6, 7 (higher education)

Due to discrepancies in the allocation of data to the three ISCED levels comprising higher education, data in this report refer to the three levels combined.

The three levels are:

- ISCED 5 Covers programmes which generally do not lead to the awarding of a university degree or equivalent, but admission to this level usually requires the successful completion of a programme at the upper secondary level.
- ISCED 6 Covers programmes leading to a first university degree or equivalent.
- ISCED 7 Covers programmes leading to a second, post graduate university degree.





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