

Denmark

Overview of the Vocational Education and Training System

June 2006

Title: Denmark: overview of the Vocational Education and Training System in 2006

Published on the web: June 2006 (*all website links were valid at this date*).

Author: ReferNet Denmark

Abstract:

This is an overview of the VET system in Denmark. Information is presented according to the following themes:

1. General policy context - framework for the knowledge society;
2. Policy development - objectives, frameworks, mechanisms, priorities;
3. Institutional framework - provision of learning opportunities;
4. Initial education and training - pathways and transition;
5. Continuing vocational education and training for adults;
6. Training VET teachers and trainers;
7. Skills and competence development and innovative pedagogy;
8. Validation of learning - recognition and mobility;
9. Guidance and counselling for learning, career and employment;
10. Financing: investment in human resources;
11. European and international dimensions: towards an open area of lifelong learning.

This overview is part of a series produced for each EU Member State (plus Norway and Iceland). Each report is prepared by Cedefop's national network member (ReferNet) and is updated on an annual basis: this one is valid for 2006. Later editions can be viewed from August 2007 onwards at:

http://www.trainingvillage.gr/etv/Information_resources/NationalVet/ where more detailed thematic information on the VET systems of the EU can be found.

Keywords:

training system; training policy, initial training, continuing vocational training, training of trainers, skill development, vocational guidance, recognition of competences, validation of non formal learning; financing of training

Geographic term:

Denmark



01 - GENERAL POLICY CONTEXT - FRAMEWORK FOR THE KNOWLEDGE SOCIETY

0101 - POLITICAL AND SOCIO-CULTURAL/ECONOMIC CONTEXT

The kingdom of Denmark constitutes Denmark, the Faeroe Islands and Greenland. Denmark is a constitutional monarchy with a single chamber parliamentary system. Denmark has been a single kingdom since the end of the 10th Century.

The Folketing (Parliament) has 179 members, including two representatives from the Faeroe Islands and two from Greenland. Both Greenland and the Faeroe Islands have home rule and are responsible for local matters such as the education and social systems, welfare, taxes, environmental policy and a number of commercial matters.

Denmark is divided into 14 counties and 275 municipalities. However, a reform of the public structure is currently taking place and will be fully implemented by 2007. The reform implies that the number of municipalities will be reduced significantly, and that 5 regions will replace the 14 counties. There will be no change to the election structure, i.e. universal adult suffrage by voluntary and secret ballot, with a voting age of 18 for both national and local elections. All voters are eligible to run for office. The voter turnout in national elections approaches approximately 88%. The state and municipalities are responsible for levying taxes and providing social services and health care, and in terms of education, the regions will elaborate visions for their own geographical area, whereas the state is overall responsible for the framework and provision of education.

On average, there are 10-12 political parties in the Folketing and the government sits for up to 4 years. On average there are elections every 3 years. All political parties support free access to education and training, including continuing training. The social partners have influence on VET in Denmark and pay their share of the costs of training employees to skilled workers.

0102 - POPULATION AND DEMOGRAPHICS

There are 5.4 million inhabitants in Denmark, of which 4 million live in urban areas. The overall population density is 123 people per square kilometre. It has a total area of 43 000 square kilometres.

Denmark consists of the peninsula of Jutland and circa 406 islands, of which circa 78 are inhabited (2003). Of these, the largest and most densely populated are Zealand on which the capital of Copenhagen is situated, the island of Funen and north Jutland peninsula. The North Sea defines Denmark to the west, while the islands divide the Baltic Sea from the Kattegat.

Both men and women are active on the labour market or participate in training activities, and most children are therefore in day care centres during the day. The average age for women to have the first child is 28.9 years (2004), for men it is 32.7 (2000). The average life expectancy is 75.2 years for men and 79.9 for women (2004).

The forecasts for population growth suggest that the number of inhabitants will grow by 3% to approximately 5.57 million in 2031. Hereafter it will start decreasing. As to the number of 6 to 16 years old this will decrease from 750 000 (2005) to 670 000 in 2031. The number of people in the age group from 25 to 64 is expected to decrease by 14%

from 2005 to 2045 (from 2.98 million today to 2.57 million in 2045) whereas the number of persons above 65 will increase by 69% (from 813 000 to 1.37 million in 2042). The forecasts for the demographic development is hereby similar to the rest of Europe: an ageing population and fewer people in the active age (Source: Nyt fra Danmarks Statistik, nr. 241, 1. juni 2005).

Immigration is higher than emigration. In particular, immigration from Turkey, former Yugoslavian countries and Asia, especially from Pakistan, has increased during the last decade. In 2005, foreign citizens represented 5% of the population compared to 2% in 1984. More than half of the foreign nationals live in the metropolitan area, and more than 1/4 of them come from either Scandinavian or other EU countries.

Source: www.denmark.dk

0103 - ECONOMY AND LABOUR MARKET INDICATORS

The Danish economy is small and open, dependent on trade with other countries and without any possibility of influencing international trading conditions or central economic factors, e.g. interest rates. The value of both exports and imports constitutes circa 1/3 of GNP. About 2/3 of foreign trade is within the EU. Germany is the most important bilateral trading partner, but Sweden, Great Britain, and Norway are also of significance. Outside Europe, the US and Japan are the most important trade partners.

Of the Danish population of 5.4 million (2006), the labour force, i.e. those in employment and the unemployed, constitutes approx. 2.9 million. Of the remaining 2.5 million Danes, just under half are children and students without work, and over 40% are pensioners and those taking early retirement. The remaining 10% consists i.a. of husbands or wives at home and those receiving state support but unconnected with the labour market.

STATISTICAL FACTS:

Table 1: Economic composition by sector (% employment) in 2002	
SECTOR	%
AGRICULTURE	4.27
MANUFACTURING/INDUSTRY	31.57
SERVICE	64.16
TOTAL	100

Source: Danmarks Statistik: Statistisk Årbog 2004

Table 2: Employment in % in 2005		
	MEN	WOMEN
EMPLOYMENT RATE	75.6	69.3
UNEMPLOYMENT RATE	5.0	6.4
UNEMPLOYMENT RATE, UNDER 25	3.4	3.4

Source: Danmarks Statistik 2006

Table 3: Expenditure on education & training in 2003	
AS A % OF GDP	8.2
PUBLIC SPENDING AS % OF PUBLIC EXPENDITURE	15.4

Source: Ministry of Education: Facts and Figures 2005

0104 - EDUCATIONAL ATTAINMENT OF POPULATION

Approximately 80% of a year group complete a recognised vocational qualification (compared to approximately 60% in the early 1980s). Approximately 13% leave the education system without any qualifications at all and will have acquired neither a competency for further studies nor a vocational qualification, and 7.5% leave only with a leaving examination at general upper secondary level.

More girls than boys complete a higher education programme. 83% of the girls complete a vocationally qualifying course of education against only 74% of the boys. Girls are overrepresented in higher education and significantly represented in medium-cycle higher education.

Table 1: Expected overall educational profile of a year group, by level of education and competency, and gender - 2003			
	MEN	WOMEN	TOTAL
UPPER SECONDARY EDUCATION LEVEL:	%		
With upper secondary education, of which	77.2	83.4	80.3
General upper secondary education	36.8	50.0	43.3
Vocational education and training	31.2	20.2	25.8
Both competencies	9.2	13.2	11.2
Without upper secondary education, of which	22.8	16.7	19.8
Basic school	5.5	4.8	5.2
Partial general upper sec. education	2.4	2.4	2.4
Partial vocational education and training	14.9	9.5	12.2
Upper secondary education level, total	100.0	100.0	100.0
END LEVEL:			
With vocational competency	70.8	79.4	75.0
Vocational education and training, of which	33.6	27.4	30.6
Commercial qualification	5.3	9.8	7.5
Technical qualification	27.7	8.2	18.2
Social & health qualification etc.	0.6	9.4	4.9
Higher education, of which	37.2	52.0	44.5
Short-cycle higher education	6.5	5.9	6.2
Medium-cycle higher education *	16.3	30.7	23.4
Long-cycle higher education	14.4	15.4	14.9
Without vocational qualifications, of which	29.2	20.6	25.0
With further study qualifications	9.7	8.9	9.3
No qualifications	19.5	11.7	15.7
End level, total	100.0	100.0	100.0

*Medium-cycle higher education includes: professional bachelors, university bachelors and other medium-cycle higher education programmes (such as building technicians, etc.)

Note: The sum of students entering and leaving the individual groups may deviate due to rounding up/down. In addition to the ordinary education programmes, there are higher preparation single subject programmes (hf), BCom, and BA programmes. The following programmes are not included: open youth education programmes, production schools, egu and adult and continuing education. The figures are corrected for incomplete reports. Source: Facts and Figures 2005, the Danish Ministry of Education, 2005.

Table 2: Educational attainment of the population aged 25-64 by ISCED level, % (2002)			
LEVEL OF EDUCATION			
	ISCED 0-2	ISCED 3-4	ISCED 5-6
EU-15	35%	43%	22%
DENMARK	20%	53%	27%

ISCED 0-2: Pre-primary, primary and lower secondary education

ISCED 3-4: Upper secondary and post-secondary non-tertiary education

ISCED 5-6: Tertiary education

Source: Eurostat, Newcronos, Labour Force Survey

Table 3: Percentage of the population, aged 18 to 24 years having left education and training with a low level of education (latest year available 2002)		
DENMARK		
2000	2002	2003
11.6%	19.6%	NA

NA: Not Available

Low level of education: pre-primary, primary and lower secondary education - levels 0-2 (ISCED 1997)

Source: Eurostat, Newcronos, Labour Force Survey

02 - POLICY DEVELOPMENT - OBJECTIVES, FRAMEWORKS, MECHANISMS, PRIORITIES

0201 - OBJECTIVES AND PRIORITIES

The Danish Government has a vision of a flexible education system that offers education and training at a high proficiency level and competency level. 95% of an age cohort should complete upper secondary education, a VET programme or gain similar qualifications through the CVT system. Today, approximately 95% of school leavers from basic schooling (*folkeskole*) continue in upper secondary education. The aim should be seen in relation to the VET system as a whole where adults in CVT are also included. It is also a political aim that 50% of an age cohort continues into higher education (either short, cycle, medium cycle or long cycle).

In the action plan for "Better Education and Training", the Government lays down the overall objectives for the Danish education system as a whole:

- Higher professional standards: to ensure a high quality in professional standards at all levels of the education/training system; in this connection, the focus should be on a clear formulation of objectives and targets.

- Flexibility: not only in the set-up of education/training programmes (modular systems), but also in connection with a higher degree of recognition of actual skills. This applies to both non-formal and informal learning. The reform of the vocational education system should also be seen as a reflection of this objective. The same applies to the below-mentioned broad initiative concerning increased recognition of actual skills.
- Innovation and entrepreneurship: the educational/training sector should ensure the efficient transfer of new knowledge to enterprises.
- Management of results and outputs: educational and training institutions should be given more freedom and broader powers and thus possibilities for increasing the quality of their offers. This freedom should be followed up by quality assessment on the basis of evaluations and openness in relation to the results obtained.
- Strengthening of cross-sector guidance: in 2003, the Danish Parliament adopted an Act stipulating that vocational guidance for young persons should be more coherent and independent of sector and institutional interests. The Act introduced a radical reform with changes to the guidance system which also means that tasks related to the ordinary basic school system and the youth education and higher education systems will now be merged. The reform came into operation on 1st August 2004.
- Increased recognition of prior competences: A cross-sector project has been initiated with a view to examining how prior qualifications and competences can be assessed and recognised with a view to also shorten the duration of the education/training programmes. The establishment of methods for documentation of real competences will be discussed with the social partners.
- Financing of basic adult vocational training programmes: In 2003, amendments were adopted in the legislation concerning the financing of adult vocational training with a view to increasing user fees. This will ensure a reasonable balance between the levels of user payment between related education/training programmes and job-oriented adult vocational training programmes where the principle of user fees has already been introduced in all single-subject programmes.
- Internationalisation of education and training: to ensure a high quality it is important to ensure the international dimension.

THE VET SYSTEM

The VET system in Denmark has undergone several reforms since the end of the 1980s. The aim has been to make the system more transparent and attractive to students, and to make it more adaptable to the continuous labour market and social changes. Reforms include:

- 1991 reform introduced principles of decentralisation, management-by-objectives, semi-privatisation of colleges and free choice of colleges for students;
- reform of commercial training programmes in 1996 introduced competence-based curricula and a higher degree of individualisation;
- 2000 reform changed technical training programmes by reducing the number of entry programmes, introducing a modularised structure in the basic programme, by making provision more individualised and flexible and by introducing new pedagogical principles, new teacher roles and new pedagogical tools (e.g. the education plan and logbook).
- 2003 amendments strengthened the individualisation of programmes, and focused on making general subjects more related to practice. It also introduced the principle of assessment of prior learning (*Realkompetencevurdering*) and the creation of a number of short VET programmes.

To conclude, the reforms have attempted to make a more individually-focused system tailored to both strong and weak learners.

THE CVET SYSTEM

The CVET system in Denmark has also undergone several reforms since the end of the 1980s. The objective of the reforms have been to make the system more demand-led and oriented towards the needs of the enterprises. Furthermore, it has been an objective of the present government to streamline the overall VET system (IVET and CVET) in order to ensure coherence and transferability between the two system. One of the measures has been to merge labour market training centres and vocational colleges so that single institutions are responsible for the provision of both kinds of VET.

The latest reform of CVET was in 2003, where Parliament adopted a reform aimed at creating more cohesion in job-oriented adult and continued training activities. More specifically, the Act merges and reduces the number of competence descriptions (with a reduction in the required subjects) for basic labour market programmes. These joint competence descriptions create uniform conditions for achieving individual subjects of training programmes. They can be used by the enterprises and employees as a strategic instrument in connection with planning of training and competence development activities – for instance, in co-operation with the institutions which deliver such education/training programmes.

The social partners have been active contributors to the reforms of the legislation for both adult vocational training and vocation education and contribute to implementing the amendments in this legislation.

03 - INSTITUTIONAL FRAMEWORK - PROVISION OF LEARNING OPPORTUNITIES

0301 - ADMINISTRATIVE FRAMEWORK

The government sets out the overall framework for general education and VET which is set by the Ministry of Education. Since the beginning of the 1990s, the Ministry has regulated VET provision through a system of targeted framework governance based on providing taximeter grants per student. The Ministry lays down the overall objectives for VET programmes and provides the framework within which the stakeholders i.e. the social partners, the colleges, and the enterprises are able to adapt curricula and methodologies to labour market needs and students. The Ministry is responsible for ensuring that the VET programmes have the breadth required for a youth education programme, and for the allocation of resources (Source: The Danish Vocational Education and Training System, the Danish Ministry of Education, 2005). In adult vocational training, an extra administrative layer exists in form of the Regional Labour Market Councils responsible for identifying skills needs, structural problems and bottleneck problems.

The VET system is decentralised in which VET providers are autonomous in terms of adapting VET to local needs and demands. They are in charge of providing training and receive financial support from the government to do so. Vocational colleges are each governed by a board consisting of teacher, student and administrative staff representatives, and social partner representatives.

The social partners play an institutionalised role at all levels of VET, from the national councils advising the Minister of Education on principal matters concerning VET to the local training committees advising the colleges and the labour market training centres on local adaptation of VET. The influence of social partners has gained since recent reforms which has led to fewer advisory bodies.

[VET system overview](#)

0302 - LEGISLATIVE FRAMEWORK FOR VOCATIONAL EDUCATION AND TRAINING

The Danish VET system is regulated by a number of acts, regulations and guidelines. The main ones are:

- The Act on Vocational Education and Training (LBK no 183 of 22/03/2004);
- The Act on Labour Market Training Programmes (LBK no 446 of 10/06/2003);
- The Regulation on Vocational Education and Training (Main regulation no 184 of 22/03/2004);
- The Regulation on the Basic Course in Vocational Education and Training (Regulation no 689 of 28/06/2004);
- The Act on Institutions Providing Vocational Education and Training (Act no 954 of 28/11/2003);
- The Act on Transparency and Openness (Act no 414 of 06/06/2002).

In addition to these, all VET programmes are regulated by specific regulation stipulating duration, contents, subject, competence levels, etc. and by a set of guidelines which go into detail concerning objectives, duration, structure, subjects, competences, examination requirements, credit transfer, quality assurance, etc. The guidelines were introduced in 2001 as a means to simplify programme updating which is done on an annual basis in cooperation between the Ministry of Education and the trade committees (Source: The Danish Vocational Education and Training System, 2005).

In 2006, the Act on Vocational Education and Training will be amended as a new practical training pathway will be introduced as an alternative pathway into VET. The aim is to attract more practically oriented students who are tired of school and thereby to reduce drop-out from VET programmes.

0303 - ROLE OF SOCIAL PARTNERS

Since the establishment of powerful organisations in the late 19th century, the social partners have helped build a welfare society with one of the world's most peaceful labour markets. Co-operation with the social partners is an integral part of national labour market policy, also in areas which are primarily regulated by statute for example health and safety at work, job placement services, labour market training, vocational education, measures to combat unemployment, and unemployment insurance.

Government co-operation with social partners is an integral part of national labour market policy and they play an institutionalised role at all levels of VET, from the national councils advising the Minister of Education on principal matters concerning VET to the local training committees advising the colleges and the labour market training centres on local adaptation of VET.

Trade committees (*De faglige udvalg*) consisting of representatives from both sides of industry constitute the backbone of the VET system. They perform a central role in relation to the creation and renewal of VET courses and have a dominant position in the formulation of curricula. The committees normally have 10-14 members and are formed by the labour market organisations (with parity of membership). They are responsible for the following matters relating to the individual VET course:

- objectives;
- duration;
- contents;
- final examination standards;
- issued final certification.

There are 59 trade committees who are responsible for approximately 96 courses.

Trade committees decide the regulatory framework for individual courses - they decide which trade is to provide the core of the training and the ratio between classroom teaching (approximately 1/3) and practical work in an enterprise (approximately 2/3). The committees also approve enterprises as qualified training establishments and rule on conflicts which may develop between apprentices and the enterprise providing practical training. The trade committees and their secretariats are financed by the participating organisations.

04 - INITIAL VOCATIONAL EDUCATION AND TRAINING

0401 - BACKGROUND TO THE IVET SYSTEM AND DIAGRAM

In Denmark, basic schooling is compulsory from the age of 7 to 16, i.e. from 1st to 9th grade, but most children start in the optional pre-school class at the age of 6. After the 9th grade, 60% of a youth cohort continues to the 10th grade which is optional. Students may follow 9th and 10th grades at *folkeskole* or an *efterskole* (continuation school for 14 to 18 years old) which 11% do.

After having completed 9th or 10th grade, 95% of a cohort continue in either general or vocational upper secondary education (approximately 55% of an age cohort), or in VET (approximately 30% of an age cohort).

The attached file contains a figure of flows from basic schooling to youth education in the Danish education system: [Flows in the Danish Education System from Basic Schooling to Youth Education](#).

General and vocational upper secondary education lasts three years and gives access to studies at tertiary level. VET lasts between 2 and 4 years and qualifies students for either entering the labour market as skilled workers or for specific short cycle higher education programmes at vocational colleges.

All educational pathways are school-based except for VET which is based on the dual training principle, i.e. school-based education and training alternating with training in a company.

The attached file contains a diagram on the educational system: [Danish Mainstream Education System 2000](#)

0402 - IVET AT LOWER SECONDARY LEVEL

There is no separate level for lower secondary education in Denmark.

0403 - IVET AT UPPER SECONDARY EDUCATION (SCHOOL-BASED AND ALTERNANCE)

Upper secondary education begins at the age of 16 after the students have completed compulsory education. In Denmark, students can choose between two tracks:

- an academic track for young people who want to continue in further or higher education;
- a vocational education and training track targeted at young people who want to learn a trade or profession and enter the labour market. This track also qualifies for certain programmes at tertiary level, the so-called short-cycle higher education programmes.

There are relatively few limitations to entering programmes at upper secondary level so it is up to the individual student to decide which track to enter.

THE ACADEMIC TRACK

This track consists of two pathways: the general upper secondary education pathway (provided at *gymnasiums*) and the vocational upper secondary education pathway (provided at vocational colleges). The general track can be further sub-divided into:

- 1) studies at *gymnasium*, a three-year general upper secondary education programme, concluding with the school-leaving certificate qualifying for university entrance (*studentereksamen*);
- 2) higher preparatory examination programme (*Højere Forberedelseseksamen - HF*), which is a two-year alternative to gymnasium.

The vocational upper secondary programmes comprise the higher commercial examination programme (*Højere Handelseksamen - HHX*) and the higher technical examination programme (*Højere Teknisk Eksamen - HTX*) offered by commercial and technical colleges, respectively. The duration of both programmes is three years.

To be enrolled in higher education, the students have to pass a final examination in a number of subjects in their upper secondary education programme.

VOCATIONAL EDUCATION AND TRAINING

VET programmes give direct access to nation-wide recognised occupations within the labour market and are organised as dual training. VET only exists as apprenticeship training in Denmark. As VET only exists in a dual apprenticeship system, please refer to heading 0405 for a more thorough description.

The programmes provide young people with professional, personal and general qualifications in demand on the labour market. Graduates are able to fulfil specific jobs in different trades but have only limited access to education programmes at higher level. There are four areas of vocational education and training:

- *Erhvervsuddannelser* – EUD (vocational education and training programmes - VET) comprising commercial and technical training programmes;
- *Social-og sundhedsuddannelser* – SOSU (social welfare and health training programmes);
- *Landbrugsuddannelser* (agricultural training programmes);
- *Søfartsuddannelser* (maritime training programmes).

A number of schemes exist for young people who are not clear in their educational/occupational choice, have learning disabilities, or social and personal problems. They can enrol in a course at a production school or in a basic vocational training programme (*Erhvervsgrunduddannelse - EGU*). The latter is an individualised course aiming at enabling the young person to enter either the ordinary VET system or the labour market. See also section 0405.

0404 - APPRENTICESHIP TRAINING

CHARACTERISTIC FEATURES OF VET

VET programmes teach the necessary skills for a trade or profession, and are all alternance-based, i.e. instruction is given at college and in companies. The apprenticeships are based on a contract between the apprentice and the company and, in general, 2/3 of training takes place in the company. All training companies are approved by the relevant trade committee, i.e. the social partners (see section 0303), and thereby have to live up to certain requirements, e.g. a certain level of technology, ability to offer a variety of tasks within the occupation. In 2002, about 1/3 of all companies

had apprentices. Colleges and companies work closely together to make sure that training takes place according to the law.

An educational plan is made for every student to ensure coherence between the student's wishes and the actual training programme. The students also have a personal educational portfolio that is intended to increase their awareness of the learning process. While the educational plan indicates learning pathways, the portfolio documents actual learning and skills acquired by the student.

THE BASIC AND THE MAIN PROGRAMMES IN VET

There are seven basic programmes, which serve as entry into the VET programmes:

- Technology and communication (*Teknologi og kommunikation*);
- Building and construction (*Bygge og anlæg*);
- Crafts and engineering trades (*Håndværk og teknik*);
- Food production and catering (*Fra jord til bord*);
- Mechanical engineering, transports and logistics (*Mekanik, transport og logistik*);
- Service industries (*Service*);
- Commerce and clerical trades (*Handel og kontor*).

Each basic programme is college-based and completed with the issue of a certificate documenting the subjects and levels which the student has achieved; this certificate forms the basis for entering the main programme. In technical training, the basic programme may last from 10 to 60 weeks depending on the needs of the individual trainee whereas in commercial training, the basic programme last either 38 or 76 consecutive weeks (with the possibility of prolonging the programme up to 116 weeks). The aim is to make the commercial basic programme more flexible so that it matches the needs and qualifications of the individual student.

Commercial training qualifies the student for a qualification within trade or commerce. The programmes are offered by commercial colleges and are more theoretical and general in scope (the latter being one of the problems as the students fail to recognise the utility of what they learn at college). Technical training is in general more practical in scope and includes workshop training at the college. The technical colleges tone the training at an early stage in order to connect college teaching with training in the company.

The main programme for vocational specialisations (96 programmes) starts with an on-the-job training placement. Before being admitted to the main programme, the student must have an apprenticeship contract with a training company (or with the college, if no training company is available).

As well as entering a VET programme through the basic programme, trainees may also start directly in a company with which they have an apprenticeship contract. In this case, they will start the practical training in the company and then alternate between school and in-company training for the remaining training period.

Trainees, who start directly in a company, receive a salary for the entire training period, including when at college, whereas trainees who start at school receive a state grant until they have concluded an apprenticeship contract and begin their in-company training after having completed the basic programme at school.

Most students choose to start their education in college before concluding an apprenticeship contract.

FACTS AND FIGURES ON VET

The number of trainees in VET fell steadily from 1985 to 1995 and rose again up to 2002. This is a result of bigger youth cohorts.

	1990	1995	2000	2002*
TOTAL	125 959	115 255	126 634	151 662
COMMERCIAL VET PROGRAMMES	42 519	38 556	37 978	37 818**
TECHNICAL VET PROGRAMMES	78 881	64 514	73 794	81 842
OTHER	1 093	1 603	812	1 615

* Source: Danish Ministry of Education, statistical dept.

** The figure accounts for students enrolled in the basic programme.

	1993	1994	1995	1996	1997	1998	1999	2000	2002	2004
MEN	56.7	57.1	57.1	56.6	55.4	53.5	54.2	54.4	55.1	56
WOMEN	43.3	42.9	42.9	43.4	44.6	46.5	45.8	45.6	44.9	44

Source: Danmarks Statistik, statistisk årbog 2004

There are slightly more male than female apprentices, but the distribution is uneven. In commercial training and in social and health care training, there is a predominance of female apprentices (90% in the latter) whereas the opposite applies to technical programmes and in building and construction (93% in the latter).

The average age of students on the basic programme was 20 in 2002. Form the main courses, the average age was 25. In 2002, approximately 92% of the students were of Danish origin, and 8% were immigrants or from ethnic minorities.

The dropout rate has increased from 16% in 1989 to nearly 30% in 2005 (source: Koudahl, Peter: Frafald i erhvervsuddannelserne: årsager og forklaringer, the Danish

Ministry of Education, 2005). Among male students with an ethnic background the drop-out rate is 60% (ibid.). So a high drop-out rate has been a continuous problem in the system.

CERTIFICATION AND QUALIFICATION

VET programmes conclude with a journeyman's test (*Svendepróve*). The relevant trade committee issues a certificate on successful completion of the programme. For the college-based part of the training, the college issues a certificate.

After having passed the journeyman's certificate, the graduate has acquired a qualification at skilled worker's level and is able to enter the labour market and the wage system. In general, 80% of a VET youth cohort is employed one year after finalising VET.

0405 - OTHER YOUTH PROGRAMMES AND ALTERNATIVE PATHWAYS

There are two types of youth programmes and alternative pathways for young people who do not enrol in IVET or upper secondary education: 1) basic vocational training; and 2) training at a school of production.

1) Basic vocational training (*erhvervsgrunduddannelse*, EGU) is aimed at unemployed young people aged 17-21. The purpose is to improve their vocational and personal qualifications and inspire them to enter the labour market or pursue further training possibilities.

Training is full-time and lasts for 2 years on average. It combines theoretical (1/3) and practical training (2/3) in turns. The training programme is set on an individual basis and may contain elements from IVET programmes, i.e. training may take place at vocational colleges, agricultural colleges, social and health care colleges, etc., although not identical with a given programme. Each training period should be concluded as an individual training element which may be accredited for other training programmes. Statements are issued on details of training content, job function, marks, etc. Upon completion of the entire training programme, a certificate is issued by the college.

Trainees receive a salary during company training and financial support from the state during training at college. The wage level is set by collective agreement in the trade. The provision for basic vocational training is at the discretion of the municipality in which the trainee lives.

2) Schools of production are aimed at young people aged under 25 who have not completed youth education or find it difficult to see a way forward in further education or in the labour market. The purpose is to help clarify the individual's future career path, and individual guidance is provided on a day-to-day basis.

Schools base activities on workshops and give priority to learning through experience and practical work cooperation. Workshop subjects range from carpentry or metalwork to media or theatre, and the teachers are skilled craftsmen with a pedagogical background.

Learning mainly takes place by doing, but theoretical training is also offered (although not mandatory). There are no examinations but participants must be present for practical training if they want to stay at the school for the entire training period.

Participation is limited to one year or shorter. The schools are independent institutions but receive funding from the municipality and state, as do the participants. A certificate of attendance is issued at the end of the stay, but there are no exams and no marks given.

0406 - VOCATIONAL EDUCATION AND TRAINING AT POST-SECONDARY (NON TERTIARY) LEVEL

There is no IVET at this level in Denmark.

0407 - VOCATIONAL EDUCATION AND TRAINING AT TERTIARY LEVEL

Vocational colleges offer a number of short-cycle higher education programmes (*kort videregående uddannelse* - KVVU) lasting 2 to 2 1/2 years. Admission requirements are either relevant VET or general upper secondary education. Most programmes give access to further studies within the same field e.g. bachelor programmes.

KVVU programmes qualify students for performing practical tasks on an analytical basis. Apart from theoretical subjects, programmes are usually completed with a project examination. Fields of study include: agriculture, textile and design, food industry, construction, hotel and tourism, computer science, industrial production, laboratory technician, IT and communication and international marketing.

Programmes are school-based, however there are often work placements included and/or project work for a company. Student numbers have been increasing: from 12 292 in 1990 to 17 515 in 2003.

Programmes are state-financed and part of the higher education system which means they are under the jurisdiction of the Ministry of Education. The social partners are represented in a national council which ensures coherence between the programmes and labour market skills demands.

05 - CONTINUING VOCATIONAL EDUCATION AND TRAINING FOR ADULTS

[top](#)

0501 - BACKGROUND INFORMATION ON CONTINUING VOCATIONAL EDUCATION AND TRAINING

In Denmark, the public sector plays a major role in the provision of continuing vocational education and training as well as general adult education. However, in the last 10-20 years, private provision of continuing and adult education and training has grown. This includes courses provided by consultancy firms, private course providers, and internal HRM departments.

The main type of CVET in Denmark is, however, the adult vocational training (CVT) programmes offered by labour market training centres and vocational colleges. These programmes are important provisions in the policy objective of furthering lifelong learning and contributing to the creation a flexible labour market. Employees are given the opportunity to increase their skills and competencies regularly by following a CVT programme.

The programmes were first introduced in the late 1950s to ease the transition from an agricultural to an industrial society. Blue-collar workers and women, in particular, could improve their employment prospects in the new manufacturing business. In the 1970s and 1980s, the employment rate was high and CVT programmes helped solve structural problems. In the 1990s, the knowledge, service and information society made the business sector demand new skills for their employees.

Providers of the programmes, labour market training centres (*Arbejdsmarkedetsuddannelsescentre* - AMU) and vocational colleges, are locally based. Programme success depends on close cooperation between local enterprises and training institutions, and programmes are adapted to local conditions.

In 2000, a reform was adopted which created stronger coherence within adult education and continuing training by providing a new framework of lifelong learning opportunities for adults, and giving the social partners greater responsibility in terms of prioritising and organising the CVT programmes. The reform was followed by a focus on closer dialogue between management, staff, and training institutions, and on the concept that training should be integrated with learning at the workplace. It also focused on individuals with a low level of educational attainment and the provision of training to provide these people with competencies similar to skilled workers.

CVT programmes have three aims:

1. maintain and improve vocational skills in accordance with labour market needs and technological development;
2. solve restructuring and adaptation problems on the labour market in the short perspective;
3. contribute to a general uplift in qualifications on the labour market for the longer perspective.

Programmes are developed and organised for low skilled and skilled workers, technicians, and the like. This includes both employed and unemployed people and there are special training offers to groups at risk of being marginalized in the labour market. For instance, this may include the long-term unemployed, refugees, and immigrants.

At the core of CVT programmes lie several factors:

- good financial framework and conditions;
- nationally recognised competencies;
- flexible structure;
- developing competencies to higher levels;
- continuous development of new training programmes;
- adult educational techniques which cater for acquiring practical skills;
- close interplay with the enterprises;
- quality assurance at all levels of the CVT system.

0502 - PUBLICLY PROMOTED CVET FOR ALL

The Ministry of Education is in overall charge of CVT programmes although there is a long tradition of involving the social partners. Subject to Ministerial recognition, the social partners decide on the aims, content, duration and final status of the various CVT programmes.

There are more than 2 000 CVT programmes which meet the continuing training needs for adult unskilled and skilled workers and technicians within a wide range of sectors and trades. The programmes mainly target employees in work, but the unemployed also have access.

The Council on Labour Market Training (*Uddannelsesrådet for Arbejdsmarkedetsuddannelser*) is the central training council responsible for CVT programmes. For each programme, a CVT committee (*Efteruddannelsesudvalg*) is set up consisting of social partner representatives. The social partners play an important role in

the management, priority setting, development, organisation and quality assurance of the programmes.

At local and provider levels, CVT committees and local school boards and education committees cooperate to provide the programmes best suited to fulfil needs of the labour market, business sector and individuals.

CVT programmes provide participants with qualifications and competencies that are applicable in the labour market. The programmes may either deepen the participant's existing knowledge within a particular field, or broaden it to related fields. Each participant has a personal training plan which outlines the goals to be achieved by the end. The participants may start from scratch and end up by completing a VET programme over a period of time.

The individual competence assessment procedure ensures that the needs for further education are determined on an individual basis. The skills of the participants are checked prior to the CVT programme and receive guidance from qualified staff. The training plans also serve as a tool for evaluation, assessment and the training to be provided. The plans have to take the following core elements into consideration:

- labour market policy needs as the basis for the CVT programme;
- programme aims and objectives;
- purpose of the individual educational plan (initial or specialised training, etc.);
- skills of the participant and required entrance qualifications;
- certification;
- quality assurance.

The CVT centres are responsible for providing adequate training according to individual training plans and ensuring that the aims and objectives are met. The teacher is the main person in charge of this.

In 2002, there were approximately 94 800 student full-time equivalents receiving an offer of adult education in the public sector. From 1994 to 2002, activity increased by 3 400 student full-time equivalents, or 3.7% (Source: Facts and Figures, the Danish Ministry of Education, 2005).

The CVT programmes are financed wholly or partly by the State, with a modest user payment as supplement.

0503 - TRAINING FOR UNEMPLOYED PEOPLE AND OTHERS VULNERABLE TO EXCLUSION IN THE LABOUR MARKET

In Denmark, there exists a number of training provisions targeted unemployed people and people at risk of exclusion. Two actors are central in the provision of training targeted unemployed people, the public employment service (*Arbejdsformidling - AF*) and the local municipalities. The latter is responsible for persons who are not insured. The AF and the local municipalities co-operate in their efforts to activate unemployed people and to reduce social exclusion. They have the following labour market instruments to employ:

- Activation offers for young unemployed persons, which encompass education and training in the ordinary system (IVET), special courses at labour market training centres, production school courses and folk high school courses;
- Specialised CVT courses requested by the AF or the municipalities;
- Municipal activation schemes, which may include production school courses, courses at non-residential folk high schools or activities initiated by the municipality itself;
- Adult vocational training, which is a VET programme targeted adults (above 25) and which makes it possible for adults to acquire a VET qualification on special conditions (including higher wages). This offer is not only for unemployed people;
- Job training in a private or a public organisation. During the job training, private employers receive a wage subsidy of DKK 55 (€7) per hour, and public employers DKK 97 (€13) per hour (2003 figures). Studies have shown that job training is one of the best means to ensure re-access to the labour market.

0504 - CVET AT THE INITIATIVE OF ENTERPRISES OR SOCIAL PARTNERS

In Denmark, private companies have increased their expenses on education and training of their employees. From 2001 to 2003, the estimated expenses have risen by 0.7 billion € (Source: IKA April 2003). Focus is especially on the development of human resources and on the developing generic competences such as the ability to cooperate, flexibility, adaptability to change, etc. Furthermore, publicly provided CVT has been re-organised in order to be able to provide more tailor-made in-company training courses in co-operation with the companies. The companies describe their training needs and the vocational colleges/labour market training centres draw up a training courses which match the needs.

As to the social partners, they offer training courses for their members. A number of trade unions offer training courses which target the needs of their members, e.g., the VET teachers' professional associations offer sector specific courses in order for the teachers to keep their vocational qualifications up-to-date.

0505 - CVET AT THE INITIATIVE OF THE INDIVIDUAL

In Denmark, the individual has a broad range of opportunities to enter continuing adult education and training from basic schooling level to university level. Individuals may enter:

- adult education (*voksenundervisning - VU*) at a adult education centre (*voksenundervisningscenter - VUC*). VU comprises subjects from basic level to upper secondary level (not VET);
- a basic adult education programme (*Grundlæggende voksenuddannelse - GVU*) at a vocational college. The

aim of the GVU is to give adults the possibility of having their non-formal vocational qualifications assessed and recognised in order to achieve a full vocational qualification;

- open education at tertiary level, which gives all adults with a qualification at upper secondary level the opportunity to study single subjects or achieve a bachelor degree at tertiary level.

These courses are subsidised by the State, however a fee is charged for participation. Furthermore, there exists a vast market of courses ranging from liberal education courses subsidised by the State to private courses in all kinds of subjects or (alternative) professions which have to be fully paid by the individual.

06 - TRAINING VET TEACHERS AND TRAINERS

In Denmark, the training of teachers in vocational colleges and at labour market training centres is based on the principle of "training-while-practising". I.e. when the teachers are employed by a college or a centre, they are required to attend a compulsory post-secondary in-service pedagogical training course. The course is based on alternance between theory and practice to integrate the teaching experiences into the course. To be employed by a college/training centre, the teacher has to have a background as either a skilled worker with 5 years of working experience or be a graduate from a higher education institution with - preferably - 2 years of working experience.

As to training of in-company trainers in Denmark, there are no legal requirements.

0601 - TYPES OF TEACHERS AND TRAINERS IN VET

Two distinct teacher profiles can be identified within VET:

- general subject teacher: usually university graduates or graduates from general teacher college;
- vocational subject teacher: usually have a VET background and substantial experience in the field.

There are no requirements for teachers to have a pedagogical qualification prior to their employment. Pedagogical training is provided as in-service training and is based on interaction between theory and practice. It is provided by the Danish Institute for Educational Training of Vocational Teachers (*Danmarks Erhvervspædagogiske Læreruddannelse* - DEL). The training course is developed by colleges and teacher organisations in co-operation with the Ministry of Education.

Colleges and the training centres have autonomy in staff recruitment, i.e., the Ministry of Education is not involved in teacher recruitment procedures and the teachers are not civil servants entering the system through tests. There are many part-time teachers who have no formal pedagogical competences but who are well respected within their field of work and are able to ensure that VET students acquire knowledge which are up-to-date with developments in the trades.

As to roles and functions, teachers are involved in the development of local educational plans, in research and development projects, in quality development, and in the daily management of lessons - often through teacher teams. The role of teachers has changed into one of facilitator of learning, coach, and guidance counsellor. These changes have

happened due to the introduction of new pedagogical and didactical principles, and changing qualification and curricula structures and increased modularisation.

IN-COMPANY TRAINERS

In-company trainers play an important role in VET given the dual training principle. There are different types of trainers with different responsibilities: planners, training managers, and daily trainers. However, there are very few legal requirements to become a trainer. Within some trades, they must have at least 5 years of work experience, however the social partners and the individual enterprise are responsible for their training and for their appointment.

0602 - TYPES OF TEACHERS AND TRAINERS IN IVET

IVET TEACHERS

Individual colleges and educational establishments are in charge of recruiting qualified staff. However, there are some formal qualification requirements for VET teachers at vocational colleges:

- they must have a bachelor degree or equivalent, but practical work experience is highly valued;
- they must be skilled workers with at least 5 years of working experience;
- teachers in vocationally oriented upper secondary education must have a master degree from a university or higher education institution.

Teachers in vocational colleges therefore have one of the following profiles depending on the education in question:

- completed a VET programme and have at least five years' of work experience in the trade; or
- completed a VET programme supplemented with further studies; or
- a theoretical background, e.g. graduates from teacher training colleges or universities.

Teachers must be specialists in the subjects they teach. Furthermore, teachers with no pedagogical training must complete a *pædagogikum*, a post-graduate pedagogical in-service teacher training course during the first two years of employment. The course lasts for approximately 500 hours and ends with an examination.

The course is a mixture of practical training and theoretical instruction. It contains teaching and observation techniques, guidance, didactics and methodology. The teachers work as teachers during the course.

TRAINERS

Trainers in enterprises who are responsible for apprentices must be master craftsmen, i.e. they must have completed the journeyman's certificate and have work experience.

The trade committees for each VET programme (consisting of social partner representatives) are in charge of approving enterprises as training enterprises. The committees consider technical equipment, variety of products and task performed by the enterprise and in some instances the number of qualified staff to perform the training. In that way, they assess whether the training provided is at an acceptable level. In terms of quality assurance, the enterprises are approved for a number of years, and only enterprises where there are no or few complaints on the part of the apprentice, are approved for yet another period of time.

0603 - TYPES OF TEACHERS AND TRAINERS IN CVET

CVET TEACHERS

Teachers in CVET have the same profiles as in IVET i.e. they are either general subject teachers with a university degree or a degree from a general teacher college or they are skilled workers with substantial working experience. For both profiles, they must acquire a pedagogical qualification within their first years of employment. This qualification can be acquired either at the Danish Institute for Educational Training of Vocational Teachers (*Danmarks Erhvervspædagogiske Læreruddannelse - DEL*) or at one of the many Centres for Further Education (*Center for Videregående Uddannelse - CVU*) offering a diploma in teaching of adults.

CVET TRAINERS

In general, there is little knowledge of trainers in CVET. Some large companies have education and training departments that offer in-company training courses to their employees. In these departments, a number of teachers and trainers are found, however the requirements to their skills and their profiles depend on the company and its specific training needs.

07 - SKILLS AND COMPETENCE DEVELOPMENT AND INNOVATIVE PEDAGOGY

0701 - MECHANISMS FOR THE ANTICIPATION OF SKILL NEEDS

In Denmark, occupational qualifications are based on defined national and international standards geared to medium- and long-term employment requirements. Certified occupational qualifications provide access to further training and a number of higher education programmes below university level.

Skills anticipation is always a compromise between society's requirements and the learner's individual drive to personal development. Early adaptation to changes of qualification requirements therefore takes place through specific mechanisms in the VET structure, including CVT. Needs for new or modified training programmes are systematically identified and fed into the VET system by the function of the trade committees in VET and local training committees in CVT. They have the task to take the initiative for renewal and to scan the respective sectors of the labour market.

0702 - BRIDGING PATHWAYS AND NEW EDUCATIONAL PARTNERSHIPS

The traditional training pathways offered to students are usually fixed with some optional variations. Students often want to change programmes and/or to mix and combine them with supplementary subjects not usually available. As a result, students switch pathways which cost in terms of motivation, time and resources (for both the students and the system). A number of initiatives have therefore been taken to bridge pathways between

the different types and levels of education to increase the opportunities available and to increase the students completing a full pathway.

The aim is that 95% of a youth cohort complete general upper secondary education, a VET programme or gain similar qualifications through the CVT system. Today, approximately 95% of school leavers from the *folkeskole* continue in upper secondary education. It is also a political aim that 50% of an age cohort continues into higher education (whether short cycle, medium cycle or long cycle).

Other mechanisms have also been introduced to support the inclusion of disabled people and others at a disadvantage on the labour market to assist them in completing a qualification in a way which is more suitable to their needs.

Initiatives include:

- modular curriculum offering well-defined units;
- substitution of a limited number of fixed standard programmes with personal training plans;
- change from classroom teaching to tutoring for the purpose of developing personal competencies of students. Teacher resources are thus allocated to handle the design, evaluation, maintenance and recording of the personal training plan.

The modular curriculum makes it easier for the individual to build on existing qualifications if an educational change of pathway is wished for. The system is more transparent and flexible, and it is thus easier for educational institutions to give credit for prior learning.

0703 - RENEWAL OF CURRICULA

VET programme curricula are agreed between the social partner trade committees (*Faglige udvalg*) and the Ministry of Education for each individual programme. The trade committees submit recommendations to renew curriculum so that VET programmes keep up with the demands of industry, based on qualification analyses and in-depth knowledge of the field in question. Recommendations must be accompanied by quantitative and qualitative data. The committees must, for example, provide information on opportunities for employment and practical work training, on the annual intake for the scheme, and information on any existing analyses and forecasts concerning qualification requirements in this area.

To provide students with the relevant personal competencies, vocational colleges focus on learning instead of teaching. Students therefore work on a project-oriented basis and in groups, learning how to collaborate to achieve a goal. The students play an active role and are not passively taught by the teacher. This is a fundamental change in the learning environment. Focus is on developing competencies that are often difficult to grade at the same time as awarding professional qualifications.

Personal educational plans (*Elevplaner*) are formulated by a teacher/guidance counsellor and students. The student must take responsibility for own learning and education, and the achievements are assessed regularly.

In its latest report on modernising VET, the Ministry of Education has forwarded the idea of centralising VET analysis and forecasting to ensure that new skills demands, changing labour market conditions and new occupational profiles are detected earlier than is the

case today. The analyses and forecasting should be carried out by universities and consultancy companies. However, the proposal is still in the pipeline (spring 2006).

08 - ACCUMULATING, TRANSFERRING AND VALIDATING LEARNING

The issue of validating formal, non-formal and informal learning receives high political attention in Denmark given the wish to live up to the Lisbon Communication on "Making a European Area of Lifelong Learning a Reality". It is also due to an interest in upgrading the skills of adults with a low level of educational attainment and to make the adult education system more cost effective. According to the OECD report on "Literacy in the Information Age", approximately one million adult Danes active in the work force have reading skills at a level which is considered insufficient compared with the literary skills required in a knowledge society (Source: OECD, 2000).

0801 - VALIDATION OF FORMAL LEARNING: GENERAL CONCEPTS AND SCHEMES

In Denmark, CIRIUS is the central body for validating formal learning through assessing foreign qualifications. The assessment is only targeted at foreigners entering the Danish system and is only a guideline; the educational institution may decide to overrule it. So there are no national accreditation institutions as found in many other European countries. Assessment and validation of formal learning are left to vocational colleges and social partners.

Social partners are responsible for the journeyman's test (*Svendeprøve*) and issuing the certificate. In most trade committees, training examiners and planning the journeyman's test take up much of their time. In commercial training, however, the commercial colleges are responsible for the final test which takes the form of a project exam based on a practical case from the work placement.

Vocational colleges are responsible for the continuous formative assessment of the student. This takes place through the educational plan and through interviews between students and their teacher. In the interview, focus is on what the student has achieved through participation in specific learning activities and on which competences the student needs to acquire to achieve the final goal, which is either completion of a basic course or the school-based part of a main course. As to summative evaluation, the students have to pass a number of tests during the training, e.g., at the end of a module or a school-based period. The college issues a certificate for the school-based part of VET. To prevent bias an external examiner takes part in the final examinations.

0802 - VALIDATION AND RECOGNITION OF NON-FORMAL AND INFORMAL LEARNING

In Denmark, there are no national accreditation bodies or centres, it is a decentralised system and the assessment, recognition and validation of prior learning take place at vocational colleges or labour market training centres. The methods are therefore also decentralised, and the role of the Ministry is one of advising and inspiring the educational institutions in their work by developing tools, frameworks and guidelines.

In recent years, a number of initiatives have been introduced aimed at making it easier for students in the VET system to have their prior learning assessed and recognised. In the dual VET system, all students are assessed when entering the system to identify their proficiency levels and to recognise prior learning in e.g. a company. On the basis of the assessment, an individual educational plan is drawn up. The student is advised on their possibilities in the VET system, e.g., a strong student may be advised to fast-track the basic programme and to add subject from the vocationally-oriented upper secondary education programmes in his plan, thereby ensuring access to higher education at a later

time in his career. A weak student may be advised to prolong the basic programme and to take subjects at a lower level to acquire the final competences which are necessary for entering the main programme.

For adults, a number of schemes exist to ease their entrance to e.g. a VET programme. In 2001, a new system for accreditation of prior learning was introduced, GUV (*Grundlæggende VoksenUddannelse*). The GUV targets unskilled workers with at least two years of work experience who want to acquire a formal VET qualification. An adult who wants to enter a GUV-programme has to go through competence assessment in co-operation with a guidance counsellor at either a vocational college or a labour market training centre, which are accredited by the Ministry of Education. On the basis of the assessment, a personal education plan is drawn up describing the competences already acquired and the competences needed to acquire a formal qualification and how to acquire these.

Another scheme targeted adults is the individual identification of competence (*Individuel KompetenceAfklaring* - IKA). This was introduced in 1995 and targeted unemployed people. The aim was to promote and strengthen the individual assessment process to ensure their participation in further education and training. A problem in many schemes for unemployed people was that it was viewed as being irrelevant from an individual perspective. In recent years, as many colleges and centres have merged and as part of making the system of assessment of prior learning more transparent, the GUV and the IKA have been aligned.

09 - GUIDANCE AND COUNSELLING FOR LEARNING, CAREER AND EMPLOYMENT

0901 - STRATEGY AND PROVISION

The 2004 Act on Educational and Vocational Guidance (*Lov om Uddannelses- og Erhvervsvejledning*) provides the regulatory framework. The overall structure for the provision of guidance is determined at national level by the government. The responsibility for providing guidance is given to two tiers: the municipal and national levels, depending on the level of education.

The responsibility for providing guidance on upper secondary education lies with approximately 50 municipal offices (called Educational Guidance for Youth (*Ungdommens Uddannelsesvejledning*)). The responsibility for guidance in higher education and vocational guidance lies with a national council for education and vocational guidance (*Landscenter for Uddannelses- og Erhvervsvejledning – LUE*). Regional centres provide guidance services.

In addition, a virtual guidance portal exists on the Internet for young people, and a national forum for dialogue for guidance is available for relevant authorities, institutions and organisations. Furthermore, a national guidance counsellor programme (*Vejlederuddannelse*) exists as a means to ensure that uniform guidance is provided throughout the country. A reform is expected for guidance for adults in employment.

Depending on the educational level which a given student is aiming at, guidance will be provided at local or national level according to national rules. The individual is thus assured better opportunities of employment. The reform also targets young people with special needs and aims to reduce the number of dropouts at all educational levels.

The educational establishments in the surrounding area and the social partners are important partners for cooperation for guidance providers.

0902 - TARGET GROUPS AND MODES OF DELIVERY

In 2004, a new Act on Educational and Vocational Guidance was implemented. The Act is primarily targeted to young people up to the age of 25, however it also includes adults who want to enter a higher education programme. With the reform, two new types of guidance centres were introduced:

- 46 Youth Guidance Centres (*Ungdommens Uddannelsesvejledning - UU*) which provide guidance for the transition from compulsory to youth education;
- 7 Regional Guidance Centres (Studievalg) which are responsible for guidance for the transition from youth education to higher education.

The aim of the youth guidance centres is to help young people become more aware of their abilities, interests and possibilities, thereby enabling them to make informed decisions regarding education and employment. A problem in the youth education system has been the number of drop-outs from one programme to shift to another. Better guidance services should help limit the number of drop-outs by making young people more clear about their educational or occupational choices. Guidance centres co-operate closely with schools and organise activities at schools so that guidance takes place close to pupils.

Regional guidance centres are for young people and adults who want to enter a higher education programme. The centres are responsible for providing information on all higher education programmes in Denmark and about possible career paths after completion of a higher level programme. The centres are open for calls from young people and adults, and provide guidance counselling in the local area, e.g., at public libraries.

Both kind of guidance centre are obliged to cooperate with relevant partners in the local area/region to ensure a coherent guidance system and a regular exchange of experiences, knowledge and best practice. Relevant partners include youth education and higher education institutions, the social partners and industry and commerce (Source: Guidance in Education - a new guidance system in Denmark, the Danish Ministry of Education, 2004).

0903 - GUIDANCE AND COUNSELLING PERSONNEL

Guidance counsellors at schools are often teachers who have completed a supplementary course. In employment agencies, social workers or employees with a university background provide guidance and have often completed a supplementary course.

The 2004 reform of guidance counselling introduced a new training scheme to improve the qualifications and competencies of counsellors. There was a general political demand for an increased professionalisation of guidance services in Denmark.

The training scheme is provided on a part-time basis and is equivalent to 6 months full-time studies. It consists of three modules:

- careers guidance and the guidance practitioner (guidance theory and methodologies, ethics, ICT in guidance, etc.);

- careers guidance and society (labour market conditions and policies, the education system and educational policies, development of society and business, etc.);
- careers guidance and the individual (different target groups, human development, learning theories, etc.).

The training programme is offered by six Centres for Higher Education and is an adult learning programme. It corresponds to half a diploma degree. Entry requirements are a completed short-cycle higher education programme and 2 years of relevant working experience (Source: Guidance in Education - a new guidance system in Denmark, the Danish Ministry of Education, 2004).

10 - FINANCING - INVESTMENT IN HUMAN RESOURCES

1001 - BACKGROUND INFORMATION CONCERNING FINANCING ARRANGEMENTS FOR TRAINING

In Denmark, education is considered a state matter, and vocational education and training is therefore to a high degree financed by public funding. Public funding is made available through taxes and through the specific labour market tax (arbejdsmarkedsbidrag). Any employed person is charged eight per cent of his/her gross earnings per year. In 2002, the total state income from this tax was DKK 602 million (€ 80 million) according to national statistics.

IVET is financed partly by the State and partly by the companies. All apprentices receive a salary during their practical training, and all companies pay a monthly sum (based on the number of employees in the company) to the Employers' Reimbursement Scheme (*Arbejdsgivernes ElevRefusion - AER*) in order to share the cost of training. The companies that take in apprentices are then compensated for wages when the apprentice is taking part in school-based training. The AER scheme is meant as an incentive for companies to take in apprentices.

As for CVET, training is financed by the State and to a certain degree by the companies who may pay fees and wages during absence.

The general trend is that funding remains a state matter but that companies investments in training increase. This is due to the fact that companies to a higher degree than previously want tailor-made courses adapted to their specific needs.

1002 - FUNDING FOR INITIAL VOCATIONAL EDUCATION AND TRAINING

In general, education is financed by the state, counties or municipalities. Vocational colleges are independent institutions that enjoy financial support from the state.

IVET is based on alternance models where training takes place at college and in a company in turns. The state finances training at colleges, and companies' finance on-the-job training, i.e. the trainees receive an apprentice salary while in the company. All employers pay an amount into a fund called the Employers' Reimbursement Scheme (*Arbejdsgivernes Elevrefusion - AER*) which is based on the number of employees in the individual company. The money is then allocated to the companies taking in trainees so that they do not bear the cost of training alone. The companies are reimbursed for costs during school-based training. In 2005, the companies paid DKK 2 909 million (€ 390 million) to AER and received DKK 3 240 million (€ 434 million) in reimbursement. The payments to AER have remained quite stable from 2001 to 2005 whereas the reimbursements have risen 20% from DKK 2 496 million (€ 335 million) in 2001 to 3 240

million (€ 434 million) in 2005. This is among other things due to the fact that the number of adult trainees has risen in the same period (Source: AER General Key Figures 2005).

In 2003, total public expenditure on education amounted to DKK 114.8 billion (€ 15 billion) this represented an increase of 20.5% since 1994. The rate of increase is not the same, however, for all areas of education. Expenditure on primary and lower secondary education increased by 22.9% to DKK 49.8 billion (€ 6.7 billion) between 1994 and 2003. Expenditure on upper secondary education increased by 4% between 1994 and 2003. Behind this moderate increase lies a considerable movement in expenditure on upper secondary education, which peaked in 1997 with expenditure of DKK 22.2 billion (€ 3 billion) (Source: Facts and Figures 2005, the Danish Ministry of Education, 2005).

Teaching costs for IVET amount to DKK 2.6 billion (€ 346 million). The average annual costs per student were around DKK 41 300 (€ 5 506) for the commercial programmes, whereas students at technical programmes cost DKK 63 100 (€ 8 413) (Source: Tal der taler 2003, the Danish Ministry of Education, 2003).

Students in other types of youth education may receive a State Educational Grant (*Statens Uddannelsesstøtte – SU*), but the exact amount depends on the income of the parents, student age and whether they live at home or by themselves. For more information, see: www.su.dk

1003 - FUNDING FOR CONTINUING VOCATIONAL EDUCATION AND TRAINING, AND ADULT LEARNING

The State, the counties and the municipalities spent approximately DKK 6.4 billion (€ 860 million) in 2002 on running adult and continuing education courses (approximately 10% of total public expenditure on education, not including various support schemes such as the state education grant and loan scheme, sabbatical leave for educational purposes, etc.). CVT activities, including the operating expenses for CVT centres, are financed through the labour market contribution (*arbejdsmarkedetsbidrag*) whereby a special tax of 8% is levied on all employed people. In 2002, the total state income from this tax was DKK 602 million (€ 80 million) according to national statistics.

The expenditure on CVT courses constituted the biggest single item in expenditure on adult and continuing education in 2002 (19% of the total expenditure). CVT courses have also been the most expensive, partly due to the expensive machines, materials, etc., used in the teaching (Source: Facts and Figures 2005, the Danish Ministry of Education, 2005).

Participants in CVT programmes normally pay a user fee, but the courses are free of charge for participants who are entitled to a financial compensation corresponding to the unemployment benefit (*voksen- og efteruddannelsesgodtgørelse – VEU*). The compensation is paid to employed people in CVET and to unemployed people. Companies often supplement it. Participants may also receive a transportation allowance and financial support for board and lodging if the programmes are offered away from home.

The government sets out the overall framework for VET, but the social partners have a considerable influence on the content of the VET courses. VET belongs to the Ministry of Education. The colleges are financed by the state according to a taximeter system where every passed student generates financial support.

CVT is at the overall responsibility of the Ministry of Education and includes in particular labour market training, called AMU (*Arbejdsmarkedetsuddannelserne*). The trade committees, the Vocational Education and Training Council, and the Training Council for

Adult Vocational Training are responsible for the administration of VET in conjunction with the training providers.

PUBLICLY- PROVIDED CVET

The main providers of CVET are AMU centres, i.e. labour market training centres, and vocational colleges. Courses cover general needs among companies for upgrading the skills of labour, but individual companies may also ask for a specific course, tailor-made to their needs. The social partners are highly involved in CVET as they are on the forefront in the forecasting of skills needs, and cooperate closely with the AMU centres in the formulation of the content of the courses provided.

During the 1990s, expenditure on public sector adult education increased steadily, but in 1999, expenditure dropped by 11.5% due to a significant reduction in activities at CVET providers (at day folk high schools, labour market training centres, and in open education).

Table 1: Public expenditure on adult education and training			
PUBLIC EXPENDITURE ON ADULT EDUCATION AND TRAINING	1995	2000	2002
TOTAL	7 193 million DKK (€0.9 million)	6 402 million DKK (€0.860 million)	6 421 million DKK (€0.861 million)
CVET PROVIDED BY LABOUR MARKET TRAINING CENTRES AND VOCATIONAL COLLEGES	1 989 million DKK (€0.270 million)	1 329 million DKK (€0.178 million)	1 225 million DKK (€0.164 million)

Table 2: Expenses for continued education and training			
EXPENSES FOR CONTINUED EDUCATION AND TRAINING IN DKK (€)			
	2001	2002	2003*
PRIVATE SECTOR	DKK 3.7 billion € 493 m	DKK 4.9 billion € 653m	DKK 5.9 billion €786 m
PUBLIC SECTOR	DKK 2.8 billion € 373 m	DKK 3.3 billion € 44 m	DKK 3.3 billion € 44 m

* Expenses estimated. Source: IKA April 2003

PRIVATE CVET COURSES

The increase in private companies' expenditure for CVET is mainly due to the following: increased course fees and the introduction of tuition fees. Yet another factor is that more courses are offered to top and middle managers and more courses are tailor-made to the needs of a particular enterprise. This implies that in terms of the amount of people employed in the private sector (1.7 million), the average cost for CVET amounts to DKK 2 900 (€ 387) per employee. In the public sector (1 million employees), the amount is DKK 3 400 (€ 453) per employee. Approximately 50% of the total labour force participates in some form of continuing education and training each year.

	TOTAL COSTS	DIRECT COSTS	LABOUR COSTS OF PARTICIPANTS
EU-15	2.3	1.4	0.8
DENMARK	3	1.7	1.4

Total costs: sum of direct costs, hourly staff costs and balance of contributions to national or regional training funds and receipts from national or other funding arrangements

Direct costs: costs of CVET courses

Source: Eurostat, Newcronos, 2nd continuing vocational training survey in enterprises (CVTS).

1004 - FUNDING FOR TRAINING FOR UNEMPLOYED PEOPLE AND OTHER GROUPS EXCLUDED FROM THE LABOUR MARKET

The Ministry of Employment is responsible for laying down the overall employment policy and for allocating resources to employment initiatives. The public employment service is responsible for offering guidance of the unemployed persons and of approving of their participation in specific training courses. During the training, the unemployed person continues to receive unemployment benefits.

The municipalities are responsible for the activation of unemployed persons who are not insured against unemployment. The social services are responsible for guiding and approving of the unemployed person's participation in a course. If the unemployed person refuses to participate, his/her unemployment benefit may be substantially reduced. Otherwise, during participation in a training scheme, the unemployed person continues to receive social benefits. In 2002, the municipalities spent DKK 7 212 million (€ 953 million) on the activation of the unemployed who were not insured. The State reimbursed 50% of the costs.

1005 - PERSPECTIVES AND ISSUES: FROM FUNDING TO INVESTING IN HUMAN RESOURCES

In Denmark, publicly financed VET has been central trait of the system and there is no sign that this is going to change. The Government attaches great importance to improving the quality and efficiency of education and training systems in order to equip all individuals with the skills required for a modern workforce in a knowledge-based society and which, at the same time permits career development and reduce skills mismatch and bottlenecks in the labour market.

The basis to achieve these objectives is a highly developed and publicly financed system for basic, secondary and further education and training as well as competence development which also recognise relevant non-formal and informal competences and – in particular – practical work experience.

Albeit the Government's attachment to a publicly financed education system there has in recent years been focus on increasing cost-efficiency and effectiveness in the system. One of the measures has been the introduction of the taximeter principle whereby colleges only receive a grant for the students who complete the basic programme and the main programme. Hereby, the colleges are given an incentive to increase retention in the system (critics point to the danger of lowering quality by being more lax in the evaluations of student performance). With the introduction of quality indicators and increased focus on outcome, there is no doubt that the Government wants "value for the money".

11 - EUROPEAN AND INTERNATIONAL DIMENSIONS, TOWARDS AN OPEN AREA OF LIFELONG LEARNING

1101 - NATIONAL STRATEGIES RELATED TO POLICY PRIORITIES, PROGRAMMES AND INITIATIVES AT EU LEVEL

Danish VET policy objectives are very much in line with those of the Lisbon Declaration and the Copenhagen process. The government wants VET to meet the challenges of globalisation and the knowledge society by increasing its quality, making it more attractive to the students, increasing its transparency, and creating more flexible pathways through the education system and by recognising formal, non-formal and informal learning. For the latter, the government presented a policy paper on the Recognition of Prior Learning (*Realkompetencevurdering*) in November 2004.

The policy paper relates to the EU objective of "Making a European Area of Lifelong Learning a Reality" and describes how the recognition, validation and development of skills and competencies that have been acquired outside the formal educational system should be strengthened. The initiative is known as "*realkompetence*" (actual competence) because it deals with the individual's actual abilities and know-how. It aims to ensure that any competence should count at any given time and in any training or job situation, for instance in the overall assessment for admission to education and training programmes.

The recognition standards remain those currently established in the educational system, such as the journeyman's certificate, the upper secondary school leaving certificate, the bachelor's degree or other diplomas from higher education institutions.

The objective is that all citizens could have their skills and competencies assessed and validated, if they so wish. This form of individual assessment of competencies already takes place in labour market training (AMU courses), but the government's aim is that the offer should be given to anybody on a more general basis.

The results of the assessment are documented in a certificate. The methods used ensure a reliable measurement of the individual's skills and competencies. It is undertaken by staff at educational institutions, and takes its point of departure in the aims and objectives, level, and admission requirements to the education which the individual wishes to enrol for. This is important to ensure that the assessment and recognition process is respected by the educational system and in the labour market, and for the maintenance of a high educational quality and professional level that objective and qualitative criteria form the basis for the assessment.

Given the complexity, a number of actors are involved in the implementation, development and realisation of real competence assessment: representatives from schools and educational institutions, local authorities, the social partners, and companies.

1102 - IMPACT OF EUROPEANISATION/INTERNATIONALISATION ON EDUCATION AND TRAINING

Globalisation and its challenges is the current focus point of policy development in Denmark. In 2005, the government set up a Globalisation Council which was to advise the government on how to modernise Danish society in order to meet the challenges. In the council work, education and training played a central role as it was perceived as the means by which society could be able to cope with global competition.

Increased internationalisation of education and training ensures that:

- Education and training programmes can measure up to the best in the world;
- Education and training programmes are up-to-date and attractive enough to avoid brain-drain;
- Europe by 2010 will be the most competitive knowledge-based economy in the world, with Danish enterprises in the vanguard of this development (Source: Enhanced Internationalisation of Danish Education and Training - Policy Paper to Parliament, the Danish Ministry of Education, 2004).

In regard to VET, this means that the mobility of VET students should be enhanced. In comparison to other European countries, the Danish VET system offers a unique opportunity for a work placement abroad through the Work Placements Abroad scheme (*Praktik i Udlandet* - PIU). The PIU scheme applies to VET students and guarantees that the work placement is recognised as part of the overall VET programme. The student receives financial support and can choose a work placement in any EU and associated countries. However, only 1 000 students go abroad each year under the scheme, and the government would like to increase this figure.

Internationalisation also entails an increased focus on internationalisation of teaching at colleges. In all VET programmes, students are to achieve an increased understanding of international matters. In commercial training programmes objectives for the achievement of intercultural competences have been formulated in national regulations.

Furthermore, the government focuses on how to increase international co-operation among vocational colleges and creates further incentives for the colleges to engage in EU Leonardo da Vinci projects and exchanges. Studies show that some vocational colleges are very international in their scope and not only engage in Leonardo projects, but have established a thriving business exporting VET services to 3rd world countries. However, at other colleges internationalisation is only at an infant stage.

List of Sources and References

THEME 1

Undervisningsministeriet: Better Education, June 2003

Undervisningsministeriet: Facts and Figures, 2002

THEME 2

The Danish Government: Better Education, June 2003

Ministry of Education: New Structure of Vocational Education and Training, 2001

THEME 3

Povelsen, Quality work and structures in Denmark, Cirius 2002

THEME 4

Ministry of Education, Folkeskolens tal, 2002

Ministry of Foreign Affairs, fact sheet Denmark: Social and Health Policy, 2001

Statistics Denmark, 2002

Ministry of Education: New structure of Vocational Education in Denmark, 2001

THEME 5

Adult learning in Denmark, Ministry of Education, 2002

THEME 10

Institut for konjunkturanalyse (IFKA), 2003

Ministry of Employment: Denmark's national action plan for employment, 2003

Cort, Pia: Portrait of the Danish VET system, DEL, 2003.

Cort, Pia: The Danish FoU Programme, DEL, 2003.

Cort, Pia: The Danish Vocational Education and Training System, the Danish Ministry of Education, 2005.

Cort, Pia: Quality in the Danish VET system, the Danish Ministry of Education, 2005.

Facts and Figures – Education Indicators Denmark, the Danish Ministry of Education, 2005.

Fremtidssikring af erhvervsuddannelserne, the Danish Ministry of Education, 2006.

Koudahl, Peter: Frafald i erhvervsuddannelserne – årsager og forklaringer, the Danish Ministry of Education, 2005.

The English sources are available at: <http://eng.uvm.dk/publications/engonline.htm>
and the Danish at: <http://pub.uvm.dk/online.htm?menuid=4505>