

Denmark

Overview of the Vocational Education and Training System

May 2005

Title: Denmark: overview of the Vocational Education and Training System in 2005

Published on the web: May 2005

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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 2005. Later editions can be viewed 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

THEMATIC OVERVIEWS



Denmark

01 - GENERAL POLICY CONTEXT - FRAMEWORK FOR THE KNOWLEDGE SOCIETY

0101 - POLITICAL AND SOCIO-CULTURAL/ECONOMIC CONTEXT

Denmark lies between 54° and 58° of latitude north and 8° and 15° of longitude east. In addition to Denmark itself, the kingdom also includes the Faeroe Islands and Greenland. Denmark is a constitutional monarchy with a single chamber parliamentary system. 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 to be fully implemented as from 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 as 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 percent. The state and municipalities are and will be 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. The municipalities will provide vocational education and training within the framework set by the government, as is the case today.

On average, there are 10-12 political parties in the Folketing and the government sits for up to four years. There are elections every three years on average so the country has a relatively stable government. The government shifts from labour to liberal conservatism regularly.

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 has been a single kingdom since the end of the 10th century.

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 28.3 years (2001), for men it is 32.7 (2000). The average life expectancy is 74.5 years for men and 79.2 for women (2002).

The forecasts for the population growth until 2025 are the following. The number of children and youth (0-24) is expected to stay at the present level throughout the period, whereas the forecasts for the number of people in the employability age (25-64) is a fall of circa six percent. This fall is expected to be of 13 percent by 2050. The number of old age pensioners (65+) is expected to rise significantly, probably by a 30 percent by 2025 and top in 2041 where the number will be around 1.322.000 people (source: Danmarks Statistik: Nyt fra Danmarks Statistik, nr. 254, 2004)

Immigration to Denmark is higher than emigration from Denmark. In particular, immigration from Turkey, former Yugoslavian countries and Asia, especially from Pakistan, has increased during the last decade. In 2003, foreign citizens represented 5 per cent of the population as against e.g. 2 per cent in 1984. More than half of the foreign nationals live in the metropolitan area, and more than a quarter 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 (2003), the labour force, i.e. those in employment and the unemployed, constitutes circa 2.9 million. Of the remaining 2.5 million Danes, just under half are children and students without work, and over 40 per cent are pensioners and those taking early retirement. The remaining 10 per cent consists i.a. of husbands or wives at home and those receiving state support but unconnected with the labour market.

STATISTICAL FACTS:

Economic composition by sector (% employment)

SECTOR	%
AGRICULTURE	4.27
MANUFACTURING/INDUSTRY	31.57
SERVICE	64.16
TOTAL	100

Source: Danmarks Statistik: Statistisk Årbog 2004

Employment in %		
	MEN	WOMEN
EMPLOYMENT RATE	77.7	68.6
UNEMPLOYMENT RATE	4.9	6.1
UNEMPLOYMENT RATE, UNDER 25	4.5	4.1

Source: Danmarks Statistik: Statistisk Årbog 2004

PERCENTAGE OF GDP, EXPENDITURE ON EDUCATION AND TRAINING	8
PUBLIC SPENDING ON EDUCATION AS % OF TOTAL PUBLIC EXPENDITURE	15.3

Source: Ministry of Education: Tal der taler 2004

0104 - EDUCATIONAL ATTAINMENT OF POPULATION

The flow through the Danish education system has become more effective. Today, around 80% of a year group will complete a vocationally qualifying course of education (to this should moreover be added some adult education programmes, which are not included in the calculation for the moment). At the beginning of the 1980s, this proportion was only around 60%. Approximately 13% of a year group will leave the education system without any qualifications at all and will have acquired neither a competency for further studies nor a vocational competency, and 7.5% will 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 boy, and girls are overrepresented in higher education and very significantly in medium-cycle higher education.

Expected total educational profile of a year group, by level of education and competency and gender, 2000

	BOYS	GIRLS	TOTAL

WITHOUT STUDY OR VOCATIONAL COMPETENCY	16.5	9.5	13.0
WITH STUDY COMPETENCY	7.5	7.0	7.5
OF WHICH - WITH:			
GYMNASIUM AND HF QUALIFICATION	4.0	4.5	4.5
HHX AND HTX QUALIFICATION	3.0	2.0	2.5
OTHER	0.5	0.5	0.5
WITH VOCATIONAL COMPETENCY	74.0	83.0	77.0
VOCATIONAL UPPER SECONDARY EDUCATION ETC.	38.5	32.5	35.5
OF WHICH - WITH			
COMMERCIAL QUALIFICATION	7.0	14.0	10.5
TECHNICAL QUALIFICATION	31.0	7.0	19.0
SOCIAL AND HEALTH EDUCATION QUALIFICATION ETC.	0.5	11.5	6.0
SHORT CYCLE HE QUALIFICATION	11.5	6.5	9.0
MEDIUM CYCLE HE QUALIFICATION	15.0	31.0	23.0
LONG CYCLE HE QUALIFICATION	10.5	13.0	12.0

Source: Ministry of Education, 2000

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

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

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 and competence level. 95 per cent of an age cohort should complete upper secondary education, a VET programme or gain similar qualifications through the CVT system. Today, approximately 95 per cent of school leavers from the folkeskole continue in upper secondary education. The aim should be seen in relation to the VET system as such where also adults in CVT are included. It is also a political aim that 50 per cent of an age cohort continues into higher education (either short cycle, medium cycle or long cycle higher education).

The VET courses should meet the needs of the business and public sectors, as well as the individual's personal needs, and it should be among the best in the world, also in terms of evaluation and benchmarking. Focus is therefore on strengthening the following five areas in both general and vocationally-oriented courses of education:

- qualifications and competencies,
- flexibility,
- innovation,
- freedom of choice and
- output management.

A reform in 2000 of mainly the commercial VET programmes introduced new teaching methods to promote skills to take an initiative and foster enthusiasm. To an increased degree, training at the vocational colleges therefore involve project work and cooperation among students to solve real or realistic cases rather than training in the traditional classroom form.

A new reform was further introduced in 2003 to modernise the technical VET programmes, and the same teaching methods are now also at the core of the activities at the technical colleges. Focus is on the constant acquisition of new skills within one's profession and from related professional areas, and a number of subject-matters are shared between initial VET and continuing VET students.

The VET programmes are simple and flexible, and are based on a modular structure which allows the students to individualise their training programme according to own needs. A specific focus is put on easing the transition from education to work with the option to qualify for admission to higher education. This should be seen as an attempt to make the VET choice more attractive. The Danish VET system is qualification (curriculum)-based but the development of personal competencies as a pedagogically innovative challenge within the structure is given a high priority. Learners increasingly take responsibility for own learning, as implied in the increased use of project work and the changed learning environment.

Efforts are further made to enable the students to obtain double/partial qualifications by making it possible for them to choose subject-matters from related training programmes and incorporating them into the student's original choice of training programme. Tutors are therefore appointed at all colleges to provide guidance on individualised training programmes, and personal educational plans and student portfolio are prepared for all students.

The reform should also be seen as an initiative to decrease the number of drop-outs in vocational education and training.

In 2003, the Danish Parliament also adopted a reform of the adult vocational training system which aims at ensuring a better cohesion in job-oriented adult and continued training activities. More specifically, the Act means that joint (and fewer) competence descriptions will be drawn up with targets and frameworks for basic labour market relevant competence development and with descriptions of the individual subjects and programmes that will contribute to this development. These joint competence descriptions will create uniform conditions in relation to 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 in connection with the reform of the legislation in the field of both adult vocational training and vocation education and will contribute effectively to the implementation of the amendments in this legislation.

The Government's action plan "Better Education and Training" from 2002 includes a number of broad themes which are briefly described below:

- **Higher professional standards:** The aim is 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:** Flexibility is important, 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 to a much higher degree than today ensure the efficient transfer of new knowledge to Danish enterprises. The initiatives in the Government's plan concerning "Better Education and Training" should thus be seen in connection with the Government's growth strategy on "Plans for Growth".
- **Management of results and outputs:** The 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 a management principle which includes quality development 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 which provides that vocational guidance in relation to young persons who are to make a choice of education and occupation should be more coherent and independent of sector and institutional interests. The Act introduced a radical reform with significant changes in the guidance system which also means that tasks in relation to, respectively, the ordinary basic school system and the youth education and higher education systems will now be merged. The reform will come into operation on 1 August 2004. A similar legislative reform is now being planned with a view to strengthening cross-sector vocational guidance in relation to adults.
- **Increased recognition of real competences:** A cross-sector project has been initiated with a view to examining how real 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 in this field. 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:** In order to ensure a high quality it is important to ensure the international dimension.

03 - INSTITUTIONAL FRAMEWORK - PROVISION OF LEARNING OPPORTUNITIES

0301 - ADMINISTRATIVE FRAMEWORK

The government sets out the overall framework for vocational education and training, but the social partners have a considerable influence on the content of the VET courses. The framework for vocational education and training is laid down by the Ministry of Education and the vocational colleges are in charge of providing the training. They receive financial support from the government.

The Danish VET system is a centralised system. The Ministry of Education lays down all standards in the form of regulations. The social partners prepare these regulations which are then approved by the Ministry. There is no regional level in the VET system, only national and local levels.

At local level, the municipalities are responsible for providing vocational education and training that takes place at vocational colleges: handelsskoler (business colleges) and tekniske skoler (technical colleges). There are 115 vocational colleges for which the Ministry of Education is responsible.

At administrative level, the Ministry of Education and Rådet for de Grundlæggende Erhvervsrettede Uddannelser – REU (the Council for Vocational Training) decide the detailed objectives and the framework for the specific training programmes in community. The Council consists of social partner representatives (10 representatives per side), two college directors, two teacher representatives and a chairman appointed by the government. A number of autonomous national trade committees are in charge of certain educational areas. These committees consist of social partner representatives.

The vocational colleges are each governed by a board consisting of teacher, student and administrative staff representatives, and social partner representatives. The colleges enjoy a high degree of autonomy within the constraints of the overall framework set out at national level.

In connection with the recent VET reform, there are now fewer advisory bodies than before, however with more power. The social partners have thus gained influence.

[VET system overview](#)

0302 - LEGISLATIVE FRAMEWORK FOR VOCATIONAL EDUCATION AND TRAINING

The current Act on Vocational Education and Training dates from 2000 where it was passed by the Danish parliament. It sets out the overall structure of the vocational education and training system which is based on the alternance principle (or dual system/sandwich principle) where training alternates between theoretical instruction at a vocational college and practical training in a company. The Act also divides the responsibilities between the various actors and organisation of the system as such.

Every VET programme has its own executive order whereby the details for the specific training programme is set out. The contents of the individual VET programmes must be organised in such a way that practical training and theoretical instruction make up a coherent course.

A new act is now passed with effect from 1 July 2003. It introduces the possibility to opt out from a training programme in order to undertake relevant work, leaving the student with the possibility to re-enter the training programme within a limited period of time. The purpose of the act is to create increased flexibility for the individual and improve relations to the labour market. The act also collects prior legislation in the field whereby only one act provides the basis for vocational education and training: no. 183 of 22 March 2004.

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.

De faglige udvalg (trade committees) consisting of representatives from both sides of industries constitute the backbone of the whole Danish VET system. For each individual VET course a trade committee must be established. 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 Danish trade committees who are responsible for approximately 96 individual courses.

The trade committees decide the regulatory framework for the 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.

From July 2003, a new advisory structure was introduced. Rådet for de Grundlæggende Erhvervsrettede Uddannelser – REU (Advisory Council for Initial Vocational Education and Training) provides advice to the Minister of Education on educational matters.

04 - INITIAL VOCATIONAL EDUCATION AND TRAINING

0401 - BACKGROUND TO THE IVET SYSTEM AND DIAGRAM

Education 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 percent of a youth cohort continues to the 10th grade which is also optional. The students may follow the 9th and 10th grades at the *folkeskole* or at an *efterskole* (continuation school for 14 to 18 year olds) which 11 per cent do.

After having completed the 9th or 10th grade, 95 per cent of a cohort continue in either general or vocational upper secondary education, or in vocational education and training.

General and vocational upper secondary education last for three years and give access to studies in higher education. Vocational education and training lasts between 2½ and 4 years and qualify for a job at the labour market.

All educational pathways are school-based except for vocational upper secondary education which is based on the alternance between school and practical 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. Compulsory education is up to the age of 16 and is organised in one unique unified school system, without streaming or level. The *folkeskole* is a nine-year basic school which also comprises an optional pre-school class and an optional one-year 10th class.

The curriculum is determined by the Primary Education Act, whereas regulations on the aims of the various subjects are drawn up by the Minister of Education in accordance with the law.

The municipalities are responsible for the *folkeskole*, including appointments, financial frameworks and curricula. Every school has a board of governors in which parent representatives are in majority. The board sets out principles for the school's activities, prepares proposals for curricula and approve teaching material. All material is free of charge for the pupils.

Approximately 88 per cent of all pupils attend the public *folkeskole*, whereas approximately 12 per cent attend private schools (2002). The state and municipalities cover 75-80 per cent of the expenditure of private schools, the parents the rest.

Source: Danmarks statistik, statistisk årbog 2003

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. There are two types of vocationally oriented upper secondary education (in addition to general upper secondary education):

- 1) Students who want to continue in higher education must enrol in vocationally oriented upper secondary education) which is an entirely school-based, academic education programme, and
- 2) Students wanting to become skilled craftsmen enrol in an IVET programme which aims at learning a profession and which does not give direct access to higher education.

It is – in general – up to the discretion of the student which upper secondary education, he/she wants to follow.

GENERAL OR VOCATIONALLY ORIENTED UPPER SECONDARY EDUCATION.

Students are prepared for higher education and are provided with general and theoretical qualifications. There are three types of general upper secondary education:

- 1) Gymnasium, a three-year general upper secondary education programme, concluding with the school-leaving certificate qualifying for university entrance (*studentereksamen*);
- 2) Højere Forberedelseseksamen - HF (higher preparatory examination programme), a two-year alternative to the Gymnasium;
- 3) Vocationally oriented upper secondary education programmes: Højere Handelseksamen - HHX (higher commercial examination programme) and Højere Teknisk Eksamen - HTX (higher technical examination programme). The duration of both programmes is three years.

In order 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.

The programmes give direct access to the labour market and are organised in alternance. VET only exists as apprenticeship training in Denmark. Please refer to heading 0405 for a more thorough description of the VET system.

The programmes aim at providing 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).

Young people who are not clarified regarding future educational pathway may enrol for an Erhvervsgrunduddannelse – EGU (basic vocational training) which is a two-year vocational training course aimed at motivating young people for initial vocational education and training (IVET) or entering the labour market. The course includes in-company training.

Students in upper secondary education by programme orientation in percentage, 2002	
DENMARK	
UPPER SECONDARY EDUCATION TOTAL ENROLMENT	214.974
GENERAL OR VOCATIONALLY ORIENTED UPPER SECONDARY EDUCATION	46%
VOCATIONAL EDUCATION AND TRAINING	54%

Source: Danish Ministry for Education, statistics department 2002

0404 - APPRENTICESHIP TRAINING THE VET SYSTEM

The VET system was reformed in 2000, whereby all trainees enrol for a broad basic programme lasting for up to 60 weeks at school, and thereafter the trainees enrol for the main programme where they acquire specific vocational skills. The programme gives the students the opportunity of "trying out" various trades and occupations before finally deciding to enter an area of specialisation. The 2000 reform was mainly intended to modernise the commercial VET programmes, and in 2003, another reform was implemented as regards the technical VET programmes. The 2003 reform introduces the possibility for the trainees to opt out of the training programme to undertake relevant work for a period of time, and then to re-enter the training system again while obtaining credit for the work experience. This possibility is known as erhvervsuddannelse plus, and relate to the new Act 183.

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

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

The 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.

The main programme of vocational specialisations (96 programmes), which starts with an on-the-job training placement, is alternance-based and comprises education and training in colleges and companies in turns. 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).

Apart from entering a VET programme via the school path, i.e. by starting on the basic programme, the 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 an 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.

CHARACTERISTIC FEATURES OF VET

The VET programmes teach the necessary vocational skills for a trade or profession, and are all alternance-based, i.e. instruction is given at the college and in the company in turns. The apprenticeships are based on a contract between the apprentice and the company, and in general, 2/3 of the training takes place in the company. All training companies are approved by the relevant trade committee, i.e. the social partners (see 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 that ensures the coherence between the student's wishes and the actual training programme. The students also have a personal educational portfolio that is intended to increase the student's awareness of the learning process, he/she is undergoing. While the educational plan contains learning pathways, the portfolio documents actual learning and skills acquired by the student.

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.

Number of trainees in VET by sector in 1990, 1995, 2000 and 2002

	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.

Gender distribution in per cent, of the total number of trainees in VET

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2002
MEN	56.6	56.7	57.1	57.1	56.6	55.4	53.5	54.2	54.4	55.1
WOMEN	43.4	43.3	42.9	42.9	43.4	44.6	46.5	45.8	45.6	44.9

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 per cent in the latter) whereas the opposite applies to the technical programmes and in building and construction (93 per cent in the latter).

It is a declared political priority that the number of dropouts in the upper secondary education programmes should be reduced. The dropout rate has increased from 16 per cent in 1989 to nearly 20 per cent in 2002 (source: The Employers' Reimbursement System 2004), and as approx. 2/3 of the dropouts continue in another upper secondary education programme, measures have been initiated to ensure that better guidance is provided to the relatively high number of the indecisive young people that shop around.

See also heading 0901 for more information on the guidance system.

TECHNICAL TRAINING PROGRAMMES

The basic programme may vary from 0 to 60 weeks depending on the needs of the individual trainee.

There are six main entrances to the technical training programmes of which there are 89 main programmes:

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

The average duration of the programmes (i.e. including basic programme and main programme) is 3½ years. 1/3 of the training takes place at the college, 2/3 in the company.

COMMERCIAL TRAINING

Training takes four years and begins with either 38 or 76 weeks at the college. The programmes are divided into three areas:

- Kontor (Clerical work)
- Detail (Retail trade)
- Engros (Wholesale trade)

There are 7 main programmes in all under the three areas.

CERTIFICATION AND QUALIFICATION

The VET programmes conclude with a journeyman's test. 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 is ready for work.

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 young people between 17 and 21. The participants are offered basic vocational training if their situation is unsatisfactory in terms of unemployment. The purpose is to improve the vocational and personal qualifications of the individual and inspire for entering the labour market or pursuing training possibilities.

Training under this programme is fulltime, lasts for 2 years in average, and consists of 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 being fully identical with a given programme. Each training period should be concluded as an individual training element which may be accredited for other training programmes. This implies that a statement should be 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 under 25 who have not completed a youth education or find it difficult to see a way forward in further education or at the labour market. The overall purpose is to help clarify the individual's future career path, and individual guidance is provided on a day-to-day basis.

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

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

Participation in training at a school of production is limited to one year or shorter. The schools are independent institutions but receive funding from 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 are a number of post-secondary non-tertiary educational programmes called korte videregående uddannelser - KVU (short cycle higher education programmes). They last in average 2 to 2½ years and take place at vocational colleges. Admission requires completion of an upper secondary education programme or a relevant VET programme. The number of students has increased over the years. In 2002, there were 20 189 students enrolled, compared to 12 292 in 1990.

The programmes cover the following general fields:

- agriculture
- textiles
- clothing and design
- food industry
- hotel and tourism
- finance
- construction
- technology and energy
- IT and electronics
- industrial production
- laboratory technicians
- IT and communication
- retail trade
- international marketing
- computer specialist
- transport logistics

The programmes are state-financed and entirely school-based. They conclude with an examination and a thesis prepared in groups. The thesis must take its point of departure in a real company case.

The Ministry of Education is overall responsible for the programmes, and the social partners are represented in the Erhvervsakademirådet (Vocational Academy Council) which has the aim to ensure coherence between programmes and skills demanded by the labour market.

0407 - VOCATIONAL EDUCATION AND TRAINING AT TERTIARY LEVEL ADULT VOCATIONALLY ORIENTED EDUCATION

The possibilities for tertiary education outside the university are limited. Programmes for adults with work experience are offered by open universities, and Master and Diploma programmes are offered by the universities and open to any person having completed a VET programme or an upper secondary education. The pathway to a master level has three steps, first a further adult education programme (lasting for two years) must be completed, then a diploma programme (further two years) must be completed, and finally, the master programme may be completed (a further two years). The student may opt out at any step. The programmes are fee-based.

05 - CONTINUING VOCATIONAL EDUCATION AND TRAINING FOR ADULTS

0501 - BACKGROUND AND MAIN TYPES OF CONTINUING VOCATIONAL EDUCATION AND TRAINING FOR ADULTS

The main type of continuing vocational education and training for adults is arbejdsmarkedsuddannelse – AMU (hereinafter called CVT programmes). The programmes are important to lifelong learning and contribute to creating 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, got the possibility to improve their employment prospects in the new manufacturing business. In the 1970s and 80s, the employment rate was high and the 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.

The providers of the programmes, AMU Center (hereinafter called CVT centres), are locally based due to the fact that the success of the CVT programmes depends on a close cooperation between local enterprises and training institutions, and that the programmes are adapted to local conditions.

In 2000, a reform was adopted, which created stronger coherence within adult education and continuing training. The reform provided a new framework of lifelong learning opportunities for adults, and gave the social partners greater responsibility in terms of prioritising and organising the CVT programmes.

The reform was followed by enhanced focus on closer dialogue between management, staff, and training institutions, and on the concept that training should be integrated with learning at the work place. The reform 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.

The CVT programmes have three aims:

1. To maintain and improve vocational skills of the individual in accordance with the needs of the labour market and the technological development,
2. To solve restructuring and adaptation problems on the labour market in the short perspective,
3. To contribute to a general lift in the qualifications on the labour market in the long perspective.

The programmes are developed and organised for low skilled and skilled workers, technicians, and the like. This includes the employed and the unemployed, 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 the CVT programmes lie several factors:

- Good financial framework and conditions
- Nationally recognised competencies
- A flexible structure
- Developing competencies to higher levels
- Continuous development of new training programmes
- Adult educational techniques which cater for acquiring practical skills
- A close interplay with the enterprises
- Quality assurance at all levels of the CVT system.

0502 - PLANNING AND ORGANISATION OF LEARNING

Denmark has a long tradition for involving the social partners in the organisation of CVT programmes. The Ministry of Education is in overall charge, and subject to its 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. Together, they meet the needs for vocational continuing training of 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 to the CVT programmes.

Uddannelsesrådet for Arbejdsmarkedetsuddannelser (council on labour market training) is the central training council responsible for the programmes. For each programme, an Efteruddannelsesudvalg (CVT committee) is set up consisting of social partner representatives. The social partners thereby play an important role in the management, priority setting, development, organisation and quality assurance of the programmes.

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

The CVT programmes provide the participants with qualifications and competencies that are directly applicable at 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 at the end of the programme. 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
- The aims and objectives of the CVT programme

- The 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 have the overall responsibility for providing adequate training according to the individual training plans and ensuring that the aims and objectives are met with. The teacher is the main person in charge of this.

Participation in adult learning has risen by approx. 36 per cent from 1993 to 1996. The CVT programmes are financed wholly or partly by the State, with a modest user payment as supplement.

0503 - DELIVERY MECHANISMS AND PROVIDERS

The CVT programmes basically reflect a labour market need for skilled persons and qualifications as experienced at a particular time and in the immediate future. The programmes are therefore of a relatively short duration and are oriented towards groups of people, not just one or two students/employees.

By far the majority of adult education and continuing training is provided free of charge and is financed from taxes although industry now shares the responsibility for both provision and funding of continuing and further education and training for adults in employment.

The aim of the programmes is to provide employees with new skills and qualifications to perform a specific job function, and the programme focus on:

- Specific qualifications, e.g. crafts, technical insight and knowledge of materials
- General qualifications, e.g. working environment, IT, languages
- Personal qualifications, e.g. responsibility, independence and ability to cooperate.

A large majority of the training programmes provides the participants with competencies to continue at higher training levels within a sector. Many training programmes are also recognised by other basic vocational education and training programmes. This means that adults wishing to graduate as skilled workers can have their period of training shortened.

The duration of the CVT programmes varies and may be between one day and up to 6 weeks. Most of the training provided has a vocational content which is directly targeted at one or several sectors and trades. But there are also qualifying training courses of a more general nature which can be applied across sectors and trades. Sector-oriented vocational training comprises e.g. transport, social and health, iron and metal, trade and service etc.

A special variant is integrated and long-term courses for refugees and immigrants. These courses include teaching in the Danish language as an integrated part of the vocational training.

PROVIDERS

The main providers of CVT courses are labour market training institutions. These institutions often share localities with technical and commercial colleges, but they are autonomous in how they structure their courses and in the determination of content.

0504 - ACCESS TO LEARNING OPPORTUNITIES AND PROGRAMMES

The aims and objectives of the programmes are described in training plans setting out clearly what the participants should achieve during the programme. The plans provide a flexible framework for training, e.g. with open workshop training and distance courses.

Within the different sectors, it is common that training plans form part of an overall training structure that enables adults in the labour market to participate in basic courses and then move on to more specialised training courses. In some sectors, the training structure is developed in such a way that it is possible to acquire the same level as a skilled worker through a CVT programme. This applies, for instance, to building caretakers, abattoir workers, gardeners, assistants in laundries, and drivers and warehouse workers. CVT training may therefore be composed of courses lasting up to one year and include elements from other programmes than CVT, for example from general adult education and vocational education and training programmes.

FINANCIAL SUPPORT FOR EMPLOYERS

A fund, Arbejdsmarkedets Uddannelsesfinansiering - AUF (the Labour Market Training Fund), has been established into which all employers contribute with an amount per full-time employee. The fund provides financial support to companies when the employees participate in CVT. The fund is governed by the social partners and makes recommendations to the Ministers of Labour and Education on the general need for education and training and the expenditure entailed in the field of CVT.

FINANCIAL SUPPORT TO PARTICIPANTS

Participants in continued and advanced training programmes receive public financial support to cover costs of living. The support is either in the form of Statens Voksenuddannelsesstøtte – SVU (state educational support for adults – SESA) or a special allowance paid to low-skilled workers. The special allowance for participation in vocationally oriented adult education and training, including CVT, supports adults who participate in these programmes as a compensation for loss of earnings or job opportunity.

SESA supports two types of training:

- Participation in general adult education at lower and upper secondary level. Support for this type of general education can only be granted to persons with a low level of educational attainment.
- Participation in education at short, medium or long cycle higher education levels.

0505 - BRIDGING INITIAL AND POST INITIAL EDUCATION AND TRAINING

In Denmark, the training system is designed for all individuals to access initial and further training at any time throughout their life. Efforts are therefore made throughout the educational system to provide training that matches individual and labour market needs.

In particular, efforts have long been made to minimise the number of drop-outs among young people in initial education (around 25 per cent in 2003) . Reforms have been implemented to provide more and better guidance and help the young people choose the educational pathway by initiating bridging activities between lower secondary and upper secondary education.

The initiatives were:

- **Bridge-building courses** for young people under 19 who have completed compulsory education but are in doubt about their further educational pathway. The courses combine guidance and teaching with the possibility for practical experience. The course may last for up to one year.
- **Basic vocational training** combines theoretical instruction and practical work, and aims at motivating less academically oriented young people to enrol for a VET programme. The course lasts for 2 years and individual training plans are prepared for all participants.
- **Vocational preparation courses** are offered by *produktionskoler* (production schools) for young unemployed under 25 with a low level of educational attainment. The course consists of practical work and production completed with theoretical education. In addition to the practical instruction, the participants are offered intensive educational and vocational guidance. It is the aim to strengthen the personal development of the participants and to improve their possibilities in the education system as well as in the labour market. There is free intake to the production schools and the courses may last for up to one year. Most production schools are self-governing and receive public funding.

As from 1996, all young unemployed must start on an educational programme after 6 months' of unemployment. The person may choose from:

- Ordinary education and training programmes.
- Specific 18-months educational programmes offered at vocational colleges and CVT centres which qualify for further education or employment.
- Courses at production schools, *daghøjskoler* (non-residential folk high schools, providing education in general subjects), *højskoler* (folk high schools, often residential) etc.

The public employment service must approve of the young person's choice to make sure that the education fulfils the needs of the labour market and the individual.

A credit transfer system ensures that parts of one educational programme may be used in another educational programme. Practical work experience may also be transferred.

0506 - RE-EDUCATION AND RE-TRAINING NEEDS DUE TO LABOUR MARKET DEVELOPMENTS AND MOBILITY

The CVT programmes form the basis for re-education and re-training. Please refer to headings 0501-0504 for a description of the administrative system and involvement of the social partners in the offer and demand of CVT programmes.

06 - TRAINING VET TEACHERS AND TRAINERS

See heading 0602.

0601 - GENERAL BACKGROUND

The vocational colleges are highly independent in the recruiting of staff and in the introduction of new technologies. The reforms undertaken in the past 3-4 years has put new requirements as to teaching methods and pedagogical concepts, and these challenges have mainly been dealt with at the individual colleges. The normal process when new concepts and methods are introduced is that the Ministry of Education allocates money to research and development projects in the fields prior to implementation, and relevant material, articles and case studies are thus available to the colleges to use in the dealing with the new challenges.

In order to ensure that teachers have pedagogical skills, all new teachers must pass basic training for teachers (Pædagogisk Grunduddannelse) during the first year of employment at a vocational college. Training lasts for six

months and is provided for by law. In order to teach specialist workers in CVT, all teachers must pass basic training for adult teachers at this level (Voksenpædagogisk Grunduddannelse). This is also provided for by law.

Moreover, teachers are requested to possess a computer driving licence regardless of the educational level, at which they teach. This is not a legally based request but money has been allocated for training courses for teachers in this respect.

0602 - TRAINING OF TEACHERS/TRAINERS IN EDUCATIONAL ESTABLISHMENTS

The individual colleges and educational establishments are in charge of recruiting qualified staff. However, there are some requirements to the formal qualifications of teachers at vocational colleges:

- Teachers in VET programmes must have a B.A. degree or equivalent, but practical work experience is highly valued.
- Teachers in vocationally oriented upper secondary education must have a *candidatus* degree from a university or higher education institution.

The teachers in vocational colleges and CVT centres 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.

This implies that teachers must be specialised in the subjects they teach. Furthermore, teachers with no pedagogical training must complete a *pædagogikum*, a pedagogical teacher training course during the first two years of employment. The course lasts for approx. 500 hours and ends with an examination.

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

Trainers in companies must be master craftsmen, i.e. have a journeyman's certificate. There are no requirements as to pedagogical training.

The statistics requested in this heading is not available as both academics and master craftsmen may undertake teaching.

0603 - TRAINING OF TRAINERS/TEACHERS AT THE WORKPLACE (APPRENTICESHIP TRAINING AND CVET IN ENTERPRISES)

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.

0604 - TRAINING OF TEACHERS AND TRAINERS IN CONTINUING EDUCATION AND TRAINING (OUTSIDE ENTERPRISES)

See heading 0602.

07 - SKILLS AND COMPETENCE DEVELOPMENT AND INNOVATIVE PEDAGOGY

0701 - MECHANISMS FOR THE ANTICIPATION OF SKILL NEEDS

In Denmark, general and professional 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 offers to the students are a limited number of fixed programmes often with some optional variations. In a growing number, the students change programmes, combine them and want to mix and have supplementary elements not available in the ordinary framework. As some combinations are not available, students make detours and switch programmes at the cost of their motivation, their own time and the resources in the educational system.

A number of initiatives have therefore been taken to bridge pathways between the different types and levels of education, which should also increase the number of students fulfilling a youth education.

The aim is that 95 per cent of an age cohort complete a general upper secondary education, a VET programme or gain similar qualifications through the CVT system. Today, approximately 95 per cent of school leavers from the folkeskole continue in upper secondary education. The aim should be seen in relation to the VET system as such where also adults in CVT are included. It is also a political aim that 50 per cent of an age cohort continues into higher education (either short cycle, medium cycle or long cycle higher education).

The mechanisms should also support the government's handicap policy whereby specific efforts should be made to make sure that people with special needs are not excluded from society, be it education or work.

The initiatives are:

- Modular curriculum offering well-defined units,
- Substitution of limited number of fixed standard programmes with personal training plans,
- Change from classroom teaching to tutoring for the purpose of developing the personal competencies of the 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 becomes more transparent and flexible, and it is thus easier for the educational institutions to give credit for prior learning.

0703 - RENEWAL OF CURRICULA

The trade committees for each vocational training programme and CVT programme decide in cooperation with the Ministry of Education on the curriculum for the given programme. They submit recommendations to the renewal of the curriculum so that the programmes are in line with the demands of industry, based on qualification analyses and in-depth knowledge of the field in question. If they see a need for changes, the recommendation 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.

From July 2003, a new advisory structure was introduced. Rådet for de grundlæggende erhvervsrettede uddannelser – REU (Advisory Council for Initial Vocational Education and Training) provides advice to the Minister of Education on educational matters.

In order to provide the students with personal competencies that are indeed very valuable in a changing society, the vocational colleges now put focus on learning instead of teaching. Among others, the 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 difficult to give a grade. The professional qualifications are at the same time acquired.

The personal educational plan is formulated by a teacher/guidance counsellor and the individual student in community. The student must take responsibility for own learning and education, and the achievements are assessed regularly.

08 - ACCUMULATING, TRANSFERRING AND VALIDATING LEARNING

0801 - VALIDATION OF FORMAL LEARNING: GENERAL CONCEPTS AND SCHEMES

Grundlæggende erhvervsuddannelse – EUD (initial vocational education and training) comprises education and training programmes at upper secondary level (post-16). Training is aimed at a specific profession or job and is part of the youth education system. Training at this level is, however, also aimed at adults in the form of Voksenerhvervsuddannelse - VEUD (adult vocational training). The education is general and not aimed at a specific profession or job, and are offered to adults with a low educational attainment.

For both training programmes it applies that after having completed the training programme, the trainee receives the journeyman's certificate. The certificate consists of evaluations from the employer and of marks obtained at examinations held at the college, as well as any other assessment made during the programme.

For each training period, be it at college or in the company, there are specific requirements as to what should be achieved and at which level. These requirements are set out in the executive order for the training programme in question. Both the college and the company are therefore heavily involved in the assessment process in that they assess the skills of the trainee whenever he/she returns from a training period by the other party. If the expected skills are not achieved, action can be taken to improve the trainee's process in this respect.

The final journeyman's certificate is set up by the social partners and the trainee is examined by relevant teachers and representatives from the profession in question.

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

Prior education and work experience are accredited for further education, and the duration of a programme may thus be shortened. This mainly applies to adults enrolled in a basic adult education programme. The participants' competencies are assessed by a guidance counsellor so that a personal training plan can be drawn up, listing the skills to be achieved by the participant. The programmes are thus tailor-made to the individual. The programme is offered on a part-time basis and the participants may continue their professional activities during the programme. The programme is not alternance-based.

The training plan serves as an evaluation tool for the teacher/guidance counsellor, as an educational pathway to the individual and as a form of certification although a final certificate is issued.

Arbejdsmarkedsuddannelser – AMU (continuing vocational training – CVT) also carry out an individual competence assessment in order to draft the personal training to be offered to the participant. The programmes are offered at three advanced levels and are special education programmes for adults. Relevant work experience is part of the entrance requirements but it is not recognised as a part of the training programme.

The aim of the three advanced levels is to further develop adults' job competencies and allow for a progression in professional competence rather than progression in study competence. The programmes may be studies in depth or in breadth, i.e. vocational specialisation either within or outside the participant's own vocational field. The programmes last between one day and three weeks. Vocational guidance is offered and skills and qualifications may be tested in workshops during the programme.

Please refer to heading 05 for more information on the CVT programmes.

09 - GUIDANCE AND COUNSELLING FOR LEARNING, CAREER AND EMPLOYMENT

0901 - STRATEGY AND PROVISION

The Act on Educational and Vocational Guidance provides the regulatory framework for guidance in vocational education. The Act was passed in April 2003 with effect from 1 August 2004. A new national guidance structure is thus implemented as from August 2004.

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 levels: the municipal level and the national level, 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).

The responsibility for guidance on higher education and vocational guidance lies with Landscenter for Uddannelses- og Erhvervsvejledning – LUE (a national council for education and vocational guidance). It has evidently been necessary to establish regional centres to provide the guidance.

On top of this, a virtual guidance portal is established on the Internet for young people, and a national forum for dialogue for guidance is established for relevant authorities, institutions and organisations.

Furthermore, a national guidance counsellor programme has replaced the manifold guidance counsellor programmes that previously existed which should also be seen as a means to ensure that uniform guidance is provided throughout the country. A reform is moreover planned on guidance on education and training 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 hopefully also reduces 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 the guidance providers.

0902 - TARGET GROUPS AND MODES OF DELIVERY

As the reform has only been recently implemented, the methods and means of guidance to be used are not definitively set out. But anyone addressing him- or herself to a guidance centre should be given individual advice, regardless of their educational or professional background. The purpose of the reform is to provide guidance on e.g. local employment possibilities or further education, and the starting point of the person seeking guidance is at any time taken seriously.

More information on the reform can be found on the Ministry of Education's website www.uvm.dk

0903 - GUIDANCE AND COUNSELLING PERSONNEL

The 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 new reform introduces a national guidance counsellor programme which replaces a number of programmes previously provided by various organisations and guidance establishments. The details for requirements and skills to be achieved are therefore not available at the moment.

10 - FINANCING - INVESTMENT IN HUMAN RESOURCES

1001 - BACKGROUND INFORMATION CONCERNING FINANCING ARRANGEMENTS FOR TRAINING

It is a fundamental principle in Denmark that education is provided and financed by the state. The exceptions to the rule are the few programmes in higher education and CVT that are partly user paid.

In vocational education and training, the vocational colleges are financed by the state according to a taximeter system where every passed student generates financial support. The colleges are thereby relatively autonomous in financial and administrative matters.

As described elsewhere, the apprentices are paid an apprenticeship salary during the vocational training programme. The rate of the salary is determined by collective bargaining between the social partners. During instruction at the college, the apprentices also get their salary, but the employer is compensated for his loss of manpower by Arbejdsgivernes Elevrefusion – AER (the Employers' Reimbursement Scheme). All employers pay a

certain amount into the scheme in order to spread out the cost of training so that employers who have no apprentices also pay for future labour. The scheme was set up by law in 1977. In 2001, the fund collected a total of DKK 2950 m (EUR 398 m). Approx. 85,000 apprentices are on contract with a training enterprise, and the total fund from enterprises is DKK 8 billion in 2002 (EUR 1.06 million).

CVT and basic adult education also enjoy state funding supplemented by user payment. The reason for this is that no person should be restrained from further education due to financial reasons. Economic barriers are thus removed for participating in adult learning.

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 the alternance models which means that training takes place at college and in a company in turns. The state finances training at colleges, and the companies finance the 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 Arbejdsgivernes Elevrefusion - AER (the Employers' Reimbursement Scheme) 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.

Total state expenditure on education and training rose from DKK 86.3 billion (EUR 11.5 million) in 1992 to DKK 110.9 billion (EUR 14.8 million) in 2002, corresponding to an increase of approximately 28 per cent. Teaching costs for IVET (basic and main programmes) amount to DKK 2.6 billion (EUR 346 million) in 2002. The average annual costs per student was around DKK 41 300 (EUR 5506) for the commercial programmes, whereas students at technical programmes cost DKK 63 100 (EUR 8413). Source: Ministry of Education: Tal der taler 2003.

Students in other types of youth education may receive a grant from *Statens Uddannelsesstøtte – SU* (State Educational Grant), but the exact amount depends on the income of the parents, the students' 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

CVT activities, including the operating expenses of the CVT centres, are financed through arbejdsmarkedsbidrag (labour market contribution) where a special tax of 8 per cent is levied on all employed people. Total public expenditure on CVT were DKK 6.5 billion (EUR 866 million) in 2001 (latest figure available).

Participants in CVT programmes normally pay a user fee, but the courses are free of charge for participants who are entitled to voksen- og efteruddannelsesgodtgørelse – VEU-godtgørelse, i.e. a financial compensation corresponding to the unemployment benefit. The compensation is paid to employed people receiving continuing vocational training and to unemployed people. Companies often supplement the financial compensation. In addition, participants may 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 vocational education and training, but the social partners have a considerable influence on the content of the VET courses. Vocational education and training 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). 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.

The Council on Open Education and the Council for Adult Education should also be mentioned, as should a cross-ministerial committee on adult and continuing training which was introduced as part of the 1996 CVET reform. The social partners are, as mentioned, represented in this system.

PUBLICLY-PROVIDED CVET

The main providers are the AMU centres, i.e. labour market training centres. The 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.

The state bears the cost for education and training, and expenditure on CVT accounted for .

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

Public expenditure on CVET in DKK million (EUR)

PUBLIC EXPENDITURE (2001 PRICES)	1995	1998	2001
DAY FOLK HIGH SCHOOLS	656 (87)	772 (103)	415 (55)

LABOUR MARKET TRAINING (AMU)	1969 (263)	2488 (332)	1377 (184)
FOLK HIGH SCHOOLS	678 (90)	571 (76)	514 (68)
GENERAL ADULT EDUCATION (VUC)	1129 (150)	1208 (161)	987 (132)
OPEN EDUCATION	964 (129)	1152 (154)	757 (101)
ADULT VOCATIONAL TRAINING (VEUD)	21 (2.8)	18 (2.4)	22 (3)
HOME ECONOMICS AND TEXTILE DESIGN SCHOOLS	93 (12)	75 (10)	80 (11)
DANISH AS A SECOND LANGUAGE	443 (59)	718 (96)	1048 (140)
SPECIAL EDUCATION FOR ADULTS	583 (78)	638 (85)	693 (92)
READING COURSES FOR ADULTS	-	35 (4.6)	3 (0.4)
FVU (ADULT BASIC SCHOOLING)	-	-	37 (5)
EVENING SCHOOLS (LIBERAL ADULT EDUCATION)	510 (68)	493 (66)	498 (66)
DK MARITIME AUTHORITY COURSES	-	7 (0.9)	5 (0.6)
MIN. OF CULTURAL AFFAIRS COURSES			15 (2)
COURSES FOR FARMERS			4 (0.5)
TOTAL	7046 (938.8)	8202 (1090.9)	6453 (860.5)

EXPENSES FOR CONTINUED EDUCATION AND TRAINING IN DKK (EUR)			
	2001	2002	2003*
PRIVATE SECTOR	DKK 3.7 billion	DKK 4.9 billion	DKK 5.9 billion

	EUR 493 m	EUR 653 m	EUR 786 m
PUBLIC SECTOR	DKK 2.8 billion	DKK 3.3 billion	DKK 3.3 billion
	EUR 373 m	EUR 44 m	EUR 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 user payment, i.e. tuition fees. Yet another factor is that still more courses are offered to top and middle managers, and still more courses are tailor-made to the needs of a particular enterprise.

This implies that in terms of amount of people employed in the private sector (1.7 million), the average cost for CVET amounts to DKK 2900 (EUR 387) per employee. In the public sector (1 million employees), the amount is DKK 3400 (EUR 453) per employee. Approximately 50 per cent of the total labour force participates in some form of continuing education and training each year.

Cost of CVT courses as % of total labour cost (all enterprises), by type of cost (1999)			
	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 state and employers are the ones responsible for the funding of CVT. CVT activities, including the operating expenses of the CVT centres, are financed through arbejdsmarkedsbidrag (labour market contribution) where a special tax of 8 per cent is levied on all employed people. Companies further pay a user fee per participant enrolled for a course.

CVT is normally provided at local or regional level, but imbalances in the costs for CVT are regulated at central level.

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

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 recognises relevant non-formal and informal competences and – in particular – practical work experience.

In 2003, amendments were adopted in the legislation concerning the financing of adult vocational training with a view to increasing user fees in this field. This was to 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. Costs for IVET are held by the state.

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

In line with EU efforts to increase transparency in education and training and the continuous development of instruments for validation and certification of skills and competencies across borders, the Danish government

prepared a statement on the validation of real competencies in the educational system in Denmark in November 2003.

The statement aims at the recognition, validation and development of skills and competencies that have been acquired outside the formal educational system. Skills acquired at work, during courses and seminars or stays abroad, or through voluntary work, should form the basis for the continuous improvement of the individual's competencies.

The initiative is known as "realkompetencer" (real competence) because it deals with the individual's actual abilities and know-how. It aims at ensuring 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 or in deciding on a reduced curriculum.

The scale for recognition remains the present and established standards in the educational system, such as the journeyman's certificate, the upper secondary school leaving certificate, the bachelor's degree or other diploma from higher education institutions.

The core objective is that all citizens should have their skills and competencies assessed and validated, if they so wish. This form of individual assessment of real competencies already takes place in labour market training (i.e. to be admitted to the so-called 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 for the assessment ensure a reliable measurement of the individual's skills and competencies. It is undertaken by competent staff at the relevant school or educational institution as is the case today, 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 significant for the recognition in the educational system and at 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, authorities, the social partners, and companies.

1102 - IMPACT OF EUROPEANISATION/INTERNATIONALISATION ON EDUCATION AND TRAINING

Internationalisation of education and training has a high priority in educational policy. In 2000, the Ministry of Education established Center for Information og Rådgivning om Internationale Uddannelses- og Samarbejdsaktiviteter - CIRIUS (the Danish Centre for International Cooperation and Mobility in Education and Training) to strengthen the internationalisation of Danish education and training and be the knowledge centre in the field. As from 1.1.2005, CIRIUS merges with Danish Center for Assessment of Foreign Qualifications, and all international activities emanating from international relations are thereby handled by one organisation. The merger underlines the stress put on internationalisation of education and training in by the Danish government.

The merger will improve the transparency of the educational system, in particular in terms to other countries, and thereby ease the transnational accreditation of skills at any level in the educational system. This is well in line with the general strategies in the educational sector on lifelong learning, employment etc.

Internationalisation is seen as a prerogative of being able to interact in the modern world. The objectives are to enhance internationalisation at educational establishments and to increase mobility among trainees, students and researchers, etc.

The statement on real competence is very important to vocational education and training. Skills acquired during stays abroad are increasingly taken into account in a lifelong learning perspective, and tools will now emerge for the assessment of the so-called soft qualifications (eg. cooperation skills).

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