

# Denmark

## VET in Europe - Country Report

2009

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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 context - framework for the knowledge society
2. Policy development - objectives, frameworks, mechanisms, priorities
3. Legislative and Institutional framework - provision of learning opportunities
4. Initial vocational education and training
5. Continuing vocational education and training for adults
6. Training VET teachers and trainers
7. Matching VET provision with labour market needs
8. Guidance and counselling for learning, career and employment
9. Financing - investment in human resources
10. National VET statistics - allocation of programmes

This overview has been prepared in 2009 and its reference year is 2008. Similar overviews of previous years can be viewed at:

<http://www.cedefop.europa.eu/EN/Information-services/browse-national-vet-systems.aspx>

More detailed thematic information on the VET systems of the EU can also be found at:  
<http://www.cedefop.europa.eu/EN/Information-services/detailed-thematic-analyses.aspx>

**Keywords:**

vocational education and training (VET) systems; initial vocational training; continuing vocational training; lifelong learning; VET policy development; financial crisis and VET policies; VET legislative and institutional frameworks; validation of non-formal and informal education; teachers and trainers; anticipation of skill needs; vocational guidance and counselling; VET financing mechanisms; allocation of national VET programmes; national and international qualification systems.

**Geographic term:**

Denmark

## TABLE OF CONTENTS

<b>1. GENERAL CONTEXT - FRAMEWORK FOR THE KNOWLEDGE SOCIETY.....</b>	<b>6</b>
1.1 Political And Socio- Economic Context.....	6
1.2 Population And Demographics .....	6
1.3 Economy And Labour Market Indicators.....	8
1.4 Educational Attainment Of Population.....	9
<b>2. POLICY DEVELOPMENT - OBJECTIVES, FRAMEWORKS, MECHANISMS, PRIORITIES .....</b>	<b>13</b>
2.1 Objectives And Priorities Of The National Policy Development Areas Of Vet .....	13
2.2 The Latest Developments In The Field Of European Tools.....	16
<b>3. LEGISLATIVE AND INSTITUTIONAL FRAMEWORK - PROVISION OF LEARNING OPPORTUNITIES .....</b>	<b>18</b>
3.1 Legislative Framework For Vocational Education And Training.....	18
3.2 Institutional Framework: IVET.....	19
3.3 Legislative Framework: CVET.....	20
3.4 Institutional Framework: CVET .....	20
<b>4. INITIAL VOCATIONAL EDUCATION AND TRAINING .....</b>	<b>21</b>
4.1 Background To The IVET System And Diagram Of The Education And Training System.....	21
4.2 IVET At Lower Secondary Level .....	23
4.3 IVET At Upper Secondary Level (School-Based And Alternance) .....	23
4.4 Apprenticeship Training .....	24
4.5 Other Youth Programmes And Alternative Pathways .....	27
4.6 Vocational Education And Training At Post-Secondary (Non Tertiary) Level.....	28
4.7 Vocational Education And Training At Tertiary Level.....	28
<b>5. CONTINUING VOCATIONAL EDUCATION AND TRAINING FOR ADULTS .....</b>	<b>29</b>
5.1 Formal Education And .....	29
5.2 Non-Formal Education .....	29
5.3 Measures To Help Job-Seekers And People Vulnerable To Exclusion From The Labour Market.....	33

<b>6.</b>	<b>TRAINING VET TEACHERS AND TRAINERS .....</b>	<b>34</b>
6.1	Types Of Teacher And Trainer Occupations In VET .....	34
6.2	Types Of Teachers And Trainers In IVET .....	35
6.3	Types Of Teachers And Trainers In CVET.....	36
<b>7.</b>	<b>MATCHING VET PROVISION WITH LABOUR MARKET NEEDS .....</b>	<b>37</b>
7.1	Systems And Mechanisms For The Anticipation Of Skill Needs .....	37
7.2	Practices To Match VET Provision With Skill Needs .....	37
<b>8.</b>	<b>GUIDANCE AND COUNSELLING FOR LEARNING, CAREER AND EMPLOYMENT .....</b>	<b>39</b>
8.1	Strategy And Provision.....	39
8.2	Target Groups And Modes Of Delivery .....	39
8.3	Guidance And Counselling Personnel.....	40
<b>9.</b>	<b>FINANCING: INVESTMENT IN HUMAN RESOURCES .....</b>	<b>42</b>
9.1	Funding For Initial Vocational Education And Training .....	42
9.2	Funding For Continuing Vocational Education And Training, And Adult Learning..	42
9.3	Funding For Training For Unemployed People And Other Groups Excluded From The Labour Market.....	43
9.4	General Funding Arrangements And Mechanisms.....	44
<b>10.</b>	<b>NATIONAL VET STATISTICS - ALLOCATION OF PROGRAMMES .....</b>	<b>46</b>
10.1	Classification Of National VET Programmes .....	46
10.2	Fields Of Education And Training .....	47
10.3	Links Between National Qualifications And International Qualifications Or Classifications.....	47
<b>11</b>	<b>AUTHORS, SOURCES, BIBLIOGRAPHY, ACRONYMS AND ABBREVIATIONS.....</b>	<b>48</b>

## 1. GENERAL CONTEXT - FRAMEWORK FOR THE KNOWLEDGE SOCIETY

### 1.1 POLITICAL AND SOCIO- ECONOMIC CONTEXT

The Kingdom of Denmark constitutes Denmark, the Faroe 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 10<sup>th</sup> century.

The Parliament (*Folketinget*) has 179 members, including two representatives from the Faroe Islands and two from Greenland. Both Greenland and the Faroe 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.

A major reform of the administrative structure was implemented in 2007 whereby 5 regions replaced 14 counties and the number of municipalities was reduced from 275 to 98. The aim of the reform was to increase the quality of public services and make them more cost effective. There has been no change to the electoral structure, i.e. universal adult suffrage by voluntary and secret ballot. National elections are open to all Danish citizens of 18 years or over, while all adult residents are eligible to vote in local and regional elections. All voters are eligible to run for office.

The state and municipalities are responsible for levying taxes and providing social services. The main responsibility of the regions is health care provision, and in terms of education, the regions compile detailed plans for their own geographical area, whereas the state has overall responsibility for the framework and provision of education. Besides the public authorities, the social partners have major influence on VET in Denmark and pay a share of the costs of both initial and continuing VET.

On average, there are 8-10 political parties in the Parliament and the government coalition sits for up to 4 years. The current right of centre coalition was first elected in November 2001 and most recently re-elected in November 2007. Lars Løkke Rasmussen of the Liberal Party of Denmark (*Venstre*) replaced Anders Fogh Rasmussen as Prime Minister in 2009. All political parties support free access to education and training, including continuing training.

Denmark, like most other countries, is, following a longer period of growth, now experiencing an economic slowdown and recession. Whilst unemployment remains at a relatively low level historically speaking, the figures are rising rapidly almost doubling between September 2008 and September 2009 to 6.4% (Source: Eurostat). Young people have been particularly vulnerable with approximately one in ten under the age of 30 now unemployed. One explanation is that one in five has yet to embark on a course of education or training providing genuine job qualifications at a time when the demand for unskilled labour continues to fall with more and more jobs requiring qualifications and participation in courses of further education and training (Source: Politiken 04.12.2009).

### 1.2 POPULATION AND DEMOGRAPHICS

There are approximately 5.5 million inhabitants in Denmark (2009), of which 4 million live in urban areas. Denmark has a total area of 43 000 square kilometres and a coastline of 7 300 kilometres. The overall population density is 128 people per square kilometre (2009).

Denmark consists of the peninsula of Jutland and 407 islands, of which approx. 78 are inhabited (2006). Of these, the largest and most densely populated are Zealand on which the capital of Copenhagen is situated, the island of Funen, and the peninsula of Jutland. 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. The average age for women to have their first child is 30.4 years (2008) - in 2005 it was 28.9. Denmark has one of the highest fertility rates in the EU with 1.89 children per woman (1.43 EU average in 2008). One explanation for the high fertility rate is the extensive system of reasonably affordable public day care centres and Danish laws regarding maternity and paternity leave.

Nonetheless, like the rest of Europe, the Danish population is getting older. According to Statistics Denmark, a fertility rate of 2.08 is needed for the population to reproduce itself. The average age of the population in Denmark is 40.1 years in 2009 (39 years for men and 41.1 years for women). The increase in the average age is due to an increase of nearly 60% in the number of people over the age of 80. The average life expectancy is 76.3 years for men and 80.7 for women.

TABLE 1: POPULATION PROJECTIONS (2009)			
	0-24	25-64	65+
2008	1,647,977	2,974,773	853,041
2020	1,637,464	2,860,093	1,157,931
2030	1,630,863	2,792,770	1,365,841

Source: Statistics Denmark: Statistical Yearbook 2009.

The aging population means that the next two decades are expected to see a considerable increase in the number of citizens receiving public benefits and a decrease in the active workforce. The Government is therefore encouraging Danes to remain within the labour market beyond the minimum pensionable age and offering retraining initiatives to increase the attractiveness of older generations to employers.

The projected old age dependency ratio for Denmark in 2010 is 24.98%, close to the EU average of 25.9%. This figure is expected to rise sharply by 2015 to 29.09% as the large post-war cohorts reach pensionable age. The predictions for Denmark are expected to closely follow the EU average until 2035 after which the EU average is predicted to continue rising while the Danish ratio is expected to plateau at around 42%. A possible explanation for this levelling out is the relative success of governmental policy seeking to improve fertility rates through improved structures for financial support, childcare and labour market protection.

Immigration is higher than emigration (in 2008 immigration: 72,749 and emigration: 43,490), but considerably lower than neighbouring countries such as Germany and Sweden. It is, however, worth noting that almost one in three immigrants is a Danish citizen returning home after a period abroad. Similarly, Danes comprise half the total annual emigration figures. Nevertheless an increasing proportion of the population is made up of foreign immigrants and their descendants. In January 2009, this group comprised 9.5% of the Danish population. Of these, 54% originate from a European country. Turkey, Iraq and Germany are the three most common countries of origin.

Sources: Statistics Denmark: Statistical Yearbook 2009 and Eurostat.

### 1.3 ECONOMY AND LABOUR MARKET INDICATORS

The Danish economy is small and open, dependent on trade with other countries and without any possibility of significantly influencing international trading conditions or central economic factors, e.g. interest rates. GDP for 2008 was almost DKK 1 750 billion (approx. EUR 235 billion). However, despite a slight increase from the 2007 figures, in real terms, this represented a negative growth of 1.1%. This reflects the start of an economic downturn following a period of high growth. The value of both exports and imports constitutes roughly 1/3 of GDP, each with a value of approximately DKK 585 billion (approx. EUR 80 billion). Since 1987, there has, however, been a surplus on the annual balance of trade, currently equal to approx 1% of GDP. About 3/4 of foreign trade is with other EU countries and Norway. Germany is the most important bilateral trading partner, but Sweden, Great Britain, Netherlands and Norway are also of significance. Outside Europe, the US and China are the most important trade partners.

The Danish labour market is characterised by a high participation rate partly due to the high participation rate of women (76.3% and 81.8% for men). Of the total population of 5.5 million, the labour force population constituted in 2008 approximately 2.9 million. 20.9% of those of working age (16 - 64 years) are outside the labour force: many are in early retirement or represent young people enrolled in education. The unemployment rate reached its lowest for 34 years during summer 2008 but has since risen sharply as a result of the global economic downturn with gloomy forecasts, particularly for youth unemployment levels.

Source: Statistics Denmark: Statistical Yearbook 2009.

#### STATISTICAL FACTS:

SECTOR	%
PRIMARY SECTOR AND UTILITIES	3.3
MANUFACTURING	15.1
CONSTRUCTION	6.9
DISTRIBUTION AND TRANSPORT	23.6
BUSINESS AND OTHER SERVICES	19.0
NON-MARKETED SERVICES	31.8

Source: Eurostat

These figures are largely in line with the European averages with the most significant differences being a small primary sector and a very large sector consisting of non-marketed services. This can be ascribed, respectively, to the highly industrialised nature of agriculture in Denmark and an extensive public sector.

<b>TABLE 2: EMPLOYMENT RATES BY AGE GROUPS AND EDUCATIONAL ATTAINMENT LEVELS IN 2007 (%)</b>			
<b>AGE</b>	<b>15-24</b>	<b>25-49</b>	<b>50-64</b>
<b>ISCED 0-2</b>	59.6	77	56
<b>ISCED 3-4</b>	77.5	88.9	70.4
<b>ISCED 5-6</b>	76.8	91.9	78.2
<b>TOTAL</b>	65.3	86.8	67.1

Source: Eurostat

These figures, compiled prior to the global recession, represent an increase on previous years. They are also across the board higher than the EU average levels, particularly among the youngest group, where the Danish level of 65.3% compares with an EU average of 37.4%. However, it is important to remember that these figures represent a relatively small number as the majority of individuals between 15 and 24 will be in full-time education.

<b>TABLE 3: UNEMPLOYMENT RATES BY AGE GROUPS AND EDUCATIONAL ATTAINMENT LEVELS IN 2007 (%)</b>			
<b>AGE</b>	<b>15-24</b>	<b>25-49</b>	<b>50-64</b>
<b>ISCED 0-2</b>	8.8	4.6	3.6
<b>ISCED 3-4</b>	5.8	2.4	2.8
<b>ISCED 5-6</b>	-	3	2.9 (u)
<b>TOTAL</b>	7.9	3.1	3.1

(u): unreliable or uncertain data

Source: Eurostat

Again, these figures represent a fall in unemployment rates since 2005 and are considerably lower than the EU average. However, as mentioned in section 0101, Danish unemployment levels, particularly among young people, have since risen sharply.

The figures for public expenditure at secondary and post-secondary non-tertiary levels of education reveal that Denmark spends a proportion of GDP (3%) well above the EU average (2.3%); source: Eurostat 2005. Figures are not available for how this money is split between different types of education.

#### **1.4 EDUCATIONAL ATTAINMENT OF POPULATION**

The following figures should be viewed in the context of the Danish government's stated goal that, in 2015, 95% of a youth cohort should complete a youth education and 50% a higher education. It is therefore to be noted that, following a long period with a steadily increasing level of education, the most recent figures exhibit a downward trend. Figures from the EU Labour Force Survey as well as the most recent extrapolations conducted by the Danish Centre of Statistical Analysis clearly display this tendency, with long-cycle higher education the only area bucking the trend with significant increases.

TABLE 1: PERCENTAGE OF THE POPULATION AGED 18 TO 24 YEARS WITH, AT MOST, LOWER SECONDARY EDUCATION AND NOT IN FURTHER EDUCATION OR TRAINING					
DENMARK					
2002	2003	2004	2005	2006	2007
8.6%	10.3% (b)	8.5%	8.5%	10.9%	12.4% (b)

(b) = Break in series

Source: Eurostat

The percentage of the population aged 18 to 24 years with at most lower secondary education and not in further education or training rose in 2007 to 12.4% from 8.5% in 2005 (Eurostat). While this figure remains below the European average, the rise can be seen as a failure in light of the 95% policy objective. The change is likely exaggerated by a change in the method of compilation, but, as a considerable rise also occurred in 2006, it would nevertheless seem fair to assume that the levels have risen. One possible explanation may be the extremely low unemployment rates during this period. With a demand for manpower within all areas, it has been easier for young people to find work without skills or qualifications. This may have led some to delay education and training, attracted by the opportunity to earn some money. With the recession and rapidly rising unemployment, it will be interesting to see whether the figures have fallen again since 2007 as young people seek the greater security qualifications can provide.

Figures for the percentage of the population 20-24 to have completed at least upper-secondary education provide a little more detail on the problems. Once again, a change in the method of compiling the national statistics prevents a true analysis of the national developments with the figures for 2005 representing a slight fall in relation to 2002. However, the 2007 figure of 70.8% is well below the European average of 78.1% which may reflect the tendency for young Danes to hold breaks during their journey through the educational system and to frequently switch between different upper-secondary programmes. The figures also show significant differences between males and females: while 77.7% of females aged 20-24 have completed an upper-secondary programme, the corresponding figure for their male contemporaries is just 64.2% (Eurostat). The problems with drop-out within many of the male-dominated areas of upper-secondary VET can be part of the explanation for the discrepancy: a problem often exacerbated by difficulties in finding a training placement within an enterprise which is required to complete the vast majority of VET programmes within the Danish dual system.

TABLE 2: GRADUATES IN ISCED 3-6 BY FIELD OF EDUCATION AND SEX IN 2006			
SEX	ISCED 3VPV	ISCED 4VPV	ISCED 5-6
MALE	27,341	425	19,971
FEMALE	35,073	1,472	27,568
TOTAL	62,414	1,897	47,539

Source: Eurostat

These figures are very similar to the numbers from 2004. The two most striking characteristics are the extent to which females dominate all levels of education from upper secondary onwards, and the extremely small number of graduates within post-

secondary non-tertiary education. Females considerably outnumber males at the tertiary level throughout Europe; however this is not generally true at the upper-secondary level. These figures should be considered alongside the low figures above for the percentage of young males who have completed an upper-secondary programme. With regard to the small number of graduates within the post-secondary non-tertiary sector, this sector was first introduced in Denmark with a major reform in 2000 and remains small - as recently as 2002, there were no graduates at this level.

<b>TABLE 3: EXTRAPOLATED OVERALL EDUCATIONAL PROFILE OF A YEAR GROUP, BY LEVEL OF EDUCATION AND COMPETENCY - 1995, 2000 AND 2005</b>			
<b>COMPLETING BASIC SCHOOLING IN</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>
<b>PROPORTION OF YOUTH COHORT WITH A YOUTH EDUCATION (%)</b>			
<b>YOUTH EDUCATION</b>	82.1	83.6	81.2
<b>UPPER SECONDARY EDUCATION</b>	51.9	52.2	53.3
<b>VOCATIONALLY ORIENTED EDUCATION AND TRAINING</b>	43.3	43.6	37.6
<b>- OF THIS BOTH VOCATIONAL AND GENERAL QUALIFICATIONS</b>	13.1	12.2	9.7
<b>PROPORTION WITH HIGHER EDUCATION WITHOUT YOUTH EDUCATION</b>	3.0	3.9	4.0
<b>AT LEAST A YOUTH EDUCATION</b>	85.1	87.5	85.3
<b>FINAL EDUCATIONAL QUALIFICATIONS (%)</b>			
<b>WITH VOCATIONAL QUALIFICATIONS</b>	74.2	80.0	76.1
<b>VOCATIONALLY ORIENTED EDUCATION AND TRAINING</b>	36.8	35.2	32.6
<b>COMMERCIAL EDUCATION</b>	12.3	10.3	8.2
<b>TECHNICAL EDUCATION</b>	17.1	18.8	16.8
<b>SOCIAL &amp; HEALTH EDUCATION ETC.</b>	7.4	6.1	7.6
<b>HIGHER EDUCATION</b>	37.4	44.8	43.5
<b>SHORT-CYCLE HIGHER EDUCATION</b>	5.9	8.8	5.6
<b>MEDIUM-CYCLE HIGHER EDUCATION*</b>	23.0	23.4	22.9
<b>LONG-CYCLE HIGHER EDUCATION</b>	8.5	12.6	15.0
<b>WITHOUT VOCATIONAL QUALIFICATIONS</b>	25.8	20.1	23.9
<b>ONLY STUDY QUALIFICATIONS (UPPER SECONDARY EDUCATION)</b>	10.9	7.6	9.2
<b>DIRECTLY FROM BASIC SCHOOL</b>	6.2	2.8	4.6
<b>AFTER DISCONTINUED EDUCATION</b>	8.7	9.7	10.1

\*Medium-cycle higher education includes: professional bachelors, university bachelors and other medium-cycle higher education programmes (such as building technicians, etc.)  
Source: Facts and Figures 2007, Danish Ministry of Education, 2008.

<b>TABLE 4: LIFE-LONG LEARNING (ADULT PARTICIPATION IN EDUCATION AND TRAINING). POPULATION AGED 25-64 PARTICIPATING IN EDUCATION AND TRAINING OVER THE FOUR WEEKS PRIOR TO THE SURVEY (%)</b>			
<b>SEX</b>	<b>2002</b>	<b>2005</b>	<b>2007</b>
<b>MALE</b>	15.6	23.6	24.2
<b>FEMALE</b>	20.5	31.2	34.2
<b>TOTAL</b>	18	27.4	29.2

*Source: Eurostat*

These figures place Denmark well above the European averages (9.5% in total for 2007) and second only to neighbouring Sweden. This reflects a number of conditions such as the national strategy to focus on knowledge intensive specialist sectors and lifelong learning, a large public sector and a tradition for strong ties between enterprises, educational institutions and the social partners. After a dramatic expansion in adult training between 2002 and 2005, the latest figures continue to show a steady growth.

## 2. POLICY DEVELOPMENT - OBJECTIVES, FRAMEWORKS, MECHANISMS, PRIORITIES

### 2.1 OBJECTIVES AND PRIORITIES OF THE NATIONAL POLICY DEVELOPMENT AREAS OF VET

#### 2.1.1 NATIONAL LLL STRATEGY

The Danish Government published its strategy for Lifelong Learning in August 2007 as a contribution to the realisation of the common EU objectives of Lisbon. The Danish strategy for Lifelong Learning is framed within the liberal-conservative Government's globalisation strategy "Progress, Innovation and Cohesion - Strategy for Denmark in the Global Economy" (2006). In the strategy, the Government describes how to realise a Lifelong Learning system with the aim of ensuring both competitiveness and social cohesion. DKK 15 billion (EUR 2 billion) have been allocated to the realisation of the strategy. This strategy encompasses the entire education system and is to be gradually implemented between 2007 and 2012.

The goal is to enable Denmark to meet the challenges of globalisation and technological development and, by strengthening participation in continuing VET, to improve the ability of enterprises and individuals to adapt to changes in the labour market, and to ensure that the individual possesses relevant skills and knowledge throughout his or her working life. To this end, the strategy places particular emphasis on the need for lifelong skills upgrading among those with the lowest levels of education, including a strengthening of basic skills courses (numeracy and literacy). There is agreement between the Government and the social partners that lifelong learning is the shared responsibility of employers, employees and public authorities.

The strategy pays considerable attention to the areas of transfer between pathways, guidance and counselling, and validation of prior learning. The Danish strategy for lifelong learning also stresses the importance of ensuring a high quality in the provision of education and training, and of improving labour market efficiency and inclusion. Increasing the interaction between educational institutions and other stakeholders is likewise seen as key to securing a VET system which reflects the needs of the labour market and the Danish society.

In the following, the specific objectives for lifelong learning are described for the different parts of the education system and for learning outside of the formal system:

#### UPPER SECONDARY EDUCATION

The overall aim for the upper secondary education system is for 95% of all school leavers to complete an academic or vocational programme at this level (the most recent figures from 2007 are a 70.8% attainment rate among 20-24 year olds; source: Eurostat. See 0104).

For VET, the ambitious aim is to make it an inclusive system. It should challenge the most talented pupils and provide them with increased opportunities for further education. And at the same time, programmes should provide realistic training opportunities for weaker learners. One way of achieving this goal is by an introduction of partial qualifications corresponding to the needs of the labour market so that all young people can obtain an education which is suited to their abilities, and at the same time providing improved opportunities for access to higher education. Likewise, 'new apprenticeship' has been introduced as an alternative pathway, especially suited to pupils with a predominantly practical orientation.

DKK 750 million (approximately EUR 100 million) has been allocated for the development of quality in VET for 2007-2009.

### HIGHER EDUCATION

The aim for higher education is to increase completion rates from 45% to 50% by 2015. There is a strong focus on providing pathways from VET to higher education.

The proportion of a youth cohort completing a long-cycle higher education programme continues to grow while institutions providing medium-cycle education have been collected under the umbrella of a number of multi-disciplinary university colleges, considerably reducing the number of institutions with the aim of creating academically strong and modern study environments. Access to short-cycle higher education programmes from VET is also to be improved, and the programmes are to be made more flexible and targeted towards labour market needs. Preliminary courses are to be offered to students entering vocational academy education programmes with the aim of improving completion rates. Furthermore, the Government aims to establish new and more vocationally oriented higher education programmes which will match the needs of the labour market. In general, higher education should comprise course content relevant to the needs of society and the economy.

### ADULT EDUCATION

Denmark has one of the highest levels of participation in adult education and continuing training with high levels of both public and private investment in competence development and qualifications. Indeed, CVET forms an integral part of many individuals' working lives - 47% of the Danish workforce participates in job-related continuing education and training, the highest level of any OECD country (*Source: Factsheet on Denmark: Education and Training, 2006*). In 2007, 29.2 percent of the Danish workforce between the ages of 25-64 had participated in some form of adult continuing training activity during the previous four weeks (see 0104).

In the strategy for Lifelong Learning, there is a strong focus to increase participation in adult education and training among unskilled, low-skilled, older workers, people with literacy problems and bilingual groups as they participate in less training than others in the labour market. In its strategy paper, the Government stresses that adult education and training is a shared responsibility: individuals are responsible for continuously developing their competences; the social partners are to contribute to the development of labour force competence and of enterprises as places of learning at work; and the authorities are to provide a good framework, relevant programmes of high quality and an incentive structure for individual learners.

### TRANSVERSAL AREAS

In its strategy, the Government prioritises transversal support areas:

- guidance and counselling;
- further development of systems for recognition of prior learning;
- greater transparency and cohesion both within the Danish system and across EU countries (e.g. by establishing and implementing a National Qualifications Framework);
- the global dimension of education;

- improving responsiveness to labour market requirements, for example through partnerships in education and training, and lifelong skills upgrading; and
- establishing quality assurance frameworks.

For further information see: Denmark's Strategy for Lifelong Learning - Education and lifelong skills upgrading for all, Danish Ministry of Education, 2007.

### 2.1.2 POLICY DEVELOPMENT IN THE MAIN VET POLICY AREAS

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; and
- 2007 reform gathered all IVET programmes, i.e. commercial, technical, agricultural and social and health care education and training, under the same legislation. The reform introduced more structured basic programmes aimed at weaker students who have problems handling the highly individualised system; new basic programmes; increased possibilities for partial qualifications (called *trin* or steps); and the electronic education plan system, *Elevplan*, was made compulsory. The law came into force from August 2007; however many of the changes were not implemented before July 2008.

To conclude, the reforms have attempted to simplify the VET system to make it more coherent and transparent. Furthermore, the aim has been to make it a more individually-focused system tailored to both strong and weak learners.

### THE CVET SYSTEM

The CVET system has also undergone several reforms to make it more demand-led and oriented toward enterprise needs. Furthermore, it has been an objective of the present government to streamline the overall VET system (IVET and CVET) to ensure coherence and transferability between the two systems. 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 was introduced by Parliament in 2003 to create 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 enterprises and employees as a way to connect the planning of training with competence development activities - for instance, in co-operation with the institutions which offer such education/training programmes.

Social partners are active contributors to legislative reforms for both initial and continuing vocational training and contribute to implementing the amendments in this legislation.

## **2.2 THE LATEST DEVELOPMENTS IN THE FIELD OF EUROPEAN TOOLS**

In the latest reform of the vocational education and training system, two EU tools have found their way into the reform: the European Qualifications Framework and the European Credit System for VET. Both tools are mentioned as reference for the ongoing efforts to establish a Danish National Qualifications Framework and as inspiration for making the VET system more transparent, both at a national and a European level. The Common Quality Assurance Framework has also served as a reference for the description of the Danish quality assurance system in VET (see Cort: The Danish Approach to Quality in Vocational Education and Training, 2008).

In general, the EU initiatives seem to have a greater impact on national education and training policy after the adoption of the Lisbon Agenda in 2000, and the initiation of the Copenhagen process in 2002. Before 2000, there were practically no references to EU documents and policies in national education and training policy papers, this is no longer the case. However, there is a need for a more thorough analysis to establish the impact and interaction between EU and national policies.

Policy initiatives within three main areas help facilitate transfer between VET pathways in Denmark: initiatives designed to allow greater flexibility and more individualised educational and training programmes; the development of a national qualifications framework; and a restructuring of the tertiary education sector involving the establishment of university colleges.

The first of these policy areas is linked to initiatives involving the validation of prior learning. Personal educational plans are compiled on the basis of assessments of student prior learning, including experience within the labour market. Reforms have introduced a modular curriculum offering well-defined units. This has led to greater flexibility, where students have better opportunities for combining elements from several VET programmes, as long as the overall programme is deemed relevant in relation to labour market needs. In 2007, a legal framework was implemented for the recognition of prior learning within CVET. This bestows all adults with the right to an assessment of prior learning, which can act as the basis for designing a personal educational plan or be detailed on a certificate officially recognising competences gained through informal or non-formal learning.

The second policy area concerns the development of a coherent national qualifications framework (NQF) with clear pathways from VET to higher education. An inter-departmental working group was set up by the Government to draw up an outline for a Danish NQF. The goal is to increase transparency and mobility within the educational sector.

The final policy area concerns the development of new profession-oriented and practice-oriented education programmes within higher education, hereby increasing VET opportunities at this level and mobility within the educational sector. At the same time, institutions providing medium-cycle education have been collected under the umbrella of a number of multi-disciplinary university colleges, considerably reducing the number of institutions with the aim of creating academically strong and modern study environments. Access to short-cycle higher education programmes from VET is also to be improved, and the programmes are to be made more flexible and targeted towards labour market needs. Preliminary courses are to be offered to students entering vocational academy education programmes with the aim of improving completion rates.

In July 2007, the Danish Government published its strategy for lifelong learning and the initiatives and actions prioritised for the future. In this strategy, the creation of a lifelong learning system, where learning both inside and outside the formal education and training system is recognised and valorised, is described. This strategy is in line with the Lisbon objectives as education and training play vital roles in ensuring economic growth and social cohesion.

In terms of geographical mobility, the Danish Agency for Internationalisation (CIRIUS) is responsible for assessing all persons with foreign qualifications who want to enter the Danish labour market. CIRIUS assess qualifications at all levels. CIRIUS' assessments may be used as advisory information in connection with job hunting in Denmark. But they are also binding in certain labour market contexts as they form the basis for:

- membership of unemployment funds; and
- public authorities' decisions on employment.

Within the regulated professions, authorisation or other formal approval is required for a person to be able to practise the profession in question based on foreign professional qualifications. The competent public authorities decide whether the terms and conditions for practising have been met. For citizens from the EU and EEA Member States, the right to practise is covered by the EU directives, and the co-ordinating function for the implementation of these directives is also handled by CIRIUS. EU and EEA citizens are therefore to send their application for recognition of foreign qualifications directly to CIRIUS, which will pass it on to the correct public authority. As the co-ordinating authority, CIRIUS is responsible for co-ordinating the competent public authorities' activities and for ensuring that the directives are implemented in a uniform manner in the vocational areas and professions in question.

As for recognition of foreign qualifications for education and training purposes, the authority lies with the individual educational institution. However, an assessment from CIRIUS may function as a guideline for the institution and this implies that the application for admission should be treated on an equal footing with applications from applicants with Danish qualifications at the same level of education as that stated by CIRIUS in its assessment.

The same applies to credit transfer for education and training purposes. The educational institution makes the decision on credit transfer of foreign qualifications to replace part of a Danish qualification, and may in the process base its decisions on an assessment issued by CIRIUS.

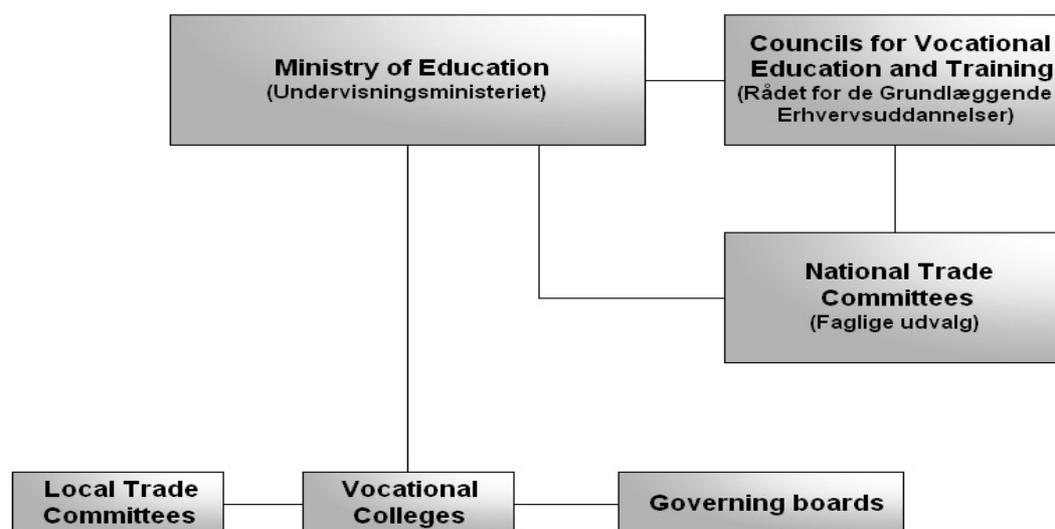
### 3. LEGISLATIVE AND INSTITUTIONAL FRAMEWORK - PROVISION OF LEARNING OPPORTUNITIES

#### 3.1 LEGISLATIVE FRAMEWORK FOR VOCATIONAL EDUCATION AND TRAINING

The Danish VET system is regulated by a number of acts, regulations and guidelines. Many of these apply to both IVET and CVET, so both are included here. The main ones are:

- The Regulation on the Vocational Education and Training Act (LBK no 1244 of 23/10/2007);
- The Regulation on the Labour Market Training Programmes Act (LBK no 190 of 18/03/2008);
- The Regulation on Vocational Education and Training (BEK no 1518 of 13/12/2007);
- The Regulation on the Basic Vocational Education and Training Act (LBK no 1321 of 27/11/2007);
- The Regulation on the Basic and Further Vocational Education and Training for Adults Act (LBK no 1051 of 29/08/2007);
- The Regulation on the Basic Subjects and Centrally Compiled Optional Subjects in Vocational Education and Training (BEK no 882 of 06/07/2007);
- The Regulation on the Institutions Providing Vocational Education and Training Act (LBK no 938 of 22/09/2008); and
- The Regulation on the Transparency and Openness in Education Act (LBK no 880 of 19/09/2005).

In addition to these, all VET programmes are regulated by specific programme regulations stipulating duration, content, subject, competence levels, etc. From 2008, focus is on the competences to be acquired during training instead of focusing on subjects and timeframe. The intention is that the focus on competences will make it possible for the vocational colleges to plan teaching to match the needs and abilities of the individual student. This change has to be seen within the overall objective of the Government to set up a Lifelong Learning system where both formal and non-formal competences can be assessed and recognised in the formal education system.



### 3.2 INSTITUTIONAL FRAMEWORK: IVET

The Government sets out the overall framework for general education and IVET which is administered by the Ministry of Education. Since the beginning of the 1990s, the Ministry has regulated IVET provision through a system of targeted framework governance based on providing taximeter grants per student. The Ministry lays down the overall objectives for IVET 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 IVET programmes have the breadth required for a youth education programme and for the allocation of resources (Source: Cort: The Danish Vocational Education and Training System, 2005).

The IVET system is centralised in terms of providing nationally recognised qualifications, and to some extent (pedagogically) decentralised as 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 teachers, students and administrative staff representatives, and social partner representatives.

The social partners play an institutionalised role at all levels of VET, from the national Advisory Council on Initial Vocational Education and Training advising the Minister of Education on principal matters concerning VET to the local training committees advising the colleges on local adaptation of VET. The influence of social partners has grown since recent reforms which have led to fewer advisory bodies.

The 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; and
- issuing 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.

### 3.3 LEGISLATIVE FRAMEWORK: CVET

See 0301.

### 3.4 INSTITUTIONAL FRAMEWORK: CVET

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. In CVET, the same institutional structure exists as in IVET:

- a national Advisory Council for Vocational Adult Education and Training responsible for advising the Minister of Education on all matters concerning adult vocational education and training;
- national trade committees for CVET responsible for drawing up the joint competence descriptions; and
- local training committees advising the colleges and the labour market training centres on local adaptation of CVET.

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.

## 4. INITIAL VOCATIONAL EDUCATION AND TRAINING

### 4.1 BACKGROUND TO THE IVET SYSTEM AND DIAGRAM OF THE EDUCATION AND TRAINING SYSTEM

In Denmark, basic schooling is compulsory from the age of 7 to 16, i.e. from 1<sup>st</sup> to 9<sup>th</sup> grade. However, from 2009 the hitherto optional (but attended by the vast majority) pre-school class became compulsory, meaning all children now enter schooling at the age of 6. After the 9<sup>th</sup> grade, 60% of a youth cohort continues to the 10<sup>th</sup> grade which is optional. Students may follow 9<sup>th</sup> and 10<sup>th</sup> grades at *folkeskole* (municipal primary and lower secondary school) or an *efterskole* (independent boarding school for lower secondary students) which 11% do.

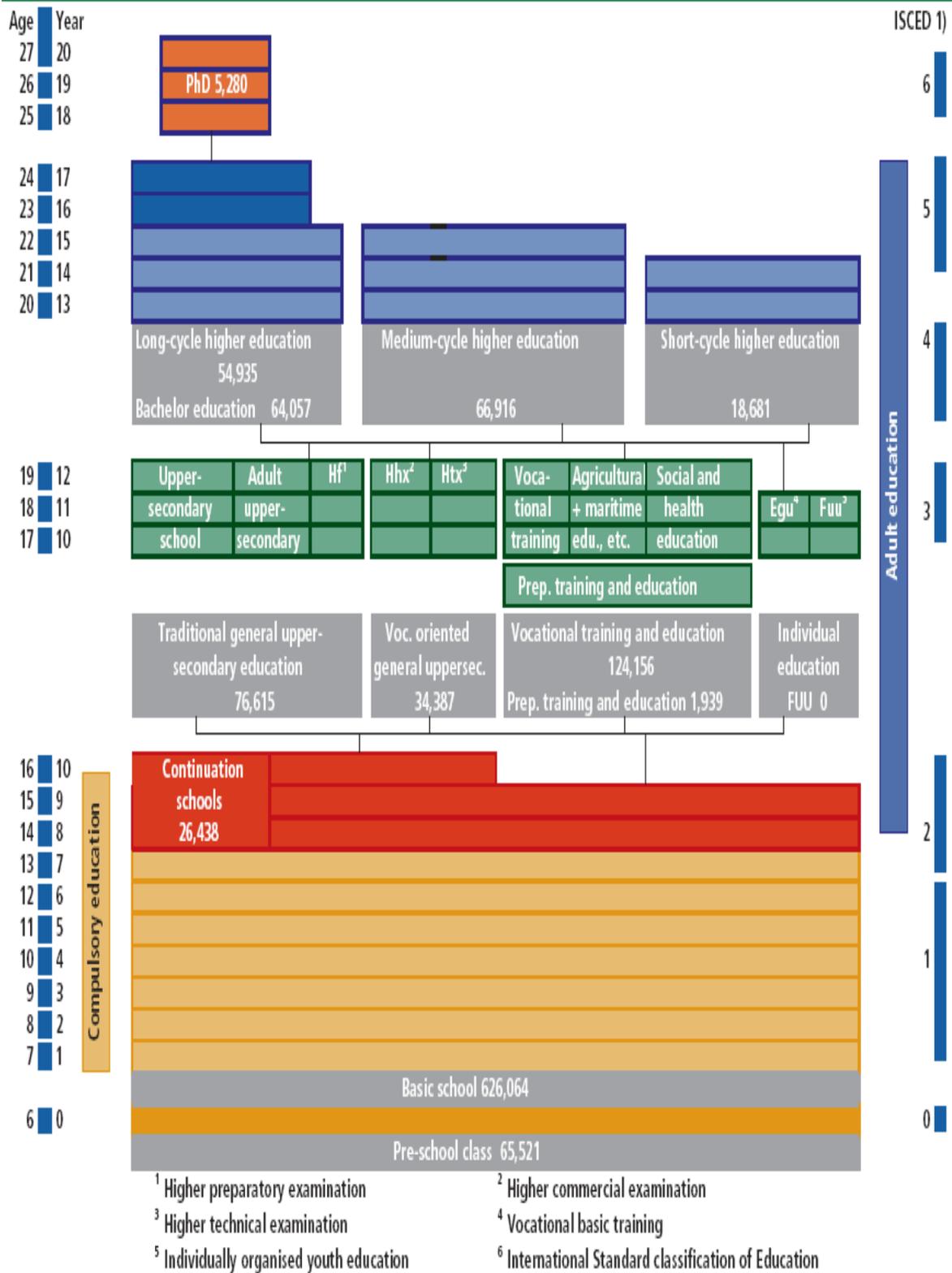
Within three months of completing 9<sup>th</sup> or 10<sup>th</sup> grade, 75% of all students in 2005-6 had commenced further education: either general or vocational upper secondary education (approximately 50%), or IVET (approximately 25%).

General and vocational upper secondary education lasts three years and gives access to studies at tertiary level. IVET 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 IVET which is based on the dual training principle, i.e. school-based education and training alternating with training within an enterprise.

The following diagram illustrates the structure of the Danish educational system, as well as the number of students enrolled at the various levels:

## Number of students in the educational system. 1 October 2007



<sup>1</sup> International Standard Classification of Education.

Source: Statistics Denmark: Statistical Yearbook 2009.

## 4.2 IVET AT LOWER SECONDARY LEVEL

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

## 4.3 IVET AT UPPER SECONDARY LEVEL (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; and
- 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 general upper secondary education level (*gymnasium*), concluding with the school-leaving certificate qualifying for university entrance (*studentereksamen*); and
- 2) higher preparatory examination programme (*Højere Forberedelseksamen - 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 TRACK

IVET programmes give direct access to nationally recognised occupations within the labour market and are organised as dual training, alternating between school-based and work-based training. As VET only exists in a dual apprenticeship system, please refer to heading 0404 for a more thorough description.

There are currently approximately 125 different programmes, offered by 117 colleges, providing young people with professional, personal and general qualifications in demand on the labour market. All programmes include an area of specialisation. In addition to these specialised subjects, students are taught area subjects, which are broad professionally-oriented subjects, and basic subjects, which are more general subjects such as

Mathematics or Danish. These basic subjects are also vocationally oriented, with content varying between the different programmes.

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:

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

Since 2007, the social welfare and health training programmes, the agricultural programmes and the vocational education and training programmes have been gathered under the same law in order to make the system more homogenous and transparent.

Besides the above-mentioned 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 (*produktionsskole*) or in a basic vocational training programme (*Erhvervsgrunduddannelse* - EGU). The latter is an individualised course aimed at enabling the young person to enter either the ordinary VET system or the labour market. See also section 0405.

#### 4.4 APPRENTICESHIP TRAINING

##### CHARACTERISTIC FEATURES OF VET

VET programmes teach the necessary skills for a trade or profession, and are all organised as alternating courses, i.e. instruction and training are provided both at vocational colleges and in companies. The apprenticeships are based on a contract, or training agreement, 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, and thereby have to live up to certain requirements, e.g. a certain level of available 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 individual educational plan is compiled 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 indicate actual learning and skills acquired by the student.

There is free access to IVET for all students upon completing compulsory schooling. However, the number of students directly entering an IVET programme at 16 is falling, with a growing proportion either being admitted following a period in the labour market, or, as is becoming increasingly common, after completing a general or vocational upper secondary education.

## THE BASIC AND THE MAIN PROGRAMMES IN VET

IVET consists of a broad introductory basic programme which gives access to one of the more specialised main programmes. Since 2008, the basic programmes have been gathered in twelve vocational clusters:

1. Motor vehicle, aircraft and other means of transportation	6 programmes
2. Building and construction	15 programmes
3. Construction and user service	3 programmes
4. Animals, plants and nature	9 programmes
5. Body and style	3 programmes
6. Human food	11 programmes
7. Media production	7 programmes
8. Business	8 programmes
9. Production and development	30 programmes
10. Electricity, management and IT	7 programmes
11. Health, care and pedagogy	4 programmes
12. Transport and logistics	7 programmes

*Source: Vocational Education and Training (VET), Danish Ministry of Education, 2008.*

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 lasts 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 programmes are offered by commercial colleges and are more theoretical and general in scope. Technical training tends to be more practical in scope and includes workshop training at the college. The technical colleges design the training at an early stage to connect college teaching with company training.

The main programme for vocational specialisations (110 programmes) starts with an on-the-job training placement. Alternating between school-based and work-based training, the programmes typically take 3 - 3.5 years. Before being admitted to the main programme, the student must have an apprenticeship contract with an approved training company (or with the college, if no training company is available).

## NEW APPRENTICESHIP

As well as entering a VET programme through the basic programme, since 2006, it has been possible for trainees to start directly in a company with which they have an apprenticeship contract. This pathway is known as New Apprenticeship (*Ny Mesterlære*). New apprenticeship was introduced as an alternative pathway into IVET and is part of the Government's strategy for reducing dropout within IVET. Pupils undertaking an IVET programme via the new apprenticeship pathway will typically spend the first year of their education receiving practical training within an enterprise. The initiative is aimed in particular at pupils who may struggle or lack the motivation to complete the more theoretical school-based education without first gaining a practical insight into the field.

However, pupils will still have to follow some school-based teaching as agreed in their personal education plans.

New apprenticeship has been introduced within all areas of IVET, although a few trade committees have chosen to opt out (e.g. electricians and plumbers). The school and the enterprise, along with the pupil, are responsible for planning and organising the form and content of the practical training and developing the pupil's personal education plan based on a description of the competences to be gained from the VET programme in question and an assessment of the pupil's actual competence. As such, the flexibility of the various pathways within IVET can be regarded as reflective of an overall policy trend throughout the educational sector toward more differentiated and individualised teaching methods and of the greater attention paid to actual competence and non-formal and informal learning.

The majority of students still choose to start their education with a basic course at a vocational college, although the number choosing new apprenticeship varies considerably between programmes.

#### FACTS AND FIGURES ON VET

TABLE 1: STUDENT POPULATION WITHIN IVET BY PROGRAMME:			
	2000	2005	2008
<b>TOTAL</b>	124 033	121 806	124 069
<b>BASIC PROGRAMMES</b>	41 002	45 064	44 060
<i>COMMERCIAL</i>	15 065	16 248	16 390
<i>TECHNICAL, TRADE AND TRANSPORT</i>	16 935	18 484	18 280
<i>HEALTH AND PEDAGOGY</i>	951	1 550	2 344
<i>BODY, NATURE AND SERVICE</i>	8 051	9 682	7 046
<b>MAIN PROGRAMMES</b>	83 031	75 842	80 009
<i>COMMERCIAL</i>	21 555	16 394	18 328
<i>TECHNICAL, TRADE AND TRANSPORT</i>	35 167	32 241	36 472
<i>HEALTH AND PEDAGOGY</i>	14 889	15 953	13 136
<i>BODY, NATURE AND SERVICE</i>	10 265	9 806	10 551
<i>OTHER</i>	1 154	1 448	1 522

Source: Data Bank: Danish Ministry of Education, statistical dept.

TABLE 2: STUDENT POPULATION IN IVET BY GENDER, AGE AND ETHNICITY			
	2000	2005	2008
MEN (%)	54.4	55.6	56.6
WOMEN (%)	45.6	44.4	43.4
AVERAGE AGE (YEARS)	23.7	23.2	23.3
OTHER ETHNICITY THAN DANISH (%)	7.3	9.6	10.3

Source: Data Bank: Danish Ministry of Education, statistical dept.

Overall, there are slightly more male than female apprentices; however the distribution is very uneven among the various strands of IVET. In commercial training and in social and health care training, there is a predominance of female apprentices (2008: 90% in the latter) whereas the opposite applies to technical programmes and in building and construction (2008: 91% in the latter).

The average age of students on the basic programme was 20.3 in 2008. For the main programmes, the average age was 24.9.

Completion rates have fallen from 59% in 2000 to 48% in 2008. Drop-out would seem to be highest from the basic programmes. Figures for students with another ethnic background than Danish are even lower at just 38% (2008). However, these figures have remained relatively stable during the period while completion rates among Danish students continue to fall steadily.

Source: Data Bank: Danish Ministry of Education, statistical dept.

#### CERTIFICATION AND QUALIFICATION

VET programmes conclude with a practical and theoretical examination, the 'journeyman's test' (*Svendeprøve*). The relevant trade committee acts alongside representatives from companies as external examiners, is involved in developing the tests, and issues a certificate on successful completion of the programme.

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 finishing VET.

#### 4.5 OTHER YOUTH PROGRAMMES AND ALTERNATIVE PATHWAYS

There are two types of youth programme and alternative pathway 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 periods of workplace 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.

#### **4.6 VOCATIONAL EDUCATION AND TRAINING AT POST-SECONDARY (NON TERTIARY) LEVEL**

There is no VET at this level in Denmark.

#### **4.7 VOCATIONAL EDUCATION AND TRAINING AT TERTIARY LEVEL**

Vocational colleges offer a number of short-cycle higher education programmes (*kort videregående uddannelse* - KVV) 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. professional bachelor programmes.

KVV 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. In 2008, there were 18,950 students enrolled in KVV.

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.

## 5. CONTINUING VOCATIONAL EDUCATION AND TRAINING FOR ADULTS

### 5.1 FORMAL EDUCATION AND

### 5.2 NON-FORMAL EDUCATION

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 of 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 growing manufacturing sector. 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 (*Arbejdsmarkedssuddannelsescentre - 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.

CVT programmes have three aims:

1. to provide, maintain and improve the vocational skills and competences of the participants in accordance with the needs and background of enterprises, the labour market, and to further competence development of the participants in line with technological and societal developments;
2. to solve labour market restructuring and adaptation problems in a short term perspective;
3. to contribute to a general upgrading of skills and qualifications of the labour force in a long term perspective.

*Source: Adult vocational training in Denmark, Danish Ministry of Education, 2008.*

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; and
- quality assurance at all levels of the CVT system.

The programmes primarily provide skills and competences directed towards specific sectors and job functions.

Participation levels rise slightly in correspondence with educational attainment and are highest among those with a higher education (ISCED 5-6) who are designated inactive within the labour market. This may well be in the form of labour market retraining or updating of practical skills. The Danish figures generally correspond with EU averages except in terms of those with an educational background at levels ISCED 0-2 where Danish participation rates are considerably higher.

Lifelong learning is a policy area given high priority in Denmark. The objective is to transform the entire formal education system to include non-formal learning at the workplaces, and informal learning in other settings to create a more flexible and individualised system in which the individual can have his/her “actual” competences recognised regardless of where they have been acquired. Within the framework of the Danish lifelong learning strategy, CVET plays a central role in contributing to a flexible labour market. The CVET sector is currently undergoing reform as a consequence of a new framework for lifelong learning opportunities set up in 2006. This reform placed greater responsibility in the hands of the social partners for organising and prioritising CVET and created stronger coherence within adult education and continuing training.

The reform is part of the overall strategy for lifelong learning in Denmark established in 2006 (Denmark’s strategy for lifelong learning - Education and lifelong skills upgrading for all, 2007). This strategy encompasses the entire education system and is to be gradually implemented between 2007 and 2012. The Government has allocated a DKK 15 billion globalisation pool for this purpose. The goal is to enable Denmark to meet the challenges of globalisation and technological development and, by strengthening participation in continuing VET, to improve the ability of enterprises and individuals to adapt to changes in the labour market, and to ensure that the individual possesses relevant skills and knowledge throughout his or her working life. To this end, the strategy places particular emphasis on the need for lifelong skills upgrading among those with the lowest levels of education, including a strengthening of basic skills courses (numeracy and literacy). There is agreement between the Government and the social partners that lifelong learning is the shared responsibility of employers, employees and public authorities.

The strategy pays considerable attention to the areas of transfer between pathways, guidance and counselling, and validation of prior learning. The Danish strategy for lifelong learning also stresses the importance of ensuring a high quality in the provision of education and training, and of improving labour market efficiency and inclusion. Increasing the interaction between educational institutions and other stakeholders is likewise seen as key to securing a CVET system which reflects the needs of the labour market and the Danish society.

It should be noted that Denmark has one of the highest levels of participation in adult education and continuing training regardless of educational attainment levels. In 2005, at ISCED 0-2, Danish participation is 30.9% compared with a 6.5% EU average; at ISCED 3-4, the respective figures are 43.9% and 16.4%; and for ISCED 5-6, 61.4% and 30.9% respectively (Eurostat). Levels of both public and private investment in competence development and qualifications are high.

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

There are more than 2 500 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 programmes are mainly of a relatively short duration ranging from half a day to 6 weeks, on average one week. The programmes can be combined both within and across qualification areas.

The Council on Labour Market Training (*Uddannelsesrådet for Arbejdsmarkedsuddannelser*) 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 the 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.

In 2007, a legal framework was implemented for the recognition of prior learning within CVET. This bestows all adults with the right to an assessment of prior learning, which can act as the basis for designing a personal educational plan or be detailed on a certificate officially recognising competences gained through informal or non-formal learning. The individual competence assessment procedure ensures that the needs for further education are determined on an individual basis. 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; and
- 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 2005/2006, there were approximately 62 200 student full-time equivalents receiving an offer of adult education in the public sector. Despite fluctuations during the period, this figure remains more or less the same as at the beginning of the decade. The majority of participants in the programmes either have VET as their highest level of education (24%) or compulsory schooling (29%), although both these groups are in steady decline in correspondence with the changing demographics. With regard to content, the largest increase is within the tertiary sector (diploma and master's programmes), while there has been a massive drop in activity levels for Danish as a second language.

*Source: Data Bank: Danish Ministry of Education, statistical dept.*

#### CVET AT THE INITIATIVE OF ENTERPRISES OR SOCIAL PARTNERS

Private companies have increased their expenditure on education and training for their employees. For 2007 expenditure is estimated to have risen by DKK 0.5 billion (EUR 67 million) to DKK 6.8 billion (EUR 913 million). Expenditure by public sector employers on education and training in 2007 was DKK 2.6 billion (EUR 350 million) representing a slight fall in relation to 2006. E-learning is an area of expansion and a form of education and training employed by a rapidly growing proportion of enterprises, especially larger ones. The vast majority of employers have offered employees some form of training or further education, although the figures are somewhat lower for smaller enterprises. (*Source: Institute for Business Cycle Analysis (IFKA): Det danske kursusmarked 2008 (The Danish Course Market 2008) 2008*).

Enterprises focus on the development of human resources in terms of improving their generic competences such as the ability to cooperate, flexibility, adaptability to change, etc. Furthermore, publicly provided CVT has been re-organised so as to provide more tailor-made in-company training courses in co-operation with companies. Companies describe their training needs and the vocational colleges/labour market training centres draw up training courses to match.

Social partners also offer training courses for their members, e.g., the VET teachers' professional associations offer sector specific courses for teachers to keep their vocational qualifications up-to-date.

#### 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 an 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.

### 5.3 MEASURES TO HELP JOB-SEEKERS AND PEOPLE VULNERABLE TO EXCLUSION FROM THE LABOUR MARKET

There are a number of training provisions targeting unemployed people and people at risk of exclusion. Previously, two actors were central: the public employment service (*Arbejdsformidling - AF*) and local municipalities where the latter were responsible for persons who had not contributed to unemployment insurance. However, since 2007, these efforts have been collected in 91 job centres under municipal jurisdiction. They use the following labour market instruments:

- activation offers for young unemployed persons comprising education and training opportunities in the mainstream IVET system, special courses at labour market training centres, production school courses and folk high school courses;
- specialised CVT courses requested by the municipalities;
- municipal activation schemes, which may include production school courses, courses at non-residential folk high schools or other activities initiated by the municipality;
- adult vocational training programme targeted at adults (above 25) which makes it possible for them to acquire a VET qualification on special conditions (including higher wages). This offer is not only for unemployed people; and
- wage subsidies - individuals who have been unemployed for more than 12 months (6 months for individuals under 30) can be employed with a public wage subsidy. Those employed within the public sector receive DKK 122/hour (EUR 16), while private enterprises can receive a subsidy of DKK 63/hour (EUR 8.5) for up to a year when employing individuals meeting the criteria (2008 figures). Employment with wage subsidy can be combined with participation in training programmes.

Source: Jobnet: <http://www.jobnet.dk/>

## 6. TRAINING VET TEACHERS AND TRAINERS

### 6.1 TYPES OF TEACHER AND TRAINER OCCUPATIONS IN VET

#### 6.1.1 TEACHING AND TRAINING OCCUPATIONS IN VET

##### TEACHERS

Two distinct teacher profiles can be identified within VET:

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

##### IN-COMPANY TRAINERS

In-company trainers play an important role in VET given the dual training principle characteristic of all Danish VET. 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.

#### 6.1.2 RESPONSIBLE BODIES

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 National Centre for Vocational Pedagogy (*Nationalt Center for Erhvervspædagogik* - NCE). 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 is 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.

## 6.2 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's degree from a university or other 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*, which is 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.

## 6.3 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 practical experience. For both profiles, they must acquire a pedagogical qualification within their first years of employment. This qualification can be acquired at one of the recently established University Colleges (*Profesionshøjskoler*) 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.

## 7. MATCHING VET PROVISION WITH LABOUR MARKET NEEDS

### 7.1 SYSTEMS AND MECHANISMS FOR THE ANTICIPATION OF SKILL NEEDS (IN SECTORS, OCCUPATIONS, EDUCATION LEVEL)

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.

Trade committees and the national Councils for Initial Vocational Education and Training (*Rådet for Erhvervsfaglige Uddannelser* - REU) and for Adult Vocational Education and Training (*Rådet for Erhvervsfaglige Voksen og Efteruddannelse* - REVE) are responsible for updating VET programmes and ensuring that they integrate the skill and competence needs of the labour market at the national level. At the regional/local level, vocational colleges, social partners and local business and industry are able to influence VET programmes so that they are adapted to the specific skills needs of local business, industry and regional development plans through the local training committees. Their main function is to provide assistance to the colleges regarding the planning of VET programme content, as well as strengthening contacts between colleges and the local labour market. Each college is attached to at least one local training committee to assist with its VET provision.

The Danish system is geared to continuously updating VET programmes so that they are in line with the needs of the labour market. However, it should be emphasised that the actual functioning of the system varies from trade committee to trade committee and from one region to another. A number of analyses have indicated that some committees only legitimise VET programmes rather than contributing to skills innovation and renewal.

Returning to the national level, a new VET programme is set up after a need has been identified by one of the trade committees. They draw up a proposal containing a number of recommendations and information regarding projected job and apprenticeship opportunities, estimated intake, and analyses and forecasts regarding the skill and competence needs within the field. This proposal is sent to the Ministry of Education which, based on the advice of REU, has the final decision as to whether or not to establish the suggested VET programme. Should the Ministry of Education decide to approve the proposal, the trade committee is responsible for outlining the objectives and scope of the programme after which the Ministry determines the financial aspects and other details before issuing a regulation describing the aim of the programme, its content, assessment, examinations, etc.

### 7.2 PRACTICES TO MATCH VET PROVISION WITH SKILL NEEDS

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 and qualifications 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 his/her own learning and education, and 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. As a consequence, the Ministry launched a survey of the trade committees' analysis and prognosis practices in order to clarify the need for supplementary analyses and prognoses.

## 8. GUIDANCE AND COUNSELLING FOR LEARNING, CAREER AND EMPLOYMENT

### 8.1 STRATEGY AND PROVISION

The Danish educational and vocational guidance system was the subject of a major reform in 2004, including the establishment of new guidance centres. The Government has described the goals with this reform as follows: “It is the government’s objective that guidance at all levels of the education system should provide the young person with a qualified basis for choosing an education that is in agreement with his/her own wishes and abilities and with society’s need for a qualified workforce. The guidance is to contribute to strengthening bridge-building between the educational levels” (“Denmark’s Contribution to the 2008 Joint Council/Commission Report on the Implementation of the Work Programme “Education and Training 2010””, 2007).

In addition, a new guidance framework for adults and enterprises was implemented in 2007-2008 with the stated objective of helping to strengthen and qualify demand for further education and training amongst both employees and enterprises. In order to achieve these goals, the reforms have been developed and implemented whilst maintaining a close dialogue with the various stakeholders.

The guidance system in Denmark, following these reforms, consists of 45 municipal youth guidance centres focused on the transition from compulsory schooling to youth education or the labour market; seven regional guidance centres responsible for the provision of guidance concerning the transition from youth education programmes to higher education; and the concentration of adult vocational/career guidance services within 91 job centres. In addition, 22 local adult guidance networks have been established as part of the Government’s strategy for creating a coherent crosscutting guidance system able to respond to the needs of society and the labour market.

Additionally, 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.

### 8.2 TARGET GROUPS AND MODES OF DELIVERY

In 2004, a new Act on Educational and Vocational Guidance was implemented. The Act is primarily targeted at 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:

- 45 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 drop-out 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 kinds 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: Kjær & Thorsen, 2004).

In a 2007 amendment to the Act, concentration of guidance efforts on those deemed unlikely to commence or complete a youth education programme has been pinpointed as a focus area for the Danish guidance strategy in order to prevent dropout and ensure as many as possible complete some form of higher secondary education. Among the new initiatives, guidance is now provided at an earlier stage of compulsory schooling than previously so as to be able to offer counselling and advice to young people struggling with school.

Similarly, DKK40 million per year (EUR 5.4 million) has been allocated to establish a permanent corps of Preparatory Adult Education (*Forberedende VoksenUddannelse - FVU*) outreach consultants, and to improving guidance and counselling for those groups with the greatest obstacles to participation in adult and in service training. These consultants are to actively approach enterprises and inform about the opportunities for literacy and numeracy training for employees making it possible to reach a greater proportion of small and medium-sized enterprises. The consultants are to work in cooperation with the outreach efforts of institutions offering VET.

### **8.3 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. This was a response to a general political demand for an increased professionalisation of guidance services in Denmark.

The training scheme was provided on a part-time basis and was equivalent to 6 months full-time studies. It consisted 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.).

Further improvements were made in conjunction with the 2007 amendment to the Act on Guidance regarding the qualifications of practitioners and the methods implemented for evaluation and quality assurance of practice with the objective of improving the professionalism of guidance services. Guidance practitioners are now required to complete a diploma programme in educational and vocational guidance or document equivalent competences through prior learning. A professional bachelor degree in education and vocational guidance has also been established.

A system for quality assessment within the guidance system is being developed and, in May 2008, a national centre for competence development was established whose role, among other things, is to collect knowledge and produce new knowledge regarding adult guidance, including an evaluation of the adult guidance networks.

## 9. FINANCING: INVESTMENT IN HUMAN RESOURCES

### 9.1 FUNDING FOR INITIAL VOCATIONAL EDUCATION AND TRAINING

IVET is based on alternance models where training takes place at college and within an enterprise 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, both public and private, 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 2006, the companies paid DKK 3 208 million (EUR 427 million) to AER and received DKK 3 554 million (EUR 474 million) in reimbursement. The payments to AER remained quite stable from 2001 to 2005 (however with a slight increase from 2005 to 2006 by DKK 300 million -EUR 40 million), whereas the reimbursements have risen 40% from DKK 2 496 million (EUR 335 million) in 2001 to 3 554 million (EUR 474 million) in 2006. This is due to the fact that the number of adult trainees has risen during the same period. The additional rise from 2005 to 2006 is due to the fact that more apprenticeship contracts were entered in this period (Source: AER General Key Figures 2006).

### 9.2 FUNDING FOR CONTINUING VOCATIONAL EDUCATION AND TRAINING, AND ADULT LEARNING

CVET is the overall responsibility of the Ministry of Education and includes in particular labour market training, called AMU (*Arbejdsmarkedsuddannelserne*). 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 colleges are financed by the state according to a taximeter system where every passed student generates financial support.

For 2006, the Ministry of Education budgeted approximately DKK 6 billion (EUR 830 million) to the areas of further education (DKK 3.9 billion, EUR 523 million) and community education and adult further education and training (DKK 2.3 billion, EUR 308 million) not including various support schemes such as the state education grant and loan scheme, sabbatical leave for educational purposes etc. This constitutes almost 20 percent of the ministry's overall budget. (Source: Statistics Denmark: Statistical Yearbook 2008)

CVET activities, including the operating expenses for CVT centres, are financed through the labour market contribution (*arbejdsmarkedsbidrag*) whereby a special tax of 8% is levied on all employed people. In 2007, the total state income from this tax was DKK 76 billion (EUR 10.2 billion) according to national statistics. (Source: National Accounts of Total Taxes and Duties, Danish Ministry of Taxation, 2008)

In addition, participants in CVET 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.

## 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 between 2000 and 2004, public operating subsidies decreased by 11 percent. This decrease is ascribed, among other things, to rationalisation following institution mergers, and a change in the composition of educational activity.

Source: Facts and Figures 2007, Danish Ministry of Education 2008

## 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 according 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 (EUR 387) per employee. In the public sector (1 million employees), the amount is DKK 3 400 (EUR 453) per employee. Approximately 50% of the total labour force participates in some form of continuing education and training each year.

In the table below, one can see that the total cost of CVT courses as a percentage of total labour costs has fallen in Denmark as in the EU as a whole. However this fall has been less dramatic in Denmark and the Danish spending levels remain high.

	<b>1999</b>	<b>2005</b>
<b>EU-25</b>	<b>2.3</b>	<b>1.6</b>
<b>DENMARK</b>	<b>3</b>	<b>2.7</b>

Source: Eurostat

## 9.3 FUNDING FOR TRAINING FOR UNEMPLOYED PEOPLE AND OTHER GROUPS EXCLUDED FROM THE LABOUR MARKET

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

Municipalities are responsible for activating unemployed people not covered by unemployment insurance. If they refuse to participate, their benefits may be substantially reduced. Otherwise, during participation in a training scheme, they continue to receive social benefits. In 2008, the municipalities budgeted DKK 5.4 billion (EUR 725 million) on

activation programmes for unemployed people. The State at present reimburses 65 percent of benefits paid to uninsured people participating in some form of activation scheme and 35 percent for 'passive' unemployed individuals. In 2009, a series of reforms was introduced transferring full responsibility for the employment sector to the municipalities, including for activating individuals covered by unemployment insurance. The aim has been a simplification of the current system.

Source: *Kommunernes Landsforening (Local Government Denmark)*: <http://www.kl.dk/>

#### 9.4 GENERAL FUNDING ARRANGEMENTS AND MECHANISMS

In Denmark, the public financing of VET is a 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, permit 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 for competence development which also recognises relevant non-formal and informal competences and - in particular - practical work experience.

While the Government remains committed to a publicly financed system, in recent years there has been a focus on increasing cost-efficiency and effectiveness. Various measures have been introduced including the development of the taximeter funding principle whereby colleges only receive a grant for the students who complete basic and main programmes. Amongst other things, such a system provides an incentive for colleges to increase retention within the system. Critics point out that such a measure endangers quality as it encourages colleges to be more lax in assessing 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".

The present funding system for VET was introduced following a major reform in 1991. The 1991 reform introduced the taximeter principle whereby VET providers are funded in accordance with their overall activity level (number of students entering and completing a VET programme). Besides the taximeter rate, the VET providers also receive an annual block grant for the maintenance of buildings, salaries, etc. The 1991 reform, which was primarily organisational, introduced management-by-objectives as a means to improve the overall provision of VET. The funding system was introduced as part of a New Public Management (NPM) strategy to decentralise and make institutions compete on "quasi markets".

Over the years, however, the budgetary room to manoeuvre of the vocational colleges has been restrained, and in fact, the trend seems to be towards greater centralisation as the Ministry of Education sets up more specific objectives, quality indicators and targets for the colleges. From 2003, the concept of "value for money" was introduced. In order to obtain earmarked funding, the institutions were to show their "will to change within specific prioritised policy areas" ("Bedre institutioner til bedre uddannelser", 2003, p. 9). An example of this change in the allocation of funds can be found within the experiment and development funds (*Forsøgs og Udviklingsprojekter: FoU*), which in the 1990s provided a valuable means for the colleges to try out new, local approaches and methods in VET. By 2003, the funds became more targeted and more regulated through narrow objectives, and

today, the funding of locally initiated projects has been more or less discontinued as a source of local development initiatives.

To sum up, since the 1980s, a shift has taken place from detailed regulation on input to framework regulation on output. The aim of output regulation is to increase focus on:

- results and quality so that the practices of the institutions meet the political objectives; and
- adaptation to the needs of the regional and local business sectors for education and competence development.

It should be noted that the basic principle of VET funding is that the state funds the vocational college budgets, while enterprises fund apprenticeships and continuous VET.

## 10. NATIONAL VET STATISTICS - ALLOCATION OF PROGRAMMES

### 10.1 CLASSIFICATION OF NATIONAL VET PROGRAMMES

#### MAIN CRITERIA USED TO ALLOCATE VET PROGRAMMES

In Denmark, there are three standard classification systems:

ISCED: The International Standard Classification of Education - defined by UNESCO and the standard for international comparisons of educational systems;

DUN: Danish Educational Nomenclature (*Dansk Uddannelses-Nomenklatur*) - primarily used by enterprises to group employees according to educational competences; and

Pre-column 1 (*Forspalte 1*) - used within national statistics to place individual education programmes and qualifications within the education system.

It is this last system which is used to allocate VET programmes in Danish national statistics. Pre-column 1 is an eight digit code with the first two digits describing the educational level, the next two the broad subject area, the next two a more specific subject area and the final digits the concrete programme or qualification. There are twelve different educational levels within this classification system:

10 Basic school (*Grundskole*)

15 Preparatory (*Forberedende uddannelser*)

20 General upper-secondary education (*Alm. gymnasiale uddannelser*)

25 Technical and commercial upper-secondary education (*Erh. gymnasiale uddannelser*)

30 Vocational basic education (*Erhvervsfaglige grundforløb*)

35 Vocational apprenticeship and main course (*Erhvervsfaglige praktik og hovedforløb*)

39 Further training of semi-skilled and skilled workers (*Efteruddannelse af specialarb/faglærte*)

40 Short-cycle higher education (*Korte videregående uddannelser*)

50 Medium-cycle higher education (*Mellemlange videregående uddannelser*)

60 Bachelor (*Bachelor*)

65 Long-cycle higher education (*Lange videregående uddannelser*)

70 PhD degree (*Forskeruddannelser*)

Certain sectors are split into further levels within this Danish classification system than within the international ISCED classification, such as the differentiation between the basic and main courses within VET; others cover more than one ISCED grouping such as basic school which includes both primary and lower-secondary education.

Source: Statistics Denmark

## VET LEVELS IN THE NATIONAL EDUCATIONAL SYSTEM

TABLE 1: VET LEVELS IN DENMARK					
LEVEL	EQUIVALENT IN ISCED	MINIMUM DURATION	MAXIMUM DURATION	AVERAGE DURATION	TYPICAL STARTING AGE OF PUPILS
UPPER SECONDARY	3A	3	3	3	16
UPPER SECONDARY	3C	2	5	4	16
HIGHER	5B	1.5	4	2.5	20

### 10.2 FIELDS OF EDUCATION AND TRAINING

TABLE 1: FIELDS OF EDUCATION AND TRAINING WITHIN VET IN DENMARK	
LEVEL	FIELDS OF EDUCATION/STUDY
Upper secondary (ISCED 3A)	Technical Commercial
Upper secondary (ISCED 3C)	
HIGHER (ISCED 5B)	

### 10.3 LINKS BETWEEN NATIONAL QUALIFICATIONS AND INTERNATIONAL QUALIFICATIONS OR CLASSIFICATIONS

Denmark is currently in the process of developing a National Qualifications Framework (NQF). The goal is to increase transparency, lifelong learning and mobility within the educational sector. The Danish NQF, referred to by the Ministry of Education as the Danish Qualification Framework for Lifelong Learning (DKLL: *Dansk Kvalifikationsramme for Livslang Læring*) will reference the European Qualifications Network (EQF). An inter-departmental working group was set up by the Government in 2007 to draw up an outline for a Danish NQF with their work resulting in a draft model. This model has been the subject of an ongoing consultation procedure and the results are expected to be made public very soon.

## 11.1 AUTHORS

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