

DOCUMENT RESUME

ED 468 609

CE 083 778

AUTHOR Cort, Pia

TITLE Vocational Education and Training in Denmark: Short Description. CEDEFOP Panorama Series.

INSTITUTION European Centre for the Development of Vocational Training, Thessaloniki (Greece).

REPORT NO TI-44-02-270-EN-C; CEDEFOP-Ser-36

ISBN ISBN-92-896-0141-8

ISSN ISSN-1562-6180

PUB DATE 2002-04-00

NOTE 49p.; For a longer description of Denmark's VET system, see CE 083 706.

AVAILABLE FROM CEDEFOP, PO Box 22427, Thessaloniki, GR-55102 Greece; Tel: 30 31 49 01 11, Fax: 30 31 49 01 02; e-mail: info@cedefop.eu.int; Web site: <http://www.trainingvillage.gr/> (#5130 EN, free). For full text: http://www2.trainingvillage.gr/etv/publication/download/panorama/5130_en.pdf. Also available in German: http://www2.trainingvillage.gr/etv/publication/download/panorama/5130_de.pdf.

PUB TYPE Information Analyses (070)

EDRS PRICE EDRS Price MF01/PC02 Plus Postage.

DESCRIPTORS Adult Education; Allied Health Occupations Education; Apprenticeships; Articulation (Education); Continuing Education; *Delivery Systems; Early Childhood Education; Education Work Relationship; *Educational Administration; Educational Attainment; Educational Environment; *Educational Finance; *Educational Policy; *Educational Practices; Educational Quality; Elementary Secondary Education; Employment Qualifications; Enrollment Trends; Financial Support; Foreign Countries; Global Approach; Government Role; Government School Relationship; Job Skills; Job Training; Postsecondary Education; School Business Relationship; Student Certification; Technical Education; *Vocational Education

IDENTIFIERS *Denmark; Social Partners (European Community)

ABSTRACT

Denmark has a uniform, nationwide vocational education and training (VET) system that provides qualifications that are valid throughout the country and recognized by employers and trade unions. Initial VET (IVET) includes the following components: VET, including commercial and technical training; basic social and health care training; agricultural training; and maritime training. All IVET programs teach the vocational skills necessary for a trade or profession and give access to higher education. Periods of school IVET alternate with periods of in-company training based on apprenticeship contracts. Continuing VET is provided primarily through Denmark's labor market training system (arbejdmarkedssuddannelserne [AMU]), which is designed to give, maintain, and improve participants' vocational skills in accordance with enterprises' needs and background. AMU courses take place exclusively at vocational schools and 24 independent AMU centers. Tertiary VET, consisting of short, vocationally oriented programs, and open education programs are also offered at vocational schools. IVET and tertiary VET are under the auspices of the Ministry of Education, whereas AMU is under authority of Denmark's Ministry of Labour. Active participation by social

Reproductions supplied by EDRS are the best that can be made
from the original document.

partners is a central element of Denmark's VET system. A list of acronyms, the addresses of 9 relevant organizations, and a bibliography of 32 online and print resources are appended. (Contains 15 figures.) (MN)

PANORAMA

Vocational education and training in Denmark

Short description

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

B. Brennan

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Vocational education and training in Denmark

Short description

Pia Cort

Cedefop Reference series; 36

Luxembourg: Office for Official Publications of the European Communities, 2002

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

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

Luxembourg: Office for Official Publications of the European Communities, 2002

ISBN 92-896-0141-8

ISSN 1562-6180

© European Centre for the Development of Vocational Training, 2002
Reproduction is authorised provided the source is acknowledged.

Printed in Belgium

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

Europe 123
GR-57001 Thessaloniki (Pylea)

Postal Address:
PO Box 22427
GR-55102 Thessaloniki

Tel. (30) 310 490 111
Fax (30) 310 490 020
E-mail: info@cedefop.eu.int
Homepage: www.cedefop.eu.int
Interactive website: www.trainingvillage.gr

Pia Cort
Danish Institute for Educational Training of Vocational Teachers (DEL)

Edited by:

Cedefop

J. Michael Adams,
Anne-France Mossoux,
Eleonora Schmid,
Dóra Stefansdóttir, Project managers

April 2002

Published under the responsibility of:
Johan van Rens, Director
Stavros Stavrou, Deputy Director

Cedefop introduction

This issue of Panorama is the third of a series of short descriptions of individual countries' system of vocational education and training (VET). These short descriptions, alongside our periodical Cedefop Info, are now becoming an important element of Cedefop's work in providing information on VET systems and their development. In this format, reports on Belgium and Spain have been published, while ones on the Netherlands and Iceland are at an advanced stage of preparation. We would be very pleased to have user feedback on the usefulness of this series.

The Danish vocational education and training system has undergone major changes during the last few years. The two main objectives of the restructuring of the system have been to make vocational education and training more attractive and to create a more flexible, individualised system furthering lifelong learning.

This short description can only touch briefly on this large and complicated subject. However, Cedefop's longer description, 'Vocational Education and Training in Denmark' is available in Danish and English both in hard copy and on the Electronic Training Village (<http://www.trainingvillage.gr/>).

We would like to thank the Danish Institute for Educational Training of Vocational Teachers (DEL), especially Pia Cort, for the hard work put into preparing this short document. This was by no means, an easy task. It was further complicated by a change of government and of policy in Denmark during the period in which the document was prepared. We are also grateful to her for dealing with great patience with the numerous proposals for amendments which we suggested to the original draft. Similarly, we would like to thank the Danish members of Cedefop's Management Board, Mr. Svend-Erik Povelsen of the Ministry of Education, Ms. Lise Skanting of the Employers' Confederation (DA) and Ms Astrid Dahl from the Danish Federation of Trade Unions (LO) for their comments on the draft text.

Stavros Stavrou
Deputy Director

J. Michael Adams
Dóra Stefansdóttir
Eleonora Schmid
Anne-France Mossoux
Project managers

February 2002

Author's preface

Trying to describe the Danish VET system is like trying to capture the colours of a chameleon. It keeps changing and adapting to a changing environment. During the last ten years it has undergone numerous reforms, and the reforms seem to come at an accelerated pace. So even the facts of a 'short description' prepared over a relatively short period of time are overtaken by change.

This description was prepared in October 2001, and as such it offers a 'snapshot' of the system. Since then, changes have taken place. A new government came to power in November 2001, and transferred the labour market training programmes from the National Labour Market Authority to the Ministry of Education. In January 2002, numerous councils and centres under the ministries were either downsized or closed down. At the time the document was being finalised, the new government was to present the budget for 2002. It was expected to have an impact on the entire education system.

This short description itself has undergone many changes due to the valuable comments and suggestions from my colleagues in Cedefop, in DEL, and from the Danish members of Cedefop's Management Board. Their comments have been highly appreciated and have been incorporated - wherever possible. However, the responsibility for this final version is my own. This short presentation is not an authorised version from either the Ministry of Education or the Ministry of Employment.

Finally, I would like to take the opportunity to thank Dóra Stefánsdóttir for the fruitful co-operation we have had during the preparation of this short description. It has been a pleasure to be able to switch to Danish – and still be understood!

Pia Cort
DEL
Frederiksberg

January 2002 (last edit)

Table of contents

1.	Background information	7
2.	The education system – a brief outline	11
2.1.	Pre-primary school	12
2.2.	<i>Folkeskole</i> - primary and lower secondary education	12
2.3.	Upper secondary education	12
2.4.	Tertiary education.....	14
2.5.	Financing of pupils and students	14
2.6.	Flow through the education system	14
2.7.	Adult education and continuing training	15
3.	Structure of vocational education and training	17
3.1.	Initial vocational education and training	17
3.1.1.	Characteristic features of IVET.....	17
3.1.2.	Facts and figures on IVET.....	17
3.1.2.1.	EUD-programmes	18
3.1.2.2.	Technical training programmes.....	19
3.1.2.3.	Commercial training.....	20
3.1.2.4.	Certification and qualification.....	20
3.1.2.5.	Financing.....	20
3.1.2.6.	Initial vocational education and training for adults.....	21
3.2.	Continuing vocational education and training.....	21
3.2.1.	Labour market training.....	21
3.2.2.	AMU courses.....	22
3.2.3.	Financing	23
3.3.	Tertiary vocational training	23
3.3.1.	Open education	24
4.	Responsible authorities	25
4.1.	The public sector	25
4.2.	Social partners	25
5.	Public expenditure.....	29
5.1.	Total public expenditure on education	29
5.2.	Public expenditure on vocational education and training.....	30
6.	Qualitative aspects	31



6.1.	Guidance arrangements	31
6.2.	Training of trainers	31
7.	Trends and perspectives	33
7.1.	Reform and innovation	33
7.2.	Reform of adult education and continuing training	33
7.3.	Reform of the social and health care training programme	35
7.4.	New strategy for education and information technology	36
7.5.	Competence development.....	37
7.6.	Internationalisation	37
7.7.	Change of government – change of policy	38
Annex 1:	Acronyms.....	39
Annex 2:	Relevant institutions and organisations	41
	Government agencies.....	41
	Social partners.....	41
	Others	42
Annex 3:	Bibliography	43
	Online Resources	43
	Literature.....	44

1. Background information

Denmark is a constitutional monarchy, which has a single chamber parliamentary system. The 'Folketing' (Parliament) has 179 members, including two elected from the Faeroe Islands and two from Greenland. The community of nations comprises Denmark, Greenland and the Faeroe Islands. Both Greenland and the Faeroe Islands have home rule and are responsible for local matters such as the education and the social system, welfare, taxes, the environment and a number of commercial matters. The following data only apply to Denmark.

Figure 1: Denmark, counties and bigger cities



There are 5.3 million inhabitants in Denmark, of which 4 million live in urban areas. The overall population density is 123 people per square kilometre. It has a total area of 43 000 square kilometres.

Table 1: Population increase per thousand, 1995-99

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
DK	2.2	3.0	3.6	3.1	3.7	6.8	4.6	3.7	3.5	3.0
EU-15	4.6	4.5	5.2	3.9	3.1	2.9	2.8	2.3	2.3	2.6

Source: Eurostat Yearbook 2001

The economy is an open economy, dependent on trade with other countries. The value of both exports and imports constitutes approximately one third of GDP, two thirds of foreign trade are with other EU countries, Germany being the most important trading partner followed by Sweden, the United Kingdom, and Norway. Outside Europe, the USA and Japan are the most significant trading partners.

*Table 2: Gross domestic product at market prices, Denmark and EU-15, 1990-1999
(Percentage change on previous period – constant prices)*

	1990	1995	1999
DK	1.00	2.80	1.70
EU-15	:	2.30	2.40

Inflation rate 2.7 % (2000) (EU-15 average 2.1 %)

1 EURO = 7.4 DKK

Source: Eurostat Yearbook 2001

The labour force constitutes 2.9 million people (1999). Labour market participation is among the highest in the world. In 1999, the labour market participation was 80.6% compared to the EU rate of 69.0%. The high labour market participation rate is due to a very high female participation rate, 76%.

Table 3: Persons in employment, 1989 and 1999, by sector (%)

	Agriculture		Industry		Services	
	1989	1999	1989	1999	1989	1999
Denmark	5.7	3.3	27.4	27.0	66.9	69.7

Source: Eurostat Yearbook 2001.

Table 4: Unemployment rates of the whole population (broken down by gender) and of young people (%)

		1990	1995	1996	1997	1998	1999
Total	EU-15		10.7	10.8	10.6	9.9	9.2
	Denmark	7.7	7.2	6.8	5.6	5.2	5.2
Males	EU-15		9.4	9.6	9.3	8.6	7.9
	Denmark	7.0	5.8	5.5	4.6	4.1	4.5
Females	EU-15		12.5	12.4	12.3	11.7	10.9
	Denmark	8.4	8.9	8.3	6.8	6.6	6.0
Youth >25 years	EU-15		21.5	21.9	21.1	19.5	17.9
	Denmark	11.4	10.6	10.6	8.4	8.0	9.8

Source: Eurostat Yearbook 2001.

The level of educational attainment in the population is one of the highest in the European Union. In 1997, 80% of the population had completed an upper secondary education programme as the lowest level of education. The objective of the Danish government is that 95% of all young people should complete an upper secondary education programme and 50% a programme at tertiary level. (Source: Denmark, The Royal Ministry of Foreign Affairs, <http://www.um.dk/english/danmark/danmarksbog/>, 2002.).

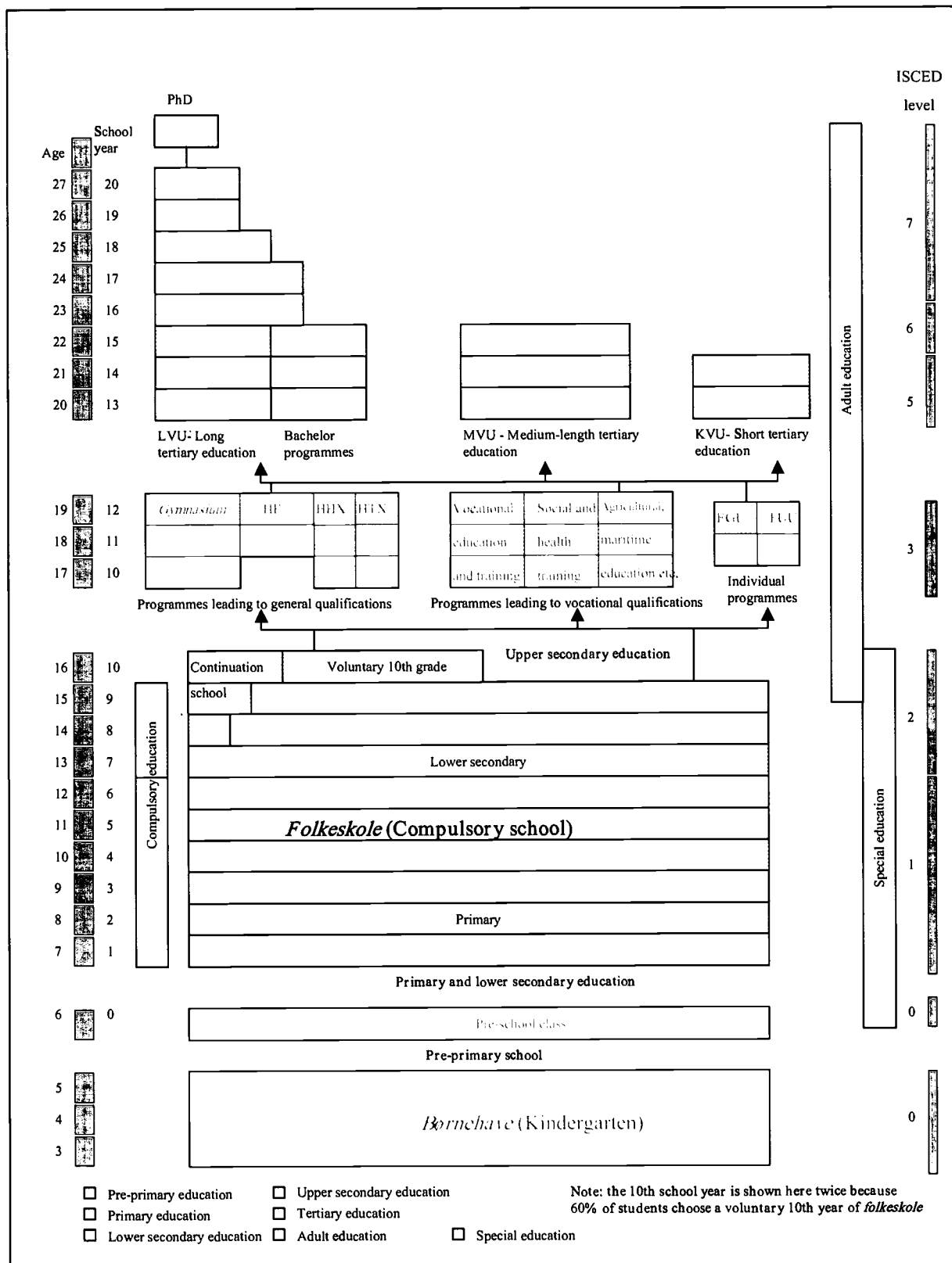
Table 5: Level of educational attainment of the 25-59-year olds in Denmark and some other EU-countries, 1997 (%)

	Compulsory school	Upper secondary education	Tertiary education
EU average	40.6	39.8	19.6
Denmark	20.0	53.6	26.4
Finland	27.4	51.2	21.4
Germany	18.0	58.6	23.5
Netherlands	34.1	42.1	23.8
Sweden	23.3	49.1	27.6
United Kingdom	44.8	31.9	23.4

Source: 'Facts and Figures 2000', Ministry of Education, 2000 on the basis of figures from OECD.

2. The education system – a brief outline

Figure 2: Structure of the education system



Source: Facts and Figures – 2000, Ministry of Education, 2000. Adapted by the author.

2.1. Pre-primary school

Municipalities provide *børnehaver* (*crèches* or kindergartens) for 0-6 year olds. The aim is partly to contribute to their development and partly, and perhaps more importantly, to enable both parents to work. The percentage of working women is among the highest in the world (76% in 1999). More than 80% of all three to six year-olds attend kindergarten (1999)¹. Six year olds can voluntarily attend a one-year pre-school class. In 1997/98, 97 % of all children did this.

2.2. *Folkeskole* - primary and lower secondary education

Education is compulsory from the age of seven to 16. The municipal *folkeskole* is responsible for 89 % of the provision ^(2.) supplemented by the private school sector (11 %). The *folkeskole* is a unified school in which there is no streaming at any level. Apart from the nine years of compulsory education, pupils can voluntarily attend a one-year 10th form³. In 1997/98, 60 % of all pupils chose to do so. On completing the 9th or 10th form the pupils can choose to take the final *folkeskole* examination. This is optional but if the pupils want to continue in one of the general education programmes, they have to take the exam.

The development of personal skills, such as independence, ability to cooperate, ability to learn, self-reliance, has a high priority in all Danish education programmes.

2.3. Upper secondary education

Until 2000, students who wanted to enter a programme preparing them for higher education had to pass final examinations in a number of subjects. This has been abolished and now all students who have completed compulsory school may continue in upper secondary education programmes - largely - of their own choice.

At the level of upper secondary education, students can choose between three types of programmes:

- (a) **General education programmes.** They prepare students for admission to tertiary education by providing them with the necessary general and theoretical qualifications. These programmes include:

⁽¹⁾ *Factsheet Denmark: Social and Health Policy*, Ministry of Foreign Affairs, 2001.

⁽²⁾ *Facts and Figures*, Ministry of Education, 2000, p. 6 – 7.

⁽³⁾ *The 10th form can be regarded as a bridging year between lower and upper secondary education. During this year, pupils have the possibility of taking introductory courses to upper secondary education programmes, thus clarifying possible options.*

- the *Gymnasium*, a three-year general upper secondary education programme, concluding with the school-leaving certificate qualifying for university entrance (*studentereksamen*);
- the *Højere Forberedelseksamen - HF* (higher preparatory examination preceded by an education programme), a two-year alternative to the *Gymnasium*;
- the vocationally oriented upper secondary education programmes: higher commercial examination preceded by training (*Højere Handelseksamen - HHX*) and higher technical examination preceded by training (*Højere Teknisk Eksamen - HTX*). The duration of both programmes is three years and they do not give direct access to any specific jobs.

All programmes have specific requirements, which the students have to meet, e.g. specific subjects, and level of subjects, average grade, and subsequent work experience. Students may have to take supplementary courses if they choose a tertiary education programme where they do not meet the specific admission requirements.

(b) **Programmes leading to vocational qualifications** that allow direct entry into the labour market. These programmes aim at providing young people with professional, personal and general qualifications in demand on the labour market. Graduates are able to enter specific jobs within different trades but have only limited access to education programmes at tertiary level. These can be divided into the following:

- vocational education and training schemes (*erhvervsuddannelserne – EUD*) comprising commercial and technical training programmes;
- social welfare and health training schemes (*Social og sundhedsuddannelserne – SOSU*);
- agricultural training programmes (*Landbrugsuddannelse*);
- maritime training programmes (*Søfartsuddannelse*).

The only requirement for admission to a vocational upper secondary education programme is normally that the applicant has completed compulsory education.

(c) **Individual youth education programmes.** Their aim is to motivate young people to continue their education and training and to assist them in the choice of suitable educational and occupational pathways.

- free youth education (*Den Fri Ungdomsuddannelse - FUU*): a two-year course developing general qualifications and the personal competence of young people. The individual decides, in co-operation with a guidance counsellor, the content of the course in accordance with his/her wishes and needs. FUU does not lead to formal qualifications. However, if participants choose programme modules from other upper secondary modules, these can be accredited.
- basic vocational training (*erhvervsgrunduddannelsen - EGU*): a two-year vocational training course aimed at motivating young people for initial vocational education and training (IVET) or entering the labour market. The course includes in-company training.

2.4. Tertiary education

The tertiary education programmes provide occupational competences and most of them are oriented directly towards certain types of jobs on the labour market. Generally, the tertiary education programmes are divided into levels according to duration and admission requirements:

- (a) short tertiary education programmes (*Korte videregående uddannelser - KVVU*) or vocational academy programmes: two -year courses at vocational schools;
- (b) medium-length tertiary education programmes (*Mellemlange videregående uddannelser - MVU*): three to four-year courses covering a wide range of programmes, e.g. teacher training, educator, policeman, midwife, librarian and the 3-year bachelor courses at the universities;
- (c) long tertiary education programmes (*Lange videregående uddannelser - LVU*): duration five to six years. Generally, the programmes consist of a three-year bachelor degree followed by a two-year *candidatus* programme (to be compared with a master programme);
- (d) a three to four-year researcher programme (PhD degree) building on the *candidatus* programme.

The entrance qualifications for tertiary education are the school-leaving certificate. Vocational training graduates can access relevant KVVU-programmes and may choose to supplement previous training by taking extra-curricular courses and thereby gain access to a MVU or LVU programme.

2.5. Financing of pupils and students

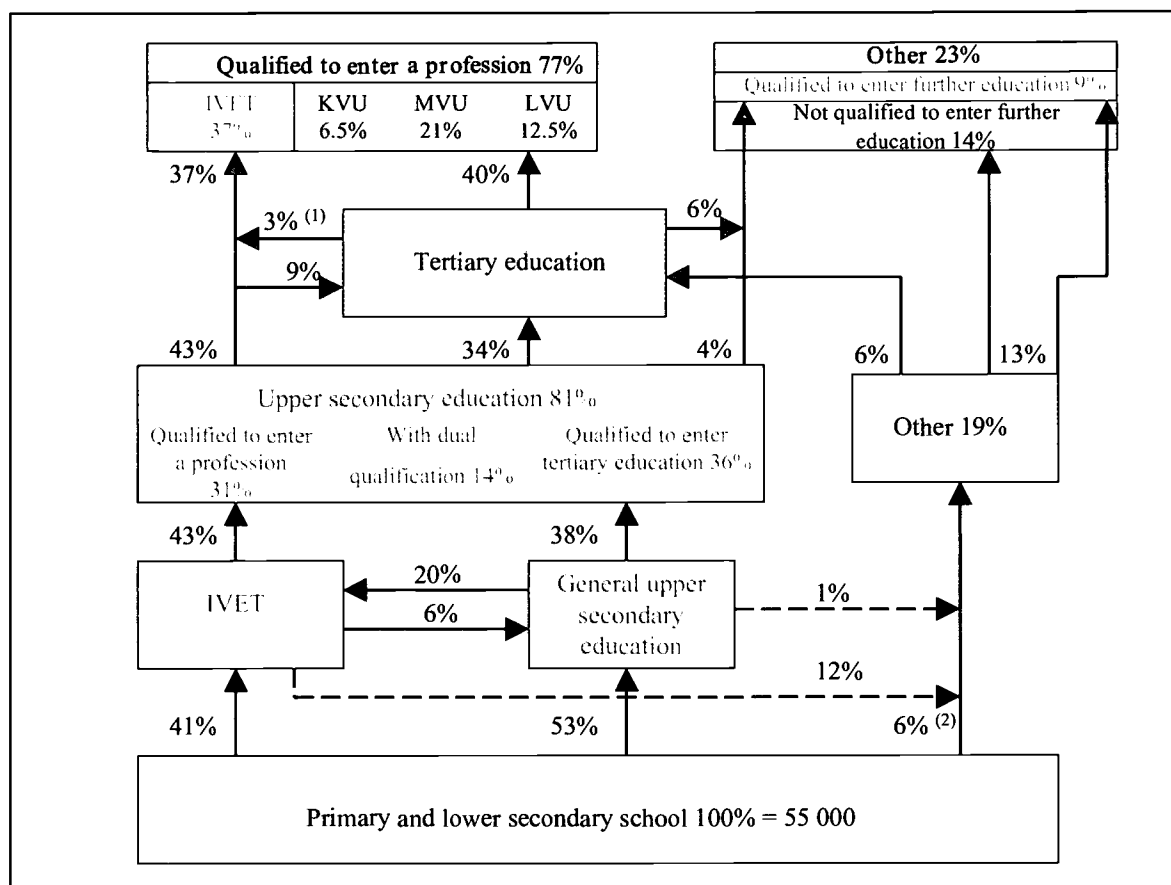
The programmes at the levels of primary, lower secondary, upper secondary and tertiary education are free of charge. Furthermore, students over 18 in upper secondary or tertiary education are entitled to allowances from the State Educational Grant and Loan Scheme (*Statens Uddannelsesstøtte – SU*⁴).

2.6. Flow through the education system

In cooperation with Statistics Denmark, the Ministry of Education's Statistics and Information Division has made a prognosis of the most likely flow through the education system of children starting primary school in 1998.

⁽⁴⁾ SU is meant to cover students' living costs during the time of study.

Figure 3: Prognosis of the flow through the education system of children starting primary school in 1998



⁽¹⁾ Leave university before termination but holding vocational qualification and hence included in the 77% above.

⁽²⁾ Those who will never acquire neither vocational qualification nor qualify for further studies at the level of upper secondary education.

However, 1% will complete a tertiary education programme, and of the remaining 5% some will continue in e.g. an EGU or FUU programme.

Please note that the figures may deviate due to rounding up/down.

Source: Statistics Denmark and model calculation made by the Ministry of Education's Statistics and Information Division. Adapted by the author.

As to the aspect of gender, figures from Statistics Denmark show that more female students complete a vocationally qualifying education programme than male students. Male students are however a majority at the IVET programmes (see section 3.1.2).

2.7. Adult education and continuing training

Denmark has a long and strong tradition in adult education and continuing training. The adult education and continuing training dealt with here is publicly financed and regulated by law, but in addition to this there is a wide range of private education and training schemes.

As can be seen from figure 2, adult education is available at almost all levels in the education system, from lower secondary to tertiary education. The programmes consequently provide a wide range of offers from basic skills courses to master programmes. They include both part- and full-time programmes of several years' duration. Many of the programmes lead to formal qualifications. The programmes are traditionally classified in three categories:

- (a) general adult education (*det almene voksenuddannelsessystem – AVU*), the adult education associations (*oplysningsforbund*) and the free evening schools;
- (b) adult vocational training schemes or 'labour market training courses' (*arbejdsmarkedetsuddannelserne – AMU*) (see 3.2.2);
- (c) further education/open education (*åben uddannelse*).

Adult and continuing training are to a large extent provided by the state. However a tuition fee must be paid for a number of adult education and continuing training programmes.

The system is currently being reformed in order to become more transparent and flexible, thus improving the possibilities for lifelong learning. The new system is described in section 7.2.

3. Structure of vocational education and training

Vocational education and training (VET) is offered within a uniform, nationwide system providing qualifications that are valid throughout the country and recognised by employers and trade unions.

3.1. Initial vocational education and training

Initial vocational education and training (IVET) can be divided into:

- (a) vocational education and training (*erhvervsuddannelserne* - *EUD*) which covers commercial and technical training;
- (b) basic social and health care training (*social- og sundhedsuddannelserne* - *SOSU*). The programmes are being reformed, see section 7.3;
- (c) agricultural training;
- (d) maritime training, controlled and regulated by the Maritime Authority.

Except for maritime training, these programmes are all under the jurisdiction of the Ministry of Education.

3.1.1. Characteristic features of IVET

All IVET programmes teach the necessary vocational skills for a trade or profession and also give access to higher education. Periods of school education alternate with periods of in-company training, based on an apprenticeship contract between trainees and the company in question. Generally, a trainee spends two thirds of his/her training period in one or more certified training companies. These must have a certain level of technology and offer a variety of tasks, according to the requirements in the chosen occupation. In 2001, about one third⁵ of all companies had apprentices. Close interaction between school-based and work-based training is an important element in easing the transition from education to work. During in-company training, the trainee not only acquires the vocational skills needed to perform in a specific trade but also the social and personal qualifications needed to enter the labour market.

3.1.2. Facts and figures on IVET

The number of trainees in IVET fell steadily from 1985 to 1998. This reduction is due to smaller youth cohorts, but also in part to the new individual youth education programmes (see

⁵⁾ Based on how many companies receive wage reimbursement from *Arbejdsgivernes Elevrefusion* - *AER*, (see section 3.1.1.4). The figure has to be taken with some reservations.

section 2.3), which attracted 2% of an annual intake (1998), and in part to the popularity of the HHX and HTX programmes, the intake of which rose from 8% in 1985 to 15% in 1998⁶.

Table 6: **Number of trainees in IVET by sector in 1985, 1990, 1995 and 1998**

	1985	1990	1995	1998
Total	136 810	124 406	129 592	122 733
Commercial EUD	55 829	50 290	47 347	37 213 ^(*)
Technical EUD	73 755	67 737	69 343	69 405
Social and health care training	4 455	3 386	11 204	13 880
Other ^(**)	2 771	2 993	1 698	1 247

Note: Compiled on 1 October of the year indicated, i.e. for 1995 at the start of the 1995/1996 school year.

(*) The 1998 figure for commercial training is not directly comparable to the figures from the previous years. The significant drop is due, among other things, to the fact that it is possible to enter the programmes via either 38 or 76 consecutive weeks of school-based training.

(**) The group 'other' includes merchant navy, agriculture, forestry, home economics and craft courses.

Source: *Uddannelsesredegørelse – 1997*, Ministry of Education, 1997. The 1998 figures are from *Uddannelse og kultur 1999:13*, Statistics Denmark, 1999.

Table 7: **Gender distribution, in %, of the total number of trainees in IVET**

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Men	57.0	57.7	56.8	56.6	56.7	57.1	57.1	56.6	55.4	53.5
Women	43.0	42.3	43.2	43.4	43.3	42.9	42.9	43.4	44.6	46.5

Source: *Uddannelse på kryds og tværs*, Ministry of Education, 2001. p. 155.

The number of male trainees is on average marginally higher than the number of females in the IVET programmes: 53.5% male trainees vs. 46.5% female trainees in 1998. There is, however, an uneven distribution within programmes. In commercial training and in SOSU, the number of female trainees is significantly higher: two third of all trainees in commercial training are female, and for the SOSU programmes more than 90%. In technical programmes, male trainees dominate for example within building and construction, there are 93% male trainees.

An important education policy priority is to reduce the number of dropouts and to reduce the number of young people 'surfing' between upper secondary education programmes. Overall the dropout rate has been only marginally reduced from 16% in 1989 to 12% in 1998. Approximately two third of dropouts continue in another education programme⁷.

3.1.2.1. EUD-programmes

EUD-programmes account for approximately 90% (1998) of all IVET and cover both technical and commercial education and training. There are about 50 technical, 50 commercial and 10 combined technical and commercial colleges.

There are two routes of access to the EUD programmes: the school path and the company path. The trainees can either enrol on a basic course or start in a company with which they

⁽⁶⁾ Source: *Uddannelse på kryds og tværs*, The Danish Ministry of Education, 2001.

⁽⁷⁾ Ibid.

have a training contract. Regardless of the entry path chosen, duration and content of the training are identical.

The EUD-programmes were reformed in 2001. A key objective was to simplify their entry routes. The number of entry routes was substantially reduced from 83 to seven basic courses:

- (a) technology and communication,
- (b) building and construction,
- (c) crafts and engineering trades,
- (d) food production and catering,
- (e) mechanical engineering, transport and logistics,
- (f) service industries,
- (g) commerce, clerical education and finance (implemented with the commercial reform in 1996. See 2.1.2.3).

The trainee has the possibility of trying out various trades before finally deciding on one of them. Many trainees are, however, quite confident in their educational choice – compared to students in general upper secondary education programmes.

Other key elements of the reform are:

- the educational plan (*uddannelsesplan*) as a compulsory element in the EUD-programmes. The aim is to ensure coherence between the trainee's wishes and the actual training programme;
- the introduction of an educational portfolio (*uddannelsesbog*). Its aim is to increase trainees' awareness of the learning processes. While the personal education plan contains intended learning pathways, the portfolio links and documents actual learning and skills acquired by the student;
- the possibility of acquiring additional or partial qualifications. These are targeted at low-achievers who may be in danger of dropping out;
- a pedagogical renewal of the programmes. The development of both the personal qualifications and the proficiency level of the trainees is further emphasised and they are to be more active in the learning.

3.1.2.2. *Technical training programmes*

The new technical training programmes consist of two parts:

- a basic course, and,
- a main course (VET specialisation).

The basic courses are school-based and completed with the award of a certificate. Generally, they last 20 weeks, but they can vary from 10 to 60 weeks depending on the needs of the individual trainee. The basic course includes both project work and workshop-based training.

Each basic course gives access to 83 main courses (specialisations) the trainee can choose from. Approximately one third of the training period is spent at school and two thirds are spent in a company. The total duration is approximately three and a half years.

3.1.2.3. *Commercial training*

The programmes in the commercial and clerical sector were reformed in 1996. Training now takes four years. The school-based part of the programmes has been extended considerably without reducing the periods of in-company training. Trainees can access the programmes through either the company or the school-based route and choose between either 38 or 76 weeks at school. The commercial and clerical courses consist of three lines of study:

- clerical;
- retail trade;
- wholesale trade (with a number of specialisations).

The reform furthermore implied a shift of focus from qualifications to competences. All the programmes are based on a number of general, personal and vocational skills required by the labour market.

3.1.2.4. *Certification and qualification*

EUD-programmes conclude with a journeyman's test. The relevant trade committee issues a certificate on successful completion of a programme. For the school-based part of the training, the school issues a certificate.

3.1.2.5. *Financing*

The vocational schools receive grants from the State on the basis of the number of participants. The introduction of this system has given the schools a relative autonomy in financial, administrative and educational matters.

Teaching is free of charge and trainees receive a salary during their entire contract period – both on-the-job and in school. During school periods the companies receive compensation from the Employers' Reimbursement Scheme (*Arbejdsgivernes Elevrefusion – AER*). The AER scheme was set up by law in 1977 and is financed from contributions from all employers. In 2000, the fund collected a total of 2 258 million DKK (305 million EUR).

3.1.2.6. *Initial vocational education and training for adults*

Under the EUD-programmes, there is a special scheme called *voksenerhvervsuddannelser* (VEUD) -adult vocational education and training - aimed at giving adults over 25 the possibility of acquiring the same vocational skills as young people. The VEUD-scheme was established in 1992 in order to reduce the number of unskilled workers and solve bottleneck problems in the labour market. VEUD-programmes are provided by vocational schools and organised as ordinary EUD-programmes with school-based training alternating with in-company training. Adult apprentices can shorten the duration of training on the basis of qualifications acquired in previous education and relevant employment (credit transfer). Employers receive a higher wage supplement for taking in an adult apprentice and the adult apprentice normally receives higher wages. In 1999, there were 2 579 full-time equivalent trainees⁸.

3.2. **Continuing vocational education and training**

A long tradition of continuing vocational education and training (CVET) is a characteristic feature of the labour market policy, CVET is considered a public responsibility.

3.2.1. **Labour market training**

CVET is primarily provided through the labour market training system (*arbejdsmarkedsuddannelserne* - AMU) initiated in the 1960s. In the 1960s and early 1970s, the labour market was characterised by full employment and major changes in the economy. Industry recruited employees from the agricultural sector, mostly men, and at the same time many women entered the labour market. The majority of these workers had only a little previous schooling and the need for systematic upgrading of qualifications arose. The first AMU act was passed in 1960 and AMU soon became an important tool in overall labour market policy⁹.

AMU is regulated by the Act on Labour Market Training last amended in 1995. Its objectives are:

- (a) to give, maintain and improve the vocational skills of the participants in accordance with the needs and background of the enterprises, the labour market and individual persons and in line with technological and social development;
- (b) to solve restructuring and adaptation problems on the labour market in a short term perspective, and

⁽⁸⁾ Source: *Thematic Review on Adult Learning – Denmark*, OECD, 2000.

⁽⁹⁾ Source: *Ibid.*

- (c) to contribute to a general upgrading of the qualifications on the labour market in a long term perspective.

AMU is provided by 24 AMU independent centres (regulated by the Act on Labour Market Centres) and vocational schools all over the country. Private companies and other educational institutions can also be certified as providers of specific AMU courses. AMU addresses both skilled and unskilled workers over 20 years of age. It is worth noting that both employed and unemployed people can participate in AMU courses.

3.2.2. AMU courses

AMU courses are not organised as alternance training, but take place exclusively at vocational schools and AMU centres. However, participants may have to acquire work experience between the different AMU modules. Often, a considerable part of practical training is included/integrated in the course, in workshops and laboratories at AMU centres. The AMU courses are a part of the system to raise the level of the individual's qualifications through several modular courses. Within a range of occupations the completion of an entire series of courses enables unskilled participants to gain vocational qualifications, sit the final apprentice's examination or acquire credit for subsequent vocational training.

As in IVET, it is considered an important objective to include elements of both general education and vocational training in AMU courses.

There are approximately 2 000 different AMU courses, which cover different sectors and trades, e.g. construction, hotel and catering, agriculture and dairy, service industries. These can be divided into five main groupings:

- (a) Training courses giving formal competence. These courses make up the core of the AMU courses and are organised as relatively short and intensive training courses of up to six weeks' duration. The courses can be arranged flexibly, i.e. continuous full-time instruction during the daytime, part-time instruction or evening classes, etc;

Table 8: Number of participants starting courses giving formal competence, 1993-2000

1993	1994	1995	1996	1997	1998	1999	2000
241 337	273 914	290 288	318 024	354 944	389 980	370 576	292 857 ⁽¹⁾

⁽¹⁾ The 25% fall in participation from 1998 to 2000 is due to two factors. First the introduction of management-by-objectives in the AMU programmes in 1999. Secondly, the arrangements for funding in the Finance Act of 2000. Funding of courses for unemployed people is now under the auspices of the Public

Table 9: Number of participants in qualifying courses distributed according to labour market status, 2000 ⁽¹⁾

Employed	Unemployed	Unknown	Total
266 730	25 723	404	292 857

⁽¹⁾ When starting AMU course.

Source: Arbejdsmarkedsuddannelserne 2000, AMS, 2000.

- (b) integrated AMU courses (*sammenhængende uddannelsesforløb*). These are training measures of longer duration targeted at persons in employment, unemployed persons or refugees/immigrants;
- (c) individual identification of competence. The purpose of these courses is to help the individual participant to identify his or her vocational competence and general qualifications with a view to subsequent participation in continuing education and training. The courses are targeted at both unemployed and employed people;
- (d) company-specific courses (*virksomhedstilpassede kurser – VTP*) are courses adapted to the specific training needs of the enterprises;
- (e) the AMU training school courses (*træningsskolens arbejdsmarkedsuddannelser - TAMU*) are targeted at those in 18–25 year old age group from with personal and social adjustment difficulties. Their aim is to develop the participants' social, work and personal competences and thereby facilitate their entrance into the labour market or the ordinary education system, e.g. a VET programme.

3.2.3. Financing

AMU activities, including the operating expenses of the AMU centres, are financed through the Labour Market Contribution (8% gross tax paid by all those employed). The total public costs of AMU in 1999 were set at about DKK 3 994 million (EUR 533 million). There are about 2 000 different AMU-training courses.

They are free of charge for the participants who are entitled to financial compensation (*voksen- og efteruddannelsesgodtgørelse – VEU-godtgørelse*) corresponding to unemployment benefit (90% of salaries). It is paid to employed wage earners and to unemployed people. For the employed, the company will very often supplement the amount. In addition, participants may receive a transportation allowance and financial support for board and lodging if the courses are offered away from home.

3.3. Tertiary vocational training

At the level of tertiary education, a number of short vocationally oriented KVVU programmes (not based on an alternance principle) are in operation. A reform was implemented in 2000 with the aim of raising their attractiveness and to ensure their quality and homogeneity. Their number reduced from 75 to 15.

The programmes cover the following fields: agriculture, textiles, clothing and design, food industry, hotel and tourism, finance, construction, technology and energy, IT and electronics, industrial production, laboratory technicians, IT and communication, retail trade, international marketing, computer specialist, and transport logistician. Except for a few of the new

programmes, students who have completed a relevant EUD programme or another upper secondary education programme will have access.

The number of participants has been increasing over the years. In 1998, there were 18 094, compared to 12 292 in 1990.

KVU is provided by vocational schools, approved by the Ministry of Education.

In the new KVU programmes, the social partners are represented in the national Vocational Academy Council (*Erhvervsakademirådet*). The aim of this council is to ensure coherence between the programmes and the skills demands at the labour market.

3.3.1. Open education

A number of one to three years further vocational education and training courses are regulated by the Act on open education (under the Ministry of Education). They are very popular, especially among people who, after completing a vocational education and training programme, have acquired job experience. The courses are provided and financed mainly by public funds, however a fixed participation fee is charged.

Vocational schools can offer all their education programmes as part-time courses or as single subjects under the Act on open education. The training programmes on offer include, among others, the '*merkonom, tekonom* and *datanom*' courses leading respectively to a diploma in specialised business studies, operations and production planning, or specialised computer studies. The courses are usually provided by vocational schools in the form of evening classes.

In the school year 2000/2001, there was a total of 162 044 open education participants at the vocational schools. Of these 70 898 completed the courses by passing an examination. The rest either failed, completed the course without attending the examination, or dropped out.

4. Responsible authorities

4.1. The public sector

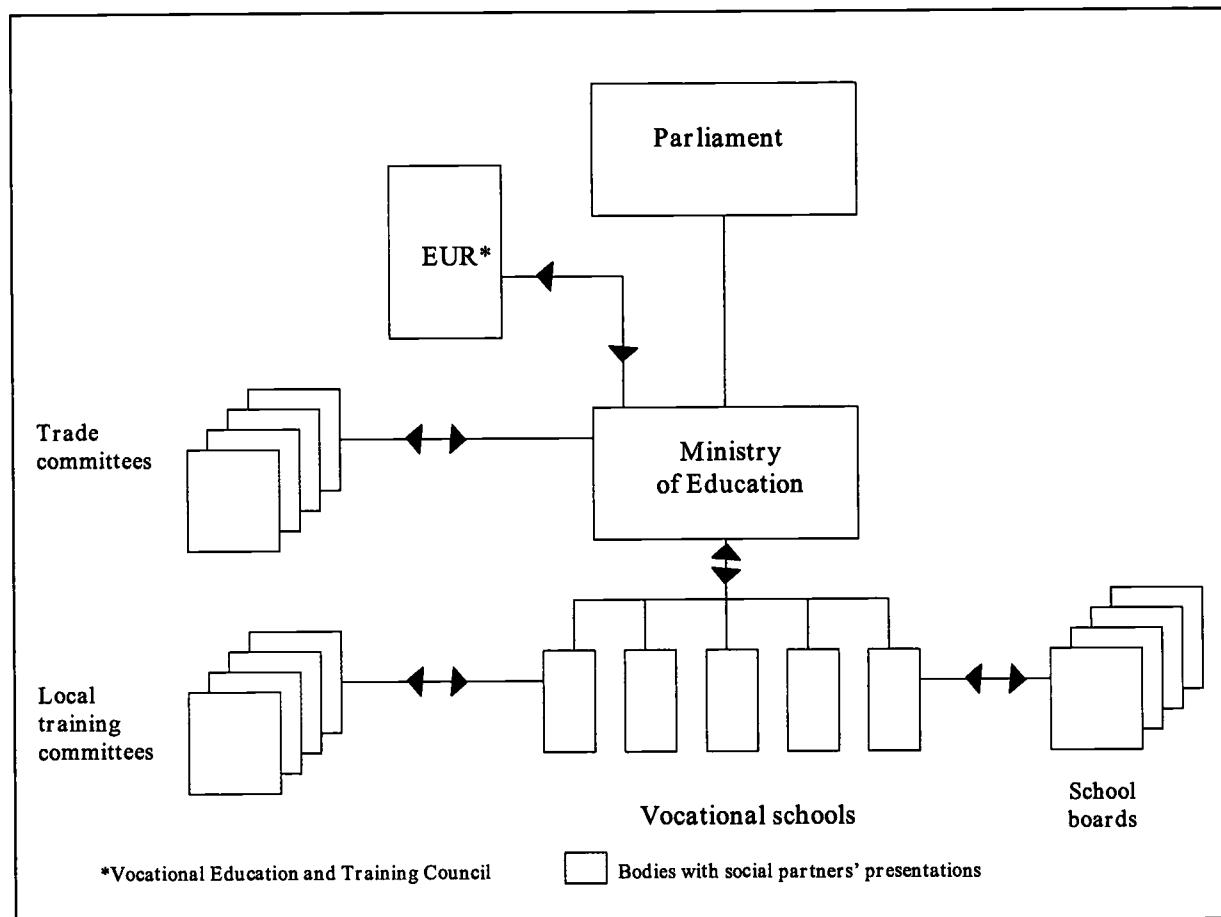
IVET, KVVU and open education are under the auspices of the Ministry of Education (except for SOSU which is under the responsibility of the counties), while AMU falls under the authority of the National Labour Market Authority (*Arbejdsmarkedsstyrelsen - AMS*)¹⁰, a unit under the Ministry of Labour. The role of the ministries in VET has gradually become restricted to controlling and framework governance. Vocational schools and AMU centres have acquired greater autonomy on content, organisational approach and financial management. However, it is still a central objective to retain a national standard of qualifications.

4.2. Social partners

Active participation by social partners is a central element in the Danish VET system ('the Danish Model'). This guarantees that the content of individual VET programmes meets the demands of the labour market and that qualifications are recognised in business and industry.

(¹⁰) From 27 November 2001 AMU is under the authority of the Ministry of Education, see section 7.7.

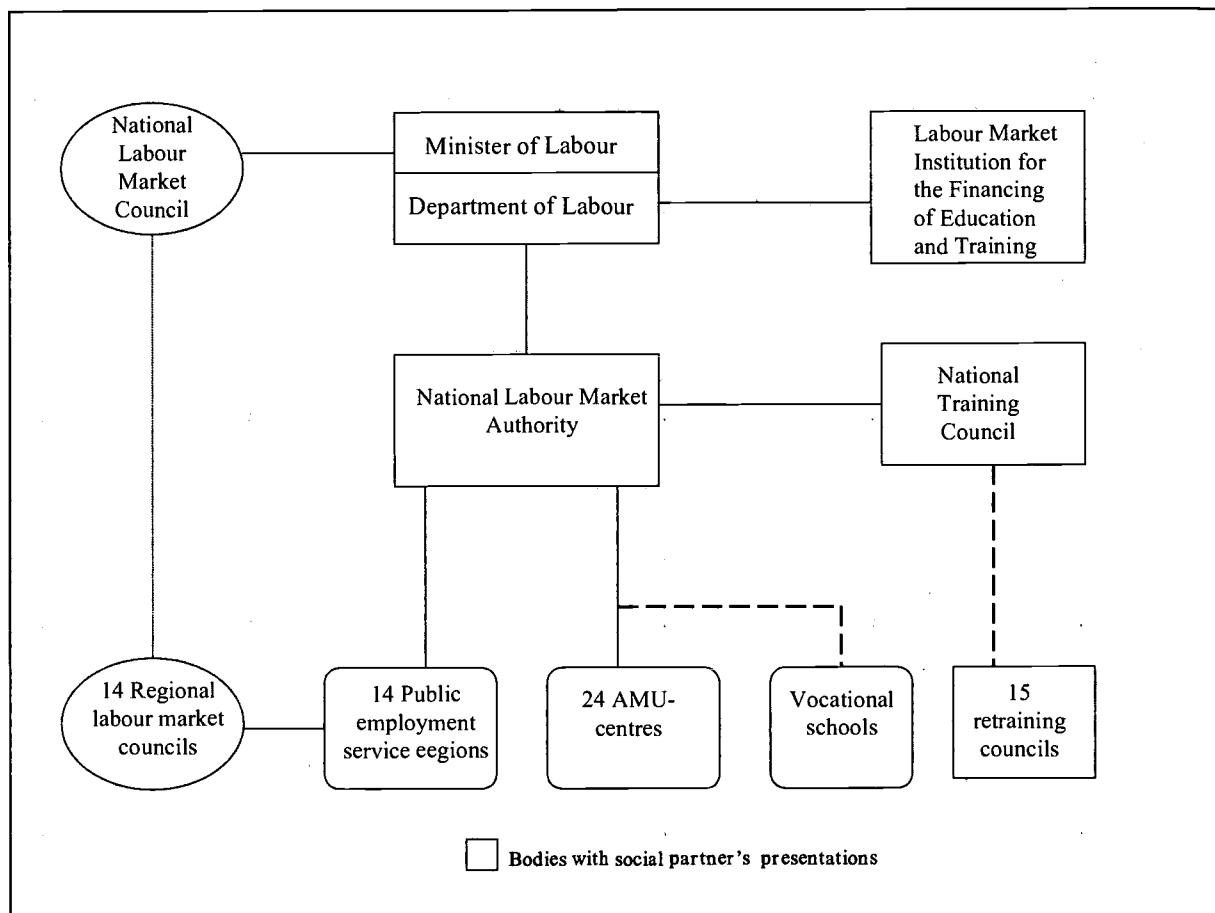
Figure 4: Major stakeholders in initial vocational education and training



The social partners are represented in:

- (a) the Vocational Education Training Council (*Erhvervsuddannelsesrådet – EUR*) which gives advice to the Minister of Education on objectives and structures, admission requirements, qualification needs, certification and quality issues;
- (b) the national Trade Committees (*de faglige udvalg*) that provide sector relevant advice on the content, structure, duration and evaluation of programmes and courses;
- (c) the Local Training Committees (*de lokale uddannelsesudvalg*) which assist schools in planning the content of programmes. They provide advice on all matters concerning training and help strengthen contact between schools and the local labour market.

Figure 5: Major stakeholders in continuing vocational education and training



Social partners play an important role in the following bodies:

- (a) the Labour Market Institution for the Financing of Education and Training, which advises the Ministers of Labour and Education concerning the total need for VEUD and CVET;
- (b) the National Training Council which advises the Minister of Labour on issues common to all labour market training programmes;
- (c) the retraining councils which play an important role in keeping labour market training in touch with the needs of the labour market. Represented in the committees are social partners from different sector areas. They make recommendations on training requirements in a specific sector, and on new training programmes etc. The number of committees was reduced from 53 to 13 in 2000 due to reorganisation;
- (d) the National Labour Market Council, which advises the Minister of Labour and participates in the planning of labour market policy;
- (e) the Regional Labour Market Councils, which are advisory bodies to public employment services.

5. Public expenditure

5.1. Total public expenditure on education

Compared to other countries, a relatively large proportion of education and training is provided and funded by the public sector. In 1998, public spending on education and training constituted 8.3% of GDP. This is a 0.6 percentage increase since 1995. The OECD-average was 5.3%. Private expenditure on education constituted only 0.36% of GDP in 1998. So the relative proportions of public and private funds for educational institutions were in 1998:

- public sources: 97.9%
- private sources: 2.1%.

Education also constitutes a relatively high percentage of total public expenditure. In 1998, 14.8% of total public expenditure went to the funding of education and training. This figure includes private sector subsidies. The 1995 OECD figures showed that a relatively high percentage goes to subsidies for living costs (the Danish SU-system): 2.5% versus the OECD average of 0.9% ⁽¹¹⁾.

Table 10: Public expenditure on educational institutions, plus subsidies to the private sector, as % of total public expenditure and as % of GDP, by level of education, 1995 and 1998.

	Total public expenditure				GDP			
	1998			1995	1998			1995
	Primary, secondary, post-secondary non-tertiary	Tertiary	All levels	All levels	Primary, secondary, post-secondary non-tertiary	Tertiary	All levels	All levels
OECD average	8.7	3.0	12.9	11.9	3.6	1.3	5.3	5.4
Denmark	8.8	3.9	14.8	13.1	4.9	2.2	8.3	7.7
Finland	7.6	4.0	12.4	12.1	3.8	2.0	6.2	6.9
Germany	6.3	2.3	9.8	8.6	3.0	1.1	4.6	4.7
Netherlands	6.8	3.0	10.6	9.1	3.1	1.4	4.9	5.0
Sweden	9.1	3.6	13.7	n.a.	5.3	2.1	8.0	n.a.
UK	8.3	2.6	11.9	11.2	3.4	1.1	4.9	5.2

n.a. = not available

Source: Education at a Glance – OECD Indicators: Education and skills, OECD, 2001, p. 100.

⁽¹¹⁾ Education at a Glance – OECD Indicators, OECD, 1997 and 2001.

5.2. Public expenditure on vocational education and training

In 1998, the vocational colleges' direct teaching expenditure in the field of VET amounted to approximately DKK 2.5 billion (EUR 338 million)⁽¹²⁾. The expenditure on programmes within the trade and clerical area amounted to DKK 657 million (EUR 89 million) and thus made up the largest proportion (26%) of the expenditure on vocational education and training. Total expenditure increased by 41% from 1992 to 1998, from DKK 1.8 billion (EUR 243 million) to DKK 2.5 billion (EUR 338 million).

Expenditure on public sector adult education rose by DKK 2.1 billion (EUR 283 million) or 38% from DKK 5.5 billion (EUR 743 million) in 1993 to DKK 7.6 billion (EUR approx. 1 billion) in 1998. This figure does not include leave allowances or educational support for participants in special education and training offers or continuing training in the private sector, etc. The expenditure on labour market training (AMU) constitutes the biggest proportion of adult education expenditure, DKK 2.3 billion (EUR 311 million) in 1998 (30% of the total expenditure).

In 1998, the expenditure on open education amounted to approximately DKK 1.1 billion (EUR 150 million).

⁽¹²⁾ Teachers' salaries, purchase of teaching material and equipment plus running expenses. Source: Ministry of Education's Statistics and Information Division.

6. Qualitative aspects

6.1. Guidance arrangements

The Act on Educational and Vocational Guidance provides the regulatory framework for guidance in vocational education. The Danish National Council for Educational and Vocational Guidance (*Rådet for Uddannelses- og Erhvervsvejledning* - R.U.E.), has been established under the Ministry of Labour¹³ and is accountable to the Minister of Labour. It functions as an advisory body for the Ministries of Labour and Education. Its aim is to develop and coordinate guidance efforts. R.U.E. plays an important role in making sure that all guidance activities link together and function as a whole.

Currently, 27 different types of guidance services are offered to specific target groups. In VET, guidance is offered within each of the schemes (EUD, SOSU, agricultural training, and AMU). The counsellors are often teachers or social workers who have completed a supplementary course. Counselling is often a part-time function.

6.2. Training of trainers

Compared to other EU Member States, the training course for vocational teachers is relatively short. The course builds on the professional skills and practical work experience of the participants who are either skilled workers or have completed tertiary education. The course aims at ensuring the skills of the participants, i.e. they should be able to work as teachers at vocational schools or labour market training centres after completion of the course.

The basic training programme for vocational teachers (*pædagogikum*) is a sandwich-type programme i.e. theoretical education alternating with practical training. The duration of the programme is three semesters with 14 weeks of school-based and 4 weeks of on-the-job training. Work-based training involves teaching, observation techniques and instruction and guidance on subject-specific didactics and methodology. Participants also work as teachers during their training period.

The educational course for vocational teachers takes place at the Danish Institute for Educational Training of Vocational Teachers (*Danmarks Erhvervspædagogiske Læreruddannelse* – DEL). Teachers can enrol in further education and training – both internally and externally. Internally, they can participate in research and development projects (*forsøgs- og udviklingsprojekter* - FoU projects) under the Ministry of Education. This is considered an important means not only to develop VET programmes and schools, but also

⁽¹³⁾ From 27 November 2001 under the Ministry of Education. See section 7.7.

teachers' resources and skills. Externally, the teachers can upgrade their skills and qualifications by taking the Diploma Programme in Vocational Teaching provided by DEL or by following the educational guidance counsellor training programme.

As to training of in-company trainers, there are no formal requirements. Normally the trainer will be a skilled worker with no specific training for this role. However, in recent years many big companies have begun organising in-company training courses for trainers. A number of vocational schools and labour market training centres are offering short coaching technique courses for in-company trainers. This trend is, among others, due to the introduction of the personal educational plan in VET and the general trend towards better human resource management. Several companies arrange additional courses for trainers aiming at developing their skills, but this is not very well documented.

7. Trends and perspectives

7.1. Reform and innovation

The VET system has in recent years undergone numerous reforms. An overall objective has been to create a flexible and transparent VET system based on the idea of lifelong learning.

A discernible movement can be detected in the principles behind the VET reforms:

- from teaching to learning;
- from focus on qualifications to focus on competences;
- from class room teaching to differentiated teaching, based on the needs of the individual;
- from narrow to broad access routes;
- from standardised to flexible modularised educational offers.

7.2. Reform of adult education and continuing training

A reform of the adult education and continuing training system came into force on 1 January 2001. Its aim is to create a 'parallel adult education system',¹⁴ in which students can acquire the same competences as in the ordinary education system. Furthermore, the reform is to ensure that adults are credited for the competences they have acquired – be it through formal education or non-formal on-the-job training. Another aim of the reform is to improve the opportunities for adults with a low level of education. Courses for adults in general subjects such as reading, writing and mathematics are highly prioritised. Finally, the reform aims at improving the utilisation of resources. Adult education and continuing training is to a high degree financed by public means.

The new adult education and continuing training system can be divided into three levels of education:

- (a) Preparatory adult education (*forberedende voksenuddannelse* - *FVU*) aims at strengthening basic skills such as reading, writing and mathematics. About one million adult Danes active in the labour market force have reading skills at a level which is considered insufficient compared with the literary skills required in a knowledge society¹⁵. Teaching at FVU programmes takes place at the participants' working place in

⁽¹⁴⁾ Source: *Thematic Review on Adult Learning – Denmark*, OECD, 2000.

⁽¹⁵⁾ Source: *Literacy in the Information Age*, OECD, 2000.

order to interact with their specific needs. In the first six months of 2001, 5 314 adults participated in FVU. The overall objective for 2001 was that 10 500 adults should go through a FVU course.

- (b) Basic adult education (*grundlæggende voksenuddannelse - GVV*) comprises education and training programmes corresponding to ordinary youth education programmes at the upper secondary level (post-16). GVV also includes VEUD (see 3.1.2.6). An innovation is that it will be easier to have prior education and work experience credited. Before starting a GVV-programme, participants will go through competence assessment in co-operation with a guidance counsellor. A personal education plan will be drawn up showing the skills that the participant lacks. The GVV programme will be tailor-made so adults may supplement their present knowledge by courses and for example thereby achieve a skill level. Via GVV-programmes, the participants can acquire the same qualifications as through an ordinary VET programme or VEUD. However, GVV is not an alternance based programme (only one month's practical training is possible as part of GVV) and the participant does not sign a contract with a company. The GVV-programme is organised on a part-time basis so that the participants can continue their professional activities.
- (c) Advanced adult education (*videregående voksenuddannelse - VVV*) corresponds to tertiary education. Its programmes are different from the 'ordinary' programmes (see 3.3) in regard to organisation and content. In VVV the admission requirements are relevant educational background and at least two years of work experience.

A major proportion of adult education and continuing training is provided free of charge and is financed from taxes. With the reform, the private sector is seen as taking on more responsibility for both the provision and funding of continuing and further education and training for adults in employment.

A new fund, the Labour Market Training Fund (*Arbejdsmarkedets Uddannelsesfinansiering - AUF*), has been established. It is built on the same principles as the AER (see 3.1.2.5), i.e. all employers will contribute with a sum per full-time employee to it. Employers then have the right to receive support from the fund when their employees participate in continuing training courses. The social partners are equally represented on the board of AUF and are responsible for making recommendations to the Ministers of Labour and Education concerning the total need for education and training and the expenditure entailed in the field of CVT.

As for participants in adult education and continuing training, a state educational support scheme for adults (*Statens Voksenuddannelsesstøtte - SVU*) has been set up. Participants in GVV and VVV now have two options for receiving financial support via either SVU or VEU-godtgørelse (see section 3.2.3).

7.3. Reform of the social and health care training programme

In spring 2001, Parliament adopted a new Act on the basic social and health care training (SOSU) programme. The programme has had a problem of esteem – similar to other VET programmes¹⁶. In recent years, municipalities and counties (which employ social and health care workers) have had problems recruiting not only to the SOSU programme but also to available positions within the sector. The reform aims at improving the image of the programme by extensive changes in structure, substance and possibilities for further education.

The reform elements are very similar to those of the EUD programmes (see 3.1.2.1):

- establishment of a broad access route, which gives access to both the social and health care helper training programme (14 months) and the educator assistant programme (19 ½ months);
- establishment of a flexible basic course. Average duration will be 20 weeks, but this can be extended to approximately 40 weeks, if the trainees need extra time to acquire the competences needed to continue the main course, want to improve their qualifications, or wish to clarify their educational choice through work-based training periods;
- increased focus on general and personal competences. The trainees have to learn to deal with different groups of clients and must therefore develop their social and (inter)personal skills. The school-based periods in the main courses will be prolonged in order to attain this objective. The prolongation should, however, also be seen as an attempt to upgrade the programmes and create a structure comparable with other VET programmes;
- a shift in focus from teaching to learning. The programmes are based on the action-reflection principle. The trainees are to be active participants in the learning processes both at school and at work. They are to reflect upon the training and thereby ‘learn how to learn’. An important tool in this process will be the personal education plan;
- improving the interaction between school-based and work-based training. This is done by introducing the personal education plan which is a working tool for the trainee, the educational institution and the workplace;
- improving access to further and tertiary education. The trainees no longer have to pass an admission examination in order to continue their studies in one of the MVU programmes within the social and health care area. Social and health care helpers can continue on the social and health care assistant programme (20 months), and afterwards on a MVU programme such as nurse, social worker, educator, and physiotherapist, while trained educator assistants have access to the educator programme.

¹⁶) The report ‘Uddannelsesvalg efter 9.klasse’ showed that young people perceive education programmes as a hierarchical range of offers with the IVET programmes placed at the bottom. The parameter determining where an education programme is placed is the degree of general rather than vocational content. Dines Andersen: *Uddannelsesvalg efter 9. klasse*, Socialforskningsinstituttet, 1997, p.23.

The new Act came into force on 1 January 2002, but prior to this a number of pilot and development projects had been initiated at the social and health care schools.

7.4. New strategy for education and information technology

In August 2001, the Ministry of Education launched a new strategy for education and IT. In the new strategy, focus shifts from hardware and the development of e-networks to educational content, knowledge sharing and the development of IT competences. Thus, the new strategy focuses on how teaching, learning and IT can be combined in a fruitful way that exploits the vast opportunities offered by IT. Another important element in the strategy is to move the focus from learning *about* IT to learning *with* IT.

An action plan has been set up and six focus areas have been defined:

- (a) development of educational content and form utilising the opportunities offered by IT;
- (b) upgrading educators' and managers' IT competences (spearhead strategy), e.g. through the creation of in-service training programmes;
- (c) development of network based tools for intensified knowledge sharing;
- (d) development of 'virtual services' in the education system, i.e. flexible education offers such as on-line courses. An important element of this focus area is the assessment of informal competences, via instruction modules available on public portals and services;
- (e) development and adaptation of education programmes for the IT industry;
- (f) development of the new opportunities that IT has opened up for the teaching of pupils with special needs.

In connection with the six action areas, a number of concrete initiatives have already been established. For the VET sector, these are:

- In relation to the reform of VET, an Internet-based educational planning tool (*elevplan*), has been designed. The plan makes it possible for the individual trainee to make his or her personal training plan electronically and adjust it continuously – together with the enterprise with which the trainee has a contract.
- An e-learning programme has been initiated for vocational teachers: Pedagogical IT driver's licence (*Pædagogisk IT-kørekort – EUD-ICT*). The aim of EUD-IT is to qualify teachers for integrating IT as a tool in the planning and implementation of teaching, and in the production of teaching materials. EUD-IT is based on the planning of teaching sequences and thus both educational and IT perspectives have to be considered.
- Within AMU, an IT action plan (IT in AMU) was drawn up in 2000. The objective is to integrate IT in all AMU courses with a specific focus on courses for people with a low level of educational attainment.

7.5. Competence development

Competence development is one of the high priority areas within education, labour market and trade policies, and the efforts to promote strategic and systematic competence development will be continued in the years to come. A number of focus areas have already been identified – among others in the long-term strategy for Denmark's industrial development *.dk21* ⁽¹⁷⁾.

The following concrete initiatives can be mentioned:

- in 2000, the development of a national competence account was initiated under the *.dk21* strategy. Its purpose is to map and assess initiatives within the field and optimise the use of human resources. The account will be the basis for future policy initiatives and for the evaluation of present ones and their effect ⁽¹⁸⁾;
- in 2000, a national centre for competence and quality development in Denmark (*Statens Center for Kvalitet og Kompetenceudvikling - SCKK*) was established. The objective is to speed up the development and re-organisation of state organisations with respect to strategic and systematic competence and quality development. The centre functions as a knowledge and information centre offering advice to state organisations entering development projects;
- in the strategy for AMU (August 2001), competence development is also one of the key issues. Competence development closely related to the workplace and the job functions that the employee performs is a central issue in this strategy. Building a bridge between the non-formal learning taking place at the workplace and the formal learning taking place in the educational institutions is seen as an important objective. AMU is to fulfil this role as bridge-builder and has to be even more demand-driven than is the case today.

7.6. Internationalisation

Internationalisation remains an important priority within education policies. As part of the government business strategy *.dk21*, the Danish Centre for International Cooperation and Mobility in Education and Training (*Center for Information og Rådgivning om Internationale Uddannelses- og Samarbejdsaktiviteter – Ciri*) was established in July 2000 under the Ministry of Education. The objectives are to further internationalisation of the educational institutions and to increase mobility among trainees, students and researchers, etc. The centre is to position itself as *the* national knowledge and information centre within the field of internationalisation.

⁽¹⁷⁾ *.dk21* 'A new strategy for Denmark's industrial development policy' is the Danish government's vision and strategy on how industrial development policy can support the development of a sustainable society. For further information see <http://www.dk21.dk/publikationer/dk21%20publikation/dk21/>

⁽¹⁸⁾ For further information on the national competence account see <http://www.uvm.dk/nkr>

With the establishment of Cirius, international activities have been concentrated within one organisation. Cirius is a merger of three former centres for internationalisation¹⁹. Cirius manages all Danish participation in EU-programmes within the field of education, vocational training and youth, e.g. Leonardo da Vinci, Socrates and Youth. Cirius has furthermore taken over the administration of the PiU-scheme (*praktik-i-udlandet* – Practical Training Abroad), a unique in Europe, training scheme which gives trainees the possibility of spending periods of work placement abroad and having them recognised as an integral part of their training. The centre offers guidance and advice about exchange study visits, in-company training placements, educational co-operation, etc. Cirius is also to promote internationalisation and mobility in education programmes by arranging conferences, seminars and courses.

7.7. Change of government – change of policy

The general election on 20 November 2001 brought a liberal government to power. It consists of the Liberal and the Conservative parties. In the government programme, Growth, Welfare - Reform (*Vækst, Velfærd – Fornyelse*), the government has stated the following objectives for its education policy:

- strengthening the quality and the proficiency level, especially in regard to primary and lower secondary school;
- strengthening the teaching of natural science and mathematics;
- improving the overall transparency of the education programmes.

The government will soon present an action plan, '*Bedre Uddannelser*' (Improved Education Programmes), for the entire education system.

In regard to VET, the government almost immediately brought about changes. The AMU centres (see 3.2.2) and R.U.E (see 6.1). were transferred to the Ministry of Education. The precise structure had, however, not yet been laid down at the time of writing.

¹⁹ICU (Information Center for International Study and Exchange), ACIU (The Danish Centre for International Training Programmes) and PIU (Centre for Practical Training Placements Abroad).

Annex 1: Acronyms

ACIU	<i>Arbejdsmarkedets Center for Internationale Uddannelsesaktiviteter</i> Danish Centre for International Training Programmes
AER	<i>Arbejdsgivernes Elevrefusion</i> Employers' Reimbursement Scheme
AF	<i>Arbejdsformidlingen</i> Public Employment Service
AMS	<i>Arbejdsmarkedsstyrelsen</i> National Labour Market Authority
AMU	<i>Arbejdsmarkedsuddannelserne</i> Labour market training
AUF	<i>Arbejdsmarkedsuddannelsesfond</i> Labour Market Training Fund
AVU	<i>Almene voksenuddannelser</i> General adult education
Cirius	<i>Center for Information og Rådgivning om Internationale Uddannelses- og Samarbejdsaktiviteter</i> Centre for International Cooperation and Mobility in Education and Training
EGU	<i>Erhvervsgrunduddannelsen</i> Basic Vocational Training Programme
EUD	<i>Erhvervsuddannelserne</i> Initial vocational education and training programmes, comprising technical and commercial training
EUR	<i>Erhvervsuddannelsesrådet</i> Vocational Training Advisory Council
FoU	<i>Forsøgs- og udviklingsprojekter</i> Research and development projects
FUU	<i>Den Fri Ungdomsuddannelse</i> Free Youth Education
FVU	<i>Forberedende voksenuddannelse</i> Preparatory adult education
GVU	<i>Grundlæggende voksenuddannelse</i> Basic adult education
ICU	<i>InformationsCenter for Udveksling</i> Information Center for International Study and Exchange
IVET	Initial vocational education and training

KVU	<i>Korte videregående uddannelser</i> Short higher education
LVU	<i>Lange videregående uddannelser</i> Long higher education
MVU	<i>Mellemlange videregående uddannelser</i> Medium length higher education
PIU	<i>Praktik-I-Udlandet</i> Centre for Practical Training Placements Abroad
R.U.E	<i>Rådet for Uddannelses- og Erhvervsvejledning</i> National Council for Educational and Vocational Guidance
SCKK	<i>Statens Center for Kompetence og kvalitetsudvikling</i> National Centre for Competence and Quality Development
SOSU	<i>Social og sundhedsuddannelserne</i> Social and health care training
SU	<i>Statens Uddannelsesstøtte</i> The State Educational Grant and Loan Scheme
SVU	<i>Statens Voksenuddannelsesstøtte</i> The State Educational Support for Adults
VET	Vocational education and training
VEUD	<i>Voksenerhvervsuddannelse</i> Adult vocational education and training
VVU	<i>Videregående voksenuddannelse</i> Advanced adult education

Annex 2: Relevant institutions and organisations

Government agencies

Arbejdsmarkedsstyrelsen (AMS)

The National Labour Market Authority
Blegdamsvej 56
DK-2100 København Ø
Tel. +45 35 28 81 00
Fax +45 35 36 24 11
Website: <http://www.ams.dk>
E-mail: ams@ams.dk

Beskæftigelsesministeriet

Ministry of Employment
Holmens Kanal 20
DK-1060 København K
Tel. +45 33 92 59 00
Fax +45 33 12 13 78
Website: <http://www.am.dk>
E-mail: am@am.dk

Undervisningsministeriet

Ministry of Education
Frederiksholms Kanal 21
DK-1220 København K
Tel. +45 33 92 50 00
Fax +45 33 92 55 47
Website: <http://www.uvm.dk>
E-mail: uvm@uvm.dk

Social partners

Dansk Arbejdsgiverforening (DA)

Danish Employers' Confederation
Vester Voldgade 113
DK-1552 København V
Tel. +45 33 93 40 00
Fax +45 33 12 29 76
Website: <http://www.da.dk>
E-mail: da@da.dk

Landsorganisationen Danmark (LO)

Danish Confederation of Trade Unions
Rosenørns Allé 12
DK-1634 København V
Tel. +45 31 35 35 41
Fax +45 35 37 37 41
Website: <http://www.lo.dk>
E-mail: lo@lo.dk

Others

**Center for Information og Rådgivning om
Internationale Uddannelses- og
Samarbejdsaktiviteter (Cirius)**

Centre for International Cooperation and
Mobility in Education and Training

Fiolstræde 44

DK-1171 Copenhagen K

Ph. +45 33 95 70 00

Fax +45 33 95 70 01

Website: <http://www.ciriusonline.dk>

E-mail: cirius@ciriusmail.dk

**Rådet for Uddannelses- og
Erhvervsvejledning (R.U.E)**

National Council for Educational and
Vocational Guidance

Vester Voldgade 123

DK-1552 Copenhagen V

Tel. +45 33 95 53 00

Fax +45 33 95 53 49

Website: <http://www.r-u-e.dk>

E-mail: r-u-e@r-u-e.dk

**Danmarks Erhvervspædagogiske
Læreruddannelse (DEL)**

Danish Institute for Educational Training of
Vocational Teachers

Rosenørns Alle 31

DK-1970 Frederiksberg C

Ph. +45 35 24 79 00

Fax +45 35 24 79 10

Website: <http://www.delud.dk>

E-mail: del-adm@delud.dk

**Statens Center for Kompetence og
kvalitetsudvikling (SCKK)**

State Centre for Competence and Quality
Development

Laksegade 19

DK-1063 Copenhagen K

Tel. +45 33 95 69 70

Fax +45 33 95 69 79

Website: <http://www.sckk.dk>

E-mail: sckk@sckk.dk

Annex 3: Bibliography

Online Resources

The Adult Education and Continuing Training Reform 2000, Ministry of Education, 2001.
Available online: <http://www.uvm.dk/eng/publications/factsheets/veureform.htm>

The Basic Social and Health Education Programmes – Factsheet, Danish Ministry of Education, 2000. Available online: <http://www.uvm.dk/eng/publications/factsheets/fact8.htm>
Denmark, The Royal Ministry of Foreign Affairs, 2002. Available online:
<http://www.um.dk/english/danmark/danmarksbog/>

Denmark's strategy for education, learning and IT: Part 1 & 2 We must move on, Ministry of Education, 2001. Available online: <http://www.it-strategi.uvm.dk>

Educational and Vocational Guidance in Denmark, R.U.E, 2001. Available online:
<http://www.r-u-e.dk>

Eurostat Yearbook 2001, Eurostat, 2001. Available online:
http://www.europa.eu.int/comm/eurostat/Public/datashop/print-catalogue/EN?catalogue=Eurostat&service=free_downloads

Facts and Figures – education indicators, Ministry of Education, 2000. Available online:
<http://www.uvm.dk/pub/2000/factsfig/>

Factsheet Denmark: Social and Health Policy, The Royal Ministry of Foreign Affairs, 2001.
Available online: <http://www.um.dk/english/faktaark/>

Financing of Education in Denmark, Ministry of Education, 2000. Available online:
<http://www.uvm.dk/eng/publications/factsheets/taximeter.htm>

National actions to implement Lifelong Learning in Europe, Eurydice & Cedefop, 2001.
Available online: <http://www.eurydice.org>

The National Competence Account, Ministry of Education, 2001. Web-address:
<http://www.uvm.dk/nkr>

National Labour Market Authority: at a glance, National Labour Market Authority, 2000.
Available online: <http://www.ams.dk/publikationer/pub0114/>

Thematic Review on Adult Learning, OECD, 2001. Available online:
<http://www.oecd.org/copyr.htm/>

Vocational Education and Training – Factsheet, Ministry of Education, 2000.
Available online: <http://www.uvm.dk/eng/publications/factsheets/fact3.htm>

Literature

- Andersen, Dines: *Uddannelsesvalg efter 9. klasse, UTA – et forskningsprojekt om unge og uddannelsessystemet*, Socialforskningsinstituttet, 1997.
- Adult Vocational Training*, Ministry of Labour, 1997.
- Arbejdsmarkedsuddannelserne – Statistik 2000*, AMS, 2001.
- Education at a Glance – OECD Indicators*, OECD, 1997.
- Education at a Glance – OECD Indicators*, OECD, 2001.
- Educational and Vocational Guidance in Denmark*, R.U.E, 2001.
- Erhvervsuddannelserne i Danmark*, Cedefop, 2000.
- Facts and Figures – Education Indicators Denmark 2000*, Ministry of Education, 2000.
- Fakta om sosu-reformen 2001*, Ministry of Education, 2001.
- The Financing of Vocational Education and Training in Denmark – Financing Portrait*, Cedefop, 1998.
- Illeris, Knud (ed.): *Adult Education in a Transforming Society*, Roskilde University Press, 1998.
- Literacy in the Information Age*, OECD, 2000.
- Matzon, Ea Stevns: *Reform 2000*, Erhvervsskolernes Forlag, 1999.
- New Structure of the Danish Vocational Education and Training System*, the Danish Ministry of Education, 1999.
- R.U.E. Årsberetning 1999*, R.U.E., 2000.
- Uddannelse på kryds og tværs*, The Danish Ministry of Education, 2001.
- De unges vej gennem uddannelsessystemet*, Ministry of Education, 2000.
- Vocational Education and Training of Tomorrow*, Volume I and II, Carl Bertelsmann Prize, 1999.
- Årselever på erhvervsskolernes uddannelser 1996–1998*, Ministry of Education, 1999.

Cedefop (European Centre for the Development of Vocational Training)

Vocational education and training in Denmark: Short description

Pia Cort

Luxembourg: Office for Official Publications of the European Communities

2002 – VI, 44 pp. – 21 x 29.7 cm

(Cedefop Panorama series ; 36 – ISSN 1562-6180)

ISBN 92-896-0141-8

Cat. No: TI-44-02-270-EN-C

Free of charge – 5130 EN –

In 1999, the Danish vocational education and training (VET) system was awarded the Bertelsmann Prize for its innovative capacity. This capacity for innovation is embedded in the very basis of the system as it rests on four fundamental pillars:

- lifelong education and training for all;
- the alternance training principle by which the trainees acquire relevant and up-to-date professional skills by going through both school-based and work-based training;
- a management-by-objective system that leaves a relative autonomy to the VET institutions;
- and close cooperation between the social partners ensuring the system's responsiveness to the skills needs of the labour market.

In this short presentation, the Danish VET system is described in terms of structure, programmes on offer, responsible authorities, and current trends and perspectives.

Vocational education and training in Denmark

Short description



European Centre for the
Development of Vocational Training

Europe 123, GR-570 01 Thessaloniki (Pylea)
Postal address: PO Box 22427, GR-551 02 Thessaloniki
Tel. (30) 310 490 111, Fax (30) 310 490 020
E-mail: info@cedetop.eu.int
Homepage: www.cedetop.eu.int
Interactive website: www.trainingvillage.gr

Free of charge – On request from Cedefop

5130 EN



OFFICE FOR OFFICIAL PUBLICATIONS
OF THE EUROPEAN COMMUNITIES

L-2985 Luxembourg

ISBN 92-896-0141-8



9 789289 601344

04
05
16
11-44-02-270-24-C

PANORAMA



*U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)*



NOTICE

Reproduction Basis

- This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.
- This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").