### **Education in a knowledge society**





Primary an

secondary education

#### Education for al

Provision of high quality education at all levels is essential to ensure competitiveness in today's global society. Danish education thus aims to ensure that all young people acquire knowledge and competencies that will qualify them to take active part in – and to contribute to the further development of – our knowledge society.

Other characteristic features of the Danish education system include:

- High standards
- The quality of Danish education is assured in many ways. It is mainly regulated and financed by the State, and all public educational institutions are approved and evaluated on an ongoing basis
- Lifelong learning
- Lifelong learning is a key principle in Denmark. The idea goes back all the way to the 19th century Danish clergyman and philosopher N.F.S. Grundtvig, who argued that a prerequisite for active participation in a democratic society is education for all citizens on a lifelong basis.
- Active participation
   Treating pupils and students as independent people with a right to form their own opinion and a duty to partici

pate actively in discussions is a matter of course in Danish education.

- Project work
- At all levels of the education system, pupils and students attend classes but they also carry out project work, either on an individual basis or in small groups. Activities that cut across disciplines are also an integrated part of Danish education.

#### Facts & figures

- Population: 5.4 mio (2006).
- Percentage of a year group moving on from compulsory education to youth education: 94.8% (2003).
- Percentage of a year group completing a youth education programme: 80.3% (2003).
- Percentage of a year group continuing into higher education: 52.5% (2003)
- Percentage of a year group completing a higher education programme: 44.5% (2003).
- Approximately 58% of those completing a higher education programme are women (2003).
- Percentage of GDP spent on education (incl. SU grants): 8% (2005).

For more facts & figures, please see http://pub.uvm.dk/2005/facts.

#### Further information

- CIRIUS
- www.ciriusonline.dk
- Studying in Denmark www.studyindenmark.dk
- The Ministry of Education www.uvm.dk
- The Ministry of Science,
   Technology and Innovation
   www.vtu.dk

## The Danish

# Education System



Vocational education

and training

Published by CIRIUS, 2006. Second edition



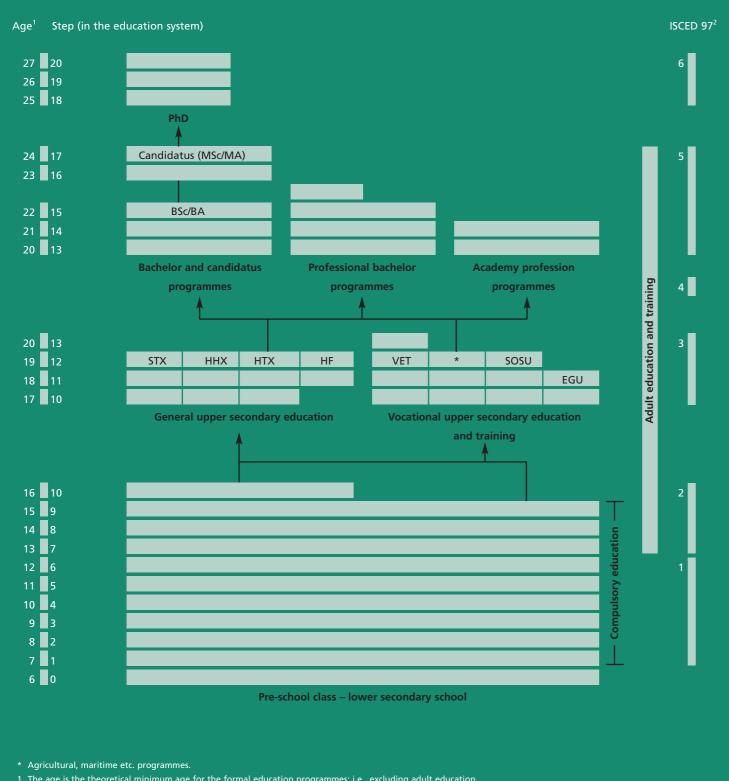


Published with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Photos: Steen Larsen, Preben B. Søborg, Møldrup Skole, Johnér/Scanpix, Tao Lytzen/CBS. Layout and DTP: BilledService



### The Danish Education System



- 1 The age is the theoretical minimum age for the formal education programmes; i.e., excluding adult education.
- 2 International Standard Classification of Education (UNESCO).

### Primary and lower secondary education

#### The public system

The public municipal school - the Folkeskole – is a comprehensive school in the sense that it includes both primary and lower secondary education with no strea-

Approximately 84% of all pupils in basic schools attend public schools, 15% attend private schools, and less than 1% are taught outside schools (for instance at home) (2004). Education is compulsory for nine years starting the year the child turns 7.

Apart from the compulsory forms 1 to 9, the Folkeskole comprises a voluntary preschool year and an optional 10th year. More than 99% of all children attend the pre-school year, and 58% attend the 10th year (2004).

The average class size is 19,6 (2005). School usually starts at 8 a.m. The younger pupils finish at around noon or 1 p.m., and the older pupils finish at around 2 or 3 p.m. The young pupils (6-10 years old) may spend their leisure time in a municipal leisure-time care facility at school (skolefritidsordning, SFO) or at a recreation centre (fritidshjem). Both are fee-based

According to the Folkeskole Act, schools must provide pupils with both subjectspecific qualifications and prepare them for further education and broadly for their role as citizens in a democratic society. The Folkeskole builds on the principle of differentiated teaching. Teaching is organised in such a way that it strengthens and develops the individual pupil's interests, qualifications and needs. At the same time, it aims at developing the pupils' cooperative skills.

Pupils are continuously evaluated, and teachers write individuel learning plans that are updated regularly. Progression to the next form is usually automatic. Examinations are limited to forms 9 (Leaving Certificate of the Folkeskole) and 10 (Advanced Leaving Certificate of the Folkeskole). Examinations are compulsory. Pupils also write a one week project

#### Other possibilities

Parents may choose a private school for their children. Private schools are called "free elementary schools". They are self-governing institutions required to measure up to the standards of the municipal schools.

There are many different types of private schools, and some are based on a specific philosophy, a special pedagogical line or religious belief.

Continuation schools (efterskoler) are private boarding schools for pupils in forms 8 to 10. In addition to normal subjects, emphasis is on social learning and such fields as sports, music, nature or ecology.

Most free elementary schools and continuation schools receive a substantial state subsidy.



# General and vocational upper secondary education



In Denmark, education programmes for young people around 16-19 years old are often called "youth education programmes". This term covers:

- General upper secondary education programmes, which primarily prepare for higher education.
- Vocational upper secondary education and training programmes primarily aimed at preparing trainees for a career in a specific trade or industry.

In total, 80.3% of a year group finish a youth education programme (2003).
43.3% complete a general upper secondary education programme and 25.8% finish a vocational upper secondary education and

training programme. In addition to this, 11.2% complete both types of programmes.

### General upper secondary education

There are four academically oriented general upper secondary programmes:

- the 3-year Upper Secondary School Leaving Examination (STX);
- the 3-year Higher Commercial Examination (*HHX*);
- the 3-year Higher Technical Examination (*HTX*); and
- the 2-year Higher Preparatory Examination Course (*HF*).

All four programmes prepare pupils for

further studies and, at the same time, they develop the pupils' personal and general competencies. The programmes aim at enhancing the pupils' independent and analytical skills as well as preparing them to become democratic and socially conscious citizens with a global outlook. The programmes comprise a wide range of both compulsory and optional subjects at different levels. The curriculum and examinations must follow national standards and are subject to external evaluation. Apart from subject-specific oral and written examinations, students must also prepare one or two major written assignments.

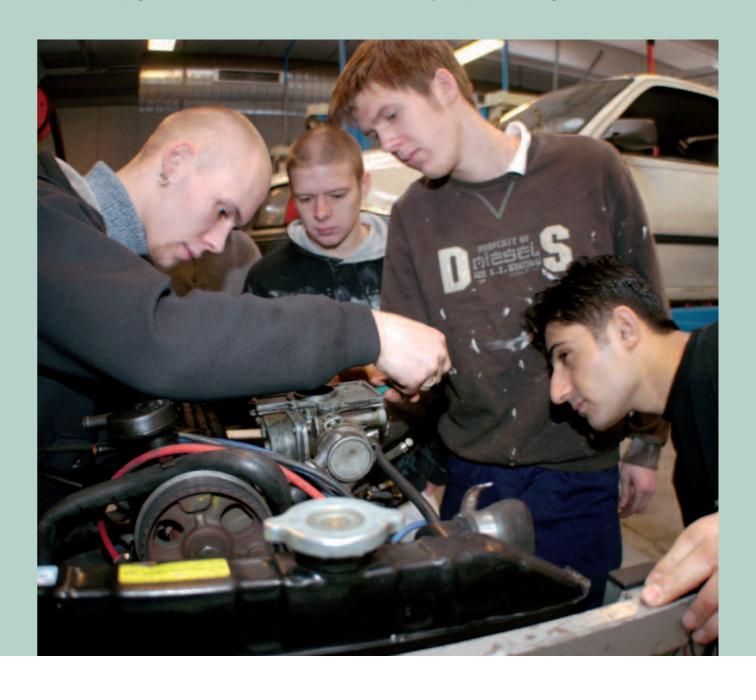
The curricula of the HHX and the HTX differ from those of the STX and the HF in the sense that the HHX instead of some general upper secondary subjects include financial/business subjects and the HTX technical subjects.

The STX and HF programmes are offered

by general upper secondary schools called *Gymnasium*, whereas business and technical colleges offer the HHX and the HTX programmes, respectively.

Admission requirements for the STX, HHX and HTX are a Leaving Certificate of the Folkeskole as well as certain subject requi-

rements. For the HF, admission requirements are 10 years of basic school or the equivalent thereof. The STX, HHX and HTX are for those aged 16-19, whereas the HF attracts both young people and adults. The HF programme can be taken on a single-subject basis and is also taught in evening classes.



### **Higher Education**

### Vocational upper secondary education and training

Vocational education and training (VET) includes a vast range of programmes. The duration varies from 2 to 5 years, the most typical being 3 1/2 to 4 years. VET programmes are sandwich-type programmes in which theoretical and practical education at a vocational college (approximately 1/3 of the time) alternates with practical training in an approved company or organisation (approximately 2/3 of the time). The dual training principle ensures that the trainees acquire theoretical, practical, general and personal skills, which are in demand on the labour market.

VET programmes are normally completed with a journeyman's test or a similar examination testing vocational skills and knowledge.

The majority begin their VET programme with an initial basic programme at a vocational college, but some trainees choose to begin with a period of in-company training before they enter the basic programme. There is a choice of seven basic courses, also called "access routes":

- Building and construction
- Crafts and engineering trades
- Food production and catering
- Mechanical engineering, transport and logistics
- Service industries
- Technology and communication
- The commercial field trade, office and finance.

The basic courses constitute the basis for admission to one of the approximately 200 main programmes of vocational specialisation. In addition to this, there are also specific social and health education programmes (SOSU) as well as programmes within the fields of agriculture, forestry, maritime studies etc., offered by specialised vocational colleges.

Admission to vocational education and training requires completion of compulsory education. All programmes qualify trainees for labour market entry as skilled workers. In addition, most programmes qualify trainees for direct admission to certain types of higher education programmes.

#### Vocational basic training

A special option for young people in a difficult educational or employment situation is the vocational basic training programme (*EGU*). The EGU is an individually designed programme focused on a specific trade, or composed of elements from several trades/programmes.

The EGU alternates between school-based periods and periods of practical training in one or more companies. The main focus is on practical training, and an individual programme is designed for each trainee depending on his or her needs and interests. Trainees are offered individual guidance during the entire programme.

In most cases, the trainees finish their EGU after two years but it may be extended by up to one more year.

A completed EGU gives vocational qualifications and also allows the trainees to continue in a VET programme.

#### **Production schools**

Production schools are schools for young people under the age of 25 who have not completed a youth education programme. The purposes of the production schools are to enhance the pupils' personal development and to improve their future possibilities in the education system and on the labour market.

Production schools are based on practical work in workshops, ranging from carpentry or metalwork to media or theatre workshops. Teaching is aimed at providing the young people with qualifications that will enable them to complete a vocationally qualifying education programme after leaving the production school. Pupils are offered individual guidance on a day-to-day basis to support their efforts to clarify their future choice of education, training and job. There are no examinations at production schools.

Production schools have continuous intake. Pupils typically stay for an average of 5 months; about 30% for more than 6 months. In Denmark, 52.5% of a year group move on to higher education (2003). There are three types of institutions offering higher education programmes, each with welldefined profiles and qualities.

### Academies of professional higher education

Academies of professional higher education offer 2-year academy profession programmes in fields such as business, technology, and IT. They combine theoretical studies with a practically oriented approach and are usually completed with a project work of 3 months' duration.

#### Colleges

Specialised colleges and centres for higher education/university colleges offer 3-4 year professional bachelor programmes in fields such as business, education, engineering and nursing. Theoretical studies, practical training through work placements and a bachelor project are always part of the programmes.

#### Universities

All Danish universities are research-intensive institutions offering research-based study programmes at undergraduate and postgraduate level.

The university bachelor programmes normally last 3 years. The bachelor degree (BSc/BA) qualifies for a professional career and further studies. Most students choose to continue in a 2-year candidatus programme (MSc/MA). They usually include one or two of the major fields of study of the bachelor programme. Independent

research activities and a Master's Thesis (equivalent to 6 months of full-time studies) are required. The candidatus programmes qualify students for a professional career and for scientific work.

The PhD degree is obtained after 3 years of research, participation in research courses, teaching and public defense of a thesis.

#### Admission

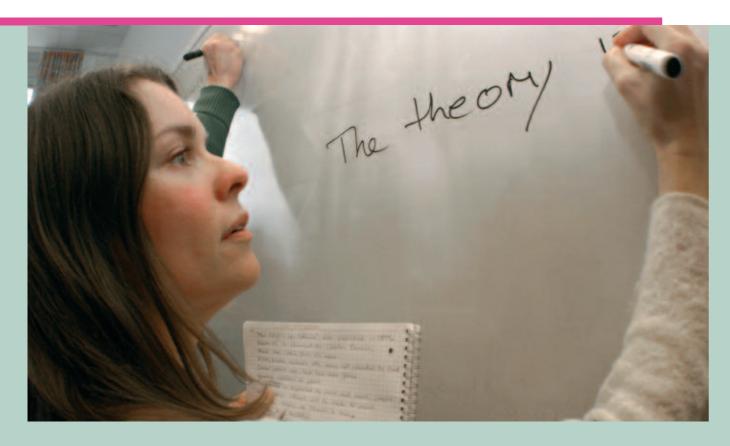
General access requirements to higher education are one of the general upper secondary school leaving examinations. Many 3 to 4-year VET programmes also give access to professionally oriented higher education programmes. Access may also depend on specific requirements such as a specific subject combination in upper secondary school or a certain level of grades.

### Programmes and courses taught in English

Although the most common language of instruction is Danish, most higher education institutions offer single subject courses and some also full study programmes taught in English. A good command of Danish is thus not a requirement for foreign students wishing to study in Denmark as they have a wide variety of courses and programmes taught in English to choose from. Intensive courses in Danish language and culture are, however, available for international students. For more information about courses and programmes in English, and about courses in Danish language and culture, please see www.studyindenmark.dk.



### Adult education and continuing training



Denmark has a long-standing tradition of lifelong learning. According to estimates from the Ministry of Education, more than 400,000 people participated in some form of adult education in 2002.

### Education and training for adults at all levels

Adult general education and vocational education and training ranges from liberal adult education to qualifying general education and continuing vocational training. Generally, the syllabus and examinations are adapted to the experience and interests of adults, and in some cases they may get recognition for prior formal and non-formal learning.

Adult courses leading to formal qualifications include:

 General adult education (general education at lower secondary level).

- Preparatory adult education (offered to improve basic literacy and numeracy skills of adults who do not have sufficient qualifications to follow education and training or cope with the demands of working life).
- Single-subject HF (general education at upper secondary level).
- Adult vocational training (the main target group is unskilled and skilled workers on the labour market who need to develop their competences. The programmes are developed and changed according to the needs of the labour market).
- Adult vocational education and training programmes (special adult courses within the ordinary VET programmes).
- Further adult education corresponding to the level of academy profession programmes.

- Diploma programmes corresponding to the level of bachelor programmes.
- Master's programmes corresponding to the level of candidatus programmes.

#### Liberal adult education

A wide range of different schools operate within the framework of liberal and nonformal adult education (folkeoplysning). The most well-known are the Folk High Schools, which are residential schools providing general and liberal education. Courses last up to 36 weeks and are attended by adults of all ages. They are nonqualifying courses meant to broaden general, social and democratic competencies.

Other possibilities are offered by Adult Education Associations, day folk high schools and university extension courses.

### Financing and ownership

The education system is financed by the State or the municipalities. Some institutions are self-governing, while others are owned by the State or the municipalities. The table below illustrates the sources of funding and forms of ownership for selected groups of institutions. In addition to public financing, tuition fees are charged

at private schools, and there is user payment for a number of adult education programmes.

#### Taximeter financing

The central government's system of financing education and training is almost exclusively based on the so-called taximeter

system, a comprehensive financing system based on per capita grants (cash-per-student) to institutions. The grants are calculated primarily on the recorded pupil/student activity measured as their participation in courses/examinations. The taximeter rate varies according to subject field and level of education.

	State institutions	State-funded/supported, self-governing institutions	Institutions funded by the municipalities	Tuition fee <sup>1</sup>
The Folkeskole			х	No
Free elementary schools		x <sup>2</sup>		Yes
Continuation schools		x³		Yes
Gymnasium		х		No
Business colleges		х		No
Technical colleges		х		No
Maritime schools	х			No
Schools of marine engineering	х			No
SOSU colleges		х		No
Academies of professional higher education		x		No
Specialised colleges and university colleges		х		No
Universities		х		No
Schools of architecture	х			No
Academies of music	х			No
Adult education centres		Х		Yes
Adult vocational training		х		Yes
Folk High Schools		х		Yes
Adult Education Associations			Х	Yes

- 1 This applies to EU/EEA citizens. Information about tuition fees for citizens from countries outside the EU/EEA is available at www.studyindenmark.dk
- 2 Public contribution to free elementary schools: 85% of the State's operational grant per pupil, excluding expenditures for pensions.
- 3 Continuation schools depend on a large degree of State funding. Pupils at continuation schools do have to pay a tuition fee but the amount varies and is subsidised by the State depending on the parents' income. Average annual tuition fee per pupil amounts to DKK 25,000 excluding state subsidies (2005).

### **Education grant and loan scheme**

Through the State Educational Grant and Loan Scheme (SU), the Danish State provides financial support to all Danes over the age of 18 enrolled in a youth or higher education programme. There are two main support programmes:

- Pupils following a youth education programme. Until pupils reach the age of 20, and if they still live with their parents
- after they turn 20, their grants depend upon their parents' income. This type of support is not subject to any time limits.
- Students enrolled in higher education programmes. Students are entitled to a number of monthly grants corresponding to the official duration of the chosen study programme and an additional 12 months if required. Students living with their parents get a lower monthly grant.

In combination with both types of grants, students are offered supplementary state loans. About half of all students make use of these state loans. For more information, visit www.su.dk.

The State also provides financial support for adults in adult education and continuing training.

### **Career guidance**

Provision of high quality guidance services is important at all levels of the education system. Starting with general career education in form 1 in the Folkeskole and the development of personal education logbooks in form 6, pupils are gradually prepared for making their first educational and vocational decisions.

Two types of independent guidance centres provide guidance in relation to the transi-

tions from one level of the education system to another:

- 45 Youth Guidance Centres (*Ungdommens Uddannelsesvejledning*) focus on the transition from compulsory to youth education.
- 7 Regional Guidance Centres (Studievalg) deal with the transition from youth education to higher education.

A national guidance portal – the "Education Guide": www.uddannelsesguiden.dk – provides comprehensive information on education and training possibilities at all levels, professions, labour market conditions and statistics.

For more information about career guidance in the Danish education system, please see http://pub.uvm.dk/2004/guidance.



### **Quality assurance**

The standard and quality of educational provision in the Danish education system are assured by a number of elements, including:

- Common rules and guidelines (curricula) specifying the aims, contents and duration of programmes and individual subiects
- Testing and examination system, with the use of external examiners.
- Ministerial approval of provision and inspection in a varying degree within the different education areas.
- Quality rules, which have been intro-

duced in a number of educational fields.

The Danish Evaluation Institute (EVA)

 The Danish Evaluation Institute (EVA), which plays an important role in the national system of quality assurance.

Private education institutions may operate without any state approval. However, if they wish for their students to be eligible for state study grants, they must abide by an accreditation procedure.

Private schools at primary and secondary level have to go through a state-regulated approval procedure in order to obtain public funding.

### The Danish Evaluation Institute (EVA)

EVA is an external and independent body under the auspices of the Danish Ministry of Education. Quality assurance of Danish education is the main focal point of EVA, and the primary task is to initiate and conduct evaluations in the educational sector – from primary school to higher education and adult education. More information about EVA is available at www.eva.dk.

### Internationalisation

Great importance is attached to the internationalisation of education and training in Denmark. The objective is to prepare pupils and students to meet the challenges of a globalised world by including intercultural understanding and international competencies in the entire educational system.

At governmental level, Denmark is an active partner in the educational cooperation of the EU, the Council of Europe, the OECD, UNESCO and the Nordic countries.

The Copenhagen and Bologna processes also play an important role in the development of Danish education and training.

At institutional level, schools and institutions participate actively in international cooperation and exchange programmes both within Europe and with the rest of the world.

Internationalisation at all levels of the education and training system is supported and promoted by CIRIUS – an authority within the Ministry of Education. Read about CIRIUS at www.ciriusonline.dk.