



Denmark

Updated version, August 2007.

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Principles and general objectives of education

As far as compulsory education is concerned, the general objective is to give the individual pupil the opportunity to develop as many of his/her talents as possible. The content of the teaching shall be selected and organized so that it gives the pupils a possibility of absorption, a general view and a feeling of coherence. The teaching shall enable the pupils to acquire the forms of cognition and working methods of the individual subjects.

The focus is on the development of personal qualifications by way of and in the education system. These qualifications are: independence, independent thought, ability to co-operate and communicate, and a desire for learning throughout one's life span.

In Denmark, it is the philosophy that the free choice of school and education is of central importance to a well-functioning education system. Apart from the fact that it is a goal in itself to give the students a free choice, a free choice of school and education will also further the schools' initiative and industry. The free choice entails that the institutions must to a greater extent be worthy of the pupils/students. If a school does not live up to the needs and demands of the pupils/students and the labour market, it will have fewer pupils/students—and thus less funding. Private schools are recognized and receive government financing regardless of the ideological, religious, political or ethnic motivations behind their establishment.

Current educational priorities and concerns

In recent years there have been comprehensive educational reforms at all levels of the system. The common denominator is: renewal and modernization of the educational programmes; increased autonomy for the educational institutions; and a more efficient financial control.

Improvement of educational quality has been the major aim of the reforms. The most important means to reach this goal has been to create the prerequisites for local freedom of choice and the possibilities to make use of this freedom. This includes: promoting of the quality and relevance of the programmes through efficiency and content controls; strengthening institutional management; establishing school boards; and implementing a more coherent, open and flexible educational structure.

Through decentralization and increased local autonomy, the decision-making process is now largely left to the institutions in cooperation with the local community. At the same time, the system of close control has been replaced by target and framework management, whereby the overall targets and requirements are laid down



at central level and the implementation is under the responsibility of the local authorities and the individual schools. The 1989 Act on the *Folkeskole* decentralized a great number of decisions to the new school boards where the parents are represented. The Act also provided the parents with a free choice of school within their local community.

Following the Consolidation Act of January 1995, and the new demands placed on teachers, the Minister of Education initiated a public debate on the reform of teacher training. The envisaged reform included the following main components: a reduced number of subjects in the curriculum; a more in-depth study of Danish and three other subjects; the possibility of completing the programme with a focus on a single subject-area of interest; training in general teaching skills, including didactic skills and the development of individual attitudes; the strengthening of a more realistic and practical application of academic learning. In March 2006, the reform of the pre-service teacher programme for the primary and lower secondary school (*folkeskole*) was adopted, effective from January 2007. The major changes introduced include: two or three main subjects instead of the existing four subjects; the general strengthening of natural sciences; more emphasis on didactic training; more strict admission requirements; and compulsory attendance during the first year.

In 1997 the Ministry of Education launched the National Development of Competences programme. The main goal of the programme has been to place the education system among the ten most outstanding systems in the world, measured according to OECD parameters. The main objectives were: strengthening the partnership between educational institutions and working life, developing lifelong learning and continuing education, and intensifying the use of ICT. Two of the goals were that the proportion of young people receiving a general or vocational education had to be raised from approximately 80% to 95%, and that the proportion of young people completing a higher education degree had to be raised from 35% to 50%.

The Danish Evaluation Institute (EVA) was established in 1999 as an independent institution under the auspices of the Ministry of Education. The Institute develops methods for evaluating the quality of teaching and learning process, evaluates systematically the quality of educational process, and advises and collaborates with public authorities and educational institutions on quality issues.

In May 2000, the Parliament adopted an Act on Democracy in the Education System in order to contribute to the continuous development of democracy. According to this Act, education shall seek to develop the interest and the prerequisites for active participation in a democratic society. The legislation ensures that education in the principles of democracy takes place at all levels. The new Act also enables students to exert more direct influence on the daily school life, through student representation in the councils and committees that deal with matters of interest to them. The Ministry of Education also set up councils on several areas of education with the representation of pupils, students and other interest groups.

The education system is being increasingly influenced by international developments in all fields. Two new centres have been established within the Ministry of Education to deal with such issues: the Centre for Assessment of Foreign Qualifications (CVUU) and the Centre for Information and Consultancy about



International Education and Cooperation Activities (CIRIUS). The objective of the CVUU is to make it easier for persons with foreign credentials to enter the Danish labour market and higher education institutions. CIRIUS, in cooperation with educational institutions and the business sector, contributes to the internationalization of education at all levels. It manages all the European Union programmes in the fields of education, vocational training, and youth, and offers guidance and advice about exchanges, study visits, training placements in companies abroad, school cooperation, etc. The two centres were merged in January 2006.

In May 2002 the new Government launched a far-reaching initiative known as “Better Education”. In the related publication, specific goals as well as reform ideas were put forward for each sector of the system. The Government therefore presented its action plan for ‘Better Education’ in order to strengthen proficiency and skill levels in upper secondary education, higher education, adult and further education, as well as continuing training.

A major reform of the gymnasium has been debated since 2001, and finally has been adopted and implemented in 2005. The reform is based on the following principles: the enhancement of students’ knowledge, proficiency and skills; consolidating students’ skills in order to better prepare them for higher education; boosting cooperation between teachers in different subjects; updating cultural and general educational concepts (common reference framework); the introduction of four programmes with clearly different profiles; and flexibility, including interconnections between different programmes. An important structural change consists in the introduction of a six-month basic course common for all students, followed by two and a half years of specialised studies. In addition, there is an increased focus on natural sciences and new forms of testing and examination have been introduced.

In 2007 the Government presented the National Strategy for Lifelong Learning, which is mainly based on the Globalization Strategy (“Progress, renewal and development: Strategy for Denmark in the global economy”) published in the spring of 2006. The overall aim of the globalization strategy is to make Denmark a leading knowledge society with strong competitiveness and strong cohesion. Education, lifelong skills upgrading, research and innovation at the highest international level are crucial for achieving this aim. The national globalization strategy comprises 350 specific initiatives aiming at extensive reforms of education and research programmes and substantial improvements in the framework for growth and innovation in all areas of the society. The Government’s globalization strategy focuses in particular on training and lifelong skills upgrading. A high level of educational attainment and increased opportunities for lifelong learning are among the most important preconditions for strong competitiveness and for everyone to be able to actively participate in the labour market and in society. It is the Government’s aim that the country shall have world-class education and that everyone shall participate in lifelong learning.

The goals of the educational reforms are that: (i) all children shall have a good start in school; (ii) all children shall achieve good academic knowledge and personal skills; (iii) 95% of all young people shall complete a general or vocational upper secondary education by 2015; (iv) 50% of all young people shall complete a higher education programme by 2015; and (v) everyone shall engage in lifelong learning.

Lifelong learning shall be promoted in all parts of society and in all areas in which the knowledge, skills and competences of people are developed and put to use. This applies at all levels and in all parts of the education system, in adult education and continuing training, in the workplace, through liberal adult education and in association and leisure activities. The Government's strategy for education and lifelong skills upgrading, which covers all forms of education and learning, shall support and promote individual personal development, employment, active citizenship and participation in society. The main objectives are: (i) a coherent education system from preschool to higher education which must provide the opportunity for everyone to acquire excellent basic skills, a qualifying education and a solid foundation for lifelong learning; (ii) the education system shall foster talent and be more accommodating to weak learners; (iii) there must be relevant, high quality adult education and continuing training for everyone in the labour market; (iv) all forms of education and learning should be based on and build on the knowledge, skills and competences of individuals; (v) coherent education paths and transparency in the education system are to contribute to targeted education and lifelong skills upgrading and facilitate the best possible use of public resources; (vi) a global perspective must be included in all education programmes contributing to strengthening internationalization and cooperation; (vii) stronger higher education environments are to be created in order to contribute to higher quality in education and knowledge development, and a better framework and better conditions shall be developed for interaction between educational institutions and enterprises and other relevant stakeholders. (Ministry of Education, 2007).

Laws and other basic regulations concerning education

The legal provisions regarding nurseries and kindergartens are established by the **Social Assistance Act** of 1976 and subsequent amendments. The legal provisions governing the one-year pre-school class are included in the Act on the *Folkeskole*.

The **Act on the *Folkeskole*** (Ministry of Education Consolidation Act No. 55 of 17 January 1995) and subsequent amendments, defines the framework of the comprehensive primary and lower secondary school system, i.e. from the pre-school class to the tenth form level. In 2003, a new Act on the *Folkeskole* came into effect introducing several amendments. The main purpose has been to strengthen pupils' subject knowledge and skills without affecting their personal development.

The **Gymnasium Act** of 1999 and subsequent amendments, regulates general upper secondary education provided in gymnasia. Provisions concerning higher preparatory examination courses at the upper secondary education level are included in several orders and regulations.

The main legislative framework for vocational education and training (VET) includes the **Act on Institutions Providing Vocational Education and Training No. 954** of 28 November 2003, the **Act on Vocational Education and Training No. 183** of 22 March 2004, the **Regulation on Vocational Education and Training No. 184** of March 2004, and the **Regulation on the Basic Course in Vocational Education and Training No. 689** of June 2004. In addition, all VET programmes are subject to specific regulations and by a set of guidelines introduced in 2001 with the aim of simplifying the system and the process of change in individual programmes. The Act



on Open Education of December 1993 started to regulate vocationally- and professionally-oriented part-time courses and single-subject studies for adults at vocational colleges and higher education institutions.

As regards higher education, the Act of 1992 has increased the autonomy of the universities and other higher education institutions with university status, and better defined the framework of the decision-making process. The new **University Act No. 403** was passed on 28 May 2003; it enhances institutional autonomy and provides for the introduction of external boards. The **Act on Medium-cycle Non-university Education No. 481** of 31 May 2000 regulates non-university, tertiary-level education. Some recent Orders passed in 2004 take into account the two-cycle degree structure of the Bologna process (see Eurydice, 2007).

The **Act on Private Schools** of 1991 introduced a new public grant system for private schools. In 1992, a new Act was passed including the private upper secondary schools within the same public grant system as the private comprehensive schools.

The **Act on Tertiary Artistic Education Institutions No. 889** of September 2000 applies to state institutions providing training in the arts (including fine and visual arts, music, theatre, and design) and operating under the auspices of the Ministry of Culture.

Provisions concerning the Danish Evaluation Institute, established in 1999, are contained in the **Consolidated Act on the Danish Evaluation No. 905** of 12 September 2000.

According to the Danish Constitution, all children of compulsory education age have a right to free education in the *folkeskole*. Parents or persons with legal custody of children, who themselves see to it that the children receive instruction which meets the general teaching requirements set for in the *folkeskole*, are not obliged to enrol their children in the *folkeskole*. It must be underlined that, in Denmark, it is education, and not schooling, that is compulsory. Compulsory education means an obligation to participate in the educational activities organized by the *folkeskole*, or in activities that are comparable to those required in the *folkeskole*.

In May 2002, the Danish Parliament passed legislation in order to provide improved access to comparable information on educational institutions, thus enabling individuals to make more informed choices. According to the new legislation, all institutions must have a Website providing information about their educational provisions. Institutions are further required to set out the pedagogical principles governing the organization of education and instruction, must publish grade averages for individual subjects and levels, and publish all information deemed relevant for an assessment of the quality of the instruction provided.

Education is compulsory from 7 to 16 years of age.

Administration and management of the education system

The Ministry of Education is responsible for general education policies and for ensuring that educational programmes are consistent with existing policies. In 2001 the overall responsibility for universities has been transferred to the newly created **Ministry of Science, Technology and Innovation**. The Ministry of Education remains responsible for non-university, tertiary level education, while higher education institutions providing training in the arts are under the authority of the **Ministry of Culture**.

The Ministry of Education issues the principal regulations and orders regarding the *folkeskole* as well as the pre-school class. It lays down regulations pertaining to the learning objectives in each subject and topic, and issues curriculum guidelines for the individual subjects, as well as guidelines for the distribution of lessons. The Ministry of Education has the overall pedagogic responsibility over general upper secondary education, is responsible and determines conditions for the approval of schools which offer vocational upper secondary education and vocational education and training, and also approves the statutes of the schools, which are self-governing institutions. The Ministry oversees the national examinations system and is also responsible for the content of education and for monitoring its quality.

The **municipal councils** have the overall responsibility for the child day-care institutions in the municipality, and they establish the objectives and framework for the activities in childcare institutions. Furthermore, they draw up statutes for the management of municipal day-care institutions. The supervision and administration of the municipal school, mainly the *folkeskole*, rest with the municipal council. Together with the individual school, the municipal council decides on the implementation of the general aims and curriculum guidelines designated by the Ministry.

The municipal council has the overall responsibility for the school system within its jurisdiction. It can determine the objectives and scope of school activities and has supervisory functions. It is responsible for: appropriations for the school system and the individual schools; the appointment and dismissal of head teachers and teaching staff; the structure of the school system (including the number of schools, the size of each school in terms of form levels, special educational assistance, etc.); the framework of the organization of the educational process (including the number of lessons, special educational assistance, and the setting up of classes); special educational assistance; referral of pupils to other schools; guidelines for enrolment as well as matters relating to school libraries.

The **county councils** are financially responsible for gymnasia and the higher preparatory examination courses (HF-courses) within their jurisdiction. The county councils decide on matters relating to the allocation of grants to the institutions under their responsibility and the financial framework of the individual institutions, the appointment of headteachers, teachers and other staff, special education, the payment by students of expenses relating to teaching materials, the maximum number of classes at the institutions as well as the minimum number of students which the school is obliged to admit. The county councils are, furthermore, responsible for the setting up, operation and closing down of schools/courses and boarding departments.



Following a general agreement reached in 2004, a structural administrative reform is being implemented from January 2007. Five new **regions** replace the existing counties and several municipalities have been merged, bringing their total number to 98 (from a former total of 275). According to the reform, educational institutions funded by the counties will be transformed into self-governing institutions funded by the State. This applies to institutions providing general upper secondary education, social and health education programmes, as well as adult education centres.

The administration of the institutions at pre-school level is the responsibility of the headteacher and an **elected board**. A board must be set up in all municipal childcare institutions. The majority of the board members are elected from among the parents, and two members are elected by and from the staff employed in the institutions. The administration of the *folkeskole* follows the same pattern. A **pedagogic council** advises the headteacher on educational issues. The school board conducts its activities in compliance with the objectives and scope stipulated by the municipal council. It elaborates the criteria for the activities of the school, including such matters as: the organization of the teaching, the number of lessons of the classes at each form level, the offer of optional subjects, special education at the school, and the distribution of pupils in the classes; the cooperation between the school and the parents; information for parents about their children's progress at school; distribution of the workload among the teachers; and joint arrangements for the pupils during school hours (such as school camps, practical job training periods, etc.).

At all schools with fifth or higher form levels, the pupils may form a **pupils' council**. The pupils themselves determine the composition and the electoral procedure. The pupils' council, which elects two representatives to the school board, is the forum representing the pupils' interests vis-à-vis the school and the municipal authorities.

The administration at the general upper secondary level is ensured by the headteacher, an elected board, the pedagogic council and the teachers' assembly. It is the task of the **teachers' assembly** to deal with the level of attainment of the students and counsel the students and their parents on the advancement to the next class. It also coordinates teaching and learning activities and determines the students' workload. The teachers' assembly is convened when the headteacher finds it necessary, often in connection with the award of term marks in the third year of the gymnasium. A **students' council** is set up at all schools. It is elected by and from all the students of the school and defines its own statutes.

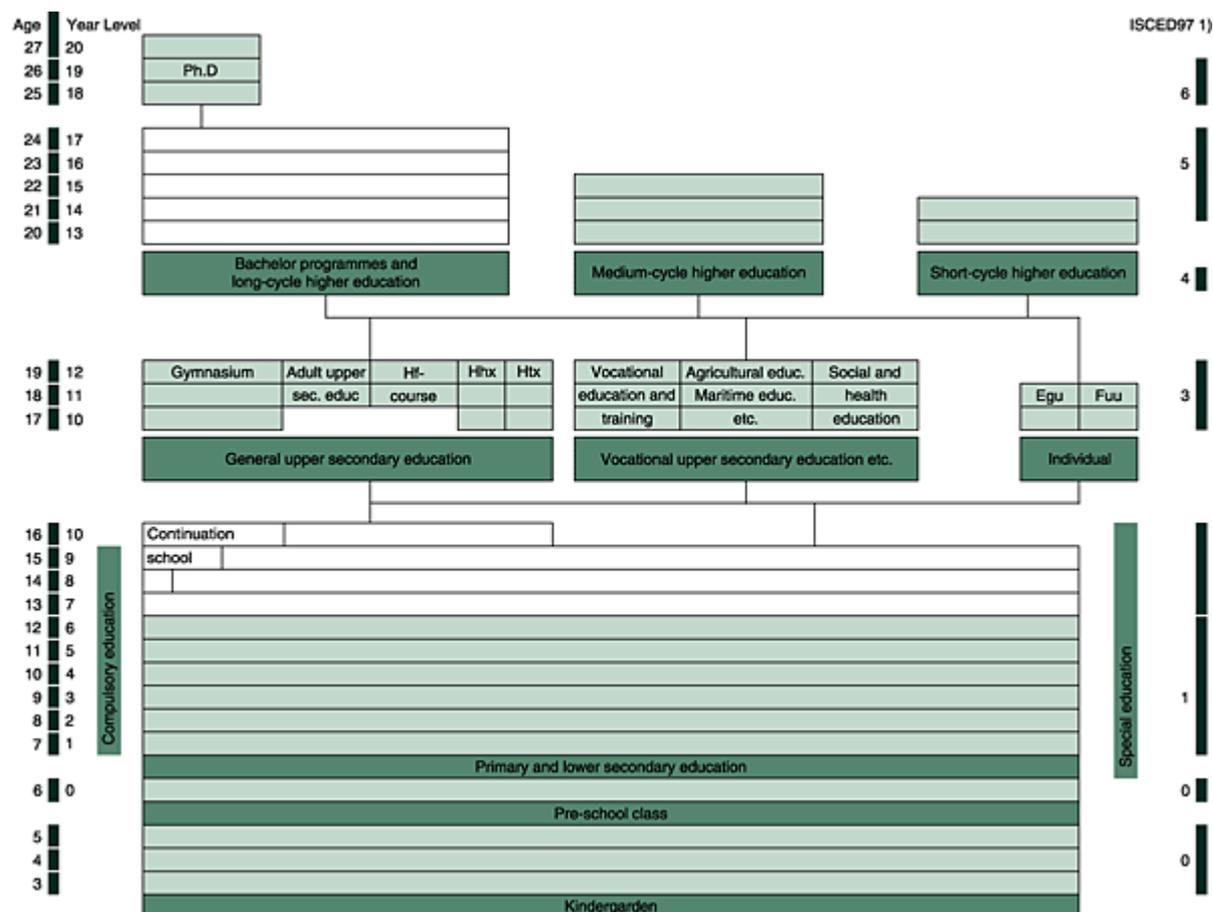
The **Advisory Council for Initial Vocational Education and Training** is an advisory body to the Ministry of Education on all matters concerning the vocational education and training (VET) system, mainly concentrating on general national issues concerning VET provision. The Council monitors labour market trends, and on this basis recommends the establishment of new VET qualifications, the adaptation of existing ones or discontinuation. It also monitors existing programmes, and makes recommendations for a better coordination.

The **Danish Evaluation Institute (EVA)** is an external, independent body for quality assurance and evaluation of the education system. The Institute was established in 1999 and continues the work of the Evaluation Centre (1992), which

focused on higher education only. Each year, the Institute submits a plan of action outlining evaluations to be undertaken in the coming year. It is the task of the Ministry of Education to ensure that this plan of action is in line with the objectives set out for the Institute.

Structure and organization of the education system

Denmark: structure of the education system



Source: Website of the Ministry of Education, August 2007.

Pre-school education

Childcare institutions comprise nurseries (age group 0-2 years), kindergartens (normally for children in the age group 3-5) and the pre-school class in primary schools (normally for 6-year-olds). There are also integrated institutions (nursery-kindergartens) catering to children aged 1-5. Attendance is not compulsory.

Primary and lower secondary education

At the primary level, the comprehensive school (*folkeskole*) covers the entire period of compulsory education. It is not divided into a primary and lower secondary stage. The



folkeskole consists of a voluntary pre-school class (for children aged 6), the nine-year compulsory programme and a voluntary tenth year. It thus caters to pupils aged 6-17. The first six years are normally for the age group 7-12, while years 7-9(10) are normally for pupils aged 13-16(17). In 2006 it has been envisaged to make the pre-school class compulsory, thus extending the period of compulsory education from nine to ten years.

Secondary education

There are two types of general upper secondary education: the gymnasium and the higher preparatory examination courses (HF). The gymnasium offers a three-year programme leading to the Upper Secondary School Leaving examination, which qualifies for admission to university and other higher education programmes. Full-time HF courses last two years and are for students who have completed the voluntary tenth year of the comprehensive school. HF courses also qualify for admission to higher education, although specific optional subjects or a determined level of attainment may be required. There are two vocationally-oriented upper secondary education programmes, one leading to the higher commercial examination (HHX) and the other leading to the higher technical examination (HTX). Both are of three years' duration and qualify for admission to higher education. Normally they are offered at business colleges and technical colleges, respectively.

Higher education institutions offer short-, medium- and three-cycle (long-cycle) programmes. Short-cycle (non-university) programmes are offered mainly in the commercial and technical fields, and normally last two years leading to the award of a diploma. Medium-cycle (non-university) programmes usually prepare students for a specific profession, and typically last three to four years leading to a (professional) diploma which is equivalent to a professionally-oriented bachelor's degree offered at university. Universities offer programmes at three levels: bachelor's degree (three years of study), *candidatus* (or master's degree), normally taking two additional years after the bachelor's degree, and doctoral degree, requiring three additional years of study after the *candidatus*/master's degree. Universities also award the traditional higher doctoral degree after a minimum of five to eight years' individual and original research. University programmes are research-based.

The Ministry of Education each year issues holiday guidelines for the *folkeskole*, fixing the number of holidays and days off, as well as the date of the beginning and end of the summer holidays for the *folkeskole* and for general upper secondary education. However, the municipal school authorities are free to decide on where to place these holidays and days off. At general upper secondary level, it is the school board that decides on the holiday plan. In vocational education and training, the schools decide on the organization of the school year, but within the same framework as the other school levels (200 school days per year). In higher education, it is the institutions themselves that decide on the organization of the school year in keeping with the Holiday Act which provides for five weeks' holiday for all. The Act on the *folkeskole* (Ministry of Education Consolidation Act no. 55 of 17 January 1995) establishes that "the school year shall begin on 1 August and shall normally comprise 200 school days". At the upper secondary level, the school year consists of thirty-five to thirty-six weeks excluding the examinations period.



The academic year is divided into two terms: from September to December and from January/February to May/June. Students have a holiday week in October, at Christmas and at Easter.

The weekly and daily timetable varies from one level to the next, but at all levels the lessons last forty-five minutes.

The financing of education

The different levels of the education system which belong under the responsibility of the Ministry of Education are, in one way or another, funded according to the principle of “the money follows the student”. This principle is part of the Ministry’s overall strategy of target and framework management.

The system is based on the allocation of grants to institutions according to their level of activity: those with many students receive a large grant; those with few students receive only a small grant. The budget of the previous year has no influence on the size of the budget of the following year. A key element in the system is the block grant principle. As long as the block grant is used for legitimate purposes, the institution is free to spend the money in accordance with its own priorities. Nurseries, kindergartens, other day-care institutions and pre-school classes are financed by the local authorities from block grants allocated by the State.

However, local government schools (municipal and county schools) are not financed according to the main system. Municipalities and counties decide themselves as to which system they want to use when financing the institutions under their responsibility (i.e. *folkeskoler* and *gymnasia/HF*-courses). Nevertheless, the Ministry of Education has fixed certain minimum requirements.

According to the Act on Vocational Schools, which came into force in 1990, each institution receives an annual grant computed on the basis of objective criteria (i.e. the number of full-time student equivalents and rates fixed for the different vocational training courses offered by the school). The rates are approved by Parliament and included in the Appropriation Act. The total annual grant for a vocational school consists of two types of grants: teaching grants and grants for joint expenditures. It must, however, be noted that the two grants are allocated in the form of one block grant, and the schools are free to reallocate the grants between teaching and joint expenditures.

Since the beginning of the 1980s, the allocation of funds to the universities and other higher education institutions has been calculated on the basis of a computerized budget model. Teaching grants were calculated on the basis of a forecast of the so-called *study step increments* (SSI), i.e. the number of passed examinations corresponding to the study activity of one year. Decisions were made based on the forecasted SSI: the number of teachers, the number of support staff, the budget for equipment and teaching aids, etc. Standard rates for teacher and support staff salaries were included in the model. These calculations were made at the faculty level. In addition to the grants calculated in this way, the institutions received funds for research and joint purposes such as management and administration, building



expenditures, etc. From 1994, the grant has been fixed according to principles similar to the system used for the vocational schools.

The 1991 Act on Private Schools introduced a new public grant system for private schools. They are allocated a grant towards the operational expenditure, per pupil, per year, which in principle matches the public expenditure per pupil in the municipal schools (minus the school fees paid by the parents). The total grant for all private and independent schools is obtained by multiplying the average rate per pupil by the total number of pupils.

Since 1993, the schools have been given grants per pupil to cover all kinds of building-related expenditures (i.e. building costs, maintenance, rent and real estate taxes). The grant distribution process consists of a computer-based calculation ruled by law, a few regulations issued by the Ministry and a few controlled key figures.

In the public education system, education is free of charge. Textbooks and teaching materials are handed out to the pupils on loan in primary and secondary education, whereas in higher education students have to buy their own books. Pupils enrolled in private education at primary and secondary levels pay a small fee.

In 1988, the present education grant and loan scheme was introduced, by which the grants and State loans were increased considerably and the so-called *voucher system* was introduced. Students enrolled in youth education (post-compulsory education) are not included in the voucher system. At the beginning of a study programme (within the voucher system), the student receives a certain number of monthly vouchers corresponding to the officially stipulated study time expressed in months of the programme. If the student has received support (used vouchers) during a previous study programme, these used vouchers are deducted from the total number of vouchers for the new programme. In principle, a student will receive support (grant and State loans) for one programme only.

The voucher system aims at improving the students' possibilities of organizing their studies. The division into monthly vouchers makes it possible for the students to make personal decisions as to when they want to use the vouchers. Students who have a job next to their studies may earn a certain maximum, the so-called "free amount", and still hold their grant. If they know that they will have a bigger income than the "free amount", they may save their vouchers for later use. In the last period of their studies, they may then use "double monthly vouchers". This is usually used by students working their way through their studies, when they have to work on their theses.

According to Eurostat, the total public expenditure on education represented 8.47% of GDP in 2004.

The educational process

The curriculum sets out the aims, content and duration of educational programmes and individual subjects. The curriculum also includes provisions concerning assessment, examinations and the required number of written assignments in basic



education and general and vocational upper secondary education. The establishment of a set of common rules ensures uniformity as well as a minimum standard and quality levels. Over the last decade, however, requirements relating to content have tended to be less detailed. Institutions have been given greater scope to organize the programmes of study and the teaching-learning process, and employ the staff and methods deemed most suitable.

The Danish Parliament takes the decisions governing the overall aims of education, and the Minister of Education sets the targets for each subject. It is up to the municipalities and schools to decide how these targets can be attained. While the Ministry of Education publishes curriculum guidelines for the individual subjects, these are mostly seen as recommendations and as such are not mandatory for local school administrators; schools are permitted to draw up their own curricula as long as they are in accordance with the aims and proficiency areas laid down by the Minister of Education. However, nearly all schools choose the centrally-prepared guidelines as their binding curricula. Thus, all municipal schools have common aims and provisions for the subjects that are to be taught and for the organization of the school system. It is the responsibility of the individual municipality to decide how the schools are to function in practice within that framework.

Pre-primary education

The legal provisions governing the one-year pre-school class are laid down in the Act on the *folkeskole*. Among other things it is established that: the *folkeskole* shall comprise a one-year pre-school class, a nine-year basic school, and a one-year tenth form; the municipal council shall be responsible for the establishment of pre-school classes; a child shall, at the request of the parents, be admitted to a pre-school class in the calendar year of his or her sixth birthday or later; the teaching in pre-school classes shall, as far as possible, be given in the form of play and other development activities; for the pre-school class and the first and second forms, an integration of parts of the programme may be organized and at small schools, the entire programme at these form levels may be common.

Pre-school education is primarily offered in the following institutions: nurseries for children between six months and 2 years of age (size: 30-60 children); kindergartens for children between 3 and 5/6 years of age (size: 40-80 children); integrated institutions for groups with a wider age-group distribution than the two other types (size: 40/60-150 children); municipal child-care facilities established by private owners catering to a few children (size: 5-10 children); pre-school classes (voluntary) established at basic schools and normally attended by children from the age of 6 (average size: about 18 children).

In theory, the admission requirement for these types of institutions is age-based, but as the supply in the three first types of institutions does not meet the demand, the municipalities distribute the places in consideration of the following categories of children: children with special pedagogical or social needs; children of one-parent families; children sent by another authority.

Nurseries, kindergartens and other day-care institutions (except for 24-hour institutions) are open Monday to Friday between 7 a.m. and 5/6 p.m. In pre-school



classes, the minimum number of weekly lessons is twenty. The daily number of lessons for the pupils must not exceed five lessons in pre-school class. The schools are, however, open between 7 a.m. and 5/6 p.m., as the children may be taken care of at school through the school leisure-time scheme. Regular classes start at 8/9 a.m. and last until mid-day. During the time outside the normal school hours, the pupils may receive instruction in practical school subjects. No formal assessment of children is carried out at this level, but it is common to hold consultations with parents.

The integration of children with special education needs in mainstream schools is a central principle. The aim is to offer disabled children or children with particular difficulties a childhood as normal as possible. The children receive more attention, frequently by attaching additional staff to the institution. Sometimes disabled children are together in a separate group. Educational employees also have the possibility of consulting specialists.

According to national data, in 2004 there were 498 nurseries catering to 17,720 children, 2,415 kindergartens with 11,358 children enrolled, and 1,865 integrated institutions with a total enrolment of 123,893 children. There were 65,380 children enrolled in the pre-school class. The total number of teachers (full-time equivalents) in kindergartens was 20,594. More than 99% of all children attend the preschool class, including 93% of all six-year-olds. (Ministry of Education, 2007).

Primary and lower secondary education (*Folkeskole*)

In section 1 of the Act on the *Folkeskole* it is stipulated that the *folkeskole* shall, in cooperation with the parents, further the pupils' acquisition of knowledge, skills, working methods and ways of expressing themselves and thus contribute to the all-round personal development of the individual pupil.

The municipal *folkeskole* caters to about 90% of all pupils in compulsory school age. It provides basic education free of charge to children between the ages of 6 and 17, i.e. in the voluntary pre-school class, the nine years of compulsory education and the voluntary tenth year.

There are different types of comprehensive or basic school: (i) schools with a pre-school class and Forms I-X; (ii) schools with a pre-school class and Forms I-VII; (iii) schools with three or more consecutive form levels (which may be placed under the management of another school, unless the number of pupils exceeds 100). As compulsory education cannot be fully provided in type (ii) and type (iii) schools, pupils have to change school after the seventh form.

In addition to the prescribed subjects, the instruction offered in the basic school includes the following obligatory topics: traffic safety; health and sex education and family knowledge; educational, vocational and labour market orientation. In the tenth form, compulsory teaching subjects include Danish, mathematics, and English; physical education and sport, Christian studies/religious education, social studies, and physics/chemistry can also be offered. In Forms VIII-X there can be several optional subjects, including a second foreign language (usually German or French). The school may, furthermore, offer pupils instruction which



combines the practical and theoretical content in a course which can take place at or outside the school. Pupils in Forms VIII-X must choose at least one elective.

The curriculum guidelines specify that Information Technology (IT) must be integrated into all the subjects at all form levels. This means a full integration of IT into the compulsory subjects, three optional IT-related subjects, and requirements regarding an extension of the IT-equipment of the schools. The pupils shall be given the possibility of acquiring basic IT skills and knowledge.

The subject Christian studies is taught through the Evangelical Lutheran Christianity of the Danish national Church. At the higher form levels, the instruction shall, furthermore, comprise foreign religions and other philosophies of life. If requested, a child shall be exempted from participation in classes of Christian studies when the person who has custody of the child submits a written declaration to the headteacher of the school to the effect that he/she will personally assume the responsibility of the child's religious instruction.

The new Act has abolished the division of the subjects of arithmetic/mathematics, English, German and physics/chemistry in a basic and an advanced course in Forms VIII-X and has introduced a system of differentiated teaching, by which the teachers have to adapt their teaching to the prerequisites of the individual pupils. Changes in the Act of the *Folkeskole* concerning Form X were put into force on 1 August 2000. In Form X, Danish, mathematics and English are now obligatory; a self-elected exercise has replaced the project-oriented exercise, and the pupils must draw up an educational plan. The guidelines concerning the weekly distribution of lessons are shown in the table below:

Compulsory school: plan for the distribution of lessons

Subject	Number of recommended lessons per year								
	I	II	III	IV	V	VI	VII	VIII	IX
Danish language	300	270	240	180	180	180	180	180	180
English language	–	–	60	60	90	90	90	90	90
German/French language	–	–	–	–	–	–	90	120	120
History	0	0	30	30	30	60	60	60	30
Religion	60	30	30	30	30	60	–	30	30
Civics	–	–	–	–	–	–	–	60	60
Mathematics	150	150	150	120	120	120	120	120	120
Science	30	30	60	60	60	60	–	–	–
Geography	–	–	–	–	–	–	60	60	–
Biology	–	–	–	–	–	–	60	60	30
Physics/chemistry	–	–	–	–	–	–	60	60	90
Physical education	30	60	60	90	90	90	60	60	60
Music	30	60	60	60	30	30	–	–	–
Art	30	60	60	60	30	–	–	–	–
Handicraft, woodwork, home economics	–	–	–	60	120	120	90	–	–
Electives	–	–	–	–	–	–	–	60	60
Hour of the class	30	23	23	23	23	30	30	30	30
Total number of lessons	660	683	773	773	803	840	900	990	900

Source: OECD. *Pilot review of the quality and equity of schooling outcomes in Danish basic education Background Report*. November 2003. Each lesson consists of 60 minutes. The number of lessons for “hour of the class” in Grades II–V (a recommended minimum of 22.5 lessons per year) has been rounded.

For pupils in Forms VIII–X and for pupils leaving school after Form VII, the assessment of the level of attainment in the subjects is expressed in proficiency marks. Proficiency marks are given at least twice a year in Forms VIII–X. The last proficiency marks are given immediately before the written examinations and express the student’s proficiency in the subject.

At the Form IX level, a mandatory project assignment gives pupils the opportunity to complete and present an interdisciplinary project. The project assignment is assessed with a written statement regarding its content, working process and presentation. The written statement affords a broader and more detailed assessment of the pupil’s ability. At the pupil’s request, a mark can also be given. The assessment of the project assignment can be indicated in the leaving certificate.

Examinations are administered at two levels: the leaving examination at the end of Form IX and the leaving examination at the end of the tenth form. Standard rules for all examinations ensure uniformity throughout the country. For the same reason, the papers for the written examinations are set and marked centrally. However, examinations are not compulsory. The student is free to decide whether or not to sit them, after consultations with his or her own teachers, and the parents. Each examination subject is assessed separately; results cannot be summed up to give an average mark.

In 2005, the Ministry of Education has decided to pay increased attention to the various science subjects and mathematics. This initiative has resulted in new



regulations, to be implemented in 2007, and new national tests in ten subjects to be introduced at the compulsory education level.

The school issues a leaving certificate for pupils leaving school at the end of Form VII, or later. The leaving certificate shall contain information on the educational activities in which the pupil has participated, as well as the most recent proficiency marks given. The leaving certificate also includes information on the assessment of examinations, if any. A written statement and/or a mark for the obligatory project assignment may be indicated in the leaving certificate, if the pupil so wishes.

According to national data, in 2003 there were 1,707 comprehensive schools, of which 469 were privately-owned. According to provisional 2003 data, there were 704,238 pupils enrolled, of whom 547,285 in the pre-school class up to Form VII and 156,953 in Forms VIII-X. Nearly all school-leavers continue their education at the upper secondary level: some 38.5% in vocational education and 56.3% in general upper secondary education in 2003. (Ministry of Education, 2005).

Upper secondary education

There are two forms of general (academic) upper secondary education: the three-year gymnasium, and the two-year higher preparatory examination courses (HF). The gymnasium leads to the upper secondary school-leaving examination, which qualifies for admission to university and other higher education institutions. The aim of the gymnasium is to provide general education as well as to prepare the students for further studies.

In 2003 there were 152 gymnasia in the country. In order to be admitted to the first year of the gymnasium, pupils must have completed the ninth form of the basic school and, in the opinion of their former school, be considered able to follow the instruction at general upper secondary level and to complete the course within the normal period of time.

Until 2005, the gymnasium was divided into a languages stream and a mathematics stream, each with three main fields of study. The programme comprised compulsory subjects for all students in the stream chosen and a number of optional subjects at two levels: an advanced and an intermediate level. The compulsory subjects in both streams were: biology, classical studies, religious education, Danish, English, geography, history, music, visual arts, and physical education and sport. At least two of the subjects taken by a student must be at the advanced level, and all students must write a major assignment. In the languages stream, the programme also included German or French at the advanced level, German, French, Italian, Japanese, Spanish or Russian at the beginner's level as well as Latin and natural science (mathematics, physics, and chemistry). In the mathematics stream, the programme also included chemistry, mathematics and physics as well as French or German at the advanced level or German, French, Spanish, Italian or Russian at the beginner's level. While a core of basic subjects must be offered at all schools, optional subjects vary from school to school. The distribution by subject of the total number of instructional hours per year prior to the reform is presented in the table below:

General upper secondary education (gymnasium): distribution by subject of the total number of lessons per year (prior to the reform of 2005)

Subject	Number of lessons per year in each form		
	I	II	III
<i>1. Languages:</i>			
Beginner language	105	108	–
Visual arts	–	–	51
Biology	79	–	–
Danish language	79	81	102
English	105	108	–
Continuation language	105	108	–
Geography	–	81	–
History and civics	79	81	76
Physical education and sport	53	54	51
Latin	79	–	–
Music	79	–	–
Science	79	108	–
Classical studies	–	–	76
Religious studies	–	–	76
<i>2. Mathematics:</i>			
Beginner/continuation language	105	108	–
Visual arts	–	–	51
Biology	79	–	–
Danish language	79	81	102
English	79	108	–
Physics	79	81	–
Geography	–	81	–
History and civics	79	81	76
Physical education and sport	53	54	51
Chemistry	79	–	–
Mathematics	132	135	–
Music	79	–	–
Classical studies	–	–	76
Religious studies	–	–	76
<i>3. Optional subjects at advanced level:</i>			
Beginner language	–	–	127
Biology	–	135	127
English	–	–	127
Continuation language	–	–	127
Physics	–	–	127
Greek	–	135	203
Chemistry	–	135	127
Latin	–	135	127
Mathematics, mathematics stream	–	–	127
Mathematics, language stream	–	135	127
Music	–	135	127
Social studies	–	135	127

Source: Danish Burydite Unit, 2005. Optional subjects are offered at an advanced and intermediate level. Concerning physical education and visual arts as optional subjects, the number of lessons may be combined with the lessons allocated to compulsory subjects. There must be 32 weekly lessons (each lasting 45 minutes) in the first year, and 31-32 in the second and third years. In the first year the 32 lessons are spent on compulsory subjects (27 in the second and 17 lessons in the third year).

There is a core curriculum in both streams. There are compulsory subjects in Years 1 and 2 and four “blocks” of optional subjects at advanced and intermediate level (three in Year 3 and one in Year 2). The core curriculum includes Danish, history (Year 1), biology (Year 1), music (Year 1), geography (Year 2), visual arts (Year 3), religious education (Year 3) and classical studies (Year 3), as well as physical education. Compulsory subjects in the languages stream include: English, German or French, a third foreign language (French or German, Spanish, Italian, Japanese or Russian), science and Latin (first year only). Compulsory subjects in the mathematics stream include: mathematics, physics, English, a second foreign language (German, French, Spanish, Italian, Japanese or Russian) and chemistry (first year only). The optional subjects at the advanced level include music and social studies in both streams, and additionally English, German and a third foreign language in the third year. In the



languages stream, Greek and Latin are also optional subjects. In the mathematics stream, biology and chemistry are optional subjects in the second year, and mathematics and physics in the third year. The optional subjects at the intermediate level include visual arts, biology, computer studies, drama, economics, film, music, philosophy, physical education, social studies, technology, astronomy and geography (third year only) in both streams. In the languages stream, Latin is also an optional subject and so are chemistry, mathematics and physics in the third year. In the mathematics stream, chemistry and Latin are also optional subjects.

As regards the optional subjects, certain requirements have to be met by all students: there must be four “blocks”, and a subject can only be taken at one of the levels; at least two of the subjects must be chosen at the advanced level; in the languages stream, students must choose at least one foreign language at the advanced level; in the mathematics stream, students must choose an advanced level in one of the following subjects: biology, chemistry, mathematics, music, physics, or social studies and the advanced level in social studies, or music must be combined with intermediate level in either biology, chemistry or geography or advanced level in mathematics or physics. Optional subjects at the intermediate level are offered in the second or third year (108 lessons in the second and 102 lessons in the third year).

The reform implemented from 2005 is based on the following principles: the enhancement of students’ knowledge, proficiency and skills; consolidating students’ skills in order to better prepare them for higher education; boosting cooperation between teachers in different subjects; updating cultural and general educational concepts (common reference framework); the introduction of four programmes with clearly different profiles; and flexibility, including interconnections between different programmes. An important structural change consists in the introduction of a six-month basic course common for all students, followed by two and a half years of specialised studies. In addition, there is an increased focus on natural sciences and new forms of testing and examination have been introduced.

The evaluation can be divided into internal and external evaluation. The aim of the continuous evaluation is to guide the student and the teacher with a view to the further planning of the instruction. The individual teacher will thus have a possibility of adjusting the progress, and the level of the evaluation must also provide a basis for a detailed guidance of the individual student with regard to his or her progress in the subject concerned and in study methods. The method of evaluation is determined by the students and the teacher together and the form and content of the instruction.

An evaluation of the individual student’s achievement in the subjects is conducted for external purposes. This is done by means of the following types of evaluation: marks for the year’s work, examination marks, term marks and testimonials. Marks for the year’s work which appear on the student’s examination certificate are given at the end of the school year in which instruction in the subject concerned is concluded. Marks for the year’s work are given by the subject teacher and reflect the subject teacher’s appraisal of the student’s level of attainment at the end of the year. Term marks are given in those subjects in which marks for the year’s work are given. Term marks are given twice during the school year and in the case of subjects which are to be continued in the following year, also at the end of the school year. These marks may be accompanied by a written testimonial as to the student’s



aptitude for, and work with, the subject concerned. If the mark given is under 6, it must be accompanied by a testimonial and the same applies if the mark is two marks or more lower than that given at the previous evaluation. A total of ten examinations must be taken in order to pass the complete examination, of which up to three may be taken after the first and second years. After the third year, all students take a written examination in Danish and in the subjects chosen at the higher level. The number of oral examinations varies for the individual student in accordance with the number of subjects chosen at the higher level.

Written examination questions are produced by the Ministry of Education's Department of Upper Secondary Education. For each subject, there is an examination committee consisting of hand-picked teachers and the Department's subject advisers for the subject in question. Oral examinations are held in subjects selected (at random) by the Department of Upper Secondary Education for each individual school. Students are given a mark (according to the 13-point marking scale) for the year's work as well as for their achievement in the examinations. The average of the two sets of marks is then the student's examination result. There is automatic promotion between if the content of the subject is followed, tests and examinations taken, and the compulsory attendance respected. Students may however (if they so wish) ask the headmaster's permission to repeat a year. Students who have passed the final examination at the end of the gymnasium are issued a certificate which contains the main following information: all marks for the year's work; examination marks, including marks for the year's work in subjects in which there has been no examination; the two average figures; and the examination results.

The *Higher Preparatory Examination* (HF course) was introduced at the end of the 1960s and is mainly for young people and adults who have left the education system and wish to continue their studies. It is also possible for students to attend an HF-course directly after the tenth year of the basic school. Like the gymnasium, the HF-courses offer general education and prepare the students for further studies. A full-time student may complete the course in two years, but for adults the examination can also be taken on a single-subject basis or as a combination of subjects over a longer period of time.

About a half of institutions offering the HF are attached to gymnasia offering mainly full-time two-year courses. About 75 adult education centres offer HF mainly as single subjects. As a parallel activity, these centres provide general education at a more basic level for adults.

In order to be admitted to an HF course in one or more subjects, the student must have finished the basic school at least one year before admission and be considered qualified by the HF course in question. Students wishing to be admitted directly from the basic school must have completed the tenth year of the basic school and must be considered qualified by their former school.

The HF course lasts two years and comprises common core subjects and three elective subjects which can be freely combined. The common core subjects are: biology, Danish, English, geography, German, history, mathematics, music, social studies, physical education (PE) and sport, religious education, and visual arts. Three subjects are offered as optional subjects at the common core level: biology, geography

and physics/chemistry. The optional subjects taught only in the second year (except beginner languages) are: biology, business economics, chemistry, classical studies, computer science, design, drama, English, film and television studies, French, German, Italian, mathematics, music, visual arts, PE and sport, physics, Russian, psychology, philosophy, social studies, Spanish and technical studies. The programme also includes a major written assignment, which is to be elaborated in the second year in one of the subjects of Danish, history or religious education or in one of the optional subjects, except for the optional subjects at the common core level.

There is no continuous evaluation in the HF courses, nor any end-of-year or end-of-term examinations. Another important difference with respect to the gymnasium is that a complete HF examination requires an examination in all subjects (except for visual arts, PE and sport and music at common core level). The examination takes place at the end of the year in which the instruction in the subject ends. Both written and oral examinations are held in the following subjects: Danish, English (optional), German/French (continuation level as optional subject), mathematics common core, mathematics optional, and in subjects chosen at the high level. In the remaining subjects, only oral examinations are held. At the end of the HF course students sit the higher preparatory examination. Those who have passed this examination are issued a certificate, which contains the following information: marks in common core subjects which have not also been chosen as optional subjects; marks in optional subjects; the mark for the major written assignment; the average mark, calculated with one decimal.

There are two vocationally-oriented upper secondary education programmes: one leading to the higher commercial examination (the HHX), and the other leading to the higher technical examination (the HTX). A few colleges offer both programmes, but normally the two programmes are offered at business colleges and technical colleges, respectively. The programmes last three years and both examinations qualify for admission to higher education, and to some extent they also prepare for an occupation. Pupils who have completed Form IX of the *folkeskole* have access to both programmes. There were some 160 business and technical colleges in 2003, out of a total of 283 institutions offering vocational education. (Ministry of Education, 2005).

The HHX course comprises a certain number of compulsory subjects such as Danish, English, second foreign language and business economics, sales, information technology, international economics, contemporary studies, commercial law, vocational education subjects, including a project as well as a wide range of optional subjects. In the HHX programme, around two thirds of the instructional time is spent on compulsory subjects and one third on optional subjects. By means of the optional subjects, the students have a chance to give the programme a profile that suits their personal interests and future plans. The compulsory subjects altogether are allocated 2,475-2,495 lessons, while 715-920 lessons are for optional subjects. Students are given marks for the year's work on the basis of their performance in class and on homework. Oral and/or written examinations are taken in almost all of the subjects. The students' performance at the examination is assessed by the teacher/examiner and external examiners appointed by the Ministry of Education. A student who has not completed or passed the examination may register once for a new examination. Under special circumstances, an exemption may be granted for a further attempt. At the end



of the third year, the school issues a certificate indicating all the marks obtained by the students at the examination and in the year's work.

The higher technical examination programme (HTX) was introduced in 1982. It is primarily directed at young people who are interested in science and technology. The programme comprises both technical subjects and general subjects, and is offered at technical colleges. The programme comprises compulsory subjects such as vocational subject I, vocational subject II, technology, mathematics, science, physics, chemistry, biology, Danish, English, second foreign language and social studies, as well as a wide range of optional subjects (at least two subjects must be chosen at level A). Around two thirds of the instructional time is spent on compulsory subjects and one third on optional subjects. A total of 2,435 lessons are devoted to compulsory subjects, and 1,175 lessons to optional subjects. Periods of practical experience in a workplace may be included in the programme of some subjects. The assessment and certification system is similar to the HHX course.

At the upper secondary vocational education level, the Ministry of Education determines the total number of lessons as follows: 31 lessons during 36 weeks in the first year, 31 lessons during 34 weeks in the second year, 31 lessons during 33 weeks of in the third year. The Ministry also decides on the distribution of lessons for the individual subjects. The colleges may organize the educational process within this framework with minor variations.

A vocational education and training (VET) programme is a programme in which theoretical and practical education at a vocational college alternates with practical training in a company. VET programmes are divided into two parts: a basic course and a main course in which the trainee specializes within a craft or a trade. There are seven basic courses. VET programmes normally last four years, but the system includes a variety of programmes lasting from 18 months to five and a half years. The programmes are highly flexible. In the case of technical training programmes the basic course typically comprises twenty weeks, while the main course (VET specialization) typically lasts three to three and a half years (of which forty weeks school-based). In the case of commercial training programmes, the proportion is 76 weeks and four years respectively. The school part of the programmes comprises four types of subjects: basic subjects, area subjects, special subjects and optional subjects. The programme is completed with a journeyman's test (technical training) or a final project-based examination (commercial training).

Short VET programmes have been introduced in 2005 in order to offer an alternative to practically-oriented young people, and to ensure their employment upon completion of a programme. There are some twenty-three new programmes typically lasting one and a half to two years. Some additional 50 programmes leading to partial qualifications are also offered, and their duration ranges between one and a half to three years. (National Education Authority, 2005).

According to national data (provisional), in 2003 there were 221,764 students enrolled at the upper secondary level, of whom 68,618 students in general (academic) upper secondary education. (Ministry of Education, 2005).



Assessing learning achievement nationwide

The Danish Evaluation Institute has been established in 1999 as an independent institution under the Ministry of Education with the task to undertake systematic and mandatory evaluations of the teaching and learning process at all levels of the education system, from pre-school to postgraduate education. Starting from 2006/07, compulsory national tests in the comprehensive school are being introduced. It is envisaged to conduct ten compulsory national tests covering Danish, English, mathematics and the natural sciences. The main purpose is to enhance the evaluation culture in the *folkeskole*.

Higher education

Higher education institutions are state-owned or public self-governing institutions regulated by law. Non-university, tertiary level institutions (college-sector higher education) are under the authority of the Ministry of Education. Since 2001, universities are under the Ministry of Science, Technology and Innovation. Higher education institutions offering training in the arts are under the authority of the Ministry of Culture.

The entrance qualifications for higher education are: the upper secondary school-leaving examination certificate, the Higher Preparatory Examination (HF), the Higher Commercial Examination (HHX) and the Higher Technical Examination (HTX) certificates. Certain non-academic institutions may, however, admit students who do not have any of these qualifications. Alternative requirements may be nine to ten years of school attendance, followed by work experience, an entrance examination or a supplementary examination. Admission is restricted in a very few courses (e.g. medicine) and there are no tuition fees. The available places are divided into two quota systems. The places in the first quota are distributed to applicants having passed a Danish qualifying examination, in accordance with the marks obtained. The places in the second quota are accorded to other applicants, who either meet the admission requirements or are found likely to be able to complete the course for which they have applied.

As mentioned, higher education institutions offer short-, medium- and three-cycle (long-cycle) programmes. Short-cycle (non-university) programmes are offered mainly in the commercial and technical fields, and normally last two years leading to the award of a diploma. Medium-cycle (non-university) programmes usually prepare students for a specific profession, and typically last three to four years leading to a (professional) diploma which is equivalent to a professionally-oriented bachelor's degree offered at university. Universities offer programmes at three levels: bachelor's degree (three years of study), *candidatus* (or master's degree), normally taking two additional years after the bachelor's degree, and doctoral degree, requiring three additional years of study after the *candidatus*/master's degree. Universities also award the traditional higher doctoral degree after a minimum of five to eight years' individual and original research. University programmes are research-based.

By the end of 2006, the higher education network comprised twelve universities, twelve institutions providing training in the arts, 22 higher education



centres/colleges, and 17 higher professional education institutions (*National report of Denmark within the framework of the Bologna process, 2007*). Universities are either multi-faculty or specializing in fields such as engineering, education, veterinary science, agriculture, pharmacy, and business studies. Apart from a few exceptions, technical and commercial education short-cycle programmes are offered at technical and commercial colleges which also offer upper secondary vocational education and training. Medium-cycle non-university programmes are offered by different specialized institutions (for example, colleges of education).

As regards universities, the rector is elected for a period of four years from among the permanent full-time academic staff, and has formal responsibility for the management of the institution and its functioning. The Senate is the supreme collegiate body of the institution. The faculty is under the responsibility of an elected dean. The faculty council establishes guidelines for the long-term planning and approves the budget of the faculty. This council also has two members from outside the university. A study committee consisting of an equal number of teachers and students is set up for each study programme. Research and related activities are normally placed within departments (institutes). Each department elects a head and a departmental board. Students are represented in the governing bodies of the institutions. Election to a governing body takes place through nomination via the students' organizations, which at the national level are associated in umbrella organizations.

Universities and university centres carry out research in traditional academic disciplines. The other university-level higher education institutions carry out research and offer education within areas such as engineering, veterinary science, pharmacy, architecture, music, art and in various business-related subjects. The colleges of education train teachers for the *Folkeskole* and have their own independent research institution: the Royal Danish School of Educational Studies. The non-academic institutions offer short and medium-cycle courses, especially within the areas of technology, education, social work and health.

The Danish Evaluation Institute conducts the following types of external quality assurance within the higher education sector: programme evaluation; accreditation of professional bachelor's degree programmes; institutional accreditation establishing the basis for obtaining a university college status; institutional audit; and accreditation of short-cycle programmes offered at private institutions. Higher education institutions are responsible for defining internal quality assurance procedures and organizing assessments. (*National report of Denmark within the framework of the Bologna process, 2007*).

According to national (provisional) data, in 2003 there were 203,349 students enrolled at the (non-university and university) higher education level, of whom 65,656 students in professionally-oriented bachelor's degree programmes and 51,649 in bachelor's degree programmes. (Ministry of Education, 2005).

Special education

Apart a few exceptions (i.e. special education for adults), there is no specific legislation which applies to pupils with special education needs. In the ordinary legislation pertaining to the different educational levels, it is stipulated, more or less explicitly, that education must be offered to all and be organized with due consideration of the pupils' different prerequisites and needs. The Act on the *Folkeskole* thus applies to all children of compulsory school age. The Act however establishes that: "special education and other special educational assistance shall be given to children whose development requires special consideration or support." The decision as to whether a child requires special consideration or support is dependent on a concrete assessment in each individual case, which is conducted by pedagogical and psychological counselling services and upon consultation with the pupil and his/her parents.

A distinction can be made between special education without and with placement in a mainstream class. In the first case, this means either a special school, a special class at a mainstream school or individual tuition. These modalities reflect a greater or lesser extent of segregation, where the special school can be considered more segregated than the special class at an ordinary school. The most segregated form is, however, individual tuition, where the pupil is isolated from both educational and social interaction with other children.

Overall, the situation at the *folkeskole* reflects a remarkably high level of integration. In 2002/03 Of the 80,000 pupils referred annually to special instruction, almost 70,000 (or roughly 80% of those referred) receive the special support as a—relatively limited—supplement to the instruction in the ordinary class. Of the roughly 10,000 pupils who are referred to special instruction without affiliation to an ordinary class, roughly 6,000 attend special classes at ordinary schools, while only the remaining 4,000 pupils attend special schools. This means that only 0.5% of the pupils of the *Folkeskole* are now taught outside an ordinary school environment.

About 80,000 pupils or 12-13% of the total number of pupils received special education for short or long periods. Of these, some 70,000 pupils received special education in addition to the ordinary programme. In the same year, 10,617 pupils were educated in segregated settings, 4,973 attended special classes in mainstream schools, and 9,897 attended special schools. There was a total of 108 institutions operated by the counties providing special needs education, both to children and adults. Due to the administrative reform implemented in 2007, these institutions are transferred either the municipalities or the newly created regions.

At the general upper secondary level, support teaching may be offered to disabled students according to their individual needs. The content of this provision is determined by the individual school. Depending on the classroom conditions instruction is provided either by the student's own teachers, by specially trained teachers at the school or by outside specialists. Students with special needs may also be granted exemptions from the examination regulations, if this is estimated to be necessary for placing these students on an equal footing with other students in the examination situation.



There are no centrally fixed rules regarding students with special needs in higher education. It is up to each institution to assess each individual case, including measures which can be taken in the case of examinations and to a possible extension of the examination time for disabled students.

Private education

The country has a tradition of private schools receiving a substantial government subsidy. About 12% of pupils at basic school level (including the pre-school class and Form X) attend private institutions, and about 4.5% of students attend self-governing upper secondary schools (gymnasia HF-courses).

Private schools mostly comprise: small independent schools in rural districts, academically-oriented lower secondary schools, religious or denominational schools, free schools, schools with a particular pedagogical aim, German minority schools, and immigrant schools. Private schools are recognized and receive government financing regardless of the ideological, religious, political or ethnic motivation behind their establishment.

The Private School Act of 1991 introduced a new public grant system for private schools covering operational expenditures “per pupil per year”. In principle this matches the comparable public expenditures in the municipal schools (less the school fees paid by the parents). This is to ensure that public expenditures for the private and municipal schools follow the same pattern. There are special grants, for example for pupils with special education needs. All grants (apart from grants relating to pupil transport, free places and school leisure time schemes) are allocated as one block grant independent of the actual expenditure. As long as this block grant is used for school and teaching and learning purposes, the school is free to use the funds (and determine the amount of school fees) according to its own priorities.

In 1992, a new Act was passed including the private upper secondary schools under the same public grant system as the private basic schools. The only private institutions at secondary level are the private gymnasia. The Minister of Education may authorize that private individuals set up a gymnasium. They must be set up as private, self-governing schools, whose statutes are approved by the Ministry. An approval may be revoked if the institution does not comply with existing legislation and regulations. There were 23 self-governing schools in 2003.

Means of instruction, equipment and infrastructure

In the past few years, a considerable amount of funds has been invested in Information Technology (IT) both in terms of equipment and in-service teacher training. What is now expected is that IT becomes a tool used by pupils and students for learning purposes. An effective pedagogical use of IT will give an opportunity for a flexible organization of the educational process. IT also provides easy access to the significant learning resources that can be found locally, nationally and internationally. Furthermore, the Government wants to promote the development of Internet-based teaching materials and the use of IT at examinations, in particular the development of new examination forms, which are to take advantage of the potential of IT in the



content and form of the examinations. Finally, the strengthening of e-learning opportunities must provide a much greater flexibility in the supply of programmes, independent of time and place.

In 2002, only about 25% of the comprehensive schools had a Learning Management System (LMS) for administrative and pedagogical purposes. In 2003, the median pupil/computer ratio in the comprehensive school was 6:1. The Ministry has decided to subsidize the acquisition of LMS and computers for the third form over the period 2004-2007. Half of the costs have been covered by the Government, and the other by the municipalities. This project is regarded as a decisive step for the integration of ICT into basic schools and aims at ensuring the daily use of ICT for contributing to school development. In 2005, the schools purchased 50,000 new computers, therefore there are now less than two pupils per computer in the third form. In March 2006, the percentage of schools with a LMS was about 70% and was expected to be close to 100% by 2007. All upper secondary schools already have a LMS.

Adult and non-formal education

In 2001 a major reform of the vocational education and continuing training system was introduced. In May 2000, the Danish Parliament adopted a number of acts which integrate continuing training and further education programmes into a single coherent and transparent adult education system. The adult vocational reform has had three main objectives: (i) to provide relevant adult education and continuing training opportunities to all adults at all levels; (ii) to improve opportunities for those with the lowest levels of education by introducing courses for adults in general subjects, such as reading, spelling, mathematics and continuing vocational training, and possibilities for work experience; and (iii) to better utilize resources.

“General popular education” is the concept which covers educational activities which do not form part of the formal education system established by the public authorities. Adult education (evening schools), associations, residential “folk high schools” and non-residential folk high schools are the main providers of general adult education. These are self-governing institutions which receive state financial support and are supervised by the public authorities.

Some folk high schools focus on one individual subject area, such as music, sports or arts and crafts, although the majority of schools offer a variety of subjects which may comprise history, politics, literature, philosophy, cultural history or environmental issues. They offer long courses (lasting five to thirty-two weeks) and short courses (lasting one to four weeks). The average age of the learners in the long courses is 22-23 years. In the short courses which take place in the summer season, the age of the learners is considerably higher. Non-residential folk high schools mainly target the unemployed. They offer a broad range of activities covering cultural, social, creative and aesthetic aspects. There are both general and vocationally oriented topics.

General adult education (AVU) is a qualifying education which offer adults an opportunity of supplementing and updating their general education and sitting



examinations at a level corresponding to the final form levels (ninth or tenth form) of the *folkeskole*. The subjects, curricula, the organization and examination forms are adapted to the needs of adults. AVU is offered at the county adult education centres (VUC).

About 60% of the labour force participated in a learning activity in 2004 either in public, private or company programmes. It is estimated that 600,000 persons participated in public general or vocational adult education and training in 2004, corresponding to over 20% of the labour force. Grants are provided by the State and tuition fees are charged for most adult education and continuing training programmes. Some 50,000 learners participated in a residential folk high school in 2004. Another 675,000 learner participated in evening school education programmes financed by the municipalities. (Ministry of Education, 2007.)

Teaching staff

Pre-service teacher training programmes vary in content and duration according to the educational level considered. Programmes qualifying to teach at the pre-school level and also in the first four years of the basic school normally last three and a half years and are offered at specialized training colleges. In order to be admitted to the programme students must have passed one of the qualifying examinations at upper secondary level or at least have completed the tenth year of the basic school, and have work experience or a vocational training qualification. The programme comprises theoretical education at a college and teaching practice at an institution (a total of sixty-four weeks of practical training). Overall, one-third of the programme consists of teaching practice, one-third of theoretical subjects and one-third of activity and cultural subjects.

The *folkeskole* teacher training programme is offered at specialized colleges of education. The programme lasts four years and the student has to specialize in four main subjects, one of which has to be Danish and/or mathematics, and will teach only those subjects they have had as main subjects in their study programme. The programme includes compulsory subjects in didactics, psychology and pedagogic and a compulsory practical training lasting 24 weeks. The programme is completed with a thesis in one of the main subjects.

The pre-service teacher training programmes qualifying to teach at the upper secondary level have a duration of five years. In addition to the subject-related theoretical part, the programme includes pedagogical education, known as *paedagogikum*. From August 1998 the *paedagogikum* consists of two parts. The first part lasts five months and is taken prior to employment; the second part can extend over two months and is taken within the first two years of employment.

Vocational education teachers have different qualifications. The teachers of vocational subjects usually have a vocational qualification and an additional five years or more of professional work experience in the subject they teach. The teachers of more general subjects have a university degree in the subject they teach, and at least an additional two years of relevant professional experience.



There are no general rules applying to teacher qualifications for higher education. However, teacher candidates must, as a rule, have a university or similar degree in the subject they teach. For full-time positions in the university sector, candidates must have a qualification at the Ph.D. level.

As regards teachers' workload, the maximum number of working hours for teachers in nurseries, kindergartens and 24-hour institutions is 37 hours per week. *Folkeskole* teachers may be appointed on a permanent basis with no time limitation ("monthly paid staff"); as substitutes in connection with illness and other absence; or on a temporary employment basis of under three months duration ("staff paid by the hour"). They are employed on a group contract basis, with a status similar to that of civil servant. The number of working hours amounts to 1,924 hours per year (including holidays and days off) corresponding to 37 weekly hours on the average. Working hours include teaching (lessons), preparation time and other tasks. The preparation time is fixed proportionally in relation to the teaching time with the factor 1:1. Concerning upper secondary school teachers, the annual number of working hours is 1,680 hours, including teaching, preparation, planning, pedagogic and pedagogic-administrative tasks. The same applies to vocational secondary teachers. Full-time higher education teachers have a 37-hour weekly work load. The retirement age in Denmark is 65 years, but it is possible to retire at 70.

In-service training courses for pre-school teachers are organized by teacher training colleges, the Danish University of Education and under the auspices of the professional organizations. In-service training for basic school teachers is mainly provided by the Danish University of Education and the colleges of education. County centres, teacher's associations and other professional associations as well as the Ministry of Education also organize in-service training activities. In-service training activities for gymnasium and HF-courses teachers are usually organized by the professional associations with the assistance of the Ministry of Education. Teachers are free to participate in in-service training activities and promotion is not conditional upon having taken part in in-service training activities. The decision-making body in this area is the municipal in-service training committee which has an equal number of representatives from the professional organizations and the employers. It is the task of this committee to contribute to the development of in-service training on the basis of objectives set, support concrete in-service training activities which further develop these objectives and to grant economic support for the activities

Educational research and information

The Danish University of Education (DPU) was established in 2000 by merging four institutions: the Royal Danish School of Educational Studies, the Danish National Institute for Educational Research, the Danish School of Advanced Pedagogy and the Danish National Centre for Technology-supported Learning. The central aims of DPU are to promote research and postgraduate education in the field of educational studies, and to enhance the quality of educational research and pedagogical practice in the country.

The Danish Evaluation Institute serves as the national knowledge centre for educational evaluation. The Institute compiles, produces, and disseminates national as well as international experiences in educational evaluation.



Sources

Eurydice (The Information Network on Education in Europe). *The education system in Denmark (1998)*. In: Eurybase. CD-ROM edition, Brussels, Eurydice, 1999.

EURYDICE. *Focus on the structure of higher education in Europe 2006/07. National trends in the Bologna Process*. EURYDICE, European Unit, Brussels, March 2007.

Danish Eurydice Unit. *The education system in Denmark 2004/05*. Prepared for Eurydice/Eurybase, 2005.

Danish National Commission for UNESCO and the Ministry of Education. *Development of Education 1994-1996. National report of Denmark*. International Conference on Education, 45th session, Geneva, 1996.

Danish National Commission for UNESCO and the Ministry of Education. *The Development of Education. National report of Denmark*. International Conference on Education, 46th session, Geneva, 2001.

Danish National Commission for UNESCO and the Ministry of Education. *The Development of Education. National report of Denmark*. International Conference on Education, 47th session, Geneva, 2004.

Ministry of Education. *Executive Order on Upper Secondary Education*. Executive Order no. 411 of 31 May 1999.

Ministry of Education. Statistics and Information Division. *Fact sheet: General and vocationally-oriented upper secondary education*. Copenhagen, December 2000.

Ministry of Education. *Facts and figures. Education indicators Denmark 2005*. September 2005.

Ministry of Education. *Denmark's strategy for lifelong learning. Education and lifelong skills upgrading for all*. Report to the European Commission, April 2007.

National Education Authority, Ministry of Education. *The Danish vocational education and training system*. September 2005.

Web resources

Ministry of Education: <http://www.uvm.dk/> [In Danish and English. Last checked: August 2007.]

Ministry of Science, Technology and Innovation:
<http://videnskabsministeriet.dk/site/frontpage> [In Danish and English. Last checked: August 2007.]

Ministry of Culture: <http://www.kum.dk/> [In Danish and English. Last checked: August 2007.]



Danish Evaluation Institute: <http://www.eva.dk/> [In Danish and English. Last checked: August 2007.]

Danish Institute for Educational Training of Vocational Teachers:
<http://www.delud.dk/> [In Danish. Last checked: August 2007.]

CIRIUS Denmark: <http://www.ciriusonline.dk/> [In Danish and English. Last checked: August 2007.]

EURYBASE, the information database on education systems in Europe:
<http://www.eurydice.org/> [In several languages.]

For updated links, consult the Web page of the International Bureau of Education of UNESCO: <http://www.ibe.unesco.org/links.htm>