



Netherlands

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Principles and general objectives of education

One of the key features of the Dutch education system, guaranteed under article 23 of the Constitution, is freedom of education, intended as the freedom to found schools (freedom of establishment), to organize the teaching in schools (freedom of organization of teaching) and to determine the principles on which they are based (freedom of conviction). People have the right to found schools and to provide teaching based on religious, ideological or educational beliefs. The Constitution places public and private schools on an equal financial footing. This means that government expenditure on public education must be matched by spending on private education. The conditions which private schools must satisfy in order to qualify for funding are laid down by law.

Current educational priorities and concerns

Two major changes characterize the education system of the Netherlands at the beginning of the twenty-first century, reflecting national needs as well as international trends. Secondary education has been reformed to improve preparation for study at the tertiary level, and a new degree structure has been introduced at the higher education level in compliance with a Europe-wide harmonization effort (Bologna process).

A policy letter on early childhood education was published in June 2000. It outlines the government's policy and lists concrete measures. Early childhood education is geared to children aged 2 to 5 who are at risk of educational disadvantage, i.e. children with poorly educated parents and ethnic minority children. The aim is to tackle educational disadvantage at an early age, using an integrated, phased, multi-track approach. Accordingly, plans will be partially integrated with urban policy and municipal policy on educational disadvantage. Municipal authorities will be given financial incentives to develop and implement early childhood education programmes.

Aims relating to educational disadvantage are set out every four years in a national policy framework (LBK). A new policy framework took effect on 1 August 2002, covering the period 2002-2006. One of its aims is to give children a better start at primary school by enabling at least half the target group to take part in effective early childhood programmes by 2006. Twenty-five percent of the target group was reached in 2003. The budget for early childhood education forms part of the educational disadvantage budget. Municipalities consult with schools to determine how much of the educational disadvantage budget is to be used for early childhood education, taking account of the above-mentioned LBK aim for 2002-2006.

Starting with the 1999/2000 school year, a major restructuring of secondary vocational and general secondary education went into effect. These changes primarily



affected preparatory vocational education (VBO), the last two years of junior general secondary education (MAVO), the last two years of senior general secondary education (HAVO), and the last three years of pre-university education (VWO). A foremost purpose of the changes has been to improve preparation at the secondary level for further study at the tertiary level (or in the case of MAVO/VBO at the senior secondary vocational education level, MBO), thereby increasing the chances for success. Within the reform, the last two years of HAVO and the last three years of VWO are referred to as the *tweede fase* (literally, second phase), or upper secondary education. One of the most important characteristics of the new system is basing the organization of curricula on four subject clusters. One additional aspect of the reform of upper secondary education has been the introduction of completely new subjects, most of which can be taken as common subjects, or as electives. The new subjects are meant to add breadth to the educational programme as a whole.

Recent reforms in the upper secondary phase of HAVO and VWO have focused not only on curriculum content and the need to improve preparation for tertiary study, but also on the need to produce graduates who can function as active, independent and socially adept learners in tomorrow's society. There has been a shift from a more passive, traditional form of instruction to one where upper secondary pupils learn the skills and gain the experience needed to actively pursue knowledge, skills that will ideally last their entire lives. To achieve these goals, schools have been transformed into "study centre", which is more of a didactic approach than a physical space within a school. In a study centre the teacher takes on the role of supervisor more than instructor, supervising the learning process of individual pupils in the class.

The preparation and introduction of reforms at the upper secondary level of HAVO and VWO have been a complex, time-consuming endeavour, and it will come as no surprise that the application of the various regulations and the development and use of study centres has required a period of adjustment on the part of students, teachers and secondary schools. Particularly at the end of 1999, there were nationwide reports of complaints made by students, teachers and schools in general that the curriculum was overloaded, and that the required amount of work far exceeded the forty hours per week students were expected to spend in school and doing school-related activities. Students also complained about the uselessness of some of the newly introduced subjects such as general science and cultural and artistic appreciation. The protests resulted in temporary measures reducing some of the internal examination requirements; general science and cultural and artistic appreciation remain required subjects.

Starting with the 1999/2000 school year, MAVO and VBO have been officially classified in the same category of education known as preparatory secondary vocational education (VMBO). The reason for this change is much the same as for reforms in the upper secondary phase of HAVO and VWO, i.e. to improve preparation for further education and encourage active and independent learning skills. Because of the vocational nature of many programmes offered in VMBO, an additional reason for the changes has been to improve preparation for employment. VMBO graduates should have a broader, less specialized educational background, enabling them to adapt in a more flexible way to future demands of the labour market. VMBO programmes start after completion of at least seven years of primary education, and last four years. During the first two years of VMBO, students complete



the basic curriculum for the first years of all secondary education programmes, after which they are placed in one of four learning tracks, which also last two years. In addition to being placed in a learning track, students in the third and fourth years of VMBO have to complete the requirements of one of four discipline sectors. The sectors in VMBO are similar in purpose to the subject clusters in the upper secondary phase of HAVO and VWO, and determine the content of the curriculum a student will follow.

Under the Adult and Vocational Education Act which came into effect in 1996, both MBO and apprenticeship training as well as other forms of vocational training have been incorporated in a new qualifications framework. The qualifications framework defines the learning outcomes for approximately 500 occupations as well as the knowledge and skills required for the individual certificates leading up to the final qualification. Representatives of the relevant sectors of labour and industry as well as social partners have been closely involved in the development of the framework, and are primarily responsible for defining the educational outcomes. A major goal of the framework is to create more coherence between existing courses, certificates and diplomas, to facilitate the transfer from one training course to the next and to facilitate the recognition of prior learning and experience. There is no longer any distinction between a diploma that used to be obtained upon completion of an MBO course and one qualification obtained through apprenticeship training. The type of instruction a student receives, i.e. daily instruction in a school or through an apprenticeship, is no longer relevant, as long as the requirements for the educational outcomes have been met. In the qualifications framework, training courses are categorized according to levels (level one to four), and the same level can be obtained by way of a more theoretical course of instruction or on-the-job training. The qualifications framework went into effect in January 1997.

On 1 August 2004 a new examination system was introduced in secondary vocational education (MBO). The Quality Centre for Examinations (KCE) will monitor the quality of examinations in MBO on the basis of national standards, which the KCE is itself developing, and which will be approved by the Minister. These standards are not merely guidelines, but quality requirements which the examinations have to meet. Educational institutions are responsible for the examinations. They have to safeguard their quality, and are accountable for meeting the standards. Every year, the KCE monitors the examinations held at each institution and issues a certificate of approval. If an institution fails to get this certificate for a given course, the Minister may withdraw the institution's right to set the relevant examinations. The Inspectorate's task is confined to monitoring both the KCE and the authorization of examining institutions.

The Dutch Minister of Education is one of the twenty-nine ministers who signed the "Joint declaration of the European Ministers of Education, convened in Bologna on 19 June 1999", which has come to be known as the *Bologna Declaration*. The Declaration calls for the construction of a 'European area of higher education' and one of the several measures mentioned to achieve this goal is the "adoption of a system essentially based on two main cycles, undergraduate and graduate." The introduction of a two-cycle degree structure in higher education on a national scale has been viewed not only as an inevitable development, but for the most part, as a positive one. The Higher Education and Research Act of 1993 has been amended in



2002, 2003 and 2004 to accommodate the two-cycle degree structure (bachelor's and master's degrees), and higher education institutions have organized programmes around a bachelor's (or undergraduate cycle) and a master's (or graduate cycle) degrees. The bachelor's/master's degree system was officially introduced at the beginning of the academic year 2002/03.

As far as higher professional education (HBO) is concerned, after 2002 graduates are awarded a bachelor's degree indicating the field of study completed (i.e. Bachelor of Engineering, B.Eng., Bachelor of Nursing, B.Nursing). Although universities of professional education will continue to offer programmes with an emphasis on the applied arts and sciences, the new legislation permits these institutions to offer programmes with an academic focus as well. Universities of professional education will also offer professional master's degree programmes. Many of these are available on a part-time basis, enabling students to combine work and study. Beginning with the academic year 2002/03, university degree programmes are organized around a bachelor's or undergraduate phase, lasting three years, and a master's or graduate phase lasting one to two years, depending on the discipline. Although universities primarily offer programmes with an academic emphasis, the new legislation permits universities to offer programmes in the applied arts and sciences, at both undergraduate and graduate levels. All universities will also continue to award doctor's degrees. Master's degree programmes in engineering, mathematics/natural sciences and agriculture will require two years of study to complete and all other programmes will take one year.

Another important aspect of the higher education system is the system of accreditation that aims to guarantee a high standard of quality of programmes offered in higher education. As of 2002, the responsibilities for quality assurance have been assigned to the Netherlands Accreditation Organization (NAO), which after the ratification of the treaty with the Flemish Community of Belgium at the end of 2004 became the Dutch-Flemish Accreditation Organization (NVAO).

According to the Act on Accreditation of Higher Education of 2002, all degree programmes offered by universities and universities of professional education are evaluated according to established criteria, and programmes that meet those criteria will be accredited, i.e. recognized. Only accredited programmes are eligible for government funding and students receive financial aid and graduate with a recognized degree only when taking or after completing an accredited degree programme. Accredited programmes are listed in the Central Register of Higher Education Study Programmes and the information is available to the public. (NUFFIC, 2002; Dutch Eurydice Unit, 2005).

Laws and other basic regulations concerning education

The **Primary Education Act** (WBO) of 2 July 1981 and the **Secondary Education Act** (WVO) of 14 February 1963, along with their subsequent amendments, constitute the legal framework for primary and secondary education in the country.

The **Education Inspection Act** (WOT) came into force on 1 September 2002. It applies to the primary, secondary, vocational and adult education sectors and



enables the Inspectorate to operate professionally and independently and to give institutions pointers as to how they can improve standards on the basis of their own quality assurance systems. Under the Act, the Inspectorate has a statutory duty to promote the quality of education.

Higher education is regulated by the **Higher Education and Research Act** (WHW) of 8 October 1992, implemented from 1 September 1993 and amended in 2002, 2003 and 2004. This act encompasses general provisions, including the objectives of the institutions for higher education. Further, the act contains a regulation concerning the educational and institutional structure and preconditions concerning the structure of education, such as pre-educational requirements and study loads. The act also contains provisions in the areas of planning and funding, and provisions for collaboration among the various institutions and for the administration and structure of the institutions.

According to the **Act on Accreditation of Higher Education** of 2002, all degree programmes offered by universities and universities of professional education are evaluated according to established criteria, and programmes that meet those criteria will be accredited, i.e. recognized. Only accredited programmes are eligible for government funding and students receive financial aid and graduate with a recognized degree only when taking or after completing an accredited degree programme. Accredited programmes are listed in the Central Register of Higher Education. As of 2002, the responsibilities for quality assurance in higher education have been assigned to the Netherlands Accreditation Organization (NAO), which after the ratification of the treaty with the Flemish Community of Belgium at the end of 2004 became the Dutch-Flemish Accreditation Organization (NVAO). The NVAO drafted the relevant framework in 2003.

The **Adult and Vocational Education Act** (WEB) went into force on 1 January 1996. As a result, existing legal regulations for adult education and vocational education were replaced by a single integral act. The most important acts in this field were the 1991 Adult Education Framework Act (KVE) and the Part-time Vocational Education Act (WCBO, 1993). Education encompasses current basic adult education and adult general secondary education (VAVO). For vocational education, it involves the apprenticeship training, senior secondary vocational education (MBO) and non-formal adult education.

The new act was initially designed to bring greater cohesion to the various forms of adult and vocational education. The WEB forms the final link in a development set in motion much earlier, such as greater attention for the requirements of the labour market, better internal alignment of study programmes and more independence for schools in structuring their own educational programmes. One objective of the Act is to improve the links between education and the labour market. A qualifications structure covers both vocational and adult education – in the first case, with a cohesive educational model and special emphasis on the cultivation of professional practice and, in the second place, with improved opportunities to continue on to vocational education.

One basic assumption of the WEB is that the participant is the key factor. Made-to-measure work must be supplied by institutions, both for the youth without



work experience and for those with jobs or seeking jobs. For example, this means that educational training and vocational education must be better aligned with each other. The new structure makes this possible. Students can also take various educational variants, depending on their personal capabilities and preferences.

Special education and secondary special education have been regulated by the **Special Education Interim Act (ISOVSO)** from 1985. The duration of the act was set at ten years, but it was extended by three years, until 1 August 1998. In 1994, the **Going to School Together Act (WSNS)** was enacted. It contains new rules encompassing peripatetic counselling. Instead of entrance commissions at each school, regional referral committees (RVCs) were set up on 1 January 1996, which are tied to school counselling services. On 1 August 1998, the Primary Education Act (WBO) and the Special Education Interim Act (ISOVSO) were converted into the **1998 Primary Education Act (WPO)** and the **Expertise Centres Act (WEC)**. Since then, primary education has covered mainstream primary education, special primary education as referred to in the 1998 Primary Education Act, and special and secondary special education as referred to in the Expertise Centres Act. As of 1 August 1998, secondary special education for students with learning and behavioural difficulties and for students with moderate learning difficulties is covered by the Secondary Education Act (WVO). Education for hospitalized children and youths is covered by separate regulations.

The **Education Participation Act (WMO)** of 3 December 1992 regulates participation in education with the exception of higher education.

The **Student Finance Act 2000 (WSF 2000)** applies to students in higher education who are under the age of 34 and who began their studies before the age of 30. Every student enrolled on an accredited full-time course in higher education who satisfies the applicable conditions is entitled to a non-means-tested basic grant. Depending on their parents' income, students may be able to claim a supplementary grant in addition to the basic grant.

The **Childcare Act** entered into force on 1 January 2005. The new Act regulates the quality and funding of childcare. Responsibility for childcare is to be shared by parents, employers and government. Under the new childcare legislation the municipal authorities will have a different role. They will be responsible for: monitoring the quality of childcare (checks will be carried out by the municipal health service); and subsidizing childcare for certain categories of individuals not receiving help with childcare costs from an employer.

Compulsory education is regulated by the **Compulsory Education Act** of 30 May 1968. Education is compulsory from the first school day of the month following the month in which a child reaches the age of 5 years. Compulsory education continues until the end of the school year in which the pupil reaches the age of 16, or has completed a minimum of twelve school years. Linked to this is a partial education obligation until the age of 18 (attending school at least one day a week).



Administration and management of the education system

Freedom of education is guaranteed by the constitution. This freedom, also called freedom of foundation, organizing the teaching and determining the principles on which schools are based, results in a wide variety of schools. Groups have the right and possibility to found schools, based on religion, philosophy of life or pedagogic-didactic ideas. There are two main groups: public and private schools. Within the latter group, there are two distinct categories: denominational and non-denominational schools. Denominational schools are Roman Catholic, Protestant and other religious schools. Non-denominational schools are based on philosophy of life or pedagogic-didactic principles. Approximately 65% of the pupils attend these privately-run schools.

In the recent past, the national government primarily employed central funding rules and rules of conduct for schools. During the last ten years the notion has grown that many objectives could be better attained by delegating competencies to others. Schools are responsible for the quality of primary educational processes, municipalities for local coordination between education and other social sectors. The state has general responsibility for the functioning of the system. The other parties must offset this mutually, so that they assume responsibility themselves. Increasingly, parents and pupils also have more possibilities, by means of the following instruments: the school is required to compile a school plan showing school policy, a school handbook with the goals, activities and results of the school and a complaint procedure. The government publishes an education handbook to give parents and pupils information about their rights and obligations with respect to the school. The institutions and participants will enter education agreements in vocational and adult education, fixing the rights and obligations of both parties with respect to each other.

The **Ministry of Education, Culture and Science** consists of twenty-one departments, four cross-sectoral departments, three state services (in the culture sector), two agencies (including the Central Funding of Institutions Agency), two inspectorates (including the Education Inspectorate) and three associated advisory councils (including the Education Council). The **Education Council** advises the government on matters relating to education, such as the main outlines of policy and legislation. It is an independent body which advises the ministers involved both on request and on its own initiative, and answers questions from Parliament. In certain specific cases governed by law, the local authorities may also ask the Council's advice.

The **Knowledge Chamber** of the Ministry of Education, Culture and Science, established in June 2006, is based on the assumption that it is necessary to include researchers and experts in policy making to share their views and insights with policy advisors in order to bring scientific evidence in. It is a consultative body of the top-ranking officials of both the knowledge institutions, such as advisory councils and planning offices, and the Ministry. The essence of the Knowledge Chamber is a structural consultation between the Ministry of Education, Culture and Science and those knowledge institutes to which the Ministry formally assigns knowledge-related tasks.



Educational supervision is the responsibility of the **Education Inspectorate**, under the authority of the Minister. Supervision takes place on the basis of the constitution and relates to public and to private education. The tasks of the inspectorate are defined in the education legislation. It is also established there that the competent authorities and staff of schools and institutions must allow the inspectorate continued access and are obligated to provide all information requested. Since 1993, the inspectorate has had a large degree of independence with respect to the Minister of Education. This enables it to carry out its duties independently.

Supervision of education is divided into distinct sectors. Besides its central office at Utrecht, there are twelve inspectorate offices spread throughout the country. Supervision of education is carried out by inspectors in each administrative area. Each inspector is in charge of supervision, in his/her own administrative areas, of several schools in an educational sector: primary education, (secondary) special education, secondary education, vocational and adult education and higher education. As stipulated in legislation, the inspectorate has the following general tasks: (i) supervising compliance with legal provisions (the control function); (ii) remaining familiar with the state of education, for example, by visiting schools (the evaluation task); (iii) promoting the development of education by consultation with competent authorities and staff of schools and with regional or local authorities (the stimulating task); (iv) reporting and making recommendations to the Minister (the reporting task). Around 200 inspectors make more than 10,000 visits to schools every year to find out whether they are in compliance with statutory obligations and whether they are adhering to their prospectuses and school plans. School report cards ensure that information about educational quality in schools is available to the public. Since 1993, the Inspectorate has been responsible for compiling the annual Report on Education, the report from the Minister to Parliament about the state of education. The picture that the inspectorate paints in the Report concerning the quality of education is partly based on the outcome of research from other parties. Separate reports are published on various evaluations. These are intended initially for Parliament, the Minister and the State Secretary, but could also affect public opinion.

National advisory bodies include the **National Institute for Educational Measurement (CITO)**, the **National Institute for Curriculum Development (SLO)**, and the **Centre for Innovation in Training (CINOP)**. In the Netherlands, the production, distribution and sale of teaching materials is a commercial activity. The **National Teaching Materials Information Centre (NICL)** produces a consumer guide to teaching materials which schools can use to compare existing and new products. The NICL is part of the SLO. Educational advisory centres include the **Educational Advisory Centre (APS)** for non-denominational schools, the **Protestant Educational Advisory Centre (CPS)**, and the Catholic **Educational Advisory Centre (KPC)**. These centres provide services for primary schools, secondary schools, primary teacher training institutions and the school advisory services.

The system of accreditation aims to guarantee a high standard of quality of programmes offered in higher education. As of 2002, the responsibilities for quality assurance have been assigned to the Netherlands Accreditation Organization (NAO), which after the ratification of the treaty with the Flemish Community of Belgium at the end of 2004 became the **Dutch-Flemish Accreditation Organization (NVAO)**. NVAO is supervised by the Inspectorate. Accredited programmes are listed in the



Central Register of Higher Education Study Programmes. The **Information Management Group** (IBG) is responsible for establishing, managing and publicizing the register and supplying information from it. The Central Register of Higher Education Enrolment, which contains the enrolment details of all students in higher education, is also managed by the IBG.

The **Central Funding of Institutions Agency** (CFI) is an executive agency responsible for funding educational establishments, research institutes and education support organizations on the basis of legislation and regulations and in accordance with the established financial frameworks. Its duties include gathering, managing and supplying information on these institutions for policy-making and funding purposes. The CFI is also responsible for the ministry's own accounts. Since 1996 when the CFI acquired agency status, it has formed an autonomous part of the Ministry of Education, Culture and Science.

At local levels, the **municipal executive council** checks whether pupils subject to compulsory education have been admitted to schools in their municipalities. The municipalities have a primary task in executing the Compulsory Education Act, both for public and for private education. The act requires each municipality to have one compulsory education officer. In smaller municipalities, this is often combined with other tasks.

Primary, special and secondary education involves a compulsory representative **advisory body** (WMO–Education Participation Act, revised in 1992). The advisory body has several competencies, advisory or approval rights and can make proposals. The advisory body may discuss any business relating to the school it represents. The representative advisory body consists of an even number of elected representatives of staff and parents/pupils.

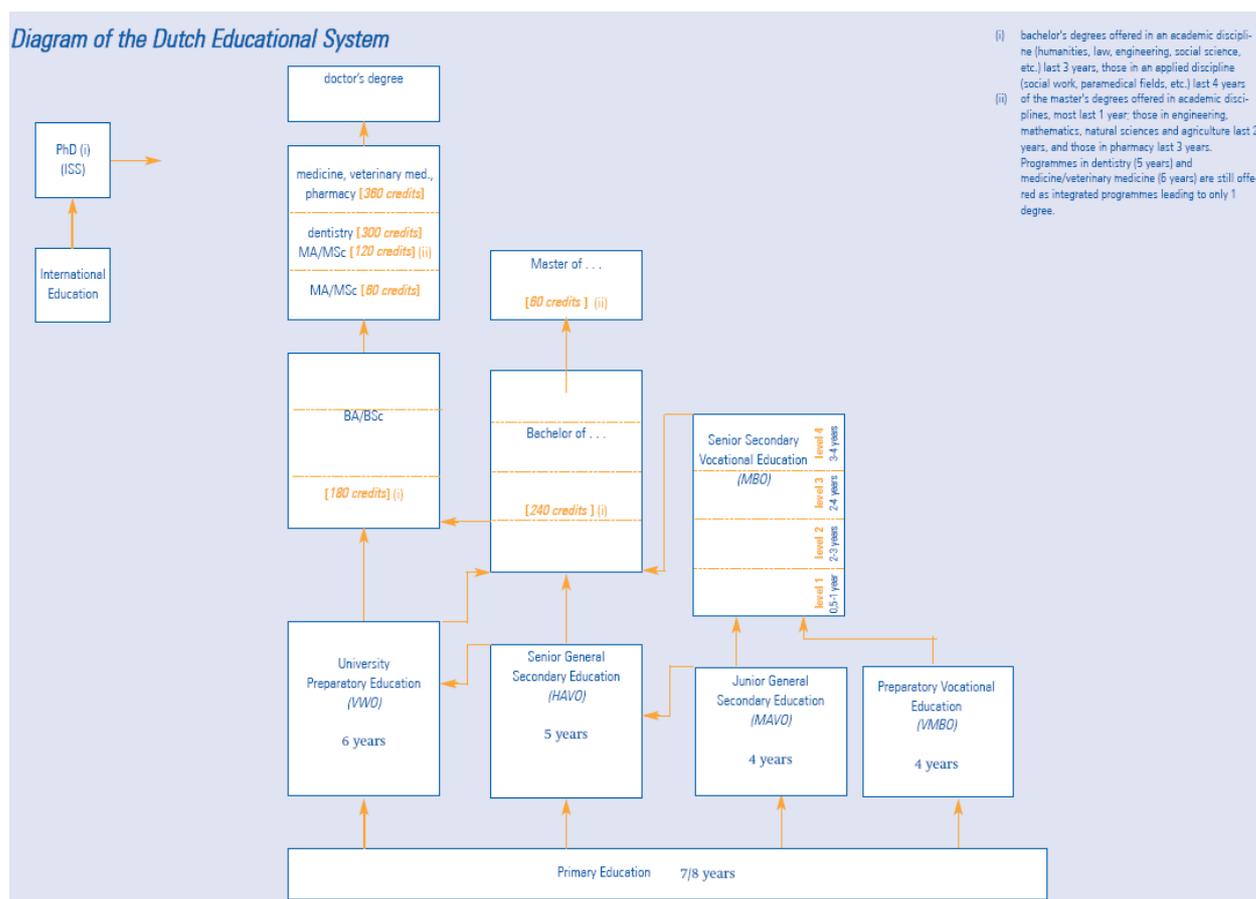
The daily administration of primary schools is the responsibility of the **director**. All schools are legally obligated to compile a plan of action, at least every two years. The school's competent authority compiles it, after receiving approval from the representative advisory body. Among other things, the plan provides insight into methods for evaluating pupils' progress and related reporting procedures. It also describes the educational method. The inspector checks the plan to make sure it meets the legal requirements. All schools compile a plan of action in the form of activities to be established annually. These include school hours, holidays and other free days. The inspector receives the activities plan before the start of the school year.

Most types of schools within secondary education belong to school communities. Within such communities, there are broad and narrow school communities. The so-called *categorial* schools only comprise a single type of school. The daily administration of secondary education schools are the responsibility of the director or the headmaster. **Headmasters** are in charge of pre-university education (VWO) schools, while those who head other schools are called directors. Each VWO, senior general secondary (HAVO), and pre-vocational (VMBO) school has a plan of action. The competent authority compiles the school plan of action, in conjunction with the school administration, presenting it to the inspectorate for evaluation.

Childcare policy is under the responsibility of the **Ministry of Social Affairs and Employment**. The public institutions which provide ‘green education’ (agriculture sector), including one university, are directly funded by the **Ministry of Agriculture, Nature and Food Quality**.

Structure and organization of the education system

Netherlands: structure of the education system



Source: NUFFIC, 2003.

Pre-school education

Since 1985, the Primary Education Act (WBO) no longer provides for separate schools for pre-school and primary education. It refers to schools for pupils 4-12 years old. Day nurseries cater to children aged from 6 weeks to 3 years. Childcare facilities, in the form of out-of-school care, are also available for children of school age.

Primary education

Primary education caters to children between the ages of 4 and (approximately) 12. In principle, education encompasses eight consecutive years. Education is compulsory from the first school day of the month following the month in which a child reaches the age of 5. Most children start school at age 4.



Secondary education

Secondary education is for pupils aged 12 and over. Starting with the school year 1999/2000, it consists of the following: (i) pre-vocational or preparatory vocational secondary education (VMBO), four-year course; (ii) senior general secondary education (HAVO), five-year course; and (iii) pre-university education (VWO), six-year course. The three types of secondary education begin with a period of 'basic secondary education'. This usually lasts three years and consists of a broad core curriculum for all students. Although all the three types of secondary education include this period of basic secondary education, they differ widely from each other in other ways (e.g. the length of the course and the level of the school-leaving examinations). Preparatory vocational education (VMBO) is a new type of secondary education introduced in 1999. It consists of 'learning pathways' which have replaced the traditional pre-vocational education (VBO) and junior general secondary education (MAVO) courses. The main aim of the change is to provide a sounder basis for the next stage of vocational training, i.e. senior secondary vocational education (MBO). The four levels of MBO are: (i) assistant training, lasting six months to one year; (ii) basic vocational training, two to three years; (iii) vocational training, two to four years; and (iv) management training, three to four years. In most cases completion of a training course at one level is required for admission to the next level. Graduates of level IV courses can enter higher professional education (HBO). The qualifications framework went into effect in January 1997.

Higher education comprises higher professional education (HBO), university education (WO—universities), and higher distance learning (Open university—OU). The traditional initial degree programmes in the HBO and WO normally involved study loads of 168 credits (the equivalent of a four-year HAVO diploma). The WO provides legal regulation of several studies, which involved five- or six-year study programmes.

Until 2002, degree programmes offered in HBO have revolved around one degree, normally requiring four years to complete. Students who are awarded a diploma from a university of professional education may use the title *baccalaureus* (bc.), or, in engineering and agriculture, the title *ingenieur* (ing.). After 2002, upon graduation students receive a bachelor's degree indicating the field of study completed (i.e. Bachelor of Engineering, B.Eng., Bachelor of Nursing, B.Nursing). Although universities of professional education will continue to offer programmes with an emphasis on the applied arts and sciences, the new legislation permits these institutions to offer programmes with an academic focus as well. Universities of professional education also offer professional master's degree programmes. Many of these are available on a part-time basis, enabling students to combine work and study.

Until 2002, university programmes have revolved around one major degree before the doctorate, known in Dutch as the *doctoraal*. A *doctoraal* programme is not divided into an undergraduate and graduate phase, but combines enough depth and breadth to be considered comparable to a master's degree. University programmes require four years of full-time study in most fields, five years in the case of engineering, mathematics/natural sciences and agriculture. A *doctoraal* degree confers eligibility for the pursuit of a doctorate through a process known as *promotie*. This entails four years of full-time research following the *doctoraal* under the



supervision of a *promotor*, who must be a full professor at a university. To earn the title of '*doctor*', a student must write a dissertation based on his/her own research project, and then successfully defend it. The doctor's degree is considered to be equivalent to a Ph.D. Individuals with a *doctoraal* degree use the academic title of *doctorandus* (drs.) unless their field is engineering or agriculture, in which case the title is *ingenieur* (ir.), or law, in which case the title is *meester* (mr.). Beginning with the academic year 2002/03, university degree programmes are organized around a bachelor's or undergraduate phase, lasting three years, and a master's or graduate phase lasting one to two years, depending on the discipline. Although universities primarily offer programmes with an academic emphasis, the new legislation permits universities to offer programmes in the applied arts and sciences, at both undergraduate and graduate levels. All universities also continue to offer four-year doctor's degree programmes. Master's degree programmes in engineering, mathematics/natural sciences and agriculture require two years of study to complete and all other programmes take one year.

As the primary and secondary education levels, the school year consists of 200 instructional days.

The financing of education

Public and private schools are given financial equality in the Constitution. This means that government expenditure for public education must also be made for private education. The education legislation includes requirements that private education must meet to be eligible for funding.

The Ministry of Education, Culture and Science is the main source of funds for education. Funds are channelled from the Ministry to the educational institutions both directly and indirectly. The main flows of funds run via the municipalities (for example, to fund adult education and, since 1997, primary and secondary school accommodation) and via students themselves, in the form of the school and tuition fees paid to Regional Training Centres (ROCs), higher professional education institutions and universities. Educational institutions are also free to generate additional income, for example by requesting voluntary parental contributions, by participating in local government projects or by earning interest on savings.

Institutional expenditures consist of three components: government expenditure, expenditure by municipalities and tuition fees. The volume of government contributions and tuition fees is reflected by the national accounts. Funds flow to the different types of education in different manners. There are particularly important differences in the financing of accommodations and in the manner in which school and tuition fees are collected. In primary and secondary education, the financing of accommodations is handled via local governments. In adult and vocational education (BVE), higher professional education (HBO) and university education (WO), the contribution for accommodations is included in the central government allowance. School fees (in the sectors of secondary education and vocational education) are collected by the Information Management Group (IBG) and as such form a source of income for the Ministry of Education. Several important educational activities are not included in the statistics on national education expenditures presented here. These are related, for example, to private sector



education and in-company training. A significant proportion of these activities is not funded by the government. In 2005, more than 1 million people up to the age of 65 were enrolled in non-subsidized education.

According to national data, the Ministry of Education, Culture and Science expenditures for education (including student finance and research at universities) as a percentage of GDP amounted to 5.0% in 2006, and accounted for approximately 19% of public spending. In the same year, the average expenditure (of the Ministry of Education) per pupil in mainstream primary education amounted to some 4,300 euros (€). The per capita expenditure in special primary education came to €9,510 and in (secondary) special education to €17,370. In secondary education, the average per capita expenditure totalled €6,260. Within the secondary education sector, this amount varies according to the composition of the school. On average, schools offering practical training programmes, learning support and pre-vocational education tend to spend more. The expenditure per participant in adult and vocational education was €6,110. The average expenditure per university student was €5,550 (in the case of HBO, €5,450). In 2006, the total expenditure of the Ministry was €26.187 billion, according to the following breakdown: €3.356 billion for primary education, €5.804 billion for secondary, €3.168 billion for adult and vocational education, €1.859 billion for higher professional education, €4.438 billion for universities, and €3.559 for student finance. (Ministry of Education, 2007).

In primary education, the Pupil Specific Funding system was introduced on 1 August 2003, and the block grant funding system was introduced on 1 August 2006. Under this system, each school receives a single block grant budget for staff and non-staff costs. Schools are free to decide how they spend their budget. The school budgets encompass three flows of funds: the regular staff budget, funding for staff and labour market policies (the former school budget) and funding for running costs. Until 1 August 2006, staff budgets were calculated in staff units of account (FREs), which provided information on the (FRE) transfers from Central Services to (special) primary schools. From 1 August 2006, these data are no longer available and these funds will be entirely attributed to the expenditure for primary education.

The staff establishment budget system, which was introduced in secondary schools in 1992, was replaced in 1996 by block grant funding. Schools receive an annual budget from which all staff and running costs must be met. The amount allocated for staff costs is calculated by multiplying the number of establishment posts by the average personnel costs (GPL). Block grant funding gives the competent authority greater freedom in deciding how resources are spent and also in negotiating the pay and conditions of staff. Negotiations on pay and conditions in secondary education have been partly decentralized. The component for running costs is fixed on the basis of the Running Costs Funding System. Schools receive a fixed amount per pupil together with a fixed amount per school (flat-rate basic grant). Responsibility for the funding of accommodation has been delegated since 1997 to the municipal authorities and payments are now made from the Municipalities Fund. (Dutch Eurydice Unit, 2005).

A new funding model for senior secondary vocational education (MBO) was introduced on 1 January 2000. Funding is distributed among the institutions in the adult and vocational education sector on the basis of the number of participants, the



number of certificates awarded, and the volume of educational preparation and support activities. In addition, the Ministry of Education allocates funds to the municipal authorities (some €248 million in 2006) for the provision of adult education (on the basis of the size of the adult population, the number of adults of ethnic origin and the number of adults with a low level of education) and integration courses (on the basis of the number of integration routes and the performance of the students taking these courses). The Regional Training Centres (ROCs) provide courses, which are paid for by the local governments. The Vocational Education and Industry Knowledge Centres (KBBs) are funded by the Ministry on the basis of the number of qualifications they have developed and maintained, the number of companies certified as offering training places and the number of training places in apprenticeship companies (BPV places) actually occupied by students. In 2006, the KBBs received €2 million. (Ministry of Education, 2007).

The overall budget for higher professional education (HBO) is allocated to the individual institutions on the basis of a set formula. Since 1994, there has been a fixed budget, adjusted to reflect wage and price rises. In addition, the budget is reviewed each year on the basis of the latest data with regard to student numbers, in order to determine to what extent it should be adjusted. Apart from the central government grant, the HBO institutions receive income from a variety of sources, including tuition fees and income from services to third parties (mainly contract teaching). Since 1994, the central government grant has included expenditure for statutory benefits and accommodation. Over 96% of it are paid directly to the institutions in the form of a block grant. Since 2001, the institutions have been required to use these funds to pay the statutory benefits (redundancy pay). The institutions themselves are responsible for the most effective distribution over staff, non-staff and accommodation costs. The remainder of the government grant consists of funds earmarked for specific activities such as educational innovation, internationalization, strengthening the vocational sector, and information and communication technology. The share of the government contribution as a part of total income came to 67.6% in 2005.

The national budget for the twelve universities funded by the Ministry of Education (direct funding) is fixed without reference to performance indicators. The budget is only adjusted in line with wage and price rises and, if necessary, adjustments are made to accommodate policy changes. In addition, the budget is reviewed each year based on the latest views with regard to trends in student numbers. The distribution of the government grant is, however, partially dependent on performance indicators, such as the number of degrees awarded, the number of first-year students and the number of doctorates obtained. Important aspects of direct government funding are: the freedom of the universities to decide their own spending priorities and how resources are split between teaching and research, provided they stay within their statutory terms of reference; the decentralization of responsibility for accommodation: the universities must allocate part of their budgets to accommodation and infrastructure; the decentralization as of 1 January 1999 of the responsibility for the formation of terms of employment for university staff; the fact that a certain proportion of the overall central government grant to the universities is earmarked for the teaching hospitals. The combination of the funding based on performance indicators and quality assurance promotes the effectiveness of the system and provides guarantees to students and potential employers.



The student finance policy encompasses the policy areas of student finance, study costs and school fees allowances, and course fees. These policy areas are laid down in three Acts. The implementation of these acts, and the expenditure and revenue under these Acts, are in the hands of the Information Management Group (IBG) in Groningen.

Student finance, as specified in the Student Finance Act (WSF), applies to full-time students in higher professional education and university education, and to full-time participants over the age of 18 in vocational training programmes under the Adult and Vocational Education Act. As of the 2000/01 academic/school year, the WSF was replaced by the WSF-2000, which offers students more flexibility in taking up what grants they are entitled to. Student finance comes as a mixed funding: it is partly a non-repayable grant, partly a loan and for some students, depending on parental income, partly a supplementary grant. In higher education, a grant is awarded as a loan and converted into a non-repayable grant when the student in question graduates. All students receiving financial aid are also entitled to a public transport pass.

Allowances for study costs and school fees, for pupils up to and including the age of 17, are provided under the Study Costs and School Fees Allowances Act (WTOS). This superseded the Study Costs Allowances Act (WTS) in 2001. The allowances are dependent on the income of the parents or the students own income. The School and Course Fees Act (LCW) specifies when school and course fees have to be paid. The way in which the amount of the school fees due is determined, is also laid down in this Act. The standard amount is indexed annually. Up to and including 1999, indexation was based on the trends in the per capita expenditure. From the 2000/01 school year, school fees are indexed on the basis of the trend in the government wages index. The number of young people required to pay school fees increased up until 2005. In 2005, a sharp decline in these numbers ensued. This was due to the fact that, at the start of the 2005/06 school year, school fees were abolished for all 16- and 17-year-old participants in vocational training courses (BOL) and adult general secondary education (VAVO), and for all pupils in full-time secondary education (VMBO, HAVO, VWO), special education (SO) and secondary special education (VSO).

The institutions which provide 'green education' (agriculture sector) are directly funded by the Ministry of Agriculture (LNV), under the general legislation and regulations for education. The bulk of spending (€60.3 million in 2006) relates to staffing. Tuition fees for students are collected by the institutions themselves, while school fees for secondary education are collected by the IBG and recorded in the Ministry of Education budgets. (Ministry of Education, 2007).

According to Eurostat, the total public expenditure on education represented 5.18% of GDP in 2004.



The educational process

Pre-primary education

As mentioned, since 1985 the Primary Education Act no longer provides for separate schools for pre-school and primary education. It provides schools for pupils 4-12 years old.

Outside the formal education system there are, however, childcare facilities for younger children. Childcare facilities, in the form of out-of-school care, are also available for children of school age.

Childcare provision falls under the 1994 Social Welfare Act. This Act gives the municipal authorities responsibility for planning and funding welfare facilities at local level. In 1996 the Childcare and Out-of-school Care (Single Parents) Scheme was set up by the Ministry of Social Affairs and Employment to enable single parents to combine work and family responsibilities, with a view to combating hidden poverty and social exclusion. Under this scheme, the municipal authorities can meet the full costs of childcare places for single parents living on benefit, so that they can go out to work. The scheme became permanent in 1997. In 1999 the Childcare and Out-of-school Care (Expansion) Scheme entered into force in order to fund the creation of a further 71,000 places between 1999 and 2002. The scheme has been extended to the end of 2003. In 2002, responsibility for childcare policy passed from the Ministry of Health, Welfare and Sport to the Ministry of Social Affairs and Employment.

Childcare facilities and playgroups offer young children the opportunity and the space to play and develop in the company of children of their own age. The aim is to stimulate children's social, cognitive and emotional development. Childcare also enables parents to take part in activities outside the home, such as a course or paid employment. The following organized facilities are available:

Day nurseries cater for children aged from 6 weeks to 3 years. They are open on week days, from around 8:00 to 18:00 (ten hours a day on average), with a few exceptions. Normally, there are two qualified staff per group of children. Half-day nurseries cater for the same age group and are open for at least five hours a day. The two are sometimes combined.

Out-of-school care is available for schoolchildren aged between 4 and 13. These centres are open before and after school (and sometimes at lunchtimes), on afternoons or days when there is no school, and during the school holidays. Most stay open all year round. After-school care is a specific form of out-of-school care, provided at the end of the school day. Pilot projects have been set up for teenagers under the age of 16; they offer leisure activities and facilities for doing homework.

Childminders can be found through agencies that have been specially set up to put parents in touch with private individuals who are willing and able to look after up to four children in their own homes. They cater for children aged between six weeks and 13 years of age, providing a minimum of 8 hours care a week for children under the age of 4, and 5 hours for children between the ages of 4 and 12.



Company childcare schemes are intended for employees or, in the case of universities, etc., students. They include crèches attached to a particular company (internal childcare), shared company crèches and reserved places at subsidized and non-subsidized nurseries. Employers receive tax incentives to provide childcare facilities for their staff.

Playgroups are for children aged from 2 to 3 years and originated as a means of fostering children's social skills by giving them the opportunity to play with other children of the same age rather than as a form of childcare. Children usually attend two mornings or afternoons a week, for between two and 3½ hours a day. Playgroups are usually subsidized by the municipal authority. Parents also pay a contribution. The parental contribution varies per municipality; sometimes it is fixed, but it can also be related to parental income.

In principle, all children between 2-2½ and 4 years of age can get a place at a playgroup. However, priority may be given to children with socio-medical problems and children suffering from (or at risk of) developmental delay. Children under 4 years of age may be admitted to day nurseries and half-day nurseries. Children between 4 and 12 qualify for out-of-school and after-school care. The age limits for childminding are flexible. Municipal authorities can give priority to special target groups in subsidized childcare, such as children with socio-medical problems. Access to childcare at the workplace is governed by agreements between employers and employees. Another factor limiting admission to playgroups and day nurseries is the availability of places.

In 2001, the total number of children in childcare places was 280,018. The total number of childcare facilities was 4,230 (including 1,647 facilities for 4-12-year-olds). (Dutch Eurydice Unit, 2005). In 2000, 95% of all 4-year-olds attended primary school. (van Die, 2001).

Primary education

The aim of primary education is to equip all pupils with knowledge, insight and skills which lay the foundation for their personal development and for their participation in society and secondary education. Primary education focuses on emotional and mental development, on creativity and on gaining the necessary knowledge and social, cultural and physical skills. One of the points of departure of the education provided by a school is that the pupils grow up in a multicultural society.

Primary schools are run by the local authorities (public-authority schools) or are privately run. Approximately one third of all children are enrolled at a public-authority school, i.e. a school run by the municipal council or by a governing committee appointed by the council. About two thirds of all children attend a private school. Most are Roman Catholic or Protestant, but there are also Jewish, Muslim, Hindu, Humanist and Steiner schools as well as non-denominational private schools, which are not based on a particular belief. Some private schools combine a particular religious or ideological outlook with a specific educational method, such as the Montessori, Dalton or Freinet method. Private schools are governed by an association (which parents can join) or a foundation.

Children with learning difficulties or behavioural problems who cannot be taught in mainstream primary schools can attend a special school for primary education. Some are publicly run and some are private. Mainstream and special primary schools now work together so that as many children as possible can remain in ordinary schools.

The Primary Education Act lays down what children must learn at school. How this is done is up to each individual school. All schools are expected to take account of the differences between pupils in terms of ability and work rate. Children can, for instance, be grouped in different ways. At most primary schools the pupils are grouped by age. There are eight year groups in all and each child begins in Year 1. At some schools, children of different ages are placed in the same class. Others have a flexible arrangement and children are grouped according to their level of development or ability. Schools which use the traditional year group system are increasingly taking account of differences between pupils and the fact that some children learn faster than others. In schools where children are grouped by level of development or ability rather than by age, the staff will make a decision each year about which class is best suited to each child. Children normally spend eight years at this kind of school, just like children at schools with a more traditional structure.

The government lays down the minimum number of hours a year children should spend at school. Younger children (i.e. those in the first four years of primary school) are not required to spend as many hours at school as older children. In general, the school day may not be longer than five and a half hours. Primary schools are required by law to ensure that pupils receive at least a total of 3,520 hours of teaching in the first four years, and at least 4,000 hours of teaching in the last four years of primary education. Calculated over a period of eight school years, the minimum number of teaching hours at a primary school is 7,520 (the minimum number of hours at old-style primary school was 8,000).

Every school has a prospectus in which it tells parents all about the school, what its aims are, how it intends to achieve them and how successful its policies have been. Schools are allocated more money for staff in the junior classes than in the senior classes. The school prospectus explains how these extra staff are used to help the younger children. All primary schools provide extra help for pupils with learning or behavioural difficulties. The nature of this extra help is described in the school prospectus.

As well as the school prospectus, every school has to draw up a school plan. In this document the school describes how it intends to improve teaching over the next four years. Schools are expected to assess the quality of their teaching at regular intervals and use the findings as a basis for the school plan. The plan must be approved by the participation council, which gives parents a major say in standards at the school. The minimum range of subjects that must be taught in primary schools is laid down by law. These subjects are: sensory co-ordination and physical exercise; Dutch; arithmetic and mathematics; English; expressive activities, including in any event: the use of language, music, drawing, handicrafts, and play and movement; social and life skills, including road safety; healthy living; a number of factual subjects, including in any event: geography, history, science (including biology), social structures (including political studies), religious and ideological movements.

The table below shows a typical weekly lesson timetable:

Primary education: typical weekly lesson timetable

Subject	Number of weekly hours in each grade							
	I	II	III	IV	V	VI	VII	VIII
Dutch language	3h30	3h30	8h45	8h30	8h30	7h45	7h15	7h15
English	–	–	–	–	–	–	0h45	0h45
Arithmetic/Mathematics	0h30	0h30	4h15	4h30	5h	5h	5h	5h
Human and environmental studies								
– general	1h	1h	1h15	1h15	0h30	0h45	0h30	0h30
– geography	–	–	–	–	1h	1h15	1h30	1h30
– history	–	–	–	–	1h	1h15	1h30	1h30
– science	–	–	–	–	1h	1h15	1h15	1h15
– road safety	0h15	0h15	0h30	0h30	0h45	0h45	0h45	0h45
Physical education	8h	8h	1h30	1h30	1h30	1h30	1h15	1h15
Art studies	6h	6h	4h	4h	3h30	3h15	3h	3h
Other	2h	2h	1h	1h	1h	1h	1h	1h
Breaks	1h15	1h15	1h15	1h15	1h15	1h15	1h15	1h15
Total weekly hours	22h30	22h30	22h30	22h30	25h	25h	25h	25h

Source: van Die, 2001. In principle, the area “human and environmental studies” comprises: geography; history; society; technology; environment; healthy living and self-reliance; and science. The following subjects are classified under “art studies”: drawing and handicrafts; music; play/promotion of language usage; movement. Primary schools are required by law to ensure that pupils receive at least a total of 3,520 hours of teaching in the first four years, and at least 4,000 hours of teaching in the last four years. (*Ibid.*).

Note: The school day may not be longer than five and a half hours. The minimum range of subjects that must be taught in primary schools is laid down by law. These subjects are: sensory co-ordination and physical exercise; Dutch; arithmetic and mathematics; English; expressive activities (including in any event: the use of language, music, drawing, handicrafts, and play and movement); social and life skills (including road safety); healthy living; and a number of factual subjects, including in any event: geography, history, science (including biology), social structures (including political studies), religious and ideological movements. Many of the subjects taught at primary school do not exist in isolation. Topics from history and geography might, for instance, be linked to current events. These subjects are sometimes taught together under the name of environmental studies. All public-authority schools must make arrangements for pupils to receive religious or ethical instruction during school time (up to 120 hours per year), if requested by parents. Other activities are organized for children who do not take part in these lessons. (Ministry of Education, 2002).

Schools in the province of Friesland must also teach Frisian, unless they have dispensation from the provincial executive. It should be noted that many of the subjects taught do not exist in isolation. The school will therefore try to make the links between different subjects apparent. Topics from history and geography might, for instance, be linked to current events. These subjects are sometimes taught together under the name “environmental studies”.



According to van Die “Each curriculum area (subject) is preceded by an introduction explaining what it is about. This is called the characterization of the curriculum area. The attainment targets for the subjects are arranged according to domains. In all the subjects, the attainment targets have been formulated as educational objectives. They contain a content component (knowledge) and a behaviour component (ability). Compared to secondary education, primary education only has a small number of attainment targets. The function of these targets is mainly to act as a guideline. The attainment targets provide a framework for the schools which they can work out according to their own views on education and teaching, and to which they can gear their educational activities.” (van Die, 2001).

Computers are being used increasingly in schools—even primary schools. Pupils practice what they have learnt on the computer as well as learning how to use computers. They use computers to write up their projects, they learn how to find information on the Internet and how e-mail works. Schools decide for themselves what role computers will play in the curriculum. They may wish to use them chiefly as sources of information, or they might prefer to use them as word processors. The introduction of the ‘Knowledge Network’ (*Kennisnet*) has made it easier for schools to make use of ICT. *Kennisnet* is an electronic network for the education sector. All schools are linked to it, allowing them to exchange information and giving them access to Internet.

All schools, both private and public, may teach other subjects as well as those which they are required by law to teach. All public-authority schools must make arrangements for pupils to receive religious or ethical instruction during school time (up to 120 hours per year), if requested by parents. Other activities are organized for children who do not take part in these lessons. Children from a non-Dutch background may under certain circumstances have lessons in their own language. The languages taught depend on local demand and the facilities available. The level of demand is determined by the municipal authorities in consultation with schools and parents. The municipal authorities then decide which languages are to be offered and where. This might be at the child’s school, but it might be at another school or at a community centre. These lessons are held in addition to the normal curriculum, i.e. after school hours or as part of an extended school day, so that the child does not miss out on any other lessons. Languages other than Dutch may be used in the classroom in Years 1 to 4 to help children in Dutch, arithmetic or other subjects.

Usually, each class has a fixed teacher—the class teacher—who teaches the class and looks after the children. Many schools have a number of specialist teachers as well, who give lessons in a specific subject such as physical education, music or drawing. More and more class teachers are specializing in a particular subject and teaching that subject in more than one class. Every school has a head teacher. Heads of small schools usually do some teaching. In the larger schools, the head may not do any teaching at all. Large schools usually have a deputy head as well.

Not all schools set homework, especially not for the youngest children. But many schools give the older pupils tasks or assignments to do at home. It is up to the individual school at what age pupils are given work to do at home.



Every school must have a participation council, with the exception of some private schools which are not required to have one on account of their religious or other beliefs. Some schools also have a parents' council or committee, although these do not have statutory rights. The participation council—which includes representatives of parents and staff—has two rights: the right of approval and the right to be consulted. Many schools also have a parents' council at the request of parents. The parents' council can make recommendations to the participation council. This body is sometimes called a parents' committee. Some schools even have a parents' council and a parents' committee.

The teachers keep a record of each pupil's progress. They assess pupil's homework, oral and written tests and pieces of work, for which a mark is often given. Many schools use tests to see how much pupils have learnt, whether the class is ahead of or behind schedule and what differences there are between the pupils. The tests used are often standard tests supplied with the textbooks or other teaching material used for a particular subject. There are also national tests which measure pupils' results in general, regardless of the textbooks used. These tests give the teacher a better picture of the standard reached by his/her own class or by individual children. Schools are increasingly able to compare their results with those of other schools. Comparison with other schools can help to highlight weak areas so that teaching can be improved.

A special test is generally administered in the last year of primary school. This test is an important factor in determining which type of school the pupil can attend after primary school. Approximately 80% of all primary schools use the attainment tests devised by the National Institute for Educational Measurement (CITO). There are also tests which look at motivation, intelligence, etc., as well as educational attainment.

Most schools issue a report on each pupil's progress three times a year, explaining how they have done in each subject or part of a subject. Schools are free to choose whether they award marks or indicate pupil's level of achievement in some other way, for example by describing their progress and results in words. Schools are increasingly recognizing the importance of accurately measuring, recording and assessing the progress of individual pupils. More and more schools are adopting a pupil monitoring system to help them record the progress of each child in a precise and systematic fashion. Most primary schools use a system of this kind as a means of following pupils' progress, so that teaching can be adapted to the individual pupil.

When the pupil is in Year 8, the head teacher and the class teacher, after consulting the rest of the staff, must advise parents on the most suitable type of secondary education for their child. This advice—officially called an educational report—is based on the school's knowledge and experience of the child during his/her eight years at primary school. If the pupil sits an attainment test in Year 7 or 8, the results of this test will also be taken into account. The advice given is the head teacher's opinion on the type of school that will be most suitable for the pupil, but parents are not obliged to follow this advice. Secondary schools can decide for themselves whom they admit, but they usually take the primary school's advice very seriously. The educational report is always put in writing and parents should receive a



copy from the school. These reports are usually discussed with parents, although this is not compulsory.

The option of repeating a year is avoided as far as possible. This usually happens only if a child is considerably behind his/her classmates in his/her level of attainment and development and the school has been unable to find any other solution. In cases like this, the child is likely to benefit from staying in the same class for another year, especially if he/she is among the youngest in the class and is also young for his/her age. Different schools have different views about this, however. Schools are making increasing use of individual education plans for pupils with special needs. This is already common practice in special schools, but ordinary primary schools are now using them as well. The aim is to help pupils as far as possible in their own school instead of sending them to a special school. An individual education plan sets out what steps have to be taken to help the child and by whom. This might include extra lessons in language and arithmetic or help with writing and speaking. The plan is drawn up and revised in consultation with the parents.

In 2006, the number of pupils in primary education was 1,658,800 (including 46,300 pupils in special primary education). There were 6,929 mainstream primary schools and 320 special primary schools (the schools for children with learning and behavioural difficulties and the schools for children with moderate learning difficulties have been converted into special primary schools). The number of staff (in full-time equivalents) in mainstream primary schools was 105,900, including 9,700 heads and deputy heads, 85,800 teachers and 10,300 support staff. The number of staff (in full-time equivalents) in special primary education was 7,900, including 500 heads and deputy heads, 5,400 teachers and 2,000 support staff. (Ministry of Education, 2007).

Secondary education

The Secondary Education Act (WVO) describes the goal of public secondary education as follows: to promote the general development of students through the acquisition of knowledge, understanding and skills; and to contribute to their education on the basis of values established within the public education system, based on Dutch traditions of Christianity and Humanism. The values in private education are determined by the schools themselves.

In 2006 there were 652 secondary schools, both public and private. Public-authority schools are run by the municipal council or by a governing committee (which parents can join) appointed by the council. Alternatively, the council can opt for a more independent school board by transferring responsibility to a public legal entity or foundation. Private schools are governed by the board of the association or foundation that set them up. Parents are usually able to join the board. Religious education can be taught as a compulsory subject at denominational schools. If parents wish, it can also be taught as an optional subject at public-authority schools and non-denominational private schools.

Secondary education encompasses pre-vocational secondary education (VMBO), lasting four years; senior general secondary education (HAVO), lasting five years; and pre-university education (VWO), lasting six years. All three types of



secondary education are for children aged 12+. All secondary education schools start with a period of 'basic secondary education' introduced in the 1993/94 school year. The duration of this varies from two to four years. It involved a substantive renewal of existing types of schools. Basic secondary education is therefore not a type of school. The goal is to give students a broad, general education.

Basic secondary education consists of no less than fifteen compulsory subjects. These include technical subjects, information sciences and self-sufficiency (social and life skills). The vocationally-oriented subjects that determine the branch of studies in the pre-vocational education are not included in the compulsory curriculum of basic secondary education. Attainment targets have been established for the basic secondary education subjects. These provide a description of students' qualities in the areas of knowledge, understanding and skills.

During the first three years of secondary school, the timetable must include at least 32 teaching periods a week. From the fourth year onwards, the number of teaching periods varies, depending on the type of education: learning support, VMBO, HAVO or VWO. Schools are free to organize the timetable as they wish within certain limits. The Ministry of Education has laid down the minimum number of periods that must be allocated to certain subjects. For other subjects there is a recommended minimum number of teaching periods. Ultimately, it is the school board that decides what the timetable will be for each year. The school board also decides when the school day will begin and end. A copy of the timetable is given to every student at the beginning of the school year.

As mentioned, every school begins with a period of basic secondary education. All students study a broad core curriculum which is largely the same whatever type of school they are at. A lot of attention is also given to everyday situations. The period of basic secondary education can vary in length from school to school, even among schools of the same type. Three years is the norm, but at some schools it is only two years, and at others four years. It is not clearly demarcated; the curriculum gradually merges into the curriculum for the higher classes.

Most secondary schools offering more than one type of education have a transition period lasting one or two years. One of the aims of this transition class or transition period is to postpone choosing a specific type of secondary education (theoretical or vocational variant of VMBO, theoretical VMBO or HAVO, HAVO or VWO) for a little longer. It gives the school time to see what type of education is most suited to each pupil.

The table below shows the recommended number of teaching periods by subject for basic secondary education:



**Basic secondary education (first three years of secondary education):
recommended number of teaching periods by subject**

Subject	Overall number of teaching periods
<u>Core subjects:</u>	
Dutch language	400
English language	280
Second modern language (French or German)	240
History and politics	200
Geography	140
Economics	80
Mathematics	400
Physics and chemistry	200
Biology	120
Social and life skills	100
Information Technology studies	20
Technology	180
Physical education	360
Two creative subjects (drawing, handicrafts, photography, film/audio-visual studies, music, drama, dance)	280
Sub-total	3,000
Number of periods to be used at school's discretion	1,000
Overall number of periods over three years	4,000

Sources: Eurydice, 2001; Ministry of Education, 2002. Each teaching period lasts 50 minutes. During the first three years of secondary education the school week consists of at least thirty-two teaching periods, or ninety-six periods over the three years. Of these, seventy periods are devoted to the compulsory core curriculum while the remaining twenty-six periods can be used at the school's discretion. (Ministry of Education, 2002).

The government has formulated requirements known as attainment targets for each subject. These attainment targets describe the knowledge and skills which students must have acquired by the time they complete their basic secondary education. Schools must do their best to help every student achieve these targets during the three years of basic secondary education. Private schools with very strong objections to certain attainment targets may set their own targets for one or more subjects, to be approved by the Education Inspectorate.

As mentioned, starting with the 1999/2000 school year a major restructuring of secondary vocational and general secondary education went into effect. These changes primarily affected preparatory vocational education (VBO), the last two years of junior general secondary education (MAVO), the last two years of senior general secondary education (HAVO), and the last three years of pre-university education (VWO). A foremost purpose of the changes has been to improve preparation at the secondary level for further study at the tertiary level (or in the case of MAVO/VBO at the senior secondary vocational education level, MBO), thereby increasing the



chances for success. In all types of education, students will be more restricted in their choice of subjects during the final years. In the case of HAVO and VWO, the curriculum will at the same time include a more varied number of subjects, some of which are available for the first time.

The first three years of HAVO and VWO, as in the past, are spent completing a fairly set curriculum in compliance with the general education requirements established in the basic curriculum for the first years of all secondary education programmes, comprising fifteen compulsory subjects. With the introduction of the recent reforms, the last two years of HAVO and the last three years of VWO are referred to as the *tweede fase* (literally, second phase), or upper secondary education. One of the most important characteristics of the new system is basing the organization of curricula on four subject clusters. A subject cluster is a cohesive educational programme that prepares students for related programmes of study at the tertiary level. A student enrolled in VWO or HAVO can choose from the following subject clusters: (i) nature and technology; (ii) nature and health; (iii) economics and society; and (iv) culture and society. Each cluster consists of a group of subjects common to all clusters (approximately 50% of all subjects studied), a group of subjects relevant to the cluster in question (approximately 30%) and a group of elective subjects (approximately 20%). Each subject cluster grants direct admission to a specified group of study programmes offered at the tertiary level.

With the introduction of the upper secondary phase of HAVO and VWO, the Ministry of Education has determined not only the content of each subject cluster, but the number of 'study load hours' that the average student requires to master each subject during the upper secondary phase as a whole. The concept of study load hours as a means to quantify study load has been used in Dutch higher education for years, but is being used in secondary education now for the first time. Study load hours are calculated based on the assumption that a student spends 40 hours per week in the classroom, doing homework, reading books, going on field trips, etc. As there are 40 weeks in a school year, the number of study load hours available is 1,600 for the entire year.

An additional aspect of the new upper secondary phase is the method of examination. Unlike the old system, the final examination is no longer given exclusively in the final year. Some of the (average number of) 15 subjects may be examined internally by the school in the penultimate year, by means of an exam, a paper, or a project. All subjects examined nationally (between five and seven for HAVO, and six and eight for VWO) are examined, as before, at the end of the last year. The subjects included in the category 'cluster subjects' are always examined nationally, in written form.

One aspect of the reform of upper secondary education has been the introduction of completely new subjects, most of which can be taken as common subjects, or as electives. The new subjects are meant to add breadth to the educational programme as a whole. They are: general science; cultural and artistic appreciation; classics; computer technology; and management and organization (that replaces the existing subject business economics). In addition, it is possible for the first time to begin studying a modern foreign language at the upper secondary level, as an elective.



Up until now, foreign language study always began in the first or second year of secondary school.

The basis for recent reforms in the upper secondary phase of HAVO and VWO has focused not only on curriculum content and the need to improve preparation for tertiary study, but also on the need to produce graduates who can function as active, independent and socially adept learners in tomorrow's society. There has been a shift from a more passive, traditional form of instruction to one where upper secondary pupils learn the skills and gain the experience needed to actively pursue knowledge, skills that will ideally last their entire lives. To achieve these goals, schools have been transformed into 'study centres', which is more of a didactic approach than a physical space within a school. In a study centre the teacher takes on the role of supervisor more than instructor, supervising the learning process of individual students in the class. Classical methods of instruction are becoming less prominent and more emphasis is placed on doing independent work or working in groups, giving presentations, researching projects in the library or media centre, or out in the community. Students have the opportunity to work at their own pace and have increased possibilities to pursue their own interests, primarily through the choice of electives. The study centre emphasizes the active pursuit rather than the transfer of knowledge, and provides an environment as well as the materials that will enable students to 'learn to learn'. Schools were required to implement the educational reforms in the upper secondary phase of HAVO and VWO by the year 1999/2000. A minority of schools began a year earlier.

Starting with the 1999/2000 school year, MAVO and VBO have been officially classified in the same category of education known as preparatory secondary vocational education (VMBO). The reason for this change is much the same as for reforms in the upper secondary phase of HAVO and VWO, i.e. to improve preparation for further education and encourage active and independent learning skills. Because of the vocational nature of many programmes offered in VMBO, an additional reason for the changes is to improve preparation for employment. VMBO graduates have a broader, less specialized educational background, enabling them to adapt in a more flexible way to future demands of the labour market. VMBO programmes start after completion of at least seven years of primary education, and last four years. During the first two years of VMBO, students complete the basic curriculum for the first years of all secondary education programmes, after which they are placed in one of four learning tracks, which also last two years. The learning tracks are: (i) theoretical; (ii) combined; (iii) advanced vocational; and (iv) basic vocational track.

The difference between these tracks is for the most part determined by the ratio of vocational to general education subjects included in the curriculum, as well as the possibilities for further study provided by each diploma. The theoretical track, for example, includes only general education subjects and is most comparable to the MAVO curriculum. Graduates of the theoretical track are admissible to levels three and four of senior secondary vocational education (MBO) and may also transfer to the fourth year of HAVO, provided the subjects mathematics and French or German have been included in the final examination. As indicated by the name, the combined track combines vocational and general education subjects. Graduates are also admissible to levels three and four of MBO, but not to HAVO. The advanced vocational and



vocational tracks offer applied vocational programmes comparable to those offered in VBO. While graduates of the advanced vocational track are admissible to levels three and four of MBO, graduates of the basic vocational track are admissible to level two.

In addition to being placed in a learning track, students in the third and fourth years of VMBO have to complete the requirements of one of four discipline sectors. The sectors in VMBO are similar in purpose to the subject clusters in the upper secondary phase of HAVO and VWO, and determine the content of the curriculum a pupil will follow. The sectors in VMBO are: (i) technology; (ii) health and personal care and welfare; (iii) economics; and (iv) agriculture.

Under the Adult and Vocational Education Act which came into effect in 1996, both MBO and apprenticeship training as well as other forms of vocational training have been incorporated in a new qualifications framework. The qualifications framework defines the learning outcomes for approximately 500 occupations as well as the knowledge and skills required for the individual certificates leading up to the final qualification. Representatives of the relevant sectors of labour and industry as well as social partners have been closely involved in the development of the framework, and are primarily responsible for defining the educational outcomes. A major goal of the framework is to create more coherence between existing courses, certificates and diplomas, to facilitate the transfer from one training course to the next and to facilitate the recognition of prior learning and experience. There is no longer any distinction between a diploma that used to be obtained upon completion of an MBO course and one obtained through apprenticeship training. The type of instruction a student receives, i.e. daily instruction in a school or through an apprenticeship, is no longer relevant, as long as the requirements for the educational outcomes have been met. In the qualifications framework, training courses are categorized according to level (level one to four), and the same level can be obtained by way of a more theoretical course of instruction or on-the-job training. MBO diplomas will no longer be awarded, but the type of education is still referred to as MBO. The four levels of MBO and the length of the training courses offered at those levels are: (a) assistant training, six months to one year; (b) basic vocational training, two to three years; (c) vocational training, two to four years; and (d) management training, three to four years. The levels represent a sequential level of difficulty, and in most cases completion of a training course at one level is required for admission to a course at the next level. Graduates of courses at level three and above are capable of working fully independently in their occupation. In addition to this, graduates of level four training courses have had some management training. Graduates of level four courses are also admissible to HBO. The qualifications framework went into effect in January 1997. (NUFFIC, 2002).

In the past, VBO, MAVO, HAVO and VWO courses tended to be taught at different schools. Nowadays, most schools are part of a broad-based combined school, offering all the different types of secondary education (usually at more than one site). This means that students no longer have to change schools to transfer from MAVO to HAVO, and so on. These large combined schools have far more pupils and staff than primary schools, which are much smaller. Students are usually grouped into streams, departments or sectors. This helps to create a stronger bond between pupils and teachers.



There are also schools that offer two or three different types of secondary education only. These are known as narrow-based combined schools and include VBO/MAVO schools, MAVO/HAVO/VWO schools and HAVO/VWO schools. There is also a third type of school offering one type of secondary education only, such as the MAVO or 'gymnasium' courses. Sometimes students at single-category schools are better off transferring to a different type of school. Schools often have special arrangements with other schools in the same area to make the move as easy as possible.

Every school must publish a prospectus for the benefit of parents and carers. This contains a great deal of information, i.e. the school's philosophy and aims, its style of teaching, and practical details like lesson times and holiday dates. Every year in September the Education Inspectorate publishes a 'school report card' on every secondary school in the country. The first report cards were published in 1998. They are aimed specifically at the parents and contain information about exam results and the number of students that have to repeat a year as well as more general information about the school. Parents can use the report cards to compare the performance of local schools with the national average, with other schools in the area and with schools operating in similar circumstances.

At the end of the second year, the school advises students as to which type of course is best for them: VMBO, HAVO or VWO. In the case of vocational education, it will usually also indicate which type of vocational education seems most appropriate, e.g. building techniques, fashion and commerce, motor mechanics, etc.

During the final two years of secondary school (or, for VWO pupils, the final three years) students prepare for their leaving examinations. Most of the timetable in the last few years is therefore devoted to exam subjects. In addition, VMBO students usually go on work placements during their third and/or fourth years. The subjects students are examined in depend on the type of course they are taking (VMBO, HAVO or VWO) and the subject combination chosen.

The school-leaving examinations generally fall into two parts: the internal exam or school exam, and the national exam. The national exams are the same for all students following the same type of education. The internal or school exams are compiled by the schools themselves, although the Ministry of Education decides the topics that pupils must be examined in. The Ministry sets the entire leaving examination syllabus. This states the topics to be covered in each subject and how this material is to be divided between the internal/school exam and the national exam. It also specifies how many papers the national exam will consist of and how long each paper will last. The number of papers in the internal/school exam is decided by the school.

Internal exams are compiled by the schools themselves, although they must keep to the official examination syllabus. It is also up to the schools to decide when to test students in which subjects. These exams generally include two or more papers in each subject. They may consist of written, oral or practical tests. Internal exams are marked by the school's own staff. Students must be told what marks they obtained in the subjects in which they are also sitting national exams before the national exams begin.



Under the new system of fixed subject combinations in HAVO and VWO the school exam consists partly of written tests with both open-ended and single-answer questions and partly of practical assignments. Some of these practical assignments are graded. For others, pupils only need to show that they have carried out the assignment satisfactorily in order to pass (pass/fail assignments). The school exam in HAVO and VWO also includes a combined project. This is a long-term practical assignment involving two or more of the specialized subjects studied. The idea is to test students' knowledge, understanding and skills, and make them think about the links between different elements of the curriculum.

The national exams are held in three periods: May, June and August. In May, all pupils sit their exams. When the results of these exams are known, every student is given the chance to re-sit one subject in June. Students who have a valid reason for not having been able to sit examinations in all their subjects in May can sit an examination in two subjects in June. If necessary, they can be examined in the remaining subjects in August.

The teachers calculate the final grades for each student in each subject by taking the average of the marks obtained in the internal or school exam and the national exam. All the final grades together decide whether a student has passed the school-leaving examination. For subjects for which there is an internal or school exam only, the final grade is the grade obtained in the internal/school exam (rounded off). A final grade of 6 or more in every subject is a pass. Under the new system HAVO and VWO students must have an average grade of 6 or more in order to pass. This means that they can still pass even if they get a lower grade in up to two subjects (either two fives or one four and one five is acceptable). Students who get a grade of 3 or lower in any of their subjects have failed. In addition, students must have an average of 6 or more in all their specialized subjects. (Ministry of Education, 2002).

In 2006, the number of students in secondary education was 909,500, of whom 112,100 receiving a special needs education provision. The number of staff (in full-time equivalents) was 84,400, including 62,600 teachers, 3,900 managers and 18,000 support staff. In 2005, a total of 165,000 students earned a diploma in secondary education. In the same year, a total of 22,000 students left secondary education without any qualifications, which represents 11% of the total number of school-leavers. Nearly two-thirds of drop-outs came from lower secondary education. In 2005, 4.9% of the students had to repeat a year. In 2006, the number of participants in MBO funded by the Ministry of Education was estimated at 465,900 (based on the preliminary surveys for 2006). The largest of the three educational routes is full-time vocational training (BOL-ft), with 322,600 participants (69% of the total number in vocational education). The number of participants in MBO funded by the Ministry of Agriculture was estimated at 25,800. (Ministry of Education, 2007).

Assessing learning achievement nationwide

According to the report published in 2007 by the Inspectorate of Education, the quality of primary education is adequate and in some respects even good. The level of the results at the end of primary school is at least satisfactory at 93% of the schools. The quality of secondary education is, on the whole, satisfactory. The implementation of special needs provision and counselling could be more systematic. The large



number of early school-leavers (drop-outs) is a cause for concern. Particularly in pre-vocational secondary education (VMBO, basic vocational and middle management vocational programmes) within the four large cities, the quality of education compares poorly with education elsewhere in the Netherlands. In 2000, the percentage of early school-leavers was 15.5%, while in 2006 12.9% of 18 to 24 year-olds had no basic qualification and were no longer enrolled in school. The goal is reducing the percentage of early school-leavers to 8% by 2010.

Primary schools with sufficient final results for language and arithmetic have more often scheduled sufficient teaching time for these basic skills than have schools whose results are below standard. Also, the coordination of the amount of time given to language and reading with the educational needs of pupils appears to correspond clearly with the higher final results for language, reading and arithmetic. In 97% of primary schools teachers make efficient use of the planned learning time. In 87% of primary schools, the learning and teaching time for language and arithmetic is sufficiently adapted to the educational needs of the pupils. During May and June 2006, the Inspectorate conducted an unannounced study into the teaching time in secondary education and senior secondary vocational education. At virtually all the secondary schools it was found that the actual teaching time did not meet the legal requirements (i.e. intended teaching time). At the end of the school year, especially, considerable teaching time is lost. Approximately half of the secondary schools have eight or more days without any activities for students. A follow-up study showed that 14 of the 25 secondary schools surveyed did not have their timetable in order and that four of the 25 schools could not demonstrate whether or not they actually implemented the legally required 1,040 teaching hours.

From an international perspective, Dutch pupils in the past achieved good results in arithmetic. There are indications that this area needs some attention. The Periodic Assessment of Educational Achievement (PPON) provides insight into the arithmetic proficiency of pupils at the end of primary education. A positive point is the fact that pupils have gained greater insight into the structure of numbers and the relationships between numbers and that progress has been achieved in working with pocket calculators. But abilities in the basic processes (adding, subtracting, multiplying and dividing) seem to have declined. There are clear signs that many pupils have insufficient numerical skills in secondary education.

Low-level reading skills are understood as level 1 in the scale of abilities of the PISA survey. The goal for 2010 is no more than 9% of 15 year-old pupils with a low level of reading skills. In 2003, 11.5% of pupils had low-level reading skills. A study conducted in 2004 showed that approximately 24% of students in basic vocational programmes were not able to independently read textbooks that were written for their age group. The same is true for 17% of students in more theoretically oriented vocational programmes and for 18% of students in general secondary education (HAVO and VWO). This shows that the 'maintenance' of basic skills continues to be important in secondary education. A study conducted by the Inspectorate itself and academic research into the subject 'Dutch' in senior secondary vocational education (MBO) revealed that 60 to 70% of the surveyed teachers thought that the language ability of the participants was insufficient to complete the study programme successfully.



Only a few special schools for children with serious behavioural problems are able to provide accountability reports for their results. They also rarely evaluate the quality of the education provided. Only 30 per cent of the schools regularly evaluate the quality of their pupil care. Only one-fourth of the schools establish a development plan for all pupils. Most of the schools do draft individual education plans. In most of these cases, they are sufficiently functional, though at most of the schools there is a discrepancy between individual education plans on paper and the (remedial) teaching of the team members in the classroom. (Inspectorate of Education, 2007).

In 2006 more than 405,000 young people earned a diploma: 170,000 in secondary education, approximately 145,000 in senior secondary vocational education and 90,000 in higher education. In secondary education overall, 82% of the students leave school with a diploma. In preparatory vocational education (VMBO), 90% leave with a diploma, in senior general secondary (HAVO) 78%, and in pre-university education (VWO), 75%. (Ministry of Education, 2007).

Higher education

Higher education comprises higher professional education (HBO), university education (WO—universities), and higher distance learning (Open university—OU). Students start higher education at around age 18.

As mentioned, organizations and institutions involved in higher education in the Netherlands have been occupied with the implementation of necessary changes since the adoption of the Bologna Declaration. The Higher Education Act of 1993 has been revised to accommodate a degree structure including bachelor's and master's degrees, and higher education institutions have organized study programmes around a bachelor's or undergraduate phase and a master's or graduate phase. The bachelor's/master's degree system was officially introduced at the beginning of the academic year 2002/03. Students who enrolled while the traditional system was in force will continue to study in the system in which they started.

As far as higher professional education (HBO) is concerned, until 2002 degree programmes have revolved around one degree, requiring four years to complete. Internships, or periods of work placement in a company or other organization, are important components in these programmes, which are always strongly oriented towards specific careers. The universities of professional education do not conduct fundamental research and they do not offer possibilities for pursuing a doctorate. Students who earn a diploma from a university of professional education may use the title *baccalaureus* (bc.), or, in engineering and agriculture, the title *ingenieur* (ing.). After 2002 upon graduation students receive a bachelor's degree indicating the field of study completed after four years of study (i.e. Bachelor of Engineering, B.Eng., Bachelor of Nursing, B.Nursing). Although universities of professional education will continue to offer programmes with an emphasis on the applied arts and sciences, the new legislation permits these institutions to offer programmes with an academic focus as well. Universities of professional education also offer professional master's degree programmes. Many of these are available on a part-time basis, enabling students to combine work and study.



Until 2002, university programmes have revolved around one major degree before the doctorate, known in Dutch as the *doctoraal*. A *doctoraal* programme is not divided into an undergraduate and graduate phase, but combines enough depth and breadth to be considered comparable to a master's degree. University programmes require four years of full-time study in most fields, five years in the case of engineering, mathematics/natural sciences and agriculture. A *doctoraal* degree confers eligibility for the pursuit of a doctorate through a process known as *promotie*. This entails four years of full-time research following the *doctoraal* under the supervision of a *promotor*, who must be a full professor at a university. To earn the title of 'doctor', a student must write a dissertation based on his/her own research project, and then successfully defend it. The doctor's degree is considered to be equivalent to a Ph.D. Individuals with a *doctoraal* degree use the academic title of *doctorandus* (drs.) unless their field is engineering or agriculture, in which case the title is *ingenieur* (ir.), or law, in which case the title is *meester* (mr.). Beginning with the academic year 2002/03, university degree programmes are organized according a two-cycle structure, i.e. bachelor's or undergraduate phase, lasting three years, and a master's or graduate phase lasting one to two years, depending on the discipline. Although universities primarily offer programmes with an academic emphasis, the new legislation permits universities to offer programmes in the applied arts and sciences, at both undergraduate and graduate levels. All universities will also continue to award the doctor's degree in the way described above. Master's degree programmes in engineering, mathematics/natural sciences and agriculture require two years of study to complete and all other programmes take one year.

A new credit system, based on the European Credit Transfer System (ECTS), has been introduced, under which sixty credits equate with the workload of a full-time student during one academic year (one credit being equal to 28 hours of study). Another important aspect is the new system of accreditation, which aims to guarantee a high standard of quality of programmes offered in higher education. As of 2002, the responsibilities for quality assurance have been given to the Netherlands Accreditation Organization (NAO), which after the ratification of the treaty with the Flemish Community of Belgium at the end of 2004 became the Dutch-Flemish Accreditation Organization (NVAO).

According to the Act on Accreditation of Higher Education of 2002, all degree programmes offered by universities and universities of professional education will be evaluated according to established criteria, and programmes that meet those criteria will be accredited, i.e. recognized. Only accredited programmes are eligible for government funding and students receive financial aid and graduate with a recognized degree only when taking or after completing an accredited degree programme. Accredited programmes are listed in the Central Register of Higher Education Study Programmes and the information is available to the public. The Information Management Group (IBG) is responsible for establishing, managing and publicizing the register and supplying information from it. The Central Register of Higher Education Enrolment, which contains the enrolment details of all students in higher education, is also managed by the IBG.

Higher professional education (*hogeschool*) offers a variety of programmes leading to some 250 qualifications for a wide range of occupations. There are both broad and specialist programmes. There are large HBO institutions offering a wide



variety of courses in many different sectors and medium-sized and small colleges offering a small assortment in one sector only. Mergers have reduced the number of government-funded HBO institutions from almost 350 in the mid-1980s to 50 in 2002, further declined to 41 in 2006. In addition, in 2003/04 there were 63 approved institutions of higher professional education which fall under the Higher Education and Research Act but do not receive funding from the Ministry of Education. Programmes are divided into seven fields of study: education; engineering and technology; health care; economics; behaviour and society; language and culture; and agriculture and the natural environment.

In the public higher education system there were fourteen universities in 2005, including nine general universities, three technological universities, the Agricultural University at Wageningen (under the Ministry of Agriculture, Nature and Food Quality), and the Open University offering distance education. Besides the government-funded universities, there are a number of approved institutions, including five offering theological courses, one offering a degree course in humanism, and the Netherlands Business School. The administrative structure of universities comprises various levels: an Executive Board, University Council and the Faculties. In order to maintain the high standard of university teaching and research, a quality assurance system is in operation. Every course is subject to periodic review and the findings are published in open reports together with recommendations for improvement. Programmes are divided into seven main fields of study: economics; health; behaviour and society; science; law; engineering and technology; and language and culture. The three technological universities focus predominantly on engineering and technology. The Agricultural University offers programmes in the field of agriculture and the natural environment. Some programmes at the technological universities and the agricultural university as well as certain science courses have a study load of 300 credits or five years, as do programmes in philosophy of a particular discipline. In the case of medicine, veterinary science and pharmacy, programmes last six years.

Applicants to university must have successfully completed pre-university education (VWO), the propaedeutic part (first year) of a course of higher professional education (HBO), certain training courses abroad or a special viva voce entrance examination set by the university itself. Students are free to apply for any university or course, although many courses require a specific combination of examination subjects. For a few courses (such as dentistry and medicine), there is an admissions quota: the number of first-year students is limited. The minimum course duration is four years. For most technical courses and dentistry, the course duration is five years; for (veterinary) medicine and pharmacy it is six years.

The Open University (OU), founded in 1984, is an institution for providing distance learning to anyone who cannot or chooses not to follow normal full-time studies at the higher educational level. One can receive the same titles as those attainable from universities and HBO. The main objective of the Open University is to make higher education accessible to adults. The open nature of this education is characterized by: an absence of entrance requirements (entrance is possible without diplomas); a large measure of freedom in putting together study programmes; the possibility to take the courses at home or at one's own pace. Besides the town of Heerlen, there are eighteen study centres spread throughout the Netherlands,



providing study information, counselling and advice. Studies can be taken in the following fields: law, social sciences, cultural sciences, economics, business and administration, technical and natural sciences. The education is by correspondence. Together with three universities, six HBO institutions and other partners, the OU has created a digital university offering a broad range of courses. The aim of the consortium, which came into being in the spring of 2001, is twofold: to contribute to innovation in education and to offer digital education as part of government-funded higher education and for new target groups. The digital university will focus on developing teaching material for initial courses at the participating institutions.

In October 2006, the number of participants in higher professional education was more than 357,000 (excluding agriculture). In 2005 the total number of staff (in full-time equivalents) was 24,500, including 13,500 teachers and 11,000 support staff. The total enrolment in universities (excluding agriculture) was 201,800 students in 2006. In 2005, the total number of staff was 36,900 (in full-time equivalents), including 20,300 academic staff and 16,500 support staff. In the Open University the number of participants was 18,474 in 2006. In the Agricultural University at Wageningen the total enrolment was 4,400 students. (Ministry of Education, 2007).

Special education

Special schools cater for children who require special educational treatment. Teaching is geared to the developmental potential of the individual child. Special education aims to promote the development of children's emotions, intellect and creativity and the acquisition of essential knowledge together with social, cultural and physical skills in an uninterrupted process of development. The aim is to enable as many pupils as possible to be integrated into mainstream education.

On 1 August 1985 separate legislation for special primary and secondary education in the form of the Special Education Interim Act (ISOVSO) came into force. Mainstream primary education was governed by the Primary Education Act 1981. As part of the "Going to School Together" policy, efforts were made to break down the division between mainstream and special primary education. This led to the introduction on 1 August 1998 of a new Primary Education Act governing special primary education for children with learning and behavioural difficulties (LOM), children with learning difficulties (MLK) and preschool children with developmental difficulties (IOBK) as well as ordinary primary education. All other types of special school formerly regulated by the Special Education Interim Act have been governed since 1998 by the new Expertise Centres Act (WEC), while special secondary education for children with learning and behavioural difficulties and children with learning difficulties come under the Secondary Education Act. Where possible, pupils are placed in mainstream schools and given extra assistance. They are only placed in special schools (preferably on a temporary basis) if it is unavoidable. Hospital schools were abolished as of 1 August 1999. Schooling for this category of children is now the responsibility of their own schools and is no longer subject to the Expertise Centres Act. The schools (and very occasionally individual pupils) can be assisted by a specialized consultant from the school advisory service.

Special (secondary) education consists of two school types: special education (SO) and secondary special education (VSO). SOVSO schools offer both forms of



education. Both school types are subdivided into various types of education, based on the disabilities or learning impediments of the pupils. With the conversion of practical training programmes and the learning support departments, secondary special education for children with learning and behavioural difficulties (formerly VSO-LOM and MLK) has been incorporated into mainstream secondary education. On 28 May 1998, an Act was implemented which required all special secondary schools for children with learning and behavioural difficulties (SVO/LOM and SVO/MLK) either to merge with a mainstream secondary school before 1 August 2002, or to convert to a practical training institution (PRO) or a special education centre (OPDC). Within (secondary) special education, different target groups are distinguished.

Special schools provide special education for disabled children and children whose education requires a special approach, catering for either the primary or secondary age group or both. This type of education, which is governed by the Expertise Centres Act, is divided into four categories, depending on the type disability. With the exception of schools for the visually impaired, all special schools falling into a particular category establish collaboration schemes, together forming an expertise centre for their region. The Expertise Centres Act defines the objectives of special education, sets out the different categories of special education and contains regulations governing the organization of teaching (content, quality, school plan, school prospectus, complaints procedure). It also regulates the position of staff, pupils (admissions) and parents, and contains provisions on funding and the establishment and closure of schools.

In 2006, the number of pupils in special primary education was 46,300 and in (secondary) special education the number was 63,400 (of whom 36,200 in special education schools and 27,200 in special education). In the same year there were 112,100 special needs students in secondary education and 14,900 students enrolled in learning support departments of 'green' education. In 2006, there were 320 special primary schools and the proportion of 4-to-12-year-olds in special primary education and special education was 5.0%. (Dutch Eurydice Unit, 2005; Ministry of Education, 2007).

Private education

Private schools are governed by the same legislation as public-authority schools. Article 23 of the Constitution places public and private schools on an equal financial footing. As a condition of funding from the public budget, the law lays down that private educational establishments must be maintained by a legal person with full legal competence, whose aim is to provide education, without any profit-making motive. The competent authority (school board) of a private school is the board of the association or foundation that maintains it. Private schools are established by private individuals. Though there are some non-denominational private schools, the majority are denominational. Most of these are Roman Catholic and Protestant, but there are also Muslim, Hindu and Jewish schools, among others. At primary level two thirds of schools are privately run.

Private educational institutions can take part in the national qualifications structure for vocational education subject to the same conditions as government-funded institutions, although they are not entitled to funding. The legislation



governing higher education does not differentiate between private and public higher education.

Means of instruction, equipment and infrastructure

The Dutch government has decided to opt for the complete integration of information and communication technology into the education system. Within the framework of the Investing in Progress project, the changes have been introduced throughout the system in four stages, in primary schools, secondary schools, vocational education and teacher training colleges.

The policy of the Ministry of Education, Culture and Science is focused on promoting the use of information and communication technology (ICT) in education. ICT should be given a place within education in order to enable schools to prepare students for the labour market of tomorrow and to make the new learning (concentrated on individual capabilities and needs, independent of location and time) possible. The policy for primary education and secondary education, the adult and vocational education sector and the teacher training programmes was described in the memorandum *Education On-line* that was approved by the Dutch Lower House in September 1999. The higher education policy is described in the Higher Education and Research Plan.

The importance of ICT in education was underlined during the Dot.Com summit held in Lisbon (March 2000) and confirmed once more during the Barcelona summit in 2001. The government leaders agreed that European Union member states would require all schools to have Internet connections before 2002 and to have 1 out of every 15 PCs at each school on-line; also, the schools should ensure that teachers possess sufficient ICT skills to make use of the possibilities of the Internet and multimedia within education. The ICT budget focuses on learning to use and using to learn, in order to shift the emphasis from the introduction of ICT to the use of ICT to improve the education provided.

The government position is that the integration of ICT into education is a matter for the schools. The system is the responsibility of the minister; schools have to be able to integrate ICT in the education they provide. Schools determine how they will use ICT to modernize and improve the education provided. In this it is the responsibility of the Ministry to come up with quality requirements, to determine the direction of development and suitable legislation. The government ensures that the schools receive sufficient resources and shall do what it can to ensure the schools get the support they need to fulfil their responsibilities.

In the ICT budget, a distinction is made between decentralized and centralized resources. The decentralized resources are based on the promotion of ICT education in schools. The schools are enabled to do this through the provision of extra resources in order to raise their purchasing power. These resources are connected to the per capita expenditures and are provided to the schools via the funding of the various education sectors. The centralized resources are spent on specific expenditures for assistance and support to schools, including a connection to the *Knowledge Network*,



ICT at School (management), staff development, methods and software. In addition, some small-scale and experimental projects are implemented.

The promotion of ICT covers the entire field of education, including culture and science policy. For the educational fields of primary, secondary, and adult and vocational education, an integral approach has been chosen to enable the schools to develop ICT in the education provided. For the other sectors, greater use is made of specific promotion because for these sectors facilities have already been integrated into education (higher professional education and university education through the *Surfnet*); in some cases, specific promotion is necessary because certain sectors have a target area that is different from participants in education. (Ministry of Education, 2003).

Adult and non-formal education

Effective 1 January 1996, the Adult and Vocational Education Act (WEB) went into force. Until then, the various forms of vocational and adult education were covered by different statutes: the apprenticeship training, the part-time MBO and the manpower training for employment strategy under the Part-time Vocational Education Act (WCBO); the MBO and the VAVO under the Secondary Education Act (WVO); the 1991 Adult Education Framework Act regulated the planning and internal alignment of adult basic education, non-formal adult education, the VAVO and vocational education. When the WEB went into effect, the Adult Education Framework Act and the Part-time Vocational Education Act were superseded, thereby placing non-formal adult education, adult basic education, VAVO, the apprenticeship training, MBO and part-time MBO under a single act.

The new act formulates the following objectives: adult education aimed at promoting personal development of adults for functioning in society, by developing knowledge, skills and attitudes so they relate to their needs, potential, experience and social necessities. Vocational education concentrates on theoretical and practical preparation for practising a profession, where a professional qualification is required or useful.

An important part of the WEB is devoted to the formation of regional training centres (ROCs). Because of their large scale, only broad school communities offer a sufficient guarantee of custom-made work for the large, extremely varied group attending adult and vocational study programmes. In 2006, the adult and vocational education (BVE) sector comprised 42 Regional Training Centres (ROCs) (excluding 'green education'), 13 specialist trade colleges, two strict Dutch Reformed institutions and two MBO institutions for the deaf. There were 18 sector-oriented Knowledge Centres (excluding agriculture) divided over three sectors (personal/social services and healthcare, economics and technology). Their statutory tasks are: developing qualifications for secondary vocational education, monitoring the examinations administered by education institutes, recruiting new companies offering training places (for practical training) and monitoring the quality of the companies offering training places. In 2006 there were five institutions for green higher professional education, twelve agricultural training centres (AOCs), one ROC with a green department and two Innovation Practical Training Centres (IPCs). Relevant VBO-green courses are taught at some forty combined schools. Seven junior general



secondary schools (MAVO) have merged with agricultural training centres. (Ministry of Education, 2007).

The aim of non-formal adult education is to help adults further develop their knowledge, understanding, skills and aptitudes, or to become more aware and more involved in the education of social and cultural ties in their own communities, jobs and social lives. There are no certificates given for the courses. Non-formal adult education is a local matter: the municipality or the collaborating municipalities are responsible for policy at a local level. Municipalities also grant subsidies to various institutions. The non-formal adult education courses are given at adult education institutes and institutes for non-formal education (residential courses) and at local centres for non-formal adult education.

Adult basic education is understood to mean: the minimum educational activities that enable adults to gain the knowledge, attitudes and skills required to function personally and in a social context. Adult basic education comprises activities directed towards developing language, arithmetic and social skills. It is also possible to concentrate on or specialize in study programmes directly linked to adult basic education, as well as Dutch as a second language (DSL, divided into five levels). The adult general secondary education (VAVO) has two functions: offering second-opportunity education aimed at getting (partial) MAVO, HAVO or VWO diplomas, and transition programmes aimed at entrance to continuing education. Financing is in the hands of the Ministry of Education, Culture and Science. Education is given at schools for VAVO. These are evening or day-evening schools (according to the law, evening education, but given during the day). To gain entry, learners must have fulfilled their compulsory education requirement, supplemented by specific requirements per type of school.

In 2006, the number of participants in adult education courses was 142,000. Over half (some 80,000) took “Dutch as a second language” courses. The number of participants in adult general secondary education (VAVO) was 10,000. The number of participants in adult basic education was 51,000. The total number of staff (in full-time equivalents) was 37,000; these included 22,300 teachers, 400 managers and 14,200 support staff. (Ministry of Education, 2007).

Teaching staff

Pre-service teacher training programmes for the various types of school are part of higher education, some being provided at institutions of higher professional education (HBO) and some at universities. There are full-time, part-time and dual (i.e. work-study) HBO teacher training courses for primary education and secondary education (leading to a grade one or a grade two qualification). At universities there are also full-time, part-time and dual courses leading to a grade one secondary school teaching qualification (postgraduate programmes or ULO courses). These courses are open to university students and graduates only. Teacher training programmes are available in practically all subjects taught at secondary schools. Grade two teachers are qualified to teach the first three years of senior general secondary education (HAVO) and of pre-university education (VWO), all years of preparatory vocational education (VMBO), and in secondary vocational education. Grade one teachers are qualified to teach at all levels of secondary education; in other words, they can also teach at the



pre-higher education level, i.e. the last two or three years of HAVO and VWO respectively. Grade one and grade two teachers of art, music, handicrafts, eurhythmics, dance, drama, English, Frisian and gymnastics are also qualified to teach at primary level and in special education. Primary school teachers are qualified to teach all subjects at primary level and in special and adult education. Most teachers working at special schools have also completed a postgraduate programme leading to a special education teaching qualification. They may take the course after completing their initial primary or secondary teacher training, or another higher education programme. Students can specialize in a particular field of work (e.g. teaching children with hearing disabilities) and are awarded a qualification with the relevant endorsement. The institutions providing the training decide whether or not a candidate will be admitted. This training course is not compulsory; it is still possible to work in special education with an ordinary teaching qualification. Lecturers at HBO institutions must hold a higher education qualification plus a certificate of competence to teach. For university lecturers, there are no specific requirements regarding previous training.

The new bachelor's-master's degree system was introduced in September 2002. As a result, the traditional credit system of 42 credits a year (1 credit being equal to 40 hours of study) has been replaced by a new system designed to facilitate the comparison of courses within the European Union. Under the new system, which is based on the European Credit Transfer System (ECTS), a student must obtain 60 ECTS credits a year (1 credit being equal to 28 hours of study). Existing initial courses of higher professional education have been converted into bachelor's degree programmes. Advanced courses offered by HBO institutions will be converted into master's degree programmes provided they are accredited by the Netherlands-Flanders Accreditation Organisation (NVAO).

Primary school teacher training programmes are higher professional education courses offered at both multisectoral HBO institutions and colleges providing primary teacher training only. All programmes have a study load of 240 ECTS credits (equivalent to four years' full-time study). However, students may be given exemptions on the basis of previous educational qualifications or skills acquired elsewhere, so that, in practice, institutions can now offer shorter tailor-made as well as standard programmes. Graduates are fully qualified to teach: all subjects and all age groups at primary level; in special education, at both primary and secondary level; in adult and vocational education, and particularly in adult education. A postgraduate programme in special education with a study load of 60 ECTS credits is also available. Although not compulsory, almost all teachers working in special education take this programme. Teaching practice is an important component of the teacher training programme. Students receive practical training in the area in which they intend eventually to work. This is a compulsory part of the course. The teaching and examination regulations for each programme must by law specify how teaching practice is organized. Around a quarter of the entire programme is devoted to periods of teaching practice, beginning in the first year. Teaching practice takes place mainly in primary and special schools. The post of trainee teacher (LIO) was introduced in primary schools in August 2000. Students in the final year of their training can be employed part-time under a training and employment contract for a limited period (equivalent to no more than five months' full time), provided the school has a vacancy. Candidates for admission to an HBO primary teacher training programme



must possess an HAVO (senior general secondary education), VWO (pre-university education) or MBO (secondary vocational education) certificate. In the latter case they must have completed level 4 (middle-management or specialist training).

Secondary school teacher training programmes are provided at HBO institutions and universities. Programmes offered at HBO lead to either a grade one or a grade two qualification. Programmes are available in general subjects, arts subjects, technical subjects and agricultural subjects. Students specialize in one subject. Programmes cover both subject training and aspects of teaching in general, including: teaching methods; teaching practice; command of language; communication; educational theory. Teachers who have obtained a grade two qualification in a general subject after studying either full or part-time can then take an HBO programme (usually part-time) leading to a grade one qualification in the same subject. Programmes in technical and agricultural subjects lead to a grade two qualification only. Both full-time and part-time courses are available. Programmes leading to a grade two qualification, both full-time and part-time, have a study load of 240 ECTS credits under the bachelor's-master's system. Programmes consist of a propaedeutic part (60 ECTS credits) and the main part (180 ECTS credits). Qualified teachers with a bachelor's degree may then carry on studying for a grade one qualification in the same subject. These courses have a study load of 120 ECTS credits. The training programme for physical education teachers (a usually full-time course with a study load of 240 ECTS credits) leads to a grade one qualification. Similarly, programmes in certain arts subjects (fine arts and design, music, drama and dance) lead to a grade one qualification only (with a study load of 240 ECTS credits).

University graduates with a *doctoraal* or master's degree can take a postgraduate teacher training course (ULO) leading to a grade one qualification. Students can also begin, and, if they wish, complete their teacher training while they are still undergraduates. The part-time, full-time and dual options all have a study load of 60 ECTS credits (equivalent to one year's full-time study). Courses are available in all subjects in the secondary curriculum. Students specialize in one subject, sometimes with an extra qualification to teach a subject like general science or culture and the arts. Graduates from university-based teacher training programmes have a grade one qualification. There are no rules concerning teaching practice for HBO programmes leading to grade one and grade two teaching qualifications. Similarly, there are no statutory requirements for teaching practice for students attending university programmes. However, the universities themselves have agreed that teaching practice should last 840 hours, 250 of which must be spent in a school, with students actually taking a class for at least 120 hours. Secondary school teacher training programmes now offer a combined period of work and study in the final year. Students can be employed part-time in a school under a training and employment contract for a limited period (equivalent to no more than five months' full time), provided the school has a vacancy. Both university graduates and master's degree students may be admitted to university teacher training programmes, but their subject must correspond to the subject they will be trained to teach. In principle, students should also have completed a two-month orientation programme as part of their first degree course. There are no government-imposed restrictions on the number of places available.

Increasingly, primary and secondary schools and institutions for adult and vocational education are training teaching staff themselves, including students on a



training and employment contract, and teaching assistants undergoing teacher training. This generates a culture of learning and working within schools. Schools share the responsibility for training both new and existing teaching staff with the teacher training institutions. Staff shortages in primary schools have led to measures to promote intake into the profession. With the entry into force of the Lateral-entry Recruitment (Primary and Secondary Education) Interim Act in 2000, people with higher education qualifications may enter the teaching profession without having been trained in the normal way. Under the terms of the Act, anyone with a higher professional education or university degree who passes an aptitude test may teach. Such teaching may be on a part-time or fulltime basis, and is combined with additional training, leading within two years to a full teaching qualification. Lateral-entry posts are also available in secondary schools, both for people who do not yet have the required qualifications and for teachers who want to obtain a qualification in another subject.

Teachers applying for a job in a given sector of education must possess a certificate qualifying them to teach the subject or subjects in question at that level. Primary and special school teachers are required to have a primary school teacher training qualification. Secondary school teachers must have a grade one or grade two secondary school teaching qualification. Teachers in higher professional education are required to have an HBO or university degree and a certificate of education. Teachers in adult and vocational education who have not trained as a teacher must have a certificate of education. Apart from the relevant teaching qualifications, teachers must be able to produce a certificate of good conduct. Teachers who are not yet fully qualified may also be appointed on a temporary basis; they are usually lateral-entry teachers. For technical subjects at VMBO level, an MBO qualification is sufficient for admission to the aptitude test. Staff in public-authority schools and institutions are formally public sector personnel; they are public servants within the meaning of the Central and Local Government Personnel Act. The same does not apply to staff in the private sector who sign a contract with the board of the legal person, governed by private law, whose employment they enter. They fall under the provisions of the civil law, insofar as the relevant educational legislation and the regulations based thereon do not differ from these provisions. Private sector staff can be deemed to share the status of public sector personnel in respect of those conditions of service that are determined by the government.

On 1 August 1998 the standard number of hours to be worked per year (standard working year) was fixed at 1,659 for all sectors of education. The official number of working hours is either 1,710 or 1,790. This includes additional leave in lieu of a shorter working week, which, for staff with a standard full-time post, amounts to either 51 or 131 hours. Staff are appointed to a standard full-time teaching post or a part-time post, expressed as a “working hours factor”. Ten percent of a teacher’s actual working hours are available for professional development. The leave entitlement of part-time staff is calculated on a pro rata basis using the working hours’ factor. Additional leave may be taken off during the course of the year (additional annual leave) or saved up (accumulated leave). Since 1 August 2000 it has also been possible to ‘cash in’ the additional leave entitlement and receive an additional payment instead of additional time off work. In primary and special education, both types of additional leave are regulated centrally and additional leave can be saved up over a period of between 5 and 12 years. In all other sectors, similar arrangements



have been made as part of the negotiations on pay and conditions at decentralized level. Primary and special school teachers may be required to spend an average of no more than 930 hours a year teaching (in relation to the official number of working hours of 1,710 or 1,790 this works out at 961 or 1,010 hours respectively). For secondary school teachers this figure is 750 hours (a maximum of twenty-six 50-minute lessons a week). In the adult and vocational education sector, arrangements regarding working hours are made by the employer in consultation with the staff representatives on the participation council. Teachers may be assigned no more than 823 hours of executive duties per year. This includes teaching, taking examinations, supervising students on placements, taking practical lessons and running courses provided on a contract basis. Other arrangements may be negotiated at institutional level.

Beginning in 1993, the budget for in-service training of teachers in primary, secondary, special and vocational education has been transferred in stages from the teacher training institutions to the schools and vocational education institutions. On 1 August 2001 a new 'personnel budget' was introduced in primary schools, which combined previously separate budgets (e.g. management support, labour market activities, school-specific problems, integrated personnel policy and in-service training). Schools are free to spend this budget as they wish, as long as expenditure is personnel-related. Institutions providing secondary education, secondary vocational education and higher education may therefore determine, within this budget, how much they spend on in-service training and how they spend it. There are no specific in-service training institutions governed by law. Courses can be provided by all kinds of institution, within both the public and commercial domain. Many are provided by the teacher training institutions (HBO institutions and universities with teacher training departments). They are sometimes organized in cooperation with the school advisory services, one of the national educational advisory centres or experts from outside the education system. The content of courses and the choice of training institution are left to the schools to decide.

Education research and information

Evaluation surveys are conducted as part of the external evaluation carried out at national level. The Ministry of Education, Culture and Science commissions policy studies and evaluations, mainly with a view to policy preparation and implementation. This work is carried out by universities and external research companies. In addition, the Education Inspectorate carries out surveys of the quality of education in the different sectors.

ICO is the Dutch Interuniversity Center for Educational Research. Participants in the center are faculty departments and research centres from ten universities. ICO is recognized by the Royal Dutch Academy of Sciences. The general mission of ICO is to promote fundamental and applied scientific research in the field of education. ICO has ten themes that represent the different areas of research: interactive learning; domain-related skills; learning and working; teaching and teacher education; ICT tools for designing; decentralization, deregulation and autonomy of schools; differential educational access and effectiveness; educational effectiveness and micro-economic theory; structured independence: the effectiveness of new learning arrangements; and new examination and assessment technology. ICO is devoted to



coordinating the research efforts of its members, in order to stimulate further development of educational theories. ICO provides its members with a platform for information exchange and collaboration. For Ph.D. students a set of advanced courses is offered.

The Groningen Institute for Educational Research (GION) is a research institute in the field of education, pedagogy and child development within the Faculty of Psychology, Education and Sociology of the University of Groningen. GION includes fundamental, applied and evaluation research in education within family settings, schools and other institutions. GION develops and tests theories with respect to education and contributes to science, policymaking and educational practice. Although GION aims at providing practical knowledge useful for educational practice, its first priority is the development of knowledge and the testing of that knowledge. The scope of GION is quite broad, but within this broad scope several specific topics are under development. For each of these topics, a research program is developed for a five year period. It is a purpose of GION to design research projects within programs in order to establish further knowledge building within a specific field. The research carried out in GION is partly paid for by University funding, partly by the Netherlands Organization for Scientific Research (NWO) and partly by further external funding. It is an explicit objective of GION to implement and disseminate developed and tested knowledge for educational practice and policymaking. Therefore, research findings are published in practice and policy oriented journals and other kind of publications in addition to international scientific publications about results and outcomes. Scholars within GION are frequently invited to act as advisors or as members of state committees on a broad range of topics.

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Web resources

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Association of Universities in the Netherlands: <http://www.vsnu.nl/> [In Dutch and English. Last checked: September 2007.]

Central Funding of Institutions Agency: <http://www.cfi.nl/> [In Dutch. Last checked: September 2007.]

Education Inspectorate: <http://www.owinsp.nl/> [In Dutch and English. Last checked: September 2007.]

Knowledge Network (*Kennisnet*): <http://www.kennisnet.nl/> [In Dutch. Last checked: September 2007.]

Ministry of Education, Culture and Science: <http://www.minocw.nl/> [In Dutch and English. Last checked: September 2007.]

National Institute for Educational Measurement: <http://www.cito.nl/> [In Dutch and English. Last checked: September 2007.]

Netherlands Accreditation Organization: <http://www.nao-ho.nl/> [In Dutch and English. Last checked: September 2007.]



Netherlands Association of Universities of Applied Sciences: <http://www.hbo-raad.nl/>
[In Dutch and English. Last checked: September 2007.]

Netherlands Institute for Curriculum Development: <http://www.slo.nl/> [In Dutch. Last checked: September 2007.]

Netherlands Organization for International Cooperation in Higher Education:
<http://www.nuffic.nl/> [In Dutch and English. Last checked: September 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>