

Higher education in the Netherlands

Country report

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The CHEPS International Higher Education Monitor

The cheps International Higher Education Monitor (IHEM) is an ongoing research project, commissioned by the Dutch Ministry of Education, Culture and Science. The project aims to provide higher education policy makers with relevant and up-to-date information on national higher education systems and policy changes. This information is presented through in-depth country reports, comparative thematic reports, annual update reports, statistical bulletins and a statistical data-base. The core countries for which this information is collected and presented include Australia, Austria, Finland, Flanders (Belgium), France, Germany, the Netherlands, Portugal, Sweden and the United Kingdom.

Country reports

Increasingly, governments take international trends into account when developing national higher education policies. Continuing European integration, the increasing mobility of people within the European Union, as well as supra-national initiatives deployed at the European level with respect to higher education (e.g. the Leonardo and Socrates programs) necessitate such an orientation. Policy makers therefore need to have access to adequate information on higher education structures, trends and issues in Europe as well as other countries. New technologies have opened access for everyone to vast amounts of facts and figures on higher education in almost every country. Although these data are indispensable for higher education policy makers and analysts, they often do not provide much in the way of usable information. What is lacking is a frame of reference to properly interpret the data.

Such a framework is offered by the cheps International Higher Education Monitor country reports. These reports have a clear structure, describing the higher education infrastructure and the research infrastructure. In addition to an in-depth description of the institutional fabric of the higher education system, the reports address issues of finance, governance and quality in higher education. The country reports provide the frame of reference for the interpretation of policy initiatives, trend-analyses and cross-country comparisons.

A wide scope of sources are used for these country reports including national statistics, (inter)national journals and magazines, national policy documents, research papers, and international documents and databases.

To keep track of the latest (policy) changes in higher education annual update reports are published.

These publications and other information on the IHEM can be found on:

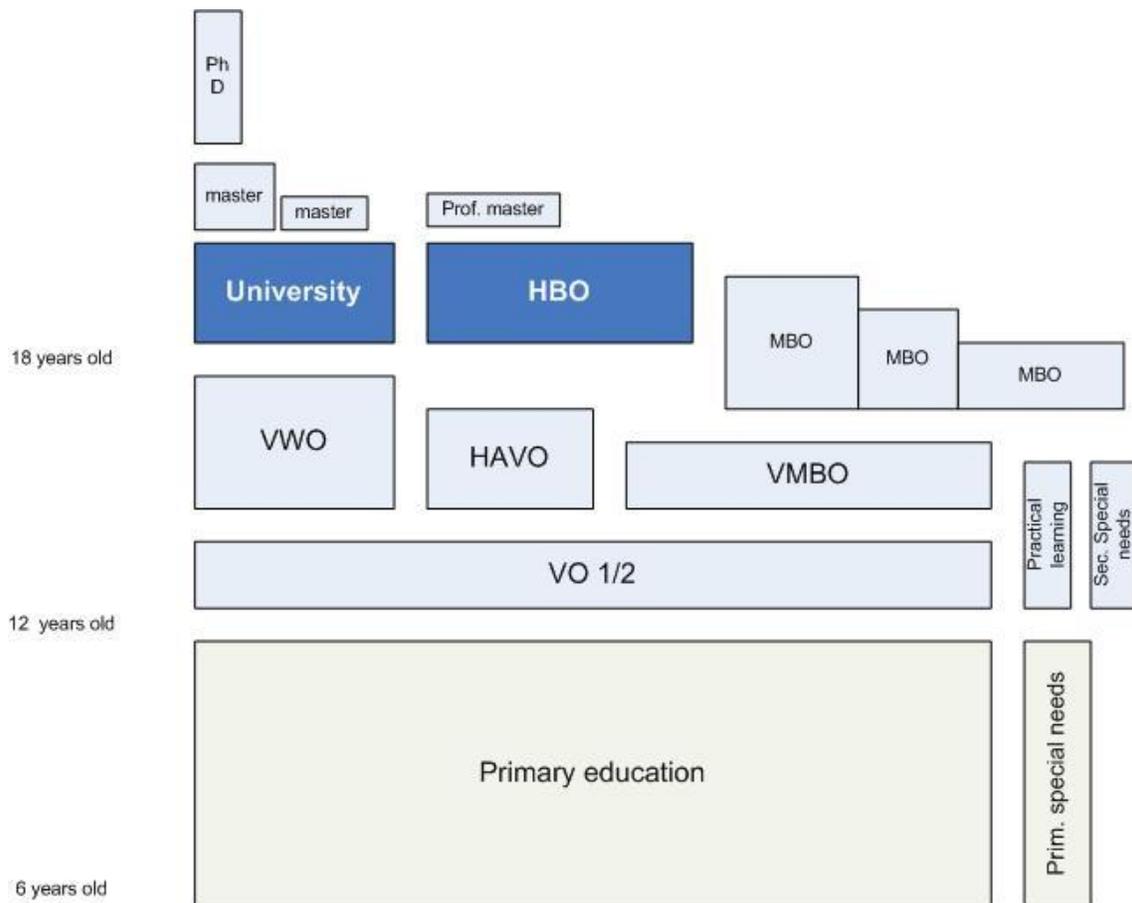
http://www.utwente.nl/cheps/higher_education_monitor

1 INTRODUCTION

1.1 The Dutch educational system

The Dutch education system includes the following levels: primary education for children between the ages of four and twelve, secondary education as a continuation of primary education for pupils between the ages of twelve and eighteen, higher education for students aged seventeen/eighteen and above, and adult and vocational education (see figure below).

Figure 1-1: Dutch education system



At the end of comprehensive primary education, pupils at the age of twelve are assigned to move on to secondary education, which consists of two stages: the first tier (two years of basic education) and the second tier. After the first tier of basic education (VO 1/2), pupils either continue in more vocationally oriented educational paths (in Dutch abbreviated to VMBO) or tracks preparing for higher education (in Dutch abbreviated to VWO and HAVO). In the vocationally oriented path, there are two tracks: the VBO also known as junior vocational secondary education and the MAVO track (junior general secondary education). These two tracks of the vocationally oriented path last two years and provide a basis for

further vocational training in senior vocational education (MBO), either in full-time or in part-time (tracks combining learning and working).

Pupils choosing the preparatory path for higher education have two options; studying the three years of preparatory higher professional education (HAVO) or the four years of preparatory university education (VWO). The higher education system in the Netherlands consists of two sectors, the university sector (WO) and the sector of higher professional education (HBO, in Dutch *hogescholen*). Both the universities and the *hogescholen* have their own focus on education, as defined in the Higher Education and Research Act (WHW) of 1993: “The universities prepare students for independent scientific work in an academic or professional setting and the *hogescholen* prepare students to practise a profession and enable them to function self-consciously in the society at large”.

1.2 Secondary education

The Secondary Education Act (WVO) of 1968 regulates the pre-vocational education (VBO), the junior general secondary education (MAVO), the senior general secondary education (HAVO) and the pre-university education (VWO). In 1992 this Secondary Education Act was amended and led to the introduction of basic secondary education (*basisvorming*). From 1993/94 all four different types of secondary education teach the same core curriculum in the first three years. All pupils in the first two years of all types of secondary education receive basis education in fifteen subjects. For each of the subjects national core objectives have been formulated. Schools can decide themselves how they intend to reach these objectives. The third year is flexible: either students continue basic education or work towards the preparation for the *bovenbouw* (the second tier of secondary education). The school advises the pupil and the parents/guardians after two years of basic education. In total, some 80% of the contents of the courses of basic education are determined nationally, the schools themselves (taking into account the needs and wishes of the pupils) can decide upon 20% of the courses.

After the basic education, in principle two paths lie ahead of the pupils, either the VMBO path towards vocational education, or the VWO/HAVO path towards higher education. This so-called second tier for VWO/HAVO has been implemented in some 125 schools in 1998. It was fully implemented in all 700 schools in 1999 (Boezeroy and Huisman 2000). In 2006, in terms of size, about 44% of the pupils opted for the preparatory tracks for higher education in VWO and HAVO, whereas 56% choose the vocationally oriented VMBO. The latter percentage has decreased over the previous decade; in 1995 it was 64% and in 2000 60% (Centraal Bureau voor de Statistiek 2007)

1.3 Pathways to higher education: the second tier of VWO and HAVO

The new structure and contents of VWO and HAVO, preparing pupils for higher education, are to a considerable extent similar to those before the implementation of the second tier of secondary education. Two basic changes are implemented, one concerning the so-called profiles preparing pupils for specific post-secondary tracks and one concerning a new approach to teaching and learning. The differences can be summarised as follows (Boezeroy and Huisman 2000).

First, the traditional set of subjects for the final examinations disappeared. In the previous structure the pupil could choose six to eight subjects. The limitations of the school (in terms of e.g. teachers available for the subjects) were the sole restrictions on pupils' choices. With the implementation of the second tier, the set of about fifteen subjects selected by the pupil is termed *doorstroomprofiel* (profile). There are four profiles, each preparing for a set of study programmes in higher education: culture and society (preparing in general for the social sciences, history, languages and culture), economy and society (preparing for economy and social sciences), nature and health (preparing for medical sciences and biology), and nature and technology (preparing for natural sciences and engineering). Each profile forms a consistent set of knowledge and skills and consists of a compulsory part (50%) meant for general education, a profile part (30%) to prepare for higher education, and a free part (20%) for personal development. The final examinations consist of school examinations and national examinations.

A second difference relates to the higher education entrance requirements. The access to some higher education programs requires a specific profile of secondary education (specifically the Technical and Natural Sciences programs). The profile nature and technology, for instance, is sufficient to enter the university programme of Pharmacy. The higher education institutions may also allow students who have another profile to enrol, but then additional requirements (parts of profiles) can be asked for. In the example of Pharmacy, pupils with a nature and health programme might enter, but should have absolved courses in Chemistry in their free part of the programme.

Third, deficiencies should be cancelled before entering the programme. Whereas many higher education programmes offered possibilities to make up for shortcomings in the qualifications in the first part of the first year, this now should be settled before actually enrolling a programme.

Fourth, course contents have changed. There is more attention for skills (design, problem solving, communication, co-operation, planning, etc.) in the profiles. Furthermore, some subject matters disappeared or are replaced by other subject matters. Also new courses have been introduced, such as informatics and management and organisation. Study and professional orientation have been integrated in all profiles, including an orientation on higher education in general, and a self-reflection on the pupil's career. This prepares the pupils for the choices to be made after secondary education (labour market or higher education).

Fifth, the traditional organisation of the learning process has been changed. In the traditional organisation the learning process was mainly directed by the teachers. In the new structure a new form of teaching and learning has been introduced, indicated with the term *studiehuis* (study house). This involves that pupils learn in an active and autonomous way and that in teaching justice is done to the differences between pupils. Pupils are offered different learning routes, dependent on their talents, interests and pace. Furthermore, the teacher should be considered as a tutor of the pupil's learning process. These changes in the second tier aim to provide an opportunity for pupils to learn more independently and consequently improve the connection with higher education.

Since its existence the four profiles have been subject of much discussion and so-called profile committees were installed to suggest various adaptations. After an intensive process of consultation the Minister decided to implement an adaptation of the current profile structure as per August 2007. This adaptation involves more choice options, also within examination programmes, but on the other hand accentuation as regards the content of prescriptions. More room for schools where possible and more requirements where needed.

1.4 Upper secondary vocational and adult education

The Adult and Vocational Education Act (WEB) of 1996, categorises a number of existing types of educational provision into two broad groups: vocational education (MBO) and adult education. One of the outcomes of the WEB, started on 1 January 1998, is the establishment of some 45 to 50 regional training centres (ROC's). All senior secondary vocational education and adult education institutions are now part of a ROC institution. The principal task in vocational education given to a ROC is to provide vocational training: theoretical and practical preparation for practising occupations for which a training course providing vocational qualifications is required or may be useful. Besides the ROC's also Agricultural Training Centres (AOC's) exist under the authority of the Ministry of Agriculture, Nature Conservation and Fisheries. The AOC's can choose whether they want to become a part of the ROC's or stay independent. However, the supply of training must fit within the format as stipulated by the WEB.

Vocational education (MBO) encompasses the old full-time and part-time senior secondary vocational education, day release training for apprentices and part-time non-formal education for young adults. Nowadays MBO comprises two alternative learning pathways: block or day release (BBL) and part-time or full-time vocational training (BOL). The vocational courses can be taken at four different levels (see table below).

Table 1-1: Qualification structure for vocational education

Level	Training	Duration
1. Simple executive work	Assistant training	0.5 - 1 years
2. Executive work	Basic vocational training	2 - 3 years
3. Complete independent execution of work	Professional training	2 - 4 years
4. Complete independent execution of work with broad usability or specialisation	Middle management training	3 - 4 years
	Specialist training	1 - 2 years

Source: Ministerie van Onderwijs, Cultuur en Wetenschappen, 2002

Adult education comprises adult general secondary education (VAVO), adult basic education and courses in Dutch as a second language (NT2). The adult education is designed to prepare students for entry to vocational education or to enable them to participate fully in society. Within adult basic education and adult general secondary education there are six levels of courses (including courses which can lead to a diploma of MAVO, HAVO or VWO), while courses in Dutch as a second language (NT2) can be taken at 5 levels.

2 HIGHER EDUCATION

2.1 Introduction

The Dutch higher education system is a binary system separating the university sector with the HBO-sector (*HBO-Hoger Beroepsopleiding*).

The university sector consists of 13 universities. They prepare students for independent scientific work in an academic or professional setting. There are nine universities which offer programmes in a wide range of disciplines and subject areas, three provide mainly technical and engineering programmes and one is specialised in agriculture. Together the universities offer some two hundred different programmes; some of these provided in part-time mode. Additionally a number of small “designated institutions” are part of the university sector: a university for business administration, four institutes for theology, a humanistic university, as well as several international education institutes. These are formally part of the higher education system, but are usually not included in the educational statistics and only to a limited extent are they influenced directly by overall higher education policy.

The HBO-sector consists of 42 government funded *hogescholen* or as they call themselves internationally universities of professional education. In recent years the HBO sector has become more concentrated via merges and some of its institutions now enrol more than 30,000 students. Altogether *hogescholen* offer programmes in a wide range of programmes which prepare students for professional practice and enable them to ‘function self-consciously in the society at large’. They offer around two hundred programmes, including a substantial number of part-time programmes.

Next to *hogescholen* and universities, higher education in the Netherlands is also provided through the Open University, located in Heerlen. The Open University offers a wide range of courses, which may lead to both formal university and higher professional education degrees. No other formal sectors of post-secondary education exist in the Netherlands. However, the Netherlands has a large number of private teaching institutes and organisations that offer recognised certificates, diplomas and degrees in various professional fields like accountancy, business administration, etc. Quite often these are structured as ‘external studies’ in the sense of correspondence and or distance learning courses with limited face-to-face interaction.

2.2 History and legislation

2.2.1 University sector

The history of the university sector dates back to 1575, when the University of Leiden was founded as a reward for its citizens' persistence in fighting the Spaniards during the 80 year war. The establishment of other universities followed in subsequent years, e.g., the Universities of Groningen (1614), Amsterdam (1632) and Utrecht (1634). Over the centuries additional universities were founded, partly as an explicit economic government policy to further activity in some disadvantaged regions, for example, the University of Twente, 1961,

and the University of Limburg, 1976. At present, the university sector consists of thirteen institutions. Until the 1970s, the university sector was left more or less on its own by the government. It appeared to function according to its own purposes and little policy attention was directed towards them. However, this changed rather dramatically and quickly. At the end of the 1970s the circumstances for higher education were not very bright. The main problems concerning the university sector were the student drop out rate being rather high and the average length of study being rather long compared to the situation in other countries. In addition, many of the academic staff appointed during the sharp rise in student numbers lacked the qualities and motivation needed to cope with the challenges of the coming decade, while institutional management was in general rather powerless, weak and not very professional. As a consequence the universities were inefficiently run. Major restructuring was believed to be necessary to make higher education more efficient and more effective. The most important reform and retrenchment operations designed and implemented from the end of the 1970s were a restructuring of university education through the introduction of the so-called two tier structure¹, two retrenchment operations for the university sector resulting in the closure of several departments and a reshuffling in terms of programmes offered, and the introduction of a system of conditional funding of research (see chapter four). These ad hoc restructuring operations lasted until the mid-1980s when a new approach regarding the steering and functioning of the Dutch higher education system was introduced.

2.2.2 The development of the *hogescholen*

The sector of the *hogescholen* (the HBO-sector), also can be traced back quite some time, but developed under very different circumstances. Most of the older institutions have their roots in the 19th Century and evolved out of the guilds. The first legal framework was provided by the 1919 Domestic Science and Technical Education Act differentiating, among others, primary, secondary domestic, and technical education. In 1968 higher vocational education was introduced as a separate type of education with the passing by Parliament of the Secondary Education Act (SEA) that codified all forms of education between primary and university education. One of the characteristics of the SEA and the way in which the Ministry of Education and Science used it, was a detailed regulation of institutional affairs, thus severely restricting the further development of the HBO-sector. A sector that, inter alia, was extremely diverse and fragmented in those days.

The period from the late 1960s to the early 1980s can be characterised as one of substantial growth and systemic development. Student numbers rose rapidly in higher education creating the beginning of budgetary pressures that were to dominate the 1980s. In line with developments in other countries, the HBO-sector was considered ideal to take care of this increasing student body, as it (1) was considerably cheaper than the university sector and 'education on the cheap' even then was considered an asset; (2) catered for part-time education; and (3) provided the kind of orientation perceived as beneficial to the growth of the Dutch economy. Expansion of the HBO-sector, however, also gave rise to discussions about both the internal structure of the sector and its relationship with the university sector.

¹ In the two-tier system of higher education, university education is structured in a first tier of four years, awarded with a doctoraal diploma and a post-graduate second tier leading to a PhD degree.

This resulted in a multitude of white papers with different scenarios. Apart from the interesting rituals, diverging political views, and quite some rhetoric that accompanied these initiatives, the actual results were meagre. The HBO-sector was praised for its values and efforts, but little was done to take it out of the developmental straitjacket of the 1968 SEA. In 1983 the then Minister of Education and Science proposed in the white paper ‘*Scale-enlargement, Task-reallocation and Concentration*’ (STC) a major restructuring of the HBO-sector with far-reaching consequences for the structure and functioning of the Dutch higher education system. The main objectives of the STC restructuring were: (a) a considerable increase of institutional size through institutional mergers; (b) an increase in institutional autonomy regarding the use of resources, personnel policy and the structuring of the educational processes; and (c) an increase in institutional efficiency through economies of scale. The Minister envisaged that as a result of the implementation of the STC-operation, a limited number of multidisciplinary, medium sized institutions with considerable autonomy would arise. The outcomes of the merger processes, however, surpassed all expectations. By July 1987 the original 350+ institutions had merged into 85 institutions of which some 45 were mostly large to very large, multi-purpose institutions. Some of the latter turned out to be larger than most of the existing universities. Thus, in terms of structure, the Dutch higher education institutional landscape had changed dramatically. In terms of function, increased autonomy was to be attained through the implementation of the new governmental steering philosophy as well as through the framework provided by the new HBO-Act (1986) that finally took *hogescholen* out of the realm of secondary education and placed it formally in higher education, thereby formalising the already existing binary structure.

2.2.3 Higher Education and Research Act 1993

The Higher Education and Research Act (WHW) entered into force on 1 August 1993 (Ministry of Education and Science (1993)). The WHW replaced the University Act, the Higher Professional Education Act and numerous other regulations governing higher education and research. The Act redefined the administrative relationship between the government and the higher education and research institutions. Previous legislation provided to a large extent for *ex ante* regulation and planning, assigning a central role to government. The new Act has its origins in the 1985 policy document ‘Autonomy and Quality in Higher Education’ (HOAK-document), which sets out the philosophy of hands-off government and autonomous educational institutions operating in a flexible way. The underlying principle is to give the institutions greater freedom of policy within the parameters laid down by government, not as an end in itself, but as a means of enabling the higher education system to respond more effectively and decisively to the changing needs of society (Goedegebuure, Kaiser et al. 1994).

The concept of autonomy is one of the *leitmotifs* of the Act. Detailed *ex ante* control by the government is replaced by *ex post* control of a more general nature. At the same time the Act stressed that despite decentralisation the government remains responsible for the macro-efficiency of the system. Government is said to apply ‘selective control’, intervening only when necessary.

The administrative relationship between government and institutions of higher education and research, as defined in the Act, is based on the following principles:

- the government should intervene to prevent undesirable developments only where self-management by the institutions is likely to have unacceptable results;
- government intervention should primarily take the form of remedying imperfections in the system *ex post*;
- the instruments at the government's disposal should be characterised by a minimum of detailed regulation;
- the institutions must lay down norms to ensure legal certainty, reasonableness and proper administration.

The Act accords the institutions considerable freedom of programming. They are responsible in the first instance for maintaining quality, providing an adequate range of teaching and research programmes and ensuring access to education. Quality control is exercised by the institutions themselves, by external experts and, on behalf of the government, by the Inspectorate for Higher Education. In principle, the government assesses on an *ex post* basis only whether funds have been deployed effectively and whether the intended results have been achieved. If major shortcomings are identified, the institutions will be informed accordingly. If discrepancies between ideal and reality persist, notably in the field of quality, the government has the option – with due regard to the proper procedures – of using coercive powers backed up by sanctions.

2.2.4 Higher Education and Research Plan (HOOP)

The WHW 1993 provided a statutory basis for a planning system. Starting in 1987 the government published the Higher Education and Research Plans (HOOP). In the HOOP the government sets out its views on higher education and research for the coming years, discusses the needs of society and trends that are of relevance to higher education and research and indicates how the institutions should respond to such developments. The HOOP is a four-year planning cycle (until 1998 it was a two-year planning cycle) and is partly drawn up on the basis of the annual reports of the higher education institutions. The institutions indicate in their annual reports what they have done in the previous year(s) and how they have spent public funds. The annual report also contains a forward-looking section in which the institutions outline the policies they intend to pursue, partly in the light of their duty to society. Before the final version of the HOOP is published, the plans for the coming four years are initially published in draft form. Then a dialogue is initiated in which the government and the institutions can together establish what is desired or required of the higher education and research system. The conclusions of this dialogue are incorporated in the final version of the HOOP.

One of the central themes of this dialogue is the macro-efficiency of the higher education and research system. The government is responsible for setting out macro-objectives in the planning cycle. To this end the Act accords the government a limited number of *ex ante* powers, the most important of which are as follows:

- assessment of the macro-efficiency of new and existing study programmes

- fixing a general formula for determining the size of the central government grant to institutions within the limits of the overall budget for higher education and research
- restricting entry to study programmes in connection with labour market considerations and capacity
- determining the main elements of personnel policy

In the last Higher Education and Research Plan the government defined as important tasks for higher education to contribute to the transition towards the knowledge society, a strengthening of the international positioning in Europe and globally, and the complexity of society. The following ambitions for higher education and research have been formulated (Ministerie van Onderwijs Cultuur en Wetenschappen 2004).

- Maximal participation and more highly qualified people. In the context of the Lisbon-objectives the government aims at increasing the enrolment ratio in higher education to 50% in 2010.
- Quality as a key element to respond to societal trends. Generally the quality is considered to be good, but more excellent research and education is necessary to create a stronger international profile.
- Young adults should be able to function adequately in a complex society. They must be equipped to take initiatives, to be entrepreneurial, and to shape their own learning processes. Combinations of learning and working are becoming increasingly important.
- HE institutions should contribute more to the innovative capacity of the Dutch economy as well as societal sectors like health and education. This requires more interaction, a permanent tuning of higher education to labour market needs, more attention to activities that are focused on knowledge valorisation.
- Although the quality of research is good, more focus and concentration is needed, more competition and research dynamics, and more opportunities to attract and keep more researchers and other knowledge workers.

In order to accomplish these ambitions, the prevailing framework conditions and steering conceptions are reconsidered. In 1995 the government launched proposals for a new HE law which is intended to replace the present law. The government should allow institutions to function more autonomously according to their own insights and preferences with less governmental interference. The government focuses primarily on the functioning and the strategic orientation of the HE system as a whole and her responsibility is focused on quality, accessibility and effectiveness of the system. Individual institutions are responsible for the education, personnel and resources. To date, it is generally felt that the existing law of 1993 needs some revisions, but these can effectively be handled by modifying the existing law rather than by introducing a new law. Suggested revisions concern for example quality assurance, a new funding structure, the research tasks by *hogescholen*, and the research infrastructure. Further decision-making will be left to the new government in 2007.

Since the introduction of the Higher Education and Research Act (WHW) in 1993 the responsibility for study programmes has been with the higher education institutions. However, institutions wanting to offer new programmes must register with the Minister,

including a review by the Advisory Committee on the Provision of Study Programmes (ACO). In general, the Minister follows the advice of the ACO. The HOOP 2000 states that the approval of the ACO is no longer needed, so the higher education institutions can start or add new study programmes without the advice of the ACO. The ACO was abolished in 2004 and its tasks have been taken over by the accreditation council NVAO (see below).

2.2.5 Implementation of the Bachelor Master structure

In 2002 the Dutch parliament approved to reform the degree structure in compliance with the Bologna-process. Amendments in the Law on Higher Education and Research (WHW) make it legally possible for Dutch Higher Education institutions to grant Bachelor and Master degrees as of the academic year (2002/2003). Together with this change, a new law on accreditation was also approved (see below) and the European Credit Transfer System has been implemented. Interestingly, most universities and some *hogescholen* had already made the decision to implement the Bachelor-Master system before the change in the WHW was approved by parliament.

From the academic year 2002/2003, university graduates will be able to adopt the title of bachelor and master in addition to the traditional diplomas of *doctorandus (drs.)*, *ingenieur (ir.)* or *meester (mr.)*. Under the “BaMa” system, university students will first take a Bachelor’s programme lasting at least three years and will then be able to go on to enter a specialised Master’s programme (one or two years). The existing regulations on the maximum time students can study will remain in force.

Graduates from the *hogescholen* will be able to adopt the title of bachelor in addition to the traditional diplomas of *bac* or *ingenieur (ing)*. They will be awarded a Bachelor’s degree after four years of study. Like the universities, the HBO-sector will also be able to set up Master’s degree programmes, but contrary to the universities, these master degree programmes, have not been financed by government so far (although this is currently considered for some Master programmes). Governmental funding for the universities for the introduction of the Bachelor/Master system has been 45 million Euro: 50% in 2001 and 50% in 2002. Gradually the Bachelor Master system (BaMa) has gradually been implemented in virtually all disciplines and subject areas.

2.3 Sector for higher professional education (HBO)

2.3.1 Structure

The purpose of the *hogescholen*, defined by the WHW 1993, is to offer theoretical instruction and to develop the skills required for practical application in a particular profession. The focus is on one specific professional field, and practical experience is an important part of the training. There are about 50 *hogescholen* providing higher vocational education for students aged 18 and onwards. The *hogescholen* offer programmes in the following disciplines: economics, health, social-agogic, agriculture, education, engineering and arts. These programmes normally have a standard length of four years and consist of 168 credits.

Hogescholen offer both full-time and part-time programmes. Students completing the four-year full-time HBO study programs receive a qualification comparable to a Bachelor's degree. Some *hogescholen* offer their graduates the possibility of upgrading this to a Master's degree. This involves a full cost fee (there is no governmental funding for this) and one extra year of study. *Hogescholen* also offer post-HBO programmes. These programmes include advanced training programs, which can vary in length anywhere from several weeks to four years.

2.3.2 Access

By law admission to *hogescholen* is open to all students who hold the HAVO, MBO or VWO certificate or any equivalent qualification. Alternatively, applicants aged 21 or over who do not possess the required qualifications may be admitted after passing a *colloquium doctum* entrance examination. The *hogescholen* may also impose subject specific entrance requirements particularly when the intended study programme leads to a professional qualification. All such requirements must have the Minister's approval and be entered in the Central Register of Higher Education Study Programmes (CROHO) in advance of the application process. The only limitation to this open admission is the system of *numerus fixus*, which only applies to a limited number of study programmes, mainly in the paramedical professions (e.g. physiotherapy), tourism, journalism and social juridical service.

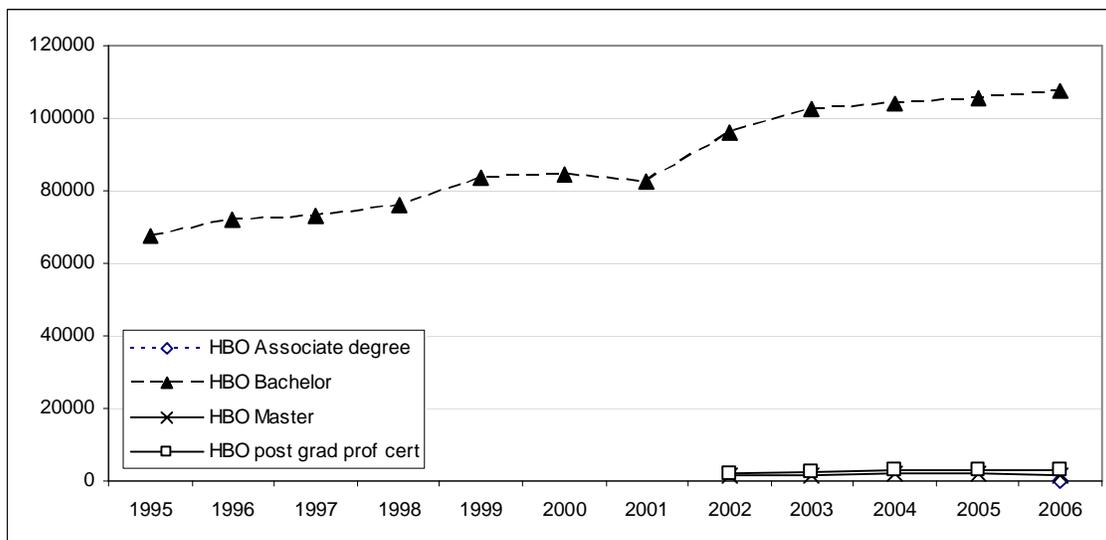
There are a number of types of *numerus fixus* (applying for both the *hogescholen* and the universities). The first type (also the oldest one) is known as the capacity fixus. When the number of applicants exceeds the national teaching capacity, the Minister decides upon the number of places (nationally and at the institutional level) which will be available. The Minister of Education, Culture and Science may also limit the intake of students if it can be shown that the supply of graduates from a particular programme exceeds the need of the labour market by a substantial amount and when this is expected to be the case for a number of years (labour market fixus or *opleidingsfixus*). A third type of *numerus fixus* is the institutional fixus; from 1 September 2000 on, higher education institutions have been given much more autonomy in determining their teaching capacity. If the number of applicants exceeds the expected enrolments in such a way that the teaching capacity of a particular institution is insufficient (in fact endangering the quality of teaching), the institution can apply for selection. In case of one of the types of the *numerus fixus*, students are selected through a so-called weighted-lottery system.

In 1993 this system has been applied to the *numerus fixus* programmes at *hogescholen*. The main characteristic of this system is that the lottery ticket decides on admission to courses with an entrance restriction. However, it is a weighted lottery, which provides enlarged chances on admission for candidates with higher average examination results in secondary education. For programmes where the number of places falls short to the number of applicants, candidates become a number by lottery. In addition they are divided over five lottery categories. Category A, which is the highest, includes candidates with the highest examination grade point average (8,5 or higher). Category F, the lowest one, includes students with an average examination grade of 6 to 6,5. A sixth category of foreigners is added. In general it can be stated that the higher the lottery class, the higher the chance on admission

and, in addition, the lower the lottery number the higher the chance on admission. Students who are not placed may re-apply in a later year but do not receive any credit for the waiting period.

Changes in this selection mechanism started in 1996 with the installation of the Drenth committee. This committee was supposed to make recommendations about possible changes in the admission system of higher education. The committee advise has been to provide direct access to people with high grades in secondary education and to apply the weighted lottery system to people with lower grades. Furthermore, the committee recommended that about 10% of the study places should be reserved for people with job experience. Due to the recommendations of the committee-Drenth the public and political discussion ended in a change in regulation by the Minister of Education, Science and Culture in 1999. From 1 September 1999 a new selection system has been implemented. The main difference with the former system is that all candidates with an average grade of 8 or higher in secondary education will be directly admitted to the programme of their choice. The other applicants will have to go through the weighted lottery procedure ad described above. Some additional changes have taken place in the year 2000. Since 2000 both *hogescholen* and universities have the opportunity to select a maximum of 10% of the total places available (decentral admissions). Selection takes place on basis of for example motivation, working experience, or talent (Boezeroy and Huisman 2000)

Figure 2-1: New entrants at *Hogescholen*, by type of programme



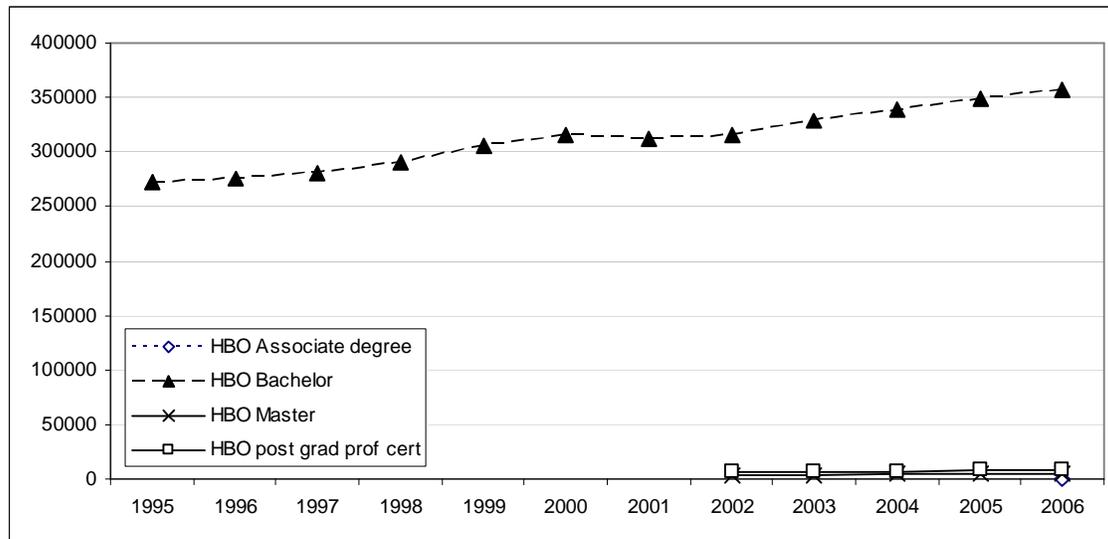
Source: CBS and CHEPS IHEM database; 2007

Figure 2-1 shows the development of the number of new entrants at *hogescholen*. After a period of increasing numbers of new entrants in the 1990s, the inflow of students showed a temporary decrease during the early years of the new Millennium. In the recent years the enrolment demonstrates again an increasing trend.

2.3.3 Enrolment

The HBO-sector is the largest sector in higher education, with over 350,000 students enrolled either full-time (80% of the students) or part-time (20% of enrolments). As can be seen in figure 2-2 enrolment in the HBO-sector has grown over the years and reached over 350,000 students in the academic year 2006/2007.

Figure 2-2: Enrolment at hogescholen by type of programme

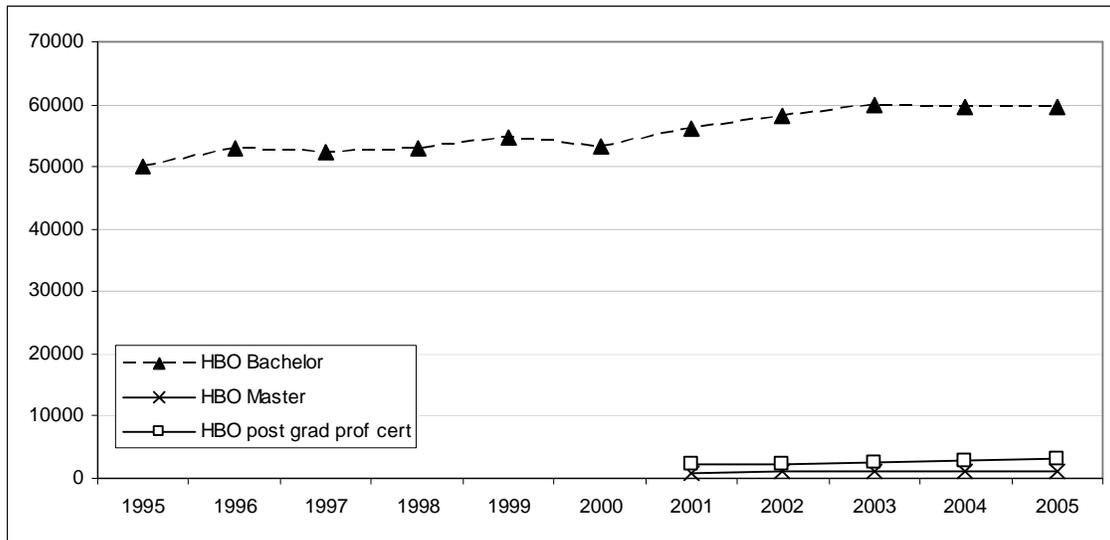


Source: CBS and CHEPS IHEM database; 2007

2.3.4 Outflow

Since 1986, the standard period of study at universities and *hogescholen* is four years. At *hogescholen* there are only slight differences between the actual duration of study and the prescribed standard period of study for full-time programmes. As can be seen in the figure below the number of students graduating from *hogescholen* has risen to a total of over 63,000 in the academic year 2006/2007 (an increase of 27% compared to students graduating in 1995).

Figure 2-3: Graduates at hogescholen by type of degree and discipline



Source: CBS and CHEPS Higher Education Monitor; 2003

2.3.5 Education - Labour market

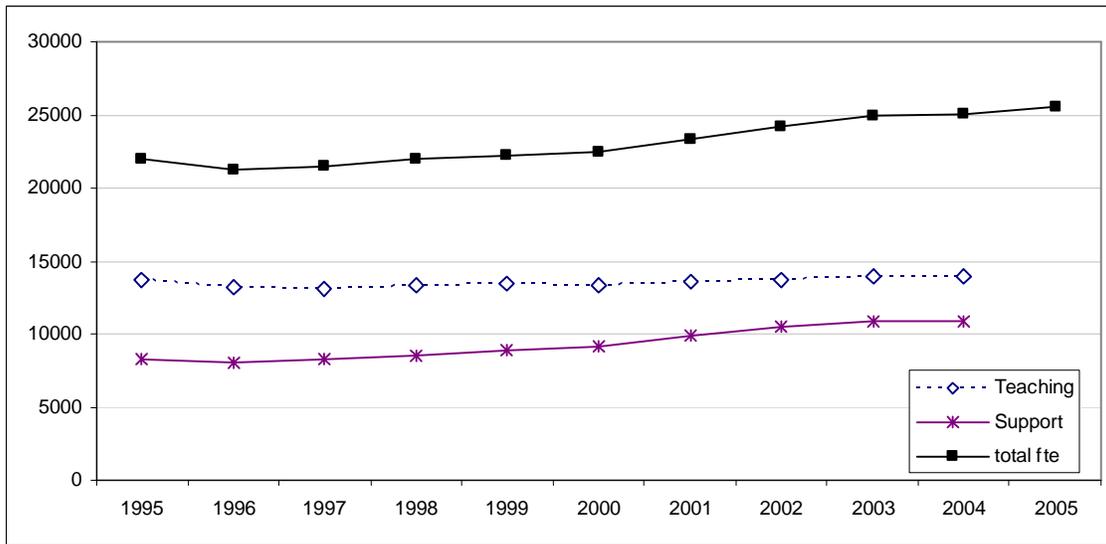
Surveys among HBO-graduates are held on an annual basis. At the end of 2005 4.6 percent of all those graduates one year and a half before were unemployed. This is lower than the 2004 survey (5.4 percent). The majority of graduates find work that matches their educational level and the subject(s) taken. Most graduates indicated that their education provides an adequate preparation for the labour market (84 percent) and a good basis for further professional development (93 percent) (HBO-Council 2005).

Due to labour market developments *hogescholen* have become interested combining learning and working. Since the academic year 1991/1992, they offer work-based learning programmes (cooperative education or *duaal leren*). The number of students in these programmes increased from 200 (1992/1993) to 11,860 students in the academic year 2006/2007 (3.2% of total enrolment).

2.3.6 Personnel

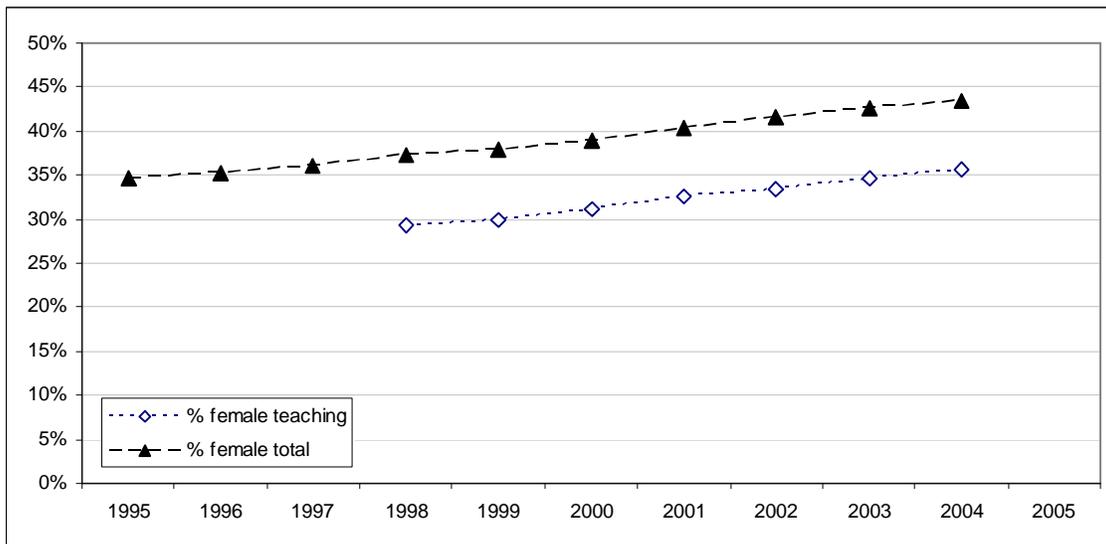
Until 1990 academic staff at *hogescholen* spent all their time on teaching. This changed in the beginning of the 1990s, when *hogescholen* started contract-research activities. Estimates based on the income of flows of *hogescholen* imply that academic staff spends about 8% of their time on research activities. The figure below shows that in 2004 about 55% of the total fte staff in *hogescholen* was teaching staff. The proportion of female non-academic staff is higher (43% in 2004) than the proportion of female teaching staff (36% in 2004).

Figure 2-4: Staff at hogescholen (fte)



Source: HBO-Raad, 1995-2005

Figure 2-5: Percentage female staff at hogescholen



Source: HBO-Raad, 1995-2005

In the context of the growing importance of (applied) research in the HBO-sector, the new academic position of lectorate has been created, a highly-qualified individual with significant expertise in the subject field and in the professional domain. The leading idea is that lectors are no isolated staff members, but act as leaders of organisational units (so-called ‘knowledge circles’). They are charged with applied research focusing on questions which arise from the professional practice and are considered an important vehicle for the research aspirations of *hogescholen*. The number of lectors has increased steadily to around 270 in 2007. Each year the results of the lectorates are assessed and in 2006 an actualisation of this assessment took

place over the previous year. The most important conclusions are (Stichting Kennisontwikkeling hbo (SKO) 2006)

- The position of the lectorate in the knowledge infrastructure shows a positive development. It appears that compared to some years ago there is more intensive collaboration with the knowledge infrastructure through individual contacts, guest lectureships, and collaboration in research projects.
- The knowledge circulation with firms and institutions (and vice versa) has intensified. After three years about 60% of the lectorates exchanges knowledge with more than 10 companies, especially with SME's. Furthermore, lectorates have undertaken forms of cooperation on both local, regional, national and international level.
- It appears that the teaching staff of *hogescholen* are increasingly involved in the lectorate, in the research activities and in curriculum innovations that emanate from the knowledge circles.

2.4 University sector

2.4.1 Structure

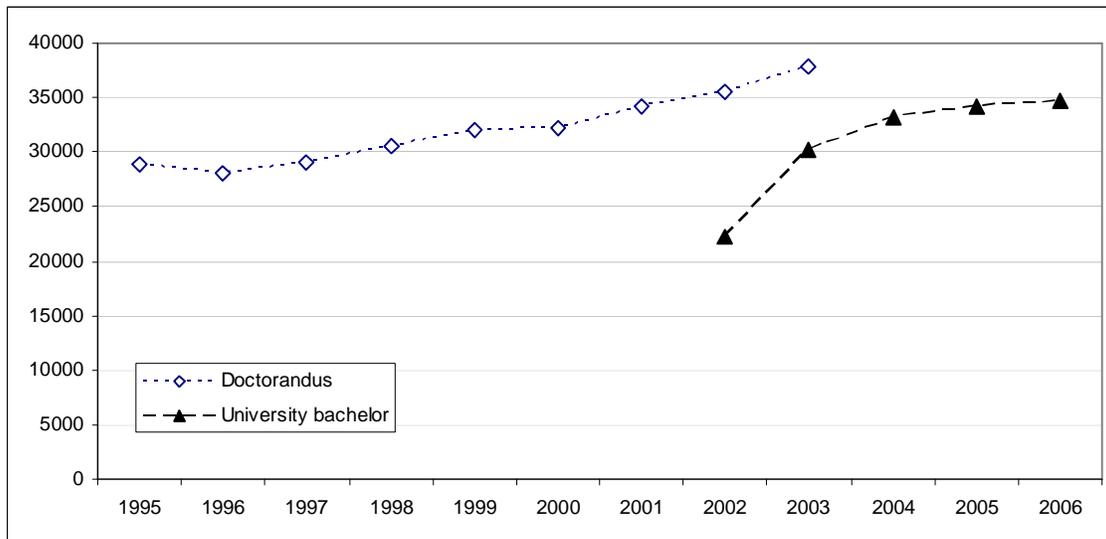
The university sector provides full- and part-time programmes. The total study load (168 credits) of part-time programmes is equal to full-time programmes, but students have on average a smaller study load per year. In the university sector all disciplines are offered; agriculture and natural environment, economics, engineering, health, humanities (including arts), law, natural sciences and social sciences. University programmes in general lead to the degree of *doctorandus* (drs), a qualification comparable to the Master's degree. Exceptions to this rule are: students completing programmes in law are awarded the degree of *meester* (mr) and students finishing a programme in engineering or agriculture and natural environment may use the title of *ingenieur* (ir). Almost all programmes have an official duration of four years; consisting of a propaedeutic year (the first year of study) and a “doctoral” phase, lasting three years. Most technical programmes last five years (210 credits) and a few medical programmes (including veterinary science) as long as six years (252 credits) (WHW, article 7.4).

2.4.2 Access

By law admission to universities is open for students with a pre-university schoolleaving certificate (VWO) or a *hogescholen* propaedeutic certificate. Admission is also open for all students who graduated at a *hogeschool*; in some cases *hogescholen* graduates may even be exempted from parts of the university programmes. Alternatively, applicants aged 21 or over who do not possess the required qualifications may be admitted after passing a *colloquium doctum* entrance examination. Like the HBO-sector the university sector is also characterised by open access. The only limitation to this “open system” is the system of *numerus fixus*, which only applies to a limited number of study programmes, such as some of the medical studies. Three types of *numerus fixus* exists: *capacity fixus*, *opleidingsfixus* and *institutional fixus*, either based on labour market considerations or on the total capacity for a program at the system level.

The figure below shows the development in first years students in the university sector. As can be seen the fastest growth is visible during the 1980s and the beginning of the nineties. Although the number of new entrants decreased in the university sector since 1992, an increase can be seen from the academic year 1997/1998 to about almost 34,000 students entering university education in 2001.

Figure 2-6: New entrants at universities by discipline

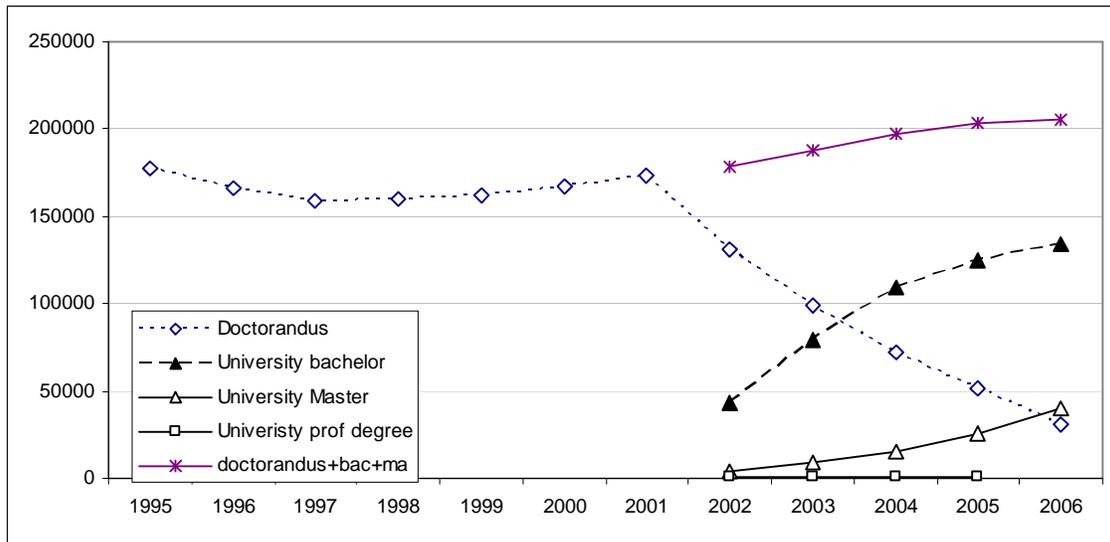


Source: CBS, and CHEPS IHEM, 2007

2.4.3 Enrolment

In 2001 the university sector has about 173,000 students (full-time: 91%; part-time: 9%), including the students that have used up the time allowed to them (usually 6 years) to be registered as a student. For the latter, two options remain: students can either be registered as an institutional student (with no entitlement to student support; paying a higher tuition fee than ordinary students) or as an *extraneus* (no possibility to receive teaching and only allowed to take examinations; not entitled to student support and paying an examination fee).

Figure 2-7: Enrolment at universities by degree programme and discipline



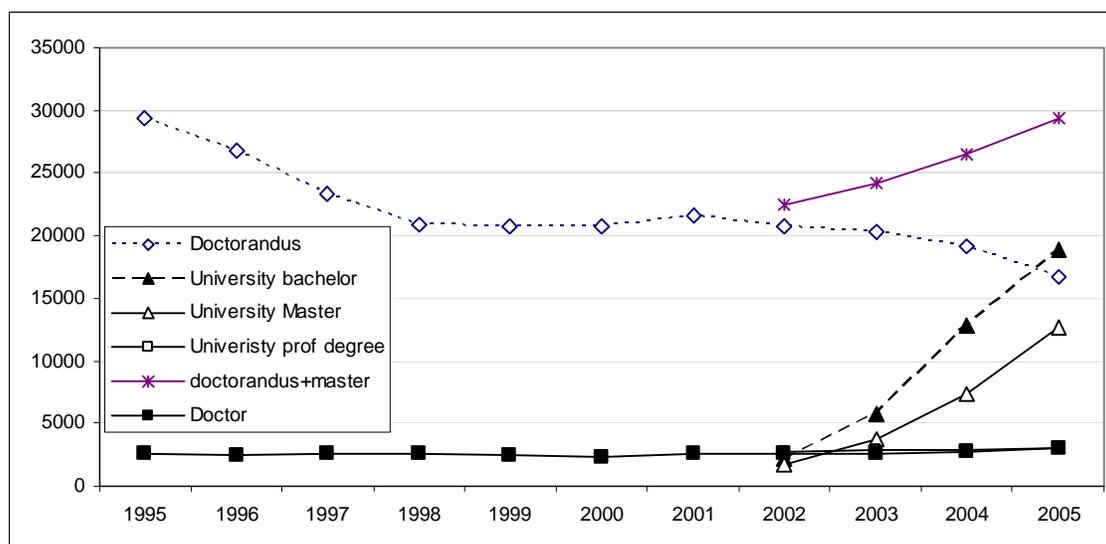
Source: CBS and CHEPS IHEM; 2007

In the late 1990s enrolment decreased to a low in 2000. After that, enrolment has grown again (by 25% over the 2000-2006 period). The impact of the introduction of the bachelor-master structure is clearly visible: the number of students in the old doctorandus programme is fading away and enrolment in bachelor and master programmes is growing rapidly.

2.4.4 Outflow

Since 1982 the standard period of study at universities is four years. The actual average duration of studies at the universities varies between 5.5 and 6.5 years, depending on the particular subject. The total number of first degree graduates was at a high in 1995 but it decreased the second half of the 1990s to a low in 2000. In 2004, the number of first degree graduates was again higher than it was in 1995.

Figure 2-8: Graduates at universities by discipline



Source: CBS and CHEPS IHEM, 2007

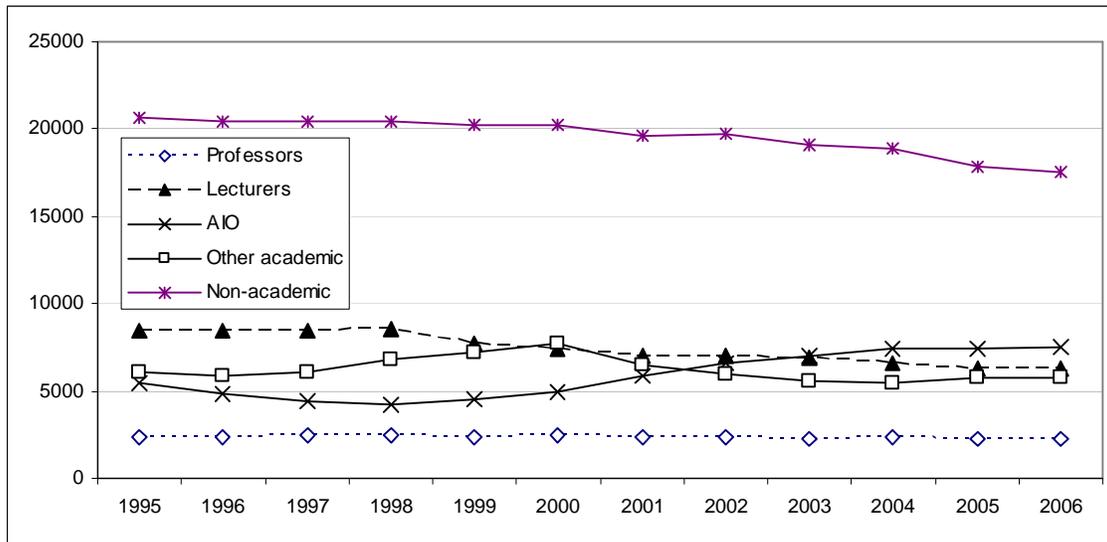
2.4.5 Education - Labour market

Although universities prepare students for independent scientific work in an academic or professional setting, only a small proportion of university graduates (about 10%) are eventually employed in research. So, just like as in the HBO sector, contacts between universities and the labour market are important. Since 1998, a survey is carried out on an annual basis among university graduates who graduates about one year and a half before. This survey, known as the WO-monitor, provides a picture of the labour market position of graduates with indicators such as (un) employment, retraining, mobility, recruitment, type of contracts, number of working hours, income, type of functions and skills required. The last survey shows that 4.6 percent of all university graduates are unemployed. Between 2000 and 2005 the proportion of graduates with a job which requires a university degree has decreased from 66 to 61 percent. In the same period the percentage of graduates with a permanent job decreased from 52 to 49 percent. Compared to international data, the transition of Dutch university graduates is relatively modest, but graduates seem to improve their position quite rapidly after the first few years. Dutch graduates (80 percent of all respondents) are very positive about their education as a basis for further development of knowledge and skills (Allen and Coenen 2007).

2.4.6 Personnel

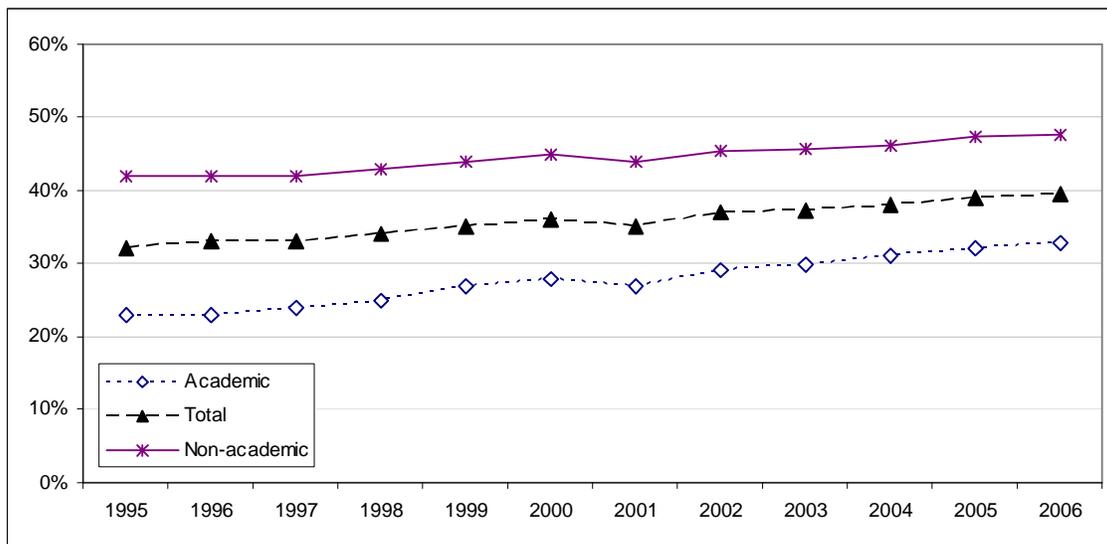
In 2006, 45% of total fte staff was non-academic. Total female staff as a proportion of total staff was 39%. The proportion of female non-academic staff is much higher (48%) than the proportion of female academic staff (33%). Over the past decade, the gender balance has improved continuously.

Figure 2-9: Staff at universities (fte)



Source: (VSNU), editions 1990-2002

Figure 2-10: Percentage female staff at universities



Source: (VSNU), editions 1990-2002

2.5 Post-graduate education

2.5.1 Policy and regulations

Up until the 1980s, individuals pursuing a PhD were usually employed as faculty staff - sometimes in the position of a research-assistant, but also as regular (senior) staff. The writing of a doctorate was an informal endeavour. The process was not a fixed series of tasks dictated by (university or government) standards. Usually, it had the characteristics of the apprentice model: the doctoral candidate working under the guidance of a professor. Yet, the role of the supervisor or chair-holders was less authoritative. The writing of a PhD was primarily a

responsibility of the one aspiring it. After World War II a broad discussion started on the reorganisation of higher education. In the course of this discussion, the function and structure of research training came to the fore. With the introduction of the two-tier act in 1981 university education was structured in two tiers. A first tier of four years, awarded with a *doctoraaldiploma*. This tier is accessible for many. The second tier consisted of a selective one-year student-assistantship (then called *onderzoekersopleiding*), followed, for a few, by the assistant-researchship. In an assistant-researchship, the doctoral candidate should work on a dissertation for a period of two - three years as an employee.

Although this act introduced important new elements with regard to first-tier education and the relationship between the government and higher education institutions, the policy idea with regard to the second tier did not introduce considerable changes. Research training was still positioned in a separate stage after first tier university education, but further governmental interference in the area of doctoral training remained scant. Within the framework of the assistant-researchships and also in normal university positions, individuals prepared their dissertations in accordance to the habits of their disciplines. Some years later, a new policy document (presented in 1984, and named the 'Beiaard Bill') and the act Adjustment of the second tier (1985) addressed the functioning and organisation of the second tier more thoroughly.

2.5.2 The AiO system

The Beiaard-bill stated that the implementation of the second-tier faced a number of general problems. Concerns were expressed about the implementation of the second tier as if it were a continuation of the first-tier education; about the lack of coherence in the second-tier programme offerings; about inappropriate accessibility and selection mechanisms; and about the high expenditures in the second tier. With regard to research training specifically, the document expressed doubts about the value of the one-year student-assistantship for the labour market. The Beiaard-bill suggested an integration of the one-year student-assistantship and the assistant-researchship into a single four year appointment as an 'assistant in training' - the *assistent in opleiding* (AiO). The objective of the AiO system was to provide advanced research training by way of active participation of the candidates in university research and, to a limited extent (<25%), in teaching and administration. The intention was expressed to anchor the position of the AiOs in legislation. In the act Adjustment of the second tier (1985), the AiO was introduced as a distinct academic position.² Although it still is possible to write a dissertation outside the AiO system, the regulatory framework uniformly structures the position of the doctoral candidate for all disciplinary fields. Striking is also the status of the instruction and supervision plan: instruction now occupies an important, formal place in the process leading to the doctorate, in addition to 'learning by doing' (Weert 2004).

² The AiOs are employed by the universities. The Dutch Research Council previously employed doctoral candidates as well under the same employment conditions, but titles them Researchers in Training (OiO). They are now all under the AiO system.

2.5.3 The research school

A next step in the shaping of the second tier system has been the establishment of the research school as developed since 1991 (Bartelse 1999). Research schools are defined as centres of high quality research in which a structured training is offered to young researchers. The reasoning was that excellent training of researchers can only be conducted in an environment of high quality research. The system of research schools should give an impetus to high quality research and education. Thereto, the Minister decided to stimulate the development of a broad, yet selective, system of research schools, from which eventually a limited number of centres of excellence should develop. The government envisaged a diverse system of research schools, which shares a number of common characteristics. Therefore, the scale criterion is complemented with the condition that the school should have a sufficient homogeneous training and research programme. Another aspect that the government standpoint adds to the criteria deals with the need for researchers on the labour market. In this respect, the Minister stresses the importance of post-doc positions in a research school. Furthermore, the government stipulated that research schools should have budget responsibility and that sufficient funds should be allocated to the research schools by the hosting universities.

The number of research schools has grown gradually since 1991, but the pace of development differs across disciplines. After the early proposals from the natural sciences, faculties of social sciences followed and, later, research schools emerged in the humanities and the faculty of law. More than 100 research schools have been established in virtually all disciplinary fields. Although the system of research schools was envisaged to include all doctoral candidates, participation rates differ among disciplinary fields.

At present the training of researchers takes place in research schools (inter-university collaboration) as well as at universities. Gradually the phenomenon of graduate schools at universities are emerging comparable to the American model of graduate schools. There is some tension between these two institutional settings since universities are less inclined to transfer all their research training to the research schools. According to the Minister both forms of research training are considered of value, and there are chances for fruitful co-operation and synergism between them (Ministerie van Onderwijs Cultuur en Wetenschappen 2005).

2.6 Policy developments

2.6.1 Internationalisation

Internationalisation is high on the political agenda. The relatively smooth transition towards the Bachelor-Masters structure was mainly nourished by the belief that this is seen as an essential condition for a modern and internationally oriented higher education (Ministry of Education Culture and Science 2000). The BaMa system intends to make the Dutch higher education system more flexible and open, thereby anticipating new societal developments, for instance internationalisation, globalisation and ICT developments. The system should be flexible enough to meet the needs of students of all ages and open enough to allow Dutch students to study abroad, as well as allowing foreign students to enter the Dutch system.

In the policy paper *'Koers op kwaliteit, Internationaliseringsbrief hoger onderwijs'* (Ministerie van Onderwijs Cultuur en Wetenschappen 2004), it is stated that there is virtually no topic that is not affected by the issue of the growing Europeanisation and internationalisation of higher education. Dutch higher education institutions become increasingly involved in internationalisation. This has gone far beyond student and staff mobility and includes bringing in international dimensions into study programmes and the development of offshore education, the provision of education on location abroad (Vossensteyn and Deen 2007)

The introduction of the Bachelor –Master structure has aroused much concern about the international recognition of the Dutch grades, mainly because of the binary Dutch system which has weakened the international position of Dutch HBO students. An International 'Committee Review Degrees' was established to review the current Dutch degree titles and to indicate degrees which are internationally adequate, transparent and robust (Committee Review Degrees 2005). One of the major proposals of this committee is a system of degree titles with two types of suffices: 'arts/science' and subjects. The first depends on the extent of the research connection, the second on the professional connection. This implies that not the type of institution determines the name of the degree, but the content of the programme. Criteria for research connection correspond with internationally valid definitions for research in the European context (cf. Bergen conference paper: "A framework for Qualifications of the European Higher Education Area").

Finally, the international dimension of higher education can be strengthened by increasing the possibilities for joint degrees, degrees granted by an institution in collaboration with one or more institutions nationally or internationally. Joint degrees are also stimulated by the European Union through the Erasmus Mundus programme. A joint degree of a Dutch HBO and university-programme, however, is not possible in the new law, since this is considered incompatible with the binary structure.

The BaMa-structure will be evaluated five years after the implementation. This is formally in 2007, but postponed to 2008. Criteria will be educational innovation, flexibility and freedom of choice for students, international recognition and mobility, and connection of higher education with the labour market.

2.6.2 Access and participation

There are in 2007 more than 560,000 students, almost 10 times as many as in 1950 and over 15,000 more than a year ago. Related to the total population of 18-25 year, the number of students has increased from 5% to 36%. The percentage of students in the 18-25 age group stagnated in the 1980s, but from 1990 on there is a steadily increase of 1% per year (Ministerie van Onderwijs Cultuur en Wetenschappen 2006). In the 2006 edition of *Education at a Glance* (OECD 2006), which compares the 25-34 age group, the Netherlands has 34% higher education graduates, a percentage that is higher than the overall OECD mean and the EU-mean. The Dutch Government has in the context of the Lisbon goals expressed its goal of

increasing the participation in HE and rise the educational level of the population. As a reaction to the advice by the Dutch Educational Council (Onderwijsraad 2005; Kaiser and Weert 2006) the Dutch government formulated the objective for the coming decades: in 2050 50% of the labour force in the age group of 25 to 44 should at least have a Bachelor degree. Four ways have been proposed to reach this 50% goal:

- Qualify more students to enter HE, especially by increasing the number of students that proceed from vocational education to HE
- Increase the success rate of students and decrease the number of drop-outs
- Increase the number of graduates in the age group above 30 who are still lagging behind the younger age group
- Attract more foreign graduates for the Dutch labour market

As a response various HE institutions have created various pathways in learning which respond to individual demands, and it is expected that these demands will increase explosively. Examples are more customised education, assessment procedures (for example, admission to a shortened program based on work experience), e-learning, cooperative education (combining education and work).

The university sector advocates more freedom for universities to differentiate their Bachelor and Masters programmes: creation of various study paths in the Bachelor programmes, such as broad Bachelor programmes which leave options open for later study choices, and Honours programmes for a selected group of students as well as an extension of Masters with an extra half year. All these measures would, together with extensive student support systems, enhance the success rate of students³.

In the HBO-sector experiments with the Associate Degrees (AD) were initiated in 2006 with the objective of exploring the demand for short-cycle education: two-year trajectories that will be designed by *hogescholen* and employers organisations. Eleven *hogescholen* started with the first round of pilots which were selected on the basis of an advice by a Committee on Associate Degrees and assessment of the quality of the programmes by the accreditation board. Since considerably more of such programmes were proposed than could be accepted, the Ministries of Education, Culture and Science and Social Affairs decided to have an early round of new pilots, with the result that the number of pilot programmes increased to 57 in 2007. In assuring that the meaning of these new programmes is clear to both students and employers, AD will have a distinctive place in the educational infrastructure. Important conditions are that AD-programmes are part of a Bachelor programme with at least 120 ECTS and provide a separate diploma-supplement. The accreditation body will assess these programmes on the basis of its relevance for the labour market and the extent to which it is embedded in a Bachelor programme.

Selection continues to be a hot topic in Dutch HE. Although it is generally felt that institutions should be more selective – a view also advocated in the new draft law - institutions are quite reluctant particularly as far as the selection of new entrants is concerned. The University of Leiden, one of the few institutions that are in favour of a policy of selecting

³ VSNU (2006) Kansen voor Kennis. Prioriteiten van de universitaire branche voor de kabinetsperiode 2007-2011.

only the best students for some of its studies, carried out an experiment. Two groups were distinguished, one group which had high scores on a selection test and a group which had no high scores. Both groups were admitted to their studies. At the end of the first year it appeared that both groups did equally well. Thus, if such a selection would actually be implemented, many new entrants would be turned away on unjustifiable grounds. The university concluded that selection on the basis of the test is not (yet) possible. Most universities as well as student associations prefer an assessment of the capacities of the students after the first year, on which basis a student gets an advice about proceeding with the study or not. In a similar way the VSNU stresses the importance of an adequate student counselling system.

2.6.3 The research function in the HBO-sector

The research function of *hogescholen* is generally recognised, as far as a clear distinction with university research is maintained. A generally adopted view to assign different research functions to universities and *hogescholen* is expressed in an advisory document by the Advisory Council on Science and Technology (AWT). Whereas the universities contribute to the development of scientific knowledge and as well as contributes to the utilisation of this knowledge in society, research activities in *hogescholen* have another function. The latter activities should contribute to the maintenance and development of the professional practice in society. Referring to types of research, the AWT provides a schematic overview of the different research activities which distinguish research by universities and *hogescholen* (AWT (Advisory Council on Science and Technology Policy) 2005). The AWT adds that such an overview is not to be understood as if all research activities exclusively belong to the one or the other sector and acknowledges much room for variation on the level of individual research projects. But generally, such a scheme delineates the research activities of universities and *hogescholen* from each other. The aim of the research function of *hogescholen* is twofold:

1. to contribute to the development of professional practice,
2. to contribute to knowledge transfer and knowledge circulation for regional and economic development and to contribute to the innovative capacity particularly in small and medium-based firms.

The research at *hogescholen* should be demand-led and short-term applicable. Another distinction is that *hogescholen* will not be eligible for basic research funding. Instead several regulations have been established, such as the so-called RAAK-regulation which offers financial support to initiate research projects in the field of development and knowledge – exchange between *hogescholen* and small and medium enterprises (SMEs).

The new personnel policies at *hogescholen*, most notable the creation of the new position of lectorate (see above under personnel) should be placed in the legitimate research aspiration of *hogescholen*. In this context the HBO-sector has claimed a role in the provision of professional doctorates. Some *hogescholen* have launched such programmes publicly with the argument that here is a need for them and that this will contribute to a further differentiation on the doctoral level. Rather than reducing the debate to the question which sector has legitimate claims on professional doctorates, there is a tendency to see this development as a challenge for universities and *hogescholen* to collaborate in a constructive way. Although the

option of professional doctorates still has to crystallise out, there is a general feeling among government and the field that given the role of *hogescholen* to meet the demands for doctoral programmes, it is necessary to upgrade the *hogescholen* staff in terms of their academic skills and their research capacities (see below under personnel). As far as the funding of postgraduate education (Masters and Professional Doctoral Education) by *hogescholen* is concerned, several actors argue that this education is part of continuing education and primarily meant for those with a number of years of working experience. The financial responsibility for this type of education belongs primarily to the participant, eventually supported by the employer (MKB-Nederland and VNO NCW 2006).

2.6.4 ICT in Higher Education

With respect to the introduction and implementation of ICT there is hardly national legislation specifically related to e-learning. This means that higher education institutions can decide themselves whether or not to invest in the development, implementation and use of ICT. As far as matters of intellectual property and copyrights are concerned, the Ministry of Education, Science and Culture follows the policies of the European Union. Regarding the use of ICT in Dutch higher education institutions two (semi) governmental funded initiatives are particularly important: the SURF Foundation and the Dutch Digital University.

The SURF Foundation (SURF) is the higher education and research partnership organisation for network services and information and communications technology (ICT). SURF was developed in the mid-1980s, with the primary goal to promote the co-operation in the field of ICT between the Dutch higher education institutions. The mission of SURF is to exploit and improve a common advanced ICT infrastructure that will enable higher education institutes to realise their own ambitions and improve the quality of learning, teaching and research. Apart from initiating innovation projects in the field of infrastructure (by SURFnet which provides the institutions an advanced technical network on a 'not for profit' basis and SURFdiensten delivering campus licenses for software and other products and services), the SURF activities can be categorised in three platforms: ICT and Research, ICT and Education and ICT and Organisation. The SURF activities are funded both by the Dutch government (Ministry of Education, Culture and Science and the Ministry of Economic Affairs) and the participating institutions. The Limited Liability Companies, SURFnet and SURFservices, operate on a self supporting basis from the rates they charge for their services and products.

The Dutch Digital University.

According to 1997 legislation the Open University has a second core function of contributing to the innovation of higher education. Since also other universities and *hogescholen* were in the process of developing innovative ways for delivering and improving higher education, the need was felt for a new arrangement of distance education in the Netherlands (Ministerie van Onderwijs Cultuur en Wetenschappen 1999). This resulted in the establishment in 2001 of a broad consortium in which apart from the Open University a number of universities, *hogescholen* and private enterprises participate: Dutch Digital University (DU). The objectives of the DU are to contribute to educational innovation and to provide digital education both as part of regular higher education and for new target groups.

In addition to governmental funding in the developing stages of the DU, the participating institutions contribute financially depending on the status of the institution with universities being responsible for 15% and universities for professional education for 5%.

Most Dutch higher education institutions not only use standard applications (word, internet etc) but increasingly electronic learning environments belong to their standard facilities. Most popular systems are Blackboard, WebCT en Lotus Learning Space, but also home made systems such as TeleTOP and N@Tschool. Although many of the Dutch higher education institutions implemented (either experiments, pilots or already institution-wide) an electronic learning environment, these systems are primarily used for purposes of communication and organization. The availability of more extensive digital learning applications, staff development and the systematic embedding of central and faculty ICT policy needs further attention.

2.6.5 OECD Thematic Review of Dutch Tertiary Education

In 2006/07 the Netherlands requested the OECD an on-site critical investigation by a team of experts the object of which was to exchange experiences and formulate recommendations for new policies. The report (OECD 2007) highlights the strengths of the Dutch higher education and research sector, such as adequate public funding, strong institutions, strong research intensive universities in international terms, and a good quality assurance system. The review team also points out a number of weaknesses and lists several policy recommendations.

Accessibility. The most significant criticism is that the policy focuses too much on young students with a good prior education. Too little attention is paid to ethnic minorities and students from lower social economic backgrounds. Moreover, lifelong learning policy provides insufficient compensation. The OECD believes that the Netherlands will not succeed in boosting its higher education participation to 50 percent by 2010.

Alignment of higher education and the labour market. Although higher (professional) education is strongly focused on the labour market, the review team identifies some weaknesses. (1) The low proportion of graduates in science and technology and the expected shortages on the labour market. (2) The insufficient differentiation in higher education. In the view of the review team differentiation is restricted to those flowing from the binary distinction between universities and *hogescholen*. The binary system is marked by a high degree of uniformity within each segment and this is relatively inflexible.

Research and innovation. The review team is positive in its assessment of the developments in research and innovation, but is concerned as to whether the Netherlands will be able to attract and retain sufficient young researchers. The report pays much attention to the necessity to increase the second flow of funds via the research council (see section Research Infrastructure). In their view reliance on flow 1 for the bulk of research funding reduces the potential for the exercise of national strategic leadership in relation to research and academic development.

Direction and long-term policy. The review teams states that the Dutch Ministry of Education, Culture and Science is disproportionately dominated by short-term responses to political-administrative affairs. A long-term strategy is lacking and is insufficiently acquainted with education and research projects. The Lisbon targets appear to be given 'lip-

service' more than affective and practical commitment. The review team adds that in many respects Dutch higher education system appears to be on 'auto-pilot'. The capacity (and perhaps willingness) of government to provide executive leadership so as to shape the system in the national interest, including global competitiveness and trajectory, appears under-developed.

In his reaction (11-5-2007), the present Minister Plasterk indicates that "several of the comments will be taken to heart". He shares the concerns regarding equal opportunities, but is not pessimistic with respect to participation in higher education. Current policy focuses on retaining pupils in the educational process, the improvement of the transition from vocational secondary education to higher education, and the creation to various routes to higher education (work-based learning routes) in the context of lifelong learning projects⁴.

Regarding the binary system the Minister draws attention to important developments in both the university and HBO sector, such as the development of the lectorate combined with the research function for *hogescholen* (see above) and initiatives regarding the funding of research.

Regarding the lack of long-term policy strategy and steering, the minister announces to present a single, strategic, long-term agenda for higher education and research policy, reflecting clear objectives. This agenda will replace the separate HOOP and the Science Budget. He emphasizes the need for consistent policy direction, but adds that centralized detailed direction by the government does not work. He advocates a strong position for the institutions, combined with the necessary checks and balances. This is why he intends to reinforce the statutory position of students, professionals, and employers.

⁴ In this context reference can be made to the strategic agenda of hogescholen 2007-2011 (HBO-council 2006).

3 RESEARCH INFRASTRUCTURE

3.1 Introduction

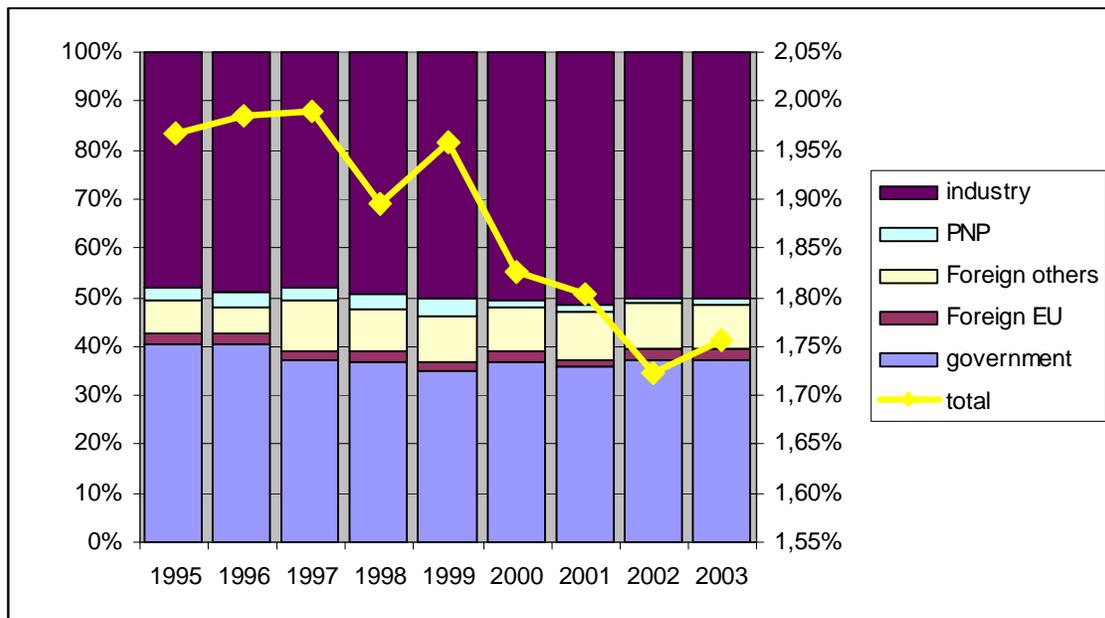
The Netherlands has a broad and varied research infrastructure. Many organisations are involved in providing and performing research; ranging from central government to industry and from university departments to research institutes. It is the task of the government to guarantee that research takes place on a sufficient scale and in appropriate fields. Apart from organising and funding basic, strategic and applied research, it therefore has the responsibility to formulate a research and science policy. There are a number of advisory bodies which advise the government on research and science policy. Their function is to raise the quality of decision-making and identify new issues.

3.2 Providers

The total amount of resources spent on R&D have decreased significantly since 1997. Although in 2003, expenditure as a percentage of GDP have gone up again, they are way behind the goal set in the context of the Lisbon agenda (3% of GDP should be spent on R&D).

R&D resources in the Netherlands are mainly provided by three categories: government, industry and the category other (such as private non-profit organisations and international sources).

Figure 3-1: Expenditure on R&D, 1995-2003, by provider of funds and total as a percentage of GDP



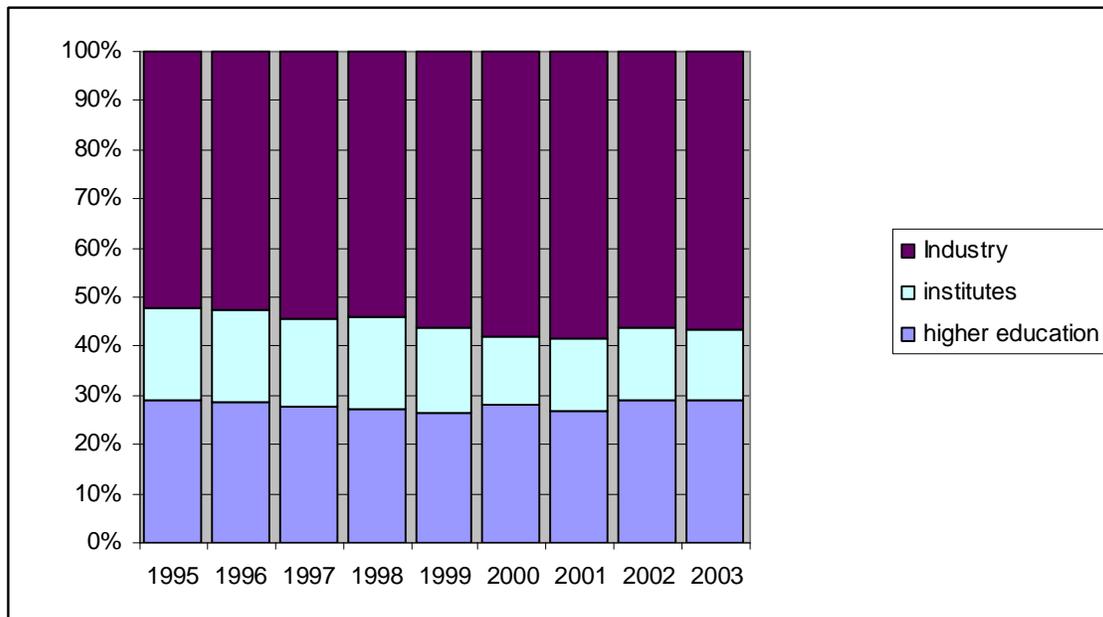
Source: CBS Statline

The industrial sector is the most important provider of research funds: 50% of R&D funds are provided by industry. This expenditure is distributed over a great number of companies, with the five multi-national companies – Philips, Shell, Akzo International, Unilever and DSM – accounting for almost 50% of all industrial research. The other main provider of R&D is government, of which the funding can be divided in two categories: direct funding to universities and funding to other R&D (mainly to public research institutes, Netherlands Organisation for Scientific Research (NWO) and the private sector).

3.3 Performers

Like the funding of R&D, industry is also the main category in performing R&D. The most part of this research is for development, while applied and basic research play a less minor role. A great part of R&D spending is in the metal and chemical industries. The remainder is distributed among other industrial and non-industrial sectors (the latter including agriculture and fisheries, transport, communications, business services and the building trade).

Figure 3-2: Performers of R&D activities (% of total R&D expenditure spent)



Source: Ministry of Education, Science and Culture, 2002

3.4 Research in the higher education system

Research in the public sector is conducted by both the *hogescholen* and the universities. Generally four types of research are distinguished: 1) fundamental research, the objective of which is to generate knowledge as an end in itself; 2) strategic research, i.e., fundamental research into fields which are of strategic interest to the government and society; 3) applied research, which is geared to practical application and 4) development, which is geared to converting the results of basic and applied research into products and processes.

The research function of the *hogescholen* has been recognised legally, but there is a clear distinction with university research. Whereas university research is fundamental (developing new insights and in-depth knowledge), research at *hogescholen* should focus on new applications of existing knowledge. It should be demand-led and short-term applicable. Another distinction is that *hogescholen* will not be eligible for basic research funding, but specific funds have been made available to fund this type of research. As mentioned before, the activities are expanding with the appointments of lectorates and knowledge circles in which a connection is made between education, professional practice and research.

3.4.1 Universities

Although *hogescholen* also conduct some of the research in higher education, most of the research is conducted by the universities. The research covers all disciplines, though it is not conducted in every discipline at every university. The universities also perform strategic and applied research. Most of the university budget is provided by the Ministry of Education, Culture and Science and the Ministry of Agriculture, Nature Management and Fisheries. These Ministries promote academic research by means of direct funding; the so-called first flow of funds. This first flow is comprised by both a performance –related component and another component known as the Strategic Considerations Component.

The second flow of funds goes via the national Organisation for Scientific Research (NWO). This consists of funding allocated on academic grounds by the research council, based on evaluation of research excellence and competitive funding for projects and programmes. Data from 2005 indicate that the first flow of funds decreased gradually and is in 2003 just below the 50 percent (decreasing from 58 percent in 1990), whereas the proportion of the second flow has increased to approximately 20 percent of the total budget (Ministry of OCW 2006). The third flow of funds involves income from contract research and teaching and “commercial” activities for companies, government departments and international organisations (30%). (Ministry of Education Culture and Science 2004).

Universities are required to support flow 2 and 3 allocations with a portion of their first flow monies. One problem that has arisen is that under this formula some universities whose incomes under flows 2 and 3 exceed income under flow 1 have a disincentive to seek further flow 2 funding. The matching requirement met much criticism as this withdraws first flow funds intended for fundamental research.

3.4.2 Research institutes

Research institutes are an important part of the Dutch R&D infrastructure. In 2003 the research institutes spent about 14% of the national R&D budget. Below, the main research institutes will be described.

TNO

Of all Dutch research institutes, the Netherlands Organisation for Applied Scientific Research (TNO) is the main performer. Their mission is to make a substantial contribution to the competitive power of companies and organisations, to the economy and to the quality of society as a whole. TNO leads the market for contract research; in 2001 the consolidated turnover amounted to 514 million Euro. All over the Netherlands specialised TNO institutes conduct a range of R&D activities:

- the development of knowledge
- the utilisation of knowledge for clients in industry and government
- technology transfer, especially to small and medium-sized enterprises (SME's);
- acting as principal laboratory for the Ministry of Defence and other ministries;
- the commercialisation of knowledge in cooperation with companies

TNO focuses on five core business areas: Quality of Life, Defence and Public Safety, Advanced Products, Processes and Systems, Natural and Built Environment and ICT and Services. As a large contract research organisation, TNO provides a link within the innovation chain between fundamental research as a source of knowledge and practical application as the use of knowledge which can be commercially exploited. About 40-50% of TNO's annual budget is financed by various Ministries. The other part of the budget is financed by means of contract research.

GTI's

The Large Technological Institutes (GTI's) are a group of five research⁵ organisations which conduct applied research in specific technological fields and act in an advisory capacity to industry and government. The (combined) research budget of the GTI's is provided by the Ministry of Education, Culture and Science, the Ministry of Economic Affairs and the Ministry of Transport, Public Works and Water Management.

Other

In addition to the GTI's, there is a number of other ministerial research institutes. Examples include the Central Planning Bureau (CPB) and the National Institute of Public Health and Environmental Protection (RIVM).

Intermediary organisations

Most of the para-university research institutes are affiliated to the Netherlands Organisation for Scientific Research (NWO) and the Royal Netherlands Academy of Arts and Sciences (KNAW). These two organisations are the largest intermediary organisations providing

⁵ The Netherlands Energy Research Foundation (ECN) performs research in the field of nuclear and other forms of energy (including safety aspects) energy and environment and materials. Soil Mechanics Delft (GD) conducts research into highway and hydraulic engineering and soil (including pollution). The Maritime Research Institute Netherlands (MARIN) conducts research into ship-building, offshore technology and ocean engineering. The National Aerospace Laboratory (NLR) conducts research into aerospace engineering for both civil and military purposes. The Hydraulics Laboratory (WL) focuses on ports, the coast, rivers, shipping, water management and the environment (Ministry of Education and Science, 1992).

funding for research at higher education institutions. In addition, these two organisations also perform research. See for more information about both the NWO and the KNAW chapter 5.

3.5 Research personnel

In the year 2000, one of the main topics concerning research in the Netherlands, was the discussion about research personnel at the universities and especially about the gender balance in scientific positions. During spring/summer of 2000 a projectgroup, chaired by Lieteke van Vucht Tijssen published the report “*Talent voor de toekomst, toekomst voor talent*”. On behalf of the Dutch Ministry of Education, Science and Culture this projectgroup conducted a research about the situation of the problems in personnel at universities and other research organizations. The recommendations of the report showed that:

- Talented young scientists have to be paid higher salaries
- Universities have to think about career planning opportunities for all of their scientific staff
- Improvement of the image of the universities as employers
- More efforts have to be developed in order to attract more women for (higher) scientific positions.

Considering this report, the Minister made extra money available to deal with the above mentioned recommendations. For example, about 33 million Euro a year is put aside to cover the price and wage adjustments. Furthermore about 18 million Euro a year was made available to offer young scientists a better perspective on a scientific career (arrangements will be made in higher salary payments, career planning, conditions of employment, etc.) and an extra amount of about 13,5 million Euro is transferred to the NWO for the so-called “*Vernieuwingsimpuls*” (see for more information about the *Vernieuwingsimpuls*, chapter 5). Other programmes and special prizes (Spinoza scholarships) have been established to reward good researchers as well as scholarships to attract foreign top students (Huygens Scholarship programme).

One recommendation of the projectgroup “Van Vucht Tijssen” dealt with the gender balance within universities and other research organisations. In the Dutch situation, it is very clear that women are underrepresented in (senior) scientific positions. While more than half of the number of undergraduate students and about one third of the doctoral students is female, women only make up by 5% of university professors. The Dutch Minister of Education, Science and Culture, sees this as a precarious situation and decided to make some money available in order to strengthen the position of female senior academic staff. The money has been transferred to the NWO, and this organisation started a stimulation fund (3,4 million Euro for the next 10 years) to strengthen the position of women in sciences. One of the programs of this stimulation fund is the Aspasia program (a budget of about half a million Euro). By means of this program the NWO wants to stimulate the circulation of women from the lower (*universitair docent*) to the higher (*universitair hoofddocent*) scientific positions.

The position of young researchers, doctoral students and postdocs remains a special concern. In the report ‘*Onderzoekstalent op waarde geschat*’ (Research talent assessed) ((Ministerie

van Onderwijs Cultuur en Wetenschappen 2005), the minister presents a coherent policy about the research training, the careers of young researchers, and the position of women and ethnic minorities in science. Major elements of this policy-document are:

- in order to control the quality of research training, universities are required to assess the quality of the organisational setting in which promotion trajectories take place. In the new HE law this (external) quality assessment task will be assigned to the Royal Netherlands Academy of Sciences.
- More diversity in promotion trajectories is needed: not merely for an academic career but also for employability outside science. Also the development of ‘professional doctorates’ is strongly advocated.
- Continuation of special programmes for young researchers, such as the ‘innovation impulse’ which provides young talented researchers with financial opportunities to develop their own research into a research programme, and the Aspasia programme for women scientists to develop their research further, as well as new programmes such as the Rubicon-programme which is especially intended for those who are in the period between their doctoral traineeship and postdocs.
- More attention for career perspectives of young talent in science, such as the development of tenure tracks and the maintenance of the employee status of research trainees. This is a reaction to the VSNU who in its 2004 paper advocates more diversity regarding employment conditions of young researchers, including the student status with scholarships and zero appointments (VSNU 2004)
- Stimulation of geographical and inter-sectoral mobility of researchers, international mobility, participation in European Framework Programmes. More generally the attractiveness of the Dutch trainee system both nationally and internationally should be maintained and where possible strengthened.

The Government stressed that more permanent positions for young people should be created and that a tenure track system should be considered which includes the question what this would imply for the total volume of researchers. This is unclear. Perhaps: The Government also recognized a need for an effective policy that would focus on talented researchers and a need for changes in universities’ HRM policies, within the existing budget.

In this context the universities indicated their preparedness to develop tenure tracks for starting scientists, to increase of the number of research positions, to improve the employment conditions, as well as a better counselling of doctoral students and enhancement of challenging career perspectives for (young) researchers (VSNU 2006). In the Science budget 2006 the government decided to increase the budget for research and science with a particular investment for ‘creative doctoral students’ who can start their doctoral research in the field of their own choice. This involves an amount of four million Euro and will start in 2007 on an annual basis. This new programme is in addition to the existing programmes for young researchers, such as the Rubicon (encouraging researchers to do work experience abroad), Casimir (encouraging public-private mobility) and the *veni-vidi- and vici* scholarships.

3.6 Policy developments: science dynamics

An important consideration of subsequent governments has been to shift a substantial part of the research budget from the basic allocation to the budget of the research council. The underlying objective is to bring about a more dynamic element in science policy and to steer research in the direction of more socio-economic relevance. In that context the emphasis currently is on establishing thematic or targeted research areas both in the fundamental research at universities as well as research funded by the research council. One of the key elements is whether and to what extent greater competition and incentives are needed in order to foster a more dynamic research landscape.

The independent committee on Science Dynamics established mid 2005 to advise the government about the relationship between outcomes of external peer reviews and university research programmes, presented its findings. According to this Committee the Netherlands has a relatively efficient research system which performs very well in qualitative terms against relatively low funds and which as far as the interaction with non-university centres is concerned compares well with other countries. In order to increase the efficiency and effectiveness of the system the Committee proposes a number of concrete measures, some of which require extra financial investments in research in a structural way. This concerns extra investments both for first stream funds (allocated directly to universities) and for the research council (NWO). Other proposals do not require extra investment. One such a proposal regards the provision of structural funds on the central university level which can be used on the basis of the outcomes of external research evaluations. Another proposal is to stimulate the involvement of companies and other social organisations in research policy (participation in boards of the research council) and stimulate companies with large R&D funds to invest part of their budget on a jointly basis in university research. Furthermore, the Committee states that university policy makers should take the outcomes of research evaluations into account, which however, would not imply financial consequences for example by rewarding top research groups. Some doubts are expressed about the new system of quality assessment. Whether visiting committees should be organised on a jointly basis or not should be considered more explicitly than currently is done. The Committee suggests universities to submit proposals which aim to maintain research in the humanities and social sciences which are considered important for the Dutch knowledge economy, and to formulate long term research plans which indicate what universities can contribute to the Dutch knowledge economy in the coming 20 years (Commissie Dynamisering (Commissie Chang) 2006).

Apart from the report by the Committee, the Research Council (NWO) presented its report "Science assessed". This report discusses the need of more investments in scientific research, excellence in research, more focus and mass, valorisation and appropriate personnel management of the institutions (NWO 2006).

The reaction of the Government to both reports is generally quite positive and many views and proposals have been supported. The government refers to its Science Budget which advocates concrete steps to a more dynamic approach in order to realise more focus and mass and a stronger exchange between research and society. For this purpose the 'smart mix' has

been developed, for which an extra amount of €100 million is available. The government aims with this policy to enhance the excellence in research and the valorisation of (the results of) research by making the funding more performance-dependent. One way to enhancing the valorisation is to give social parties and companies a bigger say in the advisory and administrative structure of the research council. The Government agrees with the Committee on Science Dynamics that valorisation is no one way direction: It is not merely offering relevant knowledge by universities and research groups, but it involves a clear articulation of demands by companies, also for long term research⁶. In the annual higher education budget, the Government launched to increase the budget for research and science with particular investments for:

- excellent scientists and strong research groups. From 2007 on about €100 M. is available on an annual basis
- research and knowledge transfer in the field of a new generation of game technology
- knowledge and innovation claims
- a special programme meant for ‘creative doctoral students’ who can start doctoral research in the field of their own choice.

⁶ Kabinetsreactie op rapporten Commissie Dynamisering en NWO 22-09-2006

4 FINANCIAL ASPECTS

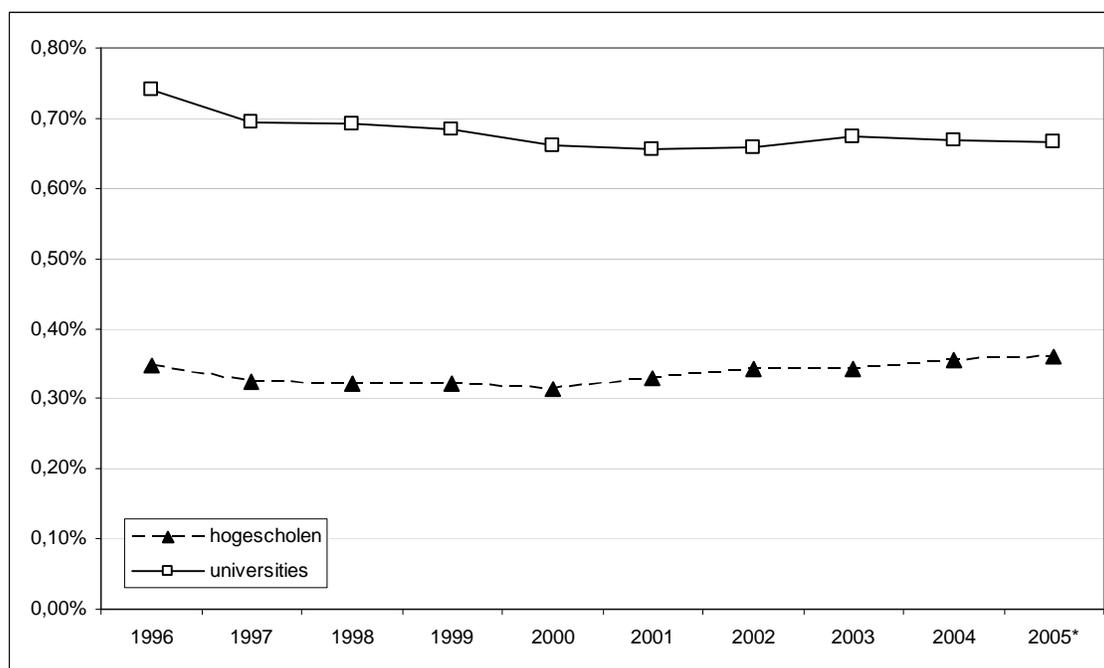
4.1 Introduction

In addition to publicly funded universities and *hogescholen*, there are a number of designated institutions who are formally part of the higher education system. Their programmes are officially recognised but not funded by the Minister of Education although their students are eligible for (public) student support.

4.2 Public expenditure on higher education

In the Netherlands, for the past two decades, public expenditure on higher education has been decreasing steadily in relation to GDP growth. The figure below shows the trends for universities as well as for *hogescholen* during the last decade.

Figure 4-1: Public funding of universities and *hogescholen*, as a % of GDP

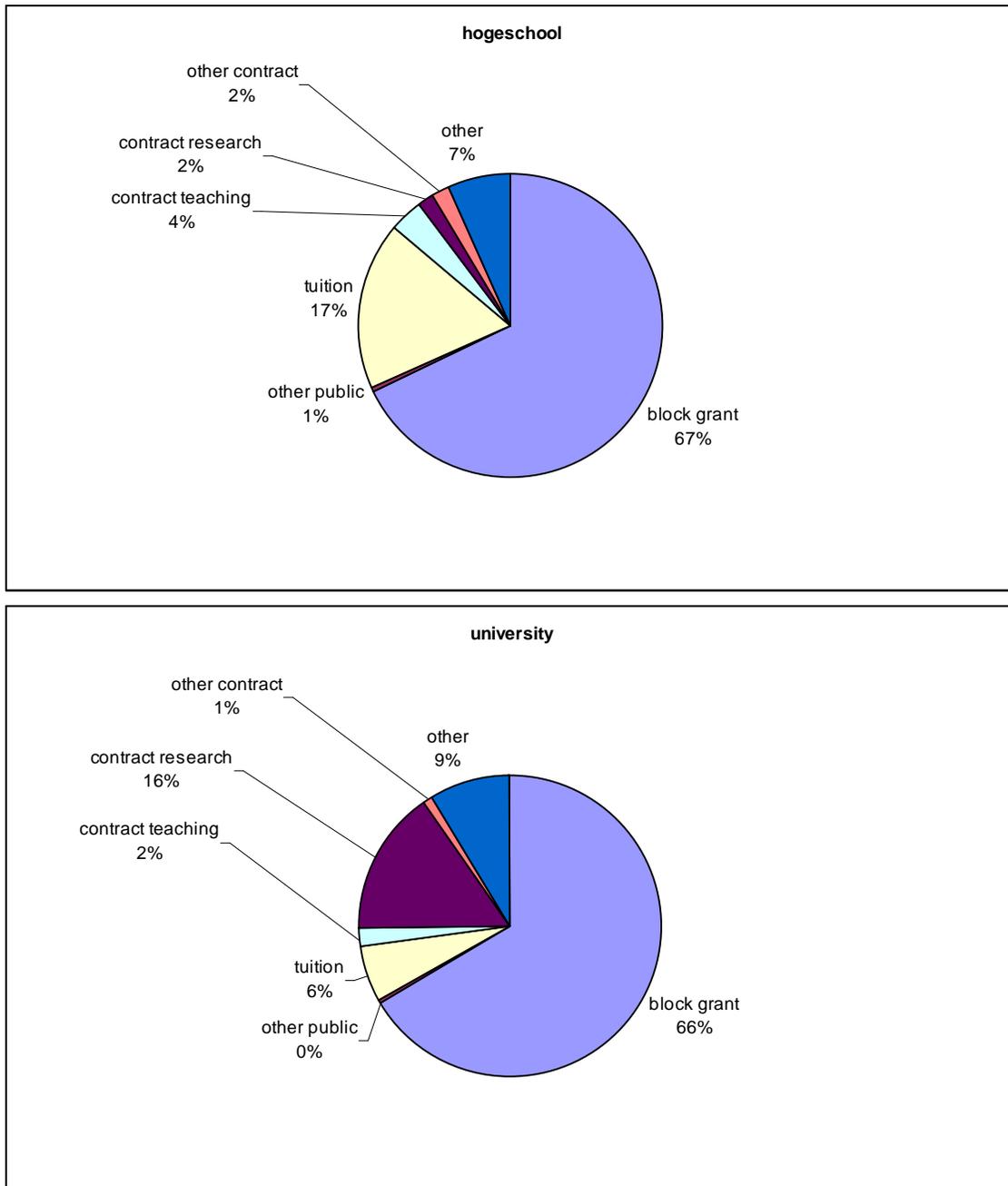


Source: CBS, Statline, 2007

4.3 Funding structure

4.3.1 Flow of funds

The income of universities and *hogescholen* derives from three so-called *flows of funds*. Apart from these, there are tuition fees paid by the students. Below we give a description of these sources of income (see table 15). The *first flow of funds* represents the core funding of the higher education institutions. It consists of block grants (i.e. lump sums) which are allocated in proportion to the teaching, research and related activities of the institutions.

Figure 4-2: Income of higher education institutions, by source of income, 2005

Source: CBS, Statline, Onderwijsfinancien Instellingen, 2007

The first flow of funds for both the universities and the *hogescholen* is supplied by the Ministry of Education, Science and Culture. Agricultural institutions (one university and six *hogescholen*) receive their grant from the Ministry of Agriculture. Universities are allowed to make their own decision with regard to the distribution of resources across teaching and research. They also make their own distribution across faculties, departments and institutes. For *hogescholen*, the block grant only covers teaching tasks. The way the block grant for both the universities and the *hogescholen* is calculated and built up is described in the next two paragraphs.

Starting from 1994 in *hogescholen* and 1995 in universities, the public subsidies, the public subsidies supplied for covering the higher education institutions' capital costs (for the institutions' property, i.e. buildings and equipment) have been integrated into the recurrent (i.e. block) grant. From these years on, *hogescholen* and universities own their buildings and land.

The *second flow of funds* consists of projects-based public payments for research, allocated by the Dutch Organisation for Scientific Research (NOW) and the Royal Netherlands Academy of Science (KNAW). NWO acts as an intermediary in granting funds for separate research proposals submitted by individual researchers or research teams. Projects are funded on a competitive basis. NWO pays the salaries of the researchers (and support staff) it funds. It also contributes partly to non-staff costs (mainly investments). However, the larger part of material and overhead costs are to be paid (i.e. 'matched') by the receiving university. Research council funds represent around 5% of total university revenues (and 7 to 8% of the universities' total research income).

The *third flow of funds* concerns income from contract research and contract teaching. Contract activities are carried out for government organisations (especially ministries), non-profit organisations, private companies, charitable boards, and (increasingly) the European Community. For universities, this supplementary source of income has been growing fast since the early 1980s. It currently represents around 20% of university income for teaching and research. For the *hogescholen*, it is difficult to obtain figures for income from contract work. Surveys reveal that this lies in the neighbourhood of 8% of their income.

For all modes of attendance students are required to pay a *tuition fee*, which is equal for students in *hogescholen* and universities. Income from tuition fees represents some 6% of total university revenues. For *hogescholen* the figure is about 17%.

4.4 Funding of universities

Under the *first flow of funds* heading, the Dutch university sector receives the major part of its public funding according to the so-called *performance-based funding model* PBM (in Dutch: *PrestatieBekostigingsModel*). PBM is operational from the year 2000 on. It is a *distribution* model, that means that it is not an 'open-ended' allocation model. The Minister of Education (or rather: Parliament) determines the budget for the university sector as a whole, and subsequently distributes this budget across the individual universities according to a set of

fixed rules (a formula). In addition to the PBM allocation, the universities receive allocations for academic teacher training, for academic hospitals, and for unemployment benefits paid to former university employees. The PBM allocation consists of a *teaching* component and a *research* component.

The teaching component has the following parts:

- fixed amounts for each university (i.e. a basic allocation, with a historical base)
- diploma-based allocation (number of degrees awarded)
- new entrants allocation
- allocation for facilities related to training in veterinary sciences and dentistry.

From the total amount available for the teaching component, allocation (d) for veterinary science and dentistry facilities (i.e. laboratories and equipment) is subtracted. The remaining budget is distributed across the parts (a), (b) and (c). The relative shares are 37%, 50% and 13%. To avoid large fluctuations in financial flows, two-year moving averages are used for measuring the number of degrees and new entrants.

The rationale for component (a) is to guarantee a minimum teaching capacity for each university, independent of the number of students. Part (a) consists of fixed amounts per university. The amounts differ across universities; they have a historical basis. Roughly, the large and relatively older universities receive a larger allocation compared to the smaller ones. The fixed allocations serve as a stabilising factor in the financial flows to universities. Component (b) serves as an incentive to increase the universities' efforts in making students complete their programmes. The rationale for component (c) partly lies in the belief that students base their enrolment decisions on the quality of the programs offered by the university. Through part (c), universities that are successful in attracting large numbers of new students are rewarded.

To account for differences in costs of programmes, funding rates (*tariffs*) are applied to the number of students (new entrants) and degrees. The tariffs for teaching make a distinction between two categories of students and diplomas, namely:

1. programmes in arts, humanities, law, social sciences, and languages; (low tariff)
2. programmes in science, engineering, agriculture, and medicine (including dentistry, pharmacy and veterinary science); (high tariff).

The *research component* of PBM consists of five parts:

1. a fixed amount for each university, the basic allocation
2. allocation for PhDs and designer certificates (in Dutch: *ontwerperscertificaten*)
3. allocation for research schools (in Dutch: *onderzoekscholen*)
4. allocation for top/excellent research schools (in Dutch: *toponderzoekscholen*)
5. strategic considerations allocation.

The first part – the basic allocation – is 15% of the research component and consists of fixed allocations per university (see table 16). The allocations are different for each university and,

like part (a) of the teaching component, vary according to the size of the university. In the allocation models that preceded PBM, part (a) was dependent on a university's teaching budget (or enrolment level).⁷

As part of their research budget, Dutch universities receive a premium for each postgraduate degree – i.e. PhD, designer certificate⁸ – awarded (based on two-year averages). For PhDs, two funding rates apply. The same distinction between fields of science as used for teaching tariffs is used (see above). The rates for science PhDs are twice as high compared to social science PhDs.

From the early 1990s onwards, the establishment of the *Research Schools*, consisting of researchers and PhD students from different universities but working in the same field, has been used as an instrument for the integration, concentration and proliferation of research. Part (c), the first of the two components for research schools, is allocated to the universities proportional to the sum of parts (a), (b), and (e). This allocation, which exists from the year 1998 onwards, is meant to stimulate universities to establish accredited research schools. From the year 1999, the minister of Education allocates funding to a limited number of research schools that are regarded as excellent. This is part (d) of the PBM research component. Six schools – all of them in the natural sciences – receive extra funding for a limited period. The selection was made by the Minister after consultation of the Dutch research council (NWO). Although the Minister had planned to extend this so-called *depth strategy* to the social sciences and humanities, he abandoned this policy and introduced an Innovation Fund (in Dutch: *Vernieuwingsimpuls*), based on resources freed up by NWO, PBM, and the universities themselves. NWO administers this Innovation Fund and allocates competitive research funding on the basis of proposals from researchers.

Most of the research component, is allocated under the heading of *strategic considerations allocations*. It consists of fixed allocations⁹ per university, based on historical reasons. The name derives from the original plan that the Minister of Education would base his research allocations on the quality of a university's research and an assessment of the relevance of a university's research for society. However, this plan was never realised, partly because of the consequences this would have in terms of reallocations between universities and the ensuing unemployment benefits. Another important reason was that a reshuffling of research funds would be a major intrusion on the university's autonomy. So far, the universities have been successful in avoiding any relocations within this component for more than 15 years, although some (relatively new and expanding) universities have sought to get a higher strategic considerations allocation. Therefore, unlike for the teaching component, the major part of the research component is still distributed mainly by referring to historical reasons.

⁷ In the successor to PBM (to be introduced in 2003), the link between part (a) of the research budget and the number of students will be reintroduced.

⁸ A two-year degree awarded in engineering.

⁹ When from one year to another, there is a rise in the number of PhDs or designer certificates, the strategic considerations component is lowered in favour of the 'performance' part (b). The result being that the total PBM research component remains within the budget available for PBM.

The PBM allocations are made to the university's central management. The PBM allocations are not targeted to faculties or departments. The idea is that the university's central management is responsible for distributing the first flow of funds across its various faculties, programmes, departments, institutes, et cetera.

4.3.3 Funding of *hogescholen*

For the funding of *hogescholen* the following basic formula generates the amount of funds allocated for teaching:

$$\text{amount} = \text{funding tariff} * \text{dynamic demand factor} * \text{enrolment}$$

There are two funding tariffs for full-time students, one for programmes with a strong practical character and a 20% lower one for programmes with a social science (so-called gamma) character. Previously there were six, so-called *profiles*. Still, there are some special arrangements for students in performing arts, music, theatre and teacher training. Until January 1998, part-time students were funded at a rate of 75 per cent. From that date on, the tariffs for part-time students have been raised up to the level of full-time students.

The funding rates are not applied to the number of registered students, but to an estimate of the teaching load ('student demand'). This teaching load is a multiplication of enrolment and a so-called dynamic demand factor. The formula for the latter is as follows:

$$\text{dynamic demand factor} = [\text{DG} \times 4.5 + \text{DO} \times 1.35] / (\text{TG} + \text{TD})$$

where:

- DG the number of degrees awarded (during previous year)
- DO the number of students that have dropped-out (during previous year)
- 4.5 the normative funding period for graduates (4.5 years)
- 1.35 the normative funding period for drop-outs (1.35 years)
- TG total period (in years), during which graduates have been registered before graduation
- TD total period (in years), during which drop-outs have been registered

The dynamic demand factor can be interpreted as the ratio of the normative funding period and the actual registration period for graduates and drop-outs. In case graduates or drop-outs take more time before leaving the *hogescholen*, the operation of this factor implies that the *hogescholen* receives less funding. In case an institution would be able to bring down the time to degree or the time to drop out, this will only affect funding if the graduation (or success) rate rises simultaneously. This is due to the fact that total enrolment also decreases along with shorter periods of stay. A *hogeschool* thus has two options to raise its funding amount:

1. through a permanent rise in numerical success rates
2. through a rise in student intake.

However, both options bring along larger costs for the institution. In any case, the funding formula intends to stress performance, especially in terms of graduation rates.

4.5 Student support and tuition fees

4.5.1 Student support

All Dutch full-time pupils and students of 18 years old and over are eligible for student financial support. This means that they are entitled to a basic grant and further support by loans and additional grants, depending on their own or parental income. Students may substitute parental contributions by voluntarily taking up a loan. By these means, a student is supposed to meet the total budget needed for study costs and maintenance. Amounts vary for students living at their parents house and those living independently. All direct public support for students is provided by the Information Administration Group (*Informatie Beheer Groep*, IBG) in Groningen on behalf of the Ministry of Education, Culture and Science. The IBG determines for each individual student the amount of allowances and loans he or she is entitled to and the IBG also administrates student debts and the repayment of these debts. All financial assistance to students in the Netherlands is provided through one system of direct student financial support by the introduction of the Student Finance Act (*Wet op de Studiefinanciering*, WSF) on 1 October 1986. Although a large number of reforms have been introduced since 1986, the system basically consists of the following elements:

- a basic grant for all full-time students
- a supplementary contribution, depending on parental income
- a loan, depending on parental income
- an additional grant, depending on parental income
- a public transport seasonal ticket (OV-kaart)

This originally rather generous system of student financial assistance has been subject to several changes. The amounts of grants awarded have been reduced, parental contributions increased and progress demands have been imposed. From September 1996 on, the system has been called the *performance grant* system, which will be described in detail here.

The 'performance grant' system

By introducing the *performance grant* at 1 September 1996, one of the major changes in the national system of student support in the Netherlands was conducted. In fact, students receive their previous grant-aid as an initial loan. As such, the performance grant can be regarded as something of a misnomer. It should be rather called a performance loan. If students meet study progress requirements, the conditional loan will be converted into a non-repayable grant. This means that students must pass 50% of the exams in the first-year to get the grant portions of the first year converted into a gift. The grant portions of succeeding years only become a gift if students complete their degree within the nominal duration of the program plus 2 years (6 or 7 years in total). In 2000, the time limit to complete a degree was relaxed. Students can now take up to 10 years to complete their degree, regardless of the nominal duration of programs. The previous time limits were regarded as a kind of straightjacket, having negative consequences for student activism. In addition, a more relaxed time frame would enable students' increased involvement in part-time work during term time (Ministerie van Onderwijs Cultuur en Wetenschappen 1999). Under these new regulations, the maximum age at which students are entitled to student support has been raised from 27 to 30 years. However, the basic grant and the additional grant are only provided for the period of the

nominal duration of the programme a student attends. When the nominal duration of a programme is over, a student may apply for student aid in terms of full-loans only. This implies that no gifts are available to students in the extra time they use to finish a programme.

The amount of basic support available to a student depends on his/her residential status (living in the parental home or “independent”). For example for the year 2007 the sums for the basic grants were €253 for an independent student and €91 for students living at their parents’ home. This budget includes study costs (tuition and study materials) and living expenses. Both students living at home as well as the “independent” students can expand their monthly budget via a mix of parental contributions and/or supplementary grants up to a maximum of €224 monthly, and a student loan and/or income from work of up to €277 per month (data 2007). Several empirical studies have shown that actual student expenditure is substantially higher than the standard budget allowed by the government. This implies that either parents contribute to a larger extent than they are expected to or that students are involved in the labour market. With regard to this latter option, students can earn up to €9125 per annum before they start to lose any of their grant entitlements.

Criteria to be eligible for direct public student support

To be eligible for student financial support, one has to meet a number of criteria:

- one has to have Dutch nationality. Of course some exceptions can be applied to this rule, such as for people without the Dutch nationality but residing in the Netherlands;
- one has to be younger than 27 years old when one starts studying;
- one has to be enrolled in a full-time study programme provided by a higher education institution funded by public means, or which is appointed (*‘aangewezen opleidingen’*) or recognised as a higher education institution by the government or one has to be enrolled in a full-time secondary vocational programme (MBO).

Finally, students eligible for student support also receive a public transport pass, entitling students to free public transport either on working days or in the weekends (the days public transport is not for free, the transport pass entitles them to a 40% discount on all fares).

Conditions for repayment of student loans

In general, amounts awarded as a performance grant are considered a loan if students drop out of higher education without getting a degree. There is one exception: if students pass 50% or more of the exams in the first year, that is 21 out of 42 study points, then all initial loans become a grant. The initial loans students receive in the second, third, and fourth (and in some cases fifth) years, can be turned into a grant if they complete their study within ten years (after they first started). Note that voluntary loans cannot be transferred into a gift. After a grace period of 2 years, debts must be repaid for those above a certain income level. The time period for graduates to pay their study debts back has been extended from 15 years to 25 years.

If graduates have difficulties in repaying their monthly instalments, they can ask for an annual means test. Based on that, monthly repayments can be reduced (even to zero). Any remaining debt after 25 years is acquitted.

Study abroad

Until recently Dutch students were eligible for student support only in the context of an international exchange project. From 2007 on, however, students who want to study at a foreign institution without being enrolled at a Dutch institution are eligible for financial support. They can move to any of the 44 countries which signed the Bologna Declaration. So the Dutch financial support system has become international in nature. One condition is that students in the previous six years have lived in the Netherlands for at least three years.

4.5.2 Tuition fees

The only charges imposed on students are tuition fees. Since 1991, the amounts charged are identical for both university students as well as *hogescholen* students. In principal, these amounts charged by the individual institutions are centrally determined by the Ministry of Education, Culture and Science and are regulated by law. Since 1991/92, full-time students enrolled in higher education have to pay a general amount of tuition. In 1995, the Minister of Education determined that tuition charges would be increased by €27 over a three year period. This means that tuition increased from €1021 in 1995/96 to €1248 in 1998/99. In 2006 the general tuition fee was €1519.

Students do not have to pay any other education-related charges, such as library fees, student union fees, laboratory fees, computer access fees etc. Administration and examination fees are rare. If a student is enrolled in a university or *hogeschool* he may use the facilities of the institution. As far as computer services are concerned, students may get an account number and an annual budget. If they exceed their budget, they have to pay for the computer services. Students are not obliged to become a student union member. If they join a student union, they have to pay a fee. This is the same as for joining any sports club, cultural or political organisation.

For some categories of student higher education institutions have to set the tuition fee themselves. These categories include full time students older than 30 years, non EU students or other foreign students not eligible for student support, and part time students.

There have been also some experiments differentiated tuition fees at five institutions. These institutions are allowed to charge higher tuition fees as long as the programmes they provide have a exceptional value to society and offer students something extra..

4.5.3 Recent developments

Because of the introduction of the Bachelor Master system, the university funding system (PBM allocation) will be changed, starting in the financial year 2003. The successor of the PBM model is labelled as the “BaMa” model. Compared to the PBM allocation model, two main changes can be seen. The first change is related to the teaching component. As has been explained above, the teaching component consists of the following parts:

1. fixed amounts for each university (i.e. a basic allocation)
2. diploma-based allocation

3. new entrants allocation
4. allocation for facilities related to training in veterinary sciences and dentistry.

In the existing PBM model component (b) serves as an incentive to increase the universities' efforts in making students complete their programmes. So, universities receive part of their finance based on the total number of graduates. In the new BaMa model, component (b) also serves as an incentive to increase the number of graduates, but contrary to the existing PBM model in which only one type of university diploma can be obtained, in the new bachelor master structure, the diploma-based allocation is based upon both the bachelors and masters diplomas. The difference in tariff between Bachelor and Master degrees will be 2 : 1, implying that universities will receive twice as much for a bachelor degree as for a master degree. The tariffs further differ between humanities/social studies versus science/engineering versus medically oriented sciences in the relationship 1 : 1,5 : 3.

A second change can be seen in the research component. As stated above, the research component consists of the following parts:

1. a fixed amount for each university
2. allocation for dissertations and designer certificates (in Dutch: *ontwerperscertificaten*)
3. allocation for research schools (in Dutch: *onderzoekscholen*)
4. allocation for excellent research schools (in Dutch: *toponderzoekscholen*)
5. strategic considerations allocation.

In the existing PBM model component (a) is based upon fixed allocations per university. In the new BaMa model, the link between the research budget and the number of diplomas (both bachelor and masters) will be (re)introduced, as was also the case in the allocation models that preceded the PBM model.

Furthermore, the transition towards the BaMa system led to extensive debates on the principles of the funding methods for higher education. With relation to Master programs, questions concern issues like whether a demand driven funding model should be implemented, whether Masters that differ in duration will also receive different levels of public subsidy, and whether Master programs from *hogescholen* and private higher education institutions can also be eligible for public funding. A second discussion relates to the question whether Bachelor programs of universities and of *hogescholen* should be equally treated according to one single funding model.

Also the debate about tuition fees continues to be an issue. The call for differential tuition fees becomes louder, particularly for university masters. Those in favour argue that high quality programs (top masters) will require higher tuition fees, which can be justified from the perspective of higher expected future returns to education. Opponents argue that this will lead to access problems creating a small elitist top-layer in the higher education system. Another issue, closely related to the tuition debate, is the system of student support. In December 2002, the Committee Vermeend has been installed to investigate the opportunities of a graduate tax system or income contingent loans in the Netherlands. The debates are still vivid and are likely to continue in the coming years.

The new student support system introduces the tuition fee loan (*'collegegeldkrediet'*). This increases the total amount of the loans. To accommodate the possible higher tuition fee students have to pay if they do not graduate in time, a student can obtain a loan for the tuition fee to be paid, up to a maximum of €7500 per year. By extending the loans the minister expects the students to be able to study more efficiently, and invest more time in their studies.

Another issue which got much attention recently concerns proposals launched by the government for a new funding structure. The aim is to transform the HE system into a more differentiated and market-driven system where students and institutions obtain more freedom and more responsibility. Central idea of such a system is the provision of learning entitlements which allows students to 'cash' their entitlements for (parts of) education at any place and time. Such a demand-led system - already operational in Australia - aims to increase the flexibility and freedom of students within the available time limits. Students that run out of entitlements will have to pay higher tuition fees. HE institutions will receive public funding on the basis of number of students with learning entitlements. This demand-driven system is supposed to turn students into critical consumers, and HE institutions into responsive providers, offering quality and meeting the needs of an increasingly heterogeneous student population. The proposals have met much criticisms from various stakeholders. Since the change of government in 2007 this reform was put of.

5 GOVERNANCE STRUCTURES

5.1 Introduction

A distinctive feature of the Dutch education system is that it combines a centralised education policy with the decentralised administration and management of educational institutions. However, institutions of higher professional education and universities have different management structures.

5.2 Federal and regional governance

Ministry of Education, Culture and Science

The Ministry of Education, Culture and Science is headed by the Minister of Education, Culture and Science. There are currently two State Secretaries (junior ministers), each with specific areas of responsibility within the general policy lines laid down by the Minister. The chief civil servants together form the Executive Board, which bears overall policy responsibility.

Approximately fifty per cent of the budget is spent on salaries for teachers, university lecturers, researchers and other personnel. 1,400 people work directly for the Ministry. 800 work for the agencies, 500 for the state services, and 500 for the inspectorate. The Executive Board (made up of the Secretary General, Deputy Secretary General, and the Directors General) ensures that the Ministry's political leaders receive policy proposals that are feasible and comply with their own political and strategic wishes.

Student Financial Assistance Policy

Around 250,000 pupils and 500,000 students receive public money in the form of financial assistance and grants to meet the cost of studying and the fees charged by educational institutions. The Student Financial Assistance Policy Department is developing the Student Financial Assistance Act in consultation with other interested parties.

Conditions of Employment and Professional Standards

The quality of education depends largely on the quality of teachers and other staff. 350,000 people work in education and science. The Conditions of Employment and Professional Standards Department is dedicated to protecting the interests of teaching staff. The current objective is to give teachers an extra incentive for life-long learning. Good terms of employment are important. The Department speaks on the Ministry's behalf in its annual negotiations with representatives of teachers in primary, secondary, vocational and adult education. The collective agreements provide guidelines on pay, working hours and important social insurance issues.

Information and Communication Technology

New communications media provide both teachers and pupils/students with new means of preparing the latter for the next stage in their education, an eventual job or an active role in society. The Information and Communication Technology Department is committed to ensuring that by 2003 all 12,000 educational institutions in the Netherlands - from primary schools to regional training centres – are connected to the fast, cheap broadband *Kennisnet* ("Knowledge Network"), a limited-access Internet site specifically for schools. The Department is also responsible for training teachers, developing educational software and managing networks, and devotes a great deal of attention to providing the services schools require.

International Policy

What is the European Union doing for Dutch students? And what makes the Netherlands attractive compared with other Member States? The International Policy Department coordinates the Netherlands' contribution to consultations on education in the European Union, the OECD and UNESCO. It develops the Ministry's international strategy and commissions comparative research. It examines issues from a national and international angle, putting the Netherlands on the map and helping it learn from developments elsewhere. In addition, the International Policy Department runs bilateral projects with priority countries such as Germany and South Africa, in close cooperation with the Ministry of Foreign Affairs. Most international educational cooperation is implemented by intermediary organisations such as the European Platform, the Netherlands Organisation for International Cooperation in Higher Education (NUFFIC), and the CROSS implementing agency (in Central and Eastern Europe).

Information Management Group

The Information Management Group (IBG) is a semi-independent part of the Ministry of Education, Culture and Science with responsibility for implementing the Student Finance Act (WSF) and the study costs and allowance schemes. Its other duties include the collection of school and course fees, the provision of administrative support for examinations, the placement and registration of prospective students, the evaluation of diplomas and the implementation of benefit schemes for education personnel (Ministry of Education Culture and Science 1996).

Central Funding of Institutions Agency

The Central Funding of Institutions Agency (CFI) is an executive agency which is responsible for funding the education system on the basis of legislation and regulations and in accordance with the established financial frameworks. Its duties also include providing information for policymaking and funding purposes. The CFI is responsible for the proper and efficient funding of institutions. Since 1 January 1996 when the CFI acquired agency status, it has formed an autonomous part of the Ministry of Education, Science and Culture (Ministry of Education Culture and Science 1996).

5.3 Advisory bodies

The Education Council (*Onderwijsraad*) is a permanent advisory body established by Act of Parliament in 1919. The Council may make recommendations on its own initiative as well as

at the request of the Minister. From 1 January 1997 the Education Councils' main task is to advise the government on the broad outline of educational policy and legislation on the basis of a working programme. In this working programme the Minister of Education, Culture and Science will specify the topics on which he wishes to be advised. Other bodies which advise the government on science and education are: the Socio-Economic Council (SER), the Advisory Council of Government Policy (WRR), and the Advisory Council for Science and Technology (AWT).

5.4 Consultative bodies

With regard to higher education, the Minister consults within the Higher Education Consultative Committee (*HO Kamer*) with the HBO Council (*HBO Raad*), association of universities (*VSNU*) and teaching hospitals and with the national research organisations. Consultation takes place within the Student Consultative Committee (*Studentenkamer*) between the Minister and representatives of the national student organisations.

5.5 Intermediary organisations

As described in chapter 3, the Netherlands Organisation for Scientific Research (NWO) and the Royal Netherlands Academy of Arts and Sciences (KNAW) are the largest intermediary organisations providing funding for research at higher education institutions. In addition, these two organisations also perform research.

NWO

The Netherlands Organisation for Scientific Research (NWO) is the most important intermediate organisation in the field of fundamental and strategic scientific research. The NWO is an independent organisation established by an Act of Parliament in 1988. It succeeded the Netherlands Organisation for the Advancement of Pure Research (ZWO). NWO promotes scientific research at Dutch universities and research institutes and seeks to raise the quality of that research. Innovation is a key element in this endeavour. NWO also promotes the dissemination and use of research results achieved wholly or partly with NWO support. To help it achieve these aims NWO receives funding of around EUR 450 million from the government. Most of this funding comes from the Ministry of Education, Culture and Science, though other ministries also contribute. NWO targets all fields of research activity pursued in the Netherlands, from physics to theology and from information technology to research on ethnic minorities. The NWO organisation encompasses all fields of scholarship and consists of six Councils, representing six scientific fields: Humanities, Social Sciences, Physical Sciences, Geosphere and Biosphere Sciences, Medical Sciences and Technical Sciences. Most Councils cover several foundations of departments. Together they are responsible for the implementation of research policy and resource distribution in their area.

NWO is committed to ensuring that the level of the research carried out in the Netherlands is and remains among the highest in the world. NWO research funding (the so-called second flow of funds of higher education) is allocated through a stringent selection process based on

the quality of the research proposals submitted each year, as well as through the provision of support to individual researchers. In 2001 a new NWO Strategy Document, "Themes and Talent" (*Thema's met Talent*) has been published (NWO 2001). One of the new policy elements in this document is the introduction of themes with a view to placing the emphasis on *interesting, innovative or strategic* scientific developments. Nine themes have been identified which meet these requirements:

1. Cultural heritage
2. Ethical and Social Aspects of Research and Innovation
3. Administrations in flux
4. Cognition and Behaviour
5. Fundamentals of Life Processes
6. System Earth
7. Digitalisation and Information Technology
8. Nano-sciences
9. Emerging Technologies

In addition to its thematic activities, NWO also places a strong emphasis on making scientific careers a more attractive proposition for talented young people. Of particular importance in this context is the *Vernieuwingsimpuls* grant scheme, which offers talented young researchers at varying stages of their scientific careers an opportunity to develop their own ideas and so to qualify for a tenured position at a university or research institute. In this way NWO contributes to the renewal and rejuvenation of the scientific staff of these establishments. Another core element in the NWO mission is to promote international, and in particular European, co-operation between researchers and scientific organisations.

NWO is itself responsible for prioritising research topics and for setting up and implementing grant schemes.

KNAW

The Royal Netherlands Academy of Arts and Sciences' (KNAW) main objective is advising the Government in all fields of science. The Academy is in its advisory capacity supported by councils and committees. These bodies are composed of both members and non-members of the Academy, including university professors and researchers from public and private research institutes and industrial laboratories. The solicited and unsolicited advice is given to: government, parliament, universities, research institutes, funding agencies and international organisations. Besides this advisory role the KNAW's functions are:

- Judging the quality of scientific research (peer review, academy fellowship programme, accreditation committee for research schools in the Netherlands)
- Providing a forum for the scientific community and promoting international scientific co-operation (international contacts, congresses, funds and endowments)
- Acting as an umbrella organisation for institutes engaged in basic and strategic research, scientific information services and biological collection management.

The KNAW's budget is about €80 million, mainly provided by government (6.3% of the total R&D budget of the research institutes), of which 86% is allocated to KNAW's own institutes.

There is little overlap between the research fields covered by these institutes and those covered by the NWO. The KNAW institutes focus on the humanities, social sciences and life sciences. The other 14% of KNAW's budget is allocated to the universities to fund post-doc positions.

5.6 Governance in higher education institutions

5.6.1 University governance

During the 1960s there was a growing concern about the effectiveness and the efficiency of the traditional forms of university governance in a new era of unprecedented expansion of participation in higher education. In 1967 these concerns about effectiveness and efficiency resulted in proposals by an important academic advisory committee (Maris) to centralise the structure of university governance. This committee proposed concentrating the major decision-making powers in the hands of a presidium of three persons which would be accountable to the Minister of Education and Science. According to the Maris committee, the relationship between the presidium and other governing bodies should be a hierarchical one. The proposal, however, was not taken up. The publication of the Maris' report more or less coincided with a radical change in public opinion. Political and social democratisation were high on the public and political agenda. The previous worries about the effectiveness and efficiency of universities were overshadowed by demands for democratic participation of junior academics, staff and students in university decision-making.

The spirit of this democratic movement left deep marks in the Act on university governance (the WUB) which passed parliament in 1970. In the first place, this Act created a system of functional representation in which academics, non-academics and students were given the right to elect representatives in university and faculty councils. At the university level, these councils also included a limited number of laymen appointed from outside the university, representing the general public. Secondly, these university and faculty councils were made the centres of power in what was basically a system of representative leadership. Although the university and faculty boards had some important independent authorities, the balance of power was definitely tilted in favour of the councils.

In 1981, the minister of Education and Science put forward a new bill for the university sector: the WWO. On the basis of an evaluation of the WUB (Polak 1984), this bill proposed, among other things, to redistribute the powers between councils and boards. According to the Polak committee, the powers of the boards should be extended. The presumption in the WWO was that such redistribution would reduce the lack of decisiveness in university governance and improve the efficiency of faculty and university governance. In spite of these amendments, the new bill did not call into question the '*raison-d'être*' of the councils with significant decision-making powers as such. The WWO was effectuated in 1986 and provided the legal basis of university governance until March 1997. In 1993 the WWO was replaced by the WHW, but the governance structure of universities was left unchanged in this new Act.

Situation before the MUB

Until the introduction of the University Government Modernisation Bill (MUB) in 1997 the management structure of the universities encompasses a number of bodies at three levels. At

the *central* level there are several actors: the university council, the executive board, the *rector magnificus* and the board of deans. The *university council* is a representative body and consists of 25 members drawn from the university community: at least one third are academics, a maximum of one third are non-academic staff, and a maximum of one third are students. The number of council members may be extended by a maximum of five external lay members who represent the general public. All members, except for the lay persons, are elected by and from the university community. Members serve for at least a two year period, except for students who serve for a one year period. The meetings of the university council are public. The chair of council is elected from its own members. The university council has the final say with respect to the budget, institutional plans, annual reports, general academic procedures, and rules and regulations. The authority of the council is stipulated in the national law. Some responsibilities are delegated to sub-committees.

The *executive board* consists of three members: the *rector magnificus* who is a member *ex officio* and two appointed members. All three persons are appointed by the minister of Education, Culture and Science. Even though the mechanism for appointment is not election, but selection, the university community (especially the board of deans (see below) and the university council) have the right to place nominations before the minister. The meetings of the executive boards are not public, though the boards report to government. According to the WHW, all powers (except those that are specifically assigned to the university council) are assigned to the executive board at the university level. The main functions of the executive board concern policy design, financial advice, building and grounds, personnel matters, and policy implementation. The executive board and the university council govern the university.

The second level of governance within a Dutch university is at the *faculty level*. At this level the following main actors can be distinguished: the faculty board, the faculty council, the dean, and two standing committees: the 'research committee' and the 'education committee'. The role of the faculty board and the faculty council as well as the relationship between them, is similar to that at the central level with respect to council and the executive board, though of course decisions at this level concern faculty matters. The *faculty board* is the executive body at faculty level, and it consists of a maximum of five persons. The dean holds the chair. The majority of board members are academics. The faculty board has the authority to govern the faculty except for those responsibilities which fall under the jurisdiction of the faculty council. The faculty board is accountable to both the faculty council and the university-wide executive board, which it has the right to advise. The *faculty council* consists of maximum 15 persons, of whom at least half are academics. Remaining members represent non-academic staff and students. As at the central level, the faculty council can extend its membership by the appointment of five lay persons. One of its main duties is approval of the faculty budget. The faculty council may delegate some of its responsibilities to the faculty board. *The dean* chairs both the faculty board and council and is elected by the faculty council from the full time professors of the faculty. In most cases the dean is in office for two or three years.

The faculty council appointed the members of the '*education committee*', half of the members of which were students. This committee had advisory powers with respect to faculty teaching

programmes and it evaluated examination procedures annually. The *'research committee'* was also appointed by the faculty council and had a majority of academic members. This committee had advisory powers with respect to the design and implementation of faculty research programmes. At the *base unit level* - the third level of governance in the old system - the *'disciplinary research group'* (DRG) was an important governing body. These DRGs were small clusters of professors and their assistants working in the same disciplinary area, but might also include non-academic staff and students. The faculty council and faculty board determined the procedural rules of the DRGs. Their main functions were the design of study and research programmes. The proposals of the DRGs had to be approved by the faculty council. The DRGs were accountable to the faculty board.

Situation after introduction of the MUB

In 1995 the Dutch minister of Education, Culture and Science launched a bill, called *Modernising Universities' Governance structure* (MUB), which was put into effect in March 1997. Six main problems were identified with respect to the former governance structure of universities as laid down in the WHW. These problems were:

- the governance structure is inadequate with respect to the organisation of teaching;
- responsibilities with respect to teaching are not clear. Due to the collective mode of decision-making no individual seems to feel responsible. In addition, the structure is highly fragmented;
- the formal separation of powers with respect to governance on the one hand, and management on the other, is unsatisfactory, especially at the faculty level;
- as a result of the second and third point it is difficult to ascertain who is accountable for the quality of teaching;
- the strong orientation towards research at the expense of teaching has a negative impact on the quality of teaching;
- coherence and communication among the various levels is inadequate. This is in part the result of the ambiguous separation of powers between the key academic decision-making units.

The MUB leads to a different administrative structure where responsibilities are clarified and administrative participation of staff and students will disappear. The main changes in the governance structure of universities concern (1) the strengthening of executive positions vis a vis the position of councils at both the central and faculty levels, (2) the university and faculty councils becoming representative advisory bodies for students and employees instead of *'heavily equipped governing bodies'*, (3) the integration of governance and management/administration (the new structure combines governance and management functions in the one body), the abolition (at least formally) of the disciplinary research groups (DRGs), which until 1997 were quite powerful, (4) the increase in power of the dean at the faculty level, and (5) the introduction of a new governing body, the supervisory board (more or less comparable to a *'board of trustees'*).

Another distinguishing feature of the MUB is that it leaves ample room for universities to design their own structures within its legal framework. The legislature explicitly gives several

options to universities to create internal institutional arrangements to meet their own challenges.

Central structure

At the central level the following actors can be distinguished: the supervisory board, the executive board, the ‘university council’, the *rector magnificus* and the ‘board for doctoral degrees’. The *supervisory board* consists of five persons appointed by and accountable to the minister. The most important plans of the university (such as strategic plans, and budget plans) will be submitted to the supervisory board for approval. The supervisory board will also arbitrate in the case of disputes between the executive board and the council. The *executive board* consists of three persons who are appointed by the supervisory board. One of these persons is the *rector magnificus*. This executive board which functions as a *collegium* has significantly greater powers than its namesake in the old governance structure.

The new *university council* no longer has decision making powers; one of its most powerful rights (approval of the budget) has been removed. It is to a large extent a representative advisory body. It has the right of comment with respect to institutional rules and regulations and important policy documents, such as the strategic plan. The MUB-Act offers two options with respect to the new university council. The first option entails a so-called divided system of representation in which there are separate advisory bodies for employees (academic and non-academic) and for students. The second option is a so-called undivided or combined body, referred to as the ‘university council new style’, and consisting of representatives of both employees (50 per cent) and students (50 per cent). The *board for doctoral degrees* more or less replaces the former board of deans, though in most cases the new board is a little less powerful, and persons other than deans can be members.

At the faculty level the new Act favours single-headed authority in the form of a deanship, although universities are permitted to retain a *collegium* as the executive body (i.e. a faculty board). The *dean* or the *faculty board*, however, has more powers than in the previous governance system. The executive board of the university appoints the deans, who may be drawn from inside or outside the university or faculty. Most universities have opted for deanships in preference to faculty boards. As at the central level, *faculty councils* have lost most of their powers and have become advisory bodies. Again there is the option of a divided or a combined structure, provided that the choice is the same as that made at the central level. The Act prescribes that half of the members of the faculty council must be students. Students also participate in the *education committee*. The executive board will resolve disputes between dean and faculty council. The size of the faculty councils varies from 3 to more than 20 members.

A major change at the base unit level is that *disciplinary research groups* have lost their legal status. They are no longer a formal governing body in the university structure. However, since universities do have some degree of freedom to design their own structures, they may choose to have a form of disciplinary research group, without legal powers. The abolishment of the DRGs has far-reaching consequences for the organisation of the primary processes, as the DRGs were the key actors with respect to both teaching and research, which were from an

organisational point of view closely related. In terms of the new Act, the organisation of teaching and research is separated. Although there is variation across faculties, generally speaking a *course director* (or a board) is responsible for the organisation of teaching programmes and a *research director* (or a board) is responsible for the organisation of research. Both directors are accountable to and appointed by the faculty dean.

Evaluation of MUB and other procedures

In 2005 the MUB was evaluated among policy-makers, academic and other staff, and students of Dutch universities. The most important conclusions were (Boer 2005):

- On average managers, academic staff and students are satisfied with the governance model, although not enthusiastically.
- Dutch universities have clearly strengthened their executive leadership, without categorically excluding staff and students from key decision making processes.
- Autonomy is seen as sufficient, although most board members would like to see a more distant role for the central government.
- The level of participation and involvement of academics and students in decision-making processes is a problem, and few of them are willing to participate in these councils.
- Academic staff is more critical about the way of governing than students. This may be partly due to tension between formal and informal structures within universities.
- The role of the supervisory board is unclear to almost everyone in the university.

Generally a strong university management is not considered as negative by most respondents. What is of concern – and not particularly related to the MUB governance structure as such - is the increasing administrative burden and the information institutions have to deliver in the context of the expanding accountability procedures. Several studies have been carried out to measure the amount of bureaucracy, for example in terms of a larger part of the higher education budget spent for management and information requirements at the cost of budget spent for the primary process and particularly ‘knowledge transmittance’. Reference can also be made to the report on Science Dynamics mentioned before that states that there is no clear view on how the financial means are distributed between the primary processes (education, research, and knowledge transmittance) and the secondary processes and that more transparency is needed. The research council (NWO) emphasises that further streamlining of administrative procedures are necessary in order to reduce the overhead costs. Because of all these concerns, the Minister has invited all educational sectors to develop a ‘bureaucracy benchmark’ on the basis of which the Minister will present a number of measures to the Dutch Parliament which aim to diminish the administrative burden for institutions.

5.6.2 HBO sector

Contrary to the universities, the management structure of *hogescholen* only comprises an executive board or central management board and a supervisory board. Besides these two boards every *hogeschool* has a participation council. The executive board consists of a maximum of three members. The chairman of the executive board is appointed by the Minister of Education, Science and Culture. According to the WHW all powers and duties have been delegated by the competent authority to the executive board. The executive board is

responsible for managing policy preparation and implementation, co-ordinating the day-to-day affairs of the institution as a whole. The supervisory board consists of a chairman and at most 11 other members. According to the WHW the supervisory board oversees the policy formation process of the executive board.

Until 1996 the executive board had no legal distribution of power among the different layers of administration, because the W.H.W. only regulated the principal structure in which the executive board has all powers of authority. With the introduction of the Administrative Organisation Bill in 1996 the competent authority has the possibility to introduce faculties or other organisational units to which the executive board can decentralise some of its functions.

Participation councils

Unlike the universities, the HBO sector has participation councils, consisting half of staff and the other half of students, since 1981. These participation councils are to a large extent derived from the Participation Act in education (WMO) 1981, which was in force for primary and secondary education. At that time the HBO sector was formally part of secondary education and this meant that *hogescholen* were legally obliged to introduce participation councils. The WMO 1981 included a long list of subjects of which the advice or approval of the participation council was required. With the introduction of the HBO-Act in 1986, in which the HBO sector was formally placed in higher education, the rules according participation were adopted from the WMO 1981. In 1992 this WMO was modernised and one of the main characteristics of the modernised WMO is the fact that for most cases the right of advice and approval is regulated by the WMO. It lasted until 1996 before the modernisations of the WMO of 1992 were adapted to the HBO-sector. 1996 Was the year in which the Higher Education and Research Act of 1993 (WHW) was amended by the Administrative Organisation Bill. However, in contrast to the WMO of 1992 the Administrative Organisation of 1996 has no extensive catalogue of powers. In the Administrative Organisation Bill there is a limited number of cases for which the power of approval of the participation council is granted. Other cases can be settled per *hogeschool* through regulations (Hoefnagel, Vermeulen, 1997). The participation council consists half of staff and the other half of students and has the authority of advice or consent.

6 QUALITY ASSURANCE

6.1 Introduction

The Netherlands was the first to develop a formal system to assess the quality of teaching and research. In the 1980's a new steering philosophy was adopted. Instead of detailed control of all kinds of input, the government would only check afterwards whether the *self-regulation* of the higher education system led to outputs in an acceptable range. In other words, the higher education institutions were given more institutional autonomy on the condition that they would show that they 'delivered' quality education. True to a historical process, this 'new steering philosophy' was first implemented before it was formulated. That happened in a policy initiative started in the Dutch universities in 1983 concerning research, the 'Conditional Funding' (CF) policy.

This policy was intended to 'promote both quality and systematic discussion of priorities and the use of resources' in research in Dutch universities —accountability regarding government funding can be seen as an ulterior goal. The Conditional Funding policy was the first effort to assess how governmental funding for higher education was being used, changing the funding of fundamental university research from a 'give away model', included in the general grant to universities, to an 'exchange model'. A successful and satisfying exchange presupposes that the receiving party can assess whether it gets 'value for money'. The government was confronted with a new problem in this way: "Because of the specific nature of fundamental research no governmental control can be placed in the actual research process. The necessary expertise for an effective control mechanism is simply lacking. If nevertheless tried, such an imposition of outside control would lead to the senseless meddling of the funding party in the operations of the funded organisation".

The alternative for the government is to put faith in assessments by scientists, by *peers*: they are the only ones who know, because of their long training in a field of knowledge, what counts as a valid knowledge claim, hence whether a research project leads to sufficient output. To attain legitimacy in the government's eyes, these peers have to be external to the units evaluated. Thus, the procedure chosen for the CF model, was to have external committees assess the research submitted by the universities, and to guarantee funding of the research group performing it for the next five years if the research was assessed positively. The information about research aims, activities and outputs (mainly publications) was to be supplied to the peers by the faculties themselves. The external committees were appointed by the Royal Academy of Arts & Sciences (KNAW). By using the principle of peer review, which is well known in academia, and through the involvement of the Royal Academy, legitimacy of the procedure in the eyes of the academics was undoubtedly sought.

The research funding was allotted to the universities, not to faculties or research programmes. It was up to the universities, therefore, to re-allocate funds from 'unprotected' to 'protected' research as they saw fit. However, very few re-allocations took place. The universities' decision-makers did not use the outcomes of the CF assessments for re-allocations, mostly because the assessments were very uniformly distributed. Very few research programmes

were judged 'insufficient', and the peers declined to indicate 'excellent' research. As a policy instrument for re-allocation of funding the CF failed.

What proved to be a much more influential aspect of the CF, was that all research submitted for assessment is grouped into *research programmes*. Grouping together the research activities of several individuals started to become the main policy level in higher education research policy. The 'CF research programmes' became a lasting characteristic of research in the universities in the Netherlands, covering, at first, a significant percentage of all their fundamental research, later practically all university-based fundamental research. Even when after two five-year rounds the CF faded away on a national scale, most universities kept these research groupings for their internal administration, and they were at the base of other research policies developed by the Ministry of Education & Science.

6.2 Quality Assessment of Teaching

Two years after the introduction of the CF, the HOAK policy paper, was published (Ministerie van Onderwijs en Wetenschappen 1985). The idea of quality assessment was to be extended from research only to all major primary activities of higher education institutions — meaning, in fact, that quality assessment of teaching had to be developed. Note that as a historical accident separate procedures for the assessment of teaching and research were well self-evident at the time. It was equally self-evident that the universities and the *hogescholen* developed separate approaches to quality assessment, although after a few years they ended up with very comparable procedures.

In their negotiations about the implementation of HOAK, the Minister of Education & Science and the umbrella bodies of the universities, the Association of Universities in the Netherlands (VSNU) and the Association of *hogescholen* (HBO Raad), in 1986 reached the compromise that the umbrella bodies would co-ordinate the procedures to assure the government that they 'produced' quality teaching without too much waste of students and time. The focus was on accountability with a special emphasis on drop out ratios and time to degree. In the spirit of self-regulation, the government would not use the outcomes of the quality assessments for further changes to funding of higher education after the cut-backs of the period before 1985. However, if a study programme was shown to be of low quality, and no improvements took place over a number of years, the government reserved the right to strike this study programme from the official register, meaning that its diploma would no longer be recognised officially and that it would no longer be funded by the government, nor would students have a right to the study grant every student of a recognised programme is given. In the hands of the umbrella bodies, the governmental goals of accountability and quality improvement changed to quality improvement and accountability —the change in order indicates a significant difference in emphasis.

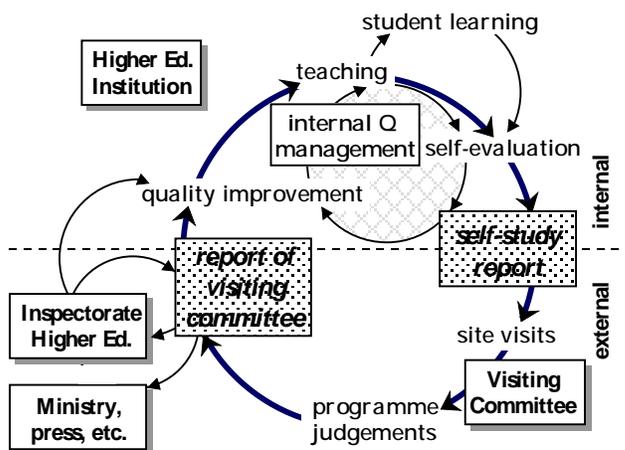
6.2.1 The Principles, and their Implementation in Universities

For the design of the quality assessment procedure, the VSNU borrowed from the CF assessment procedure and from the decades-long US experience with programme review and specialised accreditation. Accordingly, the entity to be evaluated through the new procedure is

the *programme of study*, i.e. the collection of courses leading to a specific *doctorandus* degree (equivalent to a Master's level). Ad hoc *visiting committees* of external peers are to pass judgements on all programmes of study in an area of knowledge in the country, basing their judgements on the information contained in the faculties' *self-evaluation reports* and on their own observations during two-day *site visits* to each of these faculties (see also figure). At the end of each visit, preliminary comments and judgements about the study programme are given by the chair of the visiting committee. The final version of this text, after being commented by the study programme, is included in the national, public *report of the visiting committee*.

The requirements on the self-evaluation report structure the self-evaluation process in the faculty. The VSNU guidelines for the self-evaluation report prescribe which topics should be addressed, such as programme aims, programme structure and content, student and staff information, data on graduates, issues of internationalisation and internal quality management. Partly, the structure of the report and the data to be used are prescribed in detail to ensure comparability across the country, but for another part the faculty can emphasise issues it considers to be important while de-emphasising others.

Figure 6-1: Self-evaluation and Visiting Committees in Assessment of Teaching



Source: (Westerheijden 1997)

The self-evaluation reports are also the cornerstone of quality improvement: through the self-evaluation process, faculties ought to become aware of their strengths and weaknesses, and start to ameliorate the weaknesses, even if no external committee were involved —this is of course a normative, perhaps even idealistic picture, as sketched by proponents of self-evaluation processes. The peer committee's judgements are collected in a national, public report, including an exposition of the committee's frame of reference for judging the faculties, a chapter on the general state of affairs of teaching in the discipline in the country, and chapters on each of the programmes of study, with its strengths and weaknesses and the committee's recommendations for improvement. The visiting committees do emphatically not give a single, summary judgement of a study programme's quality. To do so would be contradictory to the multi-dimensional nature of the concept of quality. This procedure is in

operation since the academic year 1987–1988 —the first year as a pilot project. Every year the VSNU appoints a number of ad hoc visiting committees to evaluate all programmes of study in their respective disciplines, thus covering all¹⁰ programmes of study in a six-year cycle.

6.2.2. The Same Principles Implemented Slightly Differently in *Hogescholen*

As mentioned above, the universities and the *hogescholen* applied the same principles in their assessment of the quality of teaching. The HBO Council, the umbrella organisation of the *hogescholen*, started assessing programmes of study in 1990, and because of the larger number of programmes it operates on a seven year cycle to cover all areas of knowledge. In some areas with very many study programmes, two or more sub-committees share the burden of visiting them. Also, the visits last, as a rule, no more than one day per study programme. The most important differences stem from the fact that the HBO study programmes are intended to be more ‘practice oriented’ than the academic programmes in universities. Applicability and job orientation accordingly have a higher priority. This influences the character the quality judgements should have, and therefore also the ways to form those judgements. Thus, the HBO Council issues its own guidelines for self-evaluation, which differ in some respects from the guidelines used by the VSNU; also, the HBO sector still being in the first round of evaluations, these guidelines are in some ways less prescriptive than the VSNU ones. And it shows in the composition of the visiting committees: whereas the VSNU mainly uses academic peers, the HBO Council visiting committees consist mainly of practitioners in the area of application of the study programme.

6.2.3 VSNU Quality Assessments of Research

After the demise of the CF procedure, the government desired a new procedure for quality assessment of research in the universities. The procedure that the VSNU then designed can briefly be characterised as an extension of experiences: of the CF experience on the one hand, and of the VSNU experience with quality assessment of teaching on the other.

Since 1993, *external peer committees* judge fundamental research taking place in the universities in the Netherlands along four dimensions of quality: productivity, quality of output, relevance and long-term viability. *All* of a faculty’s fundamental research is to be submitted, organised into *research programmes* as in the CF. The faculties provide the information again; bibliometric analyses of publication data are made by an independent bureau in a number of cases —this is new and not always part of the procedure. The committees may judge on the basis of this written information only, but they can also interview research programme leaders or visit the faculties and laboratories. National, public reports are the main output of this procedure. In contrast to the teaching assessments, the research evaluations are given in summary figures for each research programme on the four dimensions of research quality. Productivity, quality of (key) publications, relevance of the programme and long-term viability of the research group, are judged separately on five-point

¹⁰ With very few exceptions, mostly consisting of programmes that are unique in the country. For such ‘orchid programmes’ tailor-made solutions are developed.

scales ranging from (1) insufficient to (5) excellent. As with the quality assessment of teaching, there is no direct connection of quality judgements with the government's (funding) policy for higher education. How the universities and faculties use the outcomes of the quality assessment procedures, is a subject for the next section.

An important issue dealt with by the Commission on Science Dynamics concerns the role played by research assessments in the programming and resourcing of university research (Commissie Dynamisering (Commissie Chang) 2006). What is the relationship (if any) between the outcomes of the external peer reviews and university research programmes? Do such ratings affect decisions about structure, funding and staffing dedicated to research? Although research assessments provide overviews of the quality, productivity, relevance and sustainability of research at Dutch universities, it is not clear to what extent this should have implications for funding. To date performance-based funding of research does not take place on a large scale, but there is clearly a movement towards developing performance indicators, including the academic and societal impact and networking of research (Jongbloed 2005). The Advisory Council on Science and Technology Policy (AWT) advocates such a movement, the ministry is interested, but universities are generally more reluctant.

6.3 Effects

There is no direct connection between the quality assessments and government policy of higher education. Specifically, there are no financial rewards or punishments for the faculties concerned. The most important, but still marginal, financial consequence would ensue if students 'voted with their feet' (taking their tuition fees with them) by evading study programmes that are judged to be weak on many dimensions—but there is as yet no empirical evidence that they do. To ensure that the considerable amount of effort that goes into the quality assessments is not a 'paper tiger', but that they are serious and that recommendations are acted upon, the government, through the Inspectorate for Higher Education, monitors closely the visiting committees' reports and the follow-up by the universities. In the jargon of Dutch politics, this is called 'meta-evaluation'.

In terms of cybernetics, the Inspectorate for Higher Education is the 'sensor' to discover whether critical variables are within an acceptable range. The Inspectorate's role is, first, to check whether a visiting committee's report has the right quality of information for the 'sensor': did the committee follow the agreed-upon procedure and are its conclusions and recommendations based on information? In more than seven years and after tens of committees to universities, one university visiting committee's report was not accepted, and the quality assessment of teaching in this area had to be repeated. In the HBO sector, in 1997 for the first time a visiting committee's report was not accepted either.

Next, since 1993 when the institutional arrangement about follow up was re-negotiated between the government and the higher education institutions, the Inspectorate checks whether the universities react adequately on the visiting committee's remarks. Note that the Inspectorate does not prescribe a certain way of follow-up. To decide on its own way of follow-up is part of the university's autonomy. The Inspectorate only requires that some follow-up is planned, to be put in writing in an 'Action Plan'. If no adequate Action Plan

ensues, the Minister of Education issues a 'yellow card', i.e. a warning that unless thorough improvements are made quickly, the programme would be stricken from the register next year. Such warnings are also given when study programmes are judged to be very weak on crucial aspects. If the Inspectorate discovers such 'worrisome cases', the university is asked through the Minister of Education to make rapid improvements. Till 1997, a warning was issued once in the university sector of higher education and on about a handful of cases in the HBO sector —until now, this threat of sanctions has been sufficient to induce the wanted improvements. Finally, the Inspectorate has taken upon itself to check the actual follow-up in a mid-term review, three years after a visiting committee report is published. This is to ensure that quality improvement plans are implemented, and do not remain paper plans until the next visiting committee comes around in six or seven years' time.

The proof of the pudding is, of course, in what happens with these evaluations. They are not 'ritual dances' —the Inspectorate for Higher Education looks after that, also, it has been established independently that non-utilisation by the higher education institution (usually, the faculty) is a relatively small category. This does not imply that all faculties slavishly follow all recommendations of visiting committees. Frederiks (1996) has estimated that about half of the recommendations are followed up as intended by the visiting committees. Among this part, the recommendations that are in fact repeated from what the faculty itself had concluded in the self-evaluation process and report may be a large portion. On the other hand, it may be argued that faculties do not need to follow all recommendations, because it is their (legal) responsibility to care for the quality of their teaching and of their research. Consequently, as long as they seriously use the recommendations and observations of the visiting committees in one way or another as inputs to their decision-making pertinent to the quality of teaching or of research, the evaluation of the quality assessment should be positive, even if that means that the faculty rejects recommendations (with explicit arguments). This latter position is, in fact, the stance of the VSNU, which sometimes seems to claim that the Inspectorate for Higher Education only looks whether recommendations are being followed up.

6.4 Accreditation

With the introduction of the Bachelor-Master system in Dutch higher education the Dutch-Flemish Accreditation Organisation (NVAO) was established in 2004 to ensure and promote the quality of higher education in the Netherlands and the Flemish part of Belgium. The NVAO does not replace the existing quality assurance system, but is connected as much as possible with the prevailing quality assurance system. The internal self evaluation report as such is not part of the accreditation process as it is argued that in this way there is a better guarantee that the faculty will give affair self-analysis leading to an internal discussion among all those concerned, which in turn will enhance the chances for improvement. Thus, the improvement function of quality assurance will be maintained. The ranking of programmes or institutions is not the purpose and the accreditation system is dichotomous. On the basis of an independent assessment process it is determined whether a programme meets basic quality standards or not. The NVAO applies a rather broad framework which allows for differentiation of programmes in terms of distinctive profiles or special quality features. This makes it more difficult to draw up rankings and this is not what the NVAO pursues (Dittrich and Frederiks 2005).

The NVAO is organised along the bachelor–master model, and the reform plans include that accreditation will be mandatory for programs:

- to award recognised bachelor and master degrees;
- to make their students eligible for study grants and loans;
- to receive state funding (for public higher education institutions only).

Implicit in the above is that private higher education institutions will be included in the accreditation procedures on an equal footing with public ones, apart from the issue of public funding. This will open up the Dutch higher education system for globalisation forces. A potential problem relates to the issue that the Dutch accreditation system should be open for all (international) visiting and evaluating institutions. However, the practical criteria used for accreditation have a specific Dutch character. Nevertheless the NVAO operates increasingly on the European level, seeking collaboration with other accreditation agencies. The NVAO has contributed to the establishment of the European Consortium for Accreditation in Higher Education (ECA) and is an active member of the European Association for Quality Assurance in HE (ENQA). These initiatives are clearly in the context of enhancing the international mobility of students and researchers and the emergence of the European Higher Education Area. The participating organisations have agreed on a ‘code of conduct’ and on the involvement of peers for external reviews.

The first round concerns accreditation of all study programmes on an individual basis, but it was discussed to change towards institutional accreditation. To date, the general standpoint by most actors in higher education is that institutional accreditation is not desirable: for practical reasons and because the comparability of the same study programmes of different institutions would become less clear. One issue raised is the extent to which extent there is a balance between internal and external quality control: which aspects can be assessed on institutional level and which should be assessed on the departmental level. The central issue is that individual programmes should be assessed on a regularly basis and that the results of that assessment should be accessible for the public. An assessment of the institution as a whole would not be able to fulfil this function.

6.3 Ranking and classification

An issue which has received more attention is the development of a classification system of institutional types and profiles and a ranking system in terms of performance of institutions. These topics provoke much discussion and resistance, particularly the ranking of performances which may reinforce the role of the prestige of institutions. There is a general belief that if rankings are unavoidable this should be done well and based on the purpose it should serve, namely for adequate information for stakeholders. It is said that their main purpose is to inform students and prospective students as part of the study information systems. Particularly for those candidates abroad with limited access to information such a system could be very helpful. The general view is that such ranking should be multi-dimensional, and should avoid a situation where institutions are ranked as a whole. Ranking should pay attention to both teaching and research, performance, based on objective criteria and have an international scope. Currently the Ministry supports a project by CHEPS which

explores the possibility of applying the ranking system as developed by the Centre for Higher Education Development (CHE) to Dutch higher education. With this initiative the Netherlands follows Austria and Switzerland, thereby contributing to a European initiative on ranking.

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