

**Threefold differentiation**

Recommendations of the Committee on the Future Sustainability  
of the Dutch Higher Education System



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April 2010



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# Foreword

Education and research are crucial driving forces for maintaining prosperity in the future. Compromising in these areas would be both short-sighted and ill-advised. This report of the Committee on the Future Sustainability of the Dutch Higher Education System was drawn up at a turbulent juncture of economic crisis and impending cutbacks. Yet the period was also one of European reevaluation of the key role of higher education as the driving force behind the knowledge economy. These two circumstances make the subject of these recommendations both topical and urgent. Education ensures knowledge, creativity and innovative power. However, education is also more than this: it is essential for personal development and is a factor that enables people to grow into responsible citizens. And research is also more: it provides us with deeper insights and allows us to improve the conditions in which people live.

## Justification and motivation

The number of students in higher education in the Netherlands has risen sharply over the past few decades. In the coming ten years this will remain the case. In this way, the Netherlands distinguishes itself from many other European countries. This growth is praiseworthy. After all, higher education should be accessible for everyone and society needs more highly qualified people. However, for the Minister of Education, Culture and Science (OCW), it has raised the question of whether the system in its current form can cope with such growth. He therefore asked this Committee to provide advice on this matter.

## Support base

The Committee conducted interviews with a large number of stakeholder organisations and experts in Dutch and foreign higher education (cf. Annex IV). Their input was greatly appreciated. During the interviews, numerous interesting and creative ideas were put forward which have contributed to the substantiation of the recommendations. The Committee therefore believes that its proposals can count on broad public support. This is important because future-proofing the Dutch higher education system will not entail the implementation of large, structural changes to the system but rather providing direction and offering

room for differences and new initiatives. The Committee has established that consensus in this regard is widespread: future-proofing the Dutch higher education system does not demand large structural changes; we should rather try and set a process in motion that will achieve the desired result: a system of a higher level with enhanced diversity.

## Investments

Many people indicated that this high ambition cannot be realised without additional money. All the more so given that international comparisons of investment levels in higher education show that the Netherlands is lagging behind. At the same time that the Committee was thinking about the future of higher education, civil service working groups were fleshing out scenarios for rationalisation. The Committee is aware of this and will not be commenting on it. It only states that the ambitions for the future are not easily reconciled with a task of changing higher education. Even more so, substantial investments are an absolute necessity for retaining and strengthening our international competitive position. "In five years' time, once the dust from the current crisis has settled, it will become clear where we stand: have we found alignment with the best performing economies in the world? Or have we lost sight of this leading group with all the consequences this would have for our prosperity and welfare?" (IP, 2010).

## Inspiration

The Committee was inspired by the invaluable input of the foreign Committee members Professor R.M. Berdahl and Professor E. Hazelkorn. Based on their international expertise, they examined the numerous ideas and proposals submitted in the light of their experiences in their home countries and international trends in higher education. They indicated that the Dutch higher education system has a good reputation, yet they also agreed with the analysis that the weaknesses in the system need to be tackled with a firm hand. Apart from this, they emphasised that problems involving dropping out, success rates, reduced face-to-face instruction and the like are also being faced by many other countries. However, in this case, pain shared is not pain halved but rather an opportunity and a task to bring about change in this regard.

With a view to the desired development of Dutch higher education, both experts underscore the importance of strengthening academic and professional higher education across the entire spectrum. In this respect they expressly state that this must go hand in hand with the confirmation of the identity of each sub-system. For the research universities this involves more sharply focusing the academic profile with a strong link between research and teaching. Universities of applied sciences need to focus more sharply on high-quality professionally oriented bachelor's programmes supported by the further development of applied research and more room for professional master's programmes. Both the research universities and the universities of applied sciences need to tackle their development agendas in a varied manner. In particular, the experts consider the agenda for change that the Netherlands wants to give to the universities of applied sciences as being heavy and ambitious. Their recommendation is focusing on differences in profile. Universities of applied sciences should not want to and cannot do everything at once. Finally, our foreign colleagues also call on us to search for a form of steering in which both the government and the institutions take up their responsibilities and together set a process in motion that will take Dutch higher education further. This comment too has been awarded a prominent place in our report.

The Committee is extremely grateful to its foreign members for their input.

### **Profiling**

A common thread running through these recommendations is for institutions to profile themselves in some way – both universities of applied sciences and research universities – and to make clear choices regarding their missions. In this regard, binarity remains an important fact but with room for new developments at the interface of the two sectors so that the system can become more flexible and more differentiated in numerous aspects.

### **Follow-up**

Given that the recommendations had to be drawn up within a short space of time, the Committee decided to

provide only an outline for a future-proof Dutch higher education system. The precise content will have to be left to others. The Committee would welcome it if the main lines of its recommendations were to lead to consensus among the stakeholders that could be expressed in a type of “Higher Education Social Covenant”, to be agreed by and observed among the parties. Through such a covenant between the government, research universities and universities of applied sciences, and definitely including student unions and representatives of employers and employees, well-focused and concerted action would be created that would improve the quality of Dutch higher education across the entire spectrum. This is the path that offers prospects for the development of the Netherlands as a knowledge nation.

The Committee engaged in some heated discussions in order to arrive at a cohesive and well-balanced set of recommendations, in the shared realisation that a good higher education system is an absolutely essential precondition to ensure a good future for the generations to come. It is now up to others to confirm and further substantiate this starting point.



Prof. Dr Cees Veerman  
Chairman of the Committee on the Future  
Sustainability of the Dutch Higher Education System

# Summary

Education and research are crucial driving forces for maintaining prosperity in the future. Compromising in these areas would be both short-sighted and ill-advised. The Netherlands' goal is to be among the top-5 most competitive economies in the world. The Committee is convinced that we will not achieve this if we continue in the same way. Dutch higher education has to improve a lot and improve quickly. The drop-out rate is too high, talent is not challenged enough and there is too little flexibility in the system to properly serve the varied needs of students and the labour market. The Committee therefore believes that the current system is not future-proof. The recommendation is: *add powerful impetus to improving the quality and diversity of Dutch higher education*. The starting point is that the quality of higher education and research needs to be improved across the entire spectrum. To realise this, the Committee argues for threefold differentiation: in the structure of the system, in the profiles of institutions and in the range of programmes offered. The Committee has ten recommendations in this regard.

## Recommendations for the government

- 1 **Selection:** in principle, the Committee proposes that each institution should be given the right to select, for admission as well. The government should make this possible in regulations and legislation as well as providing limiting conditions.
- 2 **Encourage institutions to profile themselves and reward achievements:** the Committee challenges the institutions to choose more sharply focused profiles and proposes that the government encourage the institutions in this regard. To this end, the European multidimensional classification system needs to be developed further for application in the Dutch context. The share of student-based funding must be gradually reduced in favour of a growing share for mission-based funding, rewarding the choice of a particular profile and the related achievements.
- 3 **Reduce the share of student-based funding at research universities:** to give research universities the opportunity to add more focus to their academic profiles in the short term, their dependence on funding based predominantly on student numbers needs to be reduced as quickly as possible.
- 4 **Invest in research:** with the conviction that research is essential to the Dutch competitive position and that all higher education must be interlinked with research, the Committee argues for targeted investment incentives aimed at research at academic universities and in applied research at universities of applied sciences.
- 5 **Associate Degrees:** the Committee proposes that in the course of 2010, the Minister of OCW implement the definite introduction of Associate Degrees.



- 6 A new structure for master's programmes:** the Committee proposes that the range of master's programmes offered be expanded and that professional master's programmes be given more structural embedding. In this regard, the Committee argues for the careful expansion of publicly funded professional master's programmes. In line with this, the Committee proposes that an exploratory study be conducted into the introduction of learning entitlements with a view to the desired flexibility for lifelong learning, to begin with for students aged 30 and over.
- 7 Introduce uniform titles:** the Committee recommends that the titles of bachelor and master be set down in the law and continue to be protected for both professional and academic higher education. Each institution will choose the affix that is in line with the profile of the programme and will account for this during the accreditation procedure. Diploma Supplements specify the content of the programme and the institution at which the programme was followed.

### Recommendations for institutions

- 8 Choose a profile:** the Committee recommends that, based on proven or desired strengths, institutions and departments choose a clear profile in one or more of the dimensions as set out in the European classification system.
- 9 Pay more attention to teaching as a core task of higher education institutions:** pay more attention to teaching, respond to the learning styles and backgrounds of students, make programmes more flexible and organise programmes better. Institutions and students are called on to together make agreements as to how to tackle this issue.
- 10 Invest in the qualifications of staff:** the quality of the education provided stands or falls by the quality of the teachers and the extent to which they are valued. The Committee asks the institutions to allow teachers room and to keep an eye on career policy with equal and linked career paths for teaching and research.

If we are convinced that knowledge is the no. 1 competitive factor in the 21st century and that to this end we need a strong and future-proof education system, then the ambitions in these recommendations must be supported by sufficient funding. The ambitions for the future cannot be realised in a context of spending cuts. Substantial investments are absolutely essential to retain and strengthen the Netherlands' international competitive position. Given the economic crisis and years of under-funding, it is now a dire necessity to put in our best efforts to realise the ambition of becoming one of the world's strongest knowledge economies.



# Introduction

<sup>1</sup> Statement from the Minister of OCW to the Dutch Lower House dated 18 September 2009. Annex 5 contains the complete assignment.

## 1.1 Task

Also on behalf of the Minister of Agriculture, Nature and Food Quality (LNV), the Minister of OCW asked the Committee to “make an assessment of the Dutch system’s ability to withstand future pressure in the longer term<sup>1</sup> based on a comparison of the Dutch system with leading higher education systems elsewhere in the world. The recommendations of the Committee are on the agenda. They will constitute an important building block for shaping further ideas about a future higher education system that is suitable for the Netherlands.”

## 1.2 Elaboration

The Committee split the question of whether the system is still fit for purpose into two sub-questions:

1. is the (binary) structure of the system still adequate in light of the continuing growth in student numbers, high drop-out rates and the increasing diversity of the student population? And,
2. does the current system contain the right conditions to realise the desired quality and *dynamism* in a strongly growing system?

Answering this question requires insight into the state of affairs of Dutch higher education, an overview of the current problems in the Dutch higher education system and knowledge of the international context regarding Dutch higher education.

## 1.3 Approach and structure

Based on an extensive problem analysis and stakeholder scan, the first step of the Committee was to set down the major developments and problems in higher education (Chapter 2). To this end, the Committee not only consulted recent documents and literature but also conducted a large number of interviews with stakeholders and experts (Annex IV). Wherever possible, the themes that are of important relevance for Dutch higher education were discussed in light of the international context. The Committee tried to learn from trends abroad and chose an international (European) perspective in its vision of the future.

The Committee reached the conclusion that in essence Dutch higher education is of a high level, while in terms of structure it is in principle satisfactory and in line with foreign higher education systems, but nonetheless desires that higher education be charged with the task of implementing significant changes aimed at an integral increase in level. This entails that the system needs to have far more variety than is currently the case. The question of whether or not the system has sufficient variation to cope successfully with the growing and increasingly diverse student intake and to realise the desired improvement in quality, must, however, be answered with “no”. Being future-proof requires a more varied higher education system (Chapter 3) with more differentiation:

1. in the structure of the system,
2. between institutions, and
3. in the range of programmes offered.

To realise this differentiation, recommendations will be drawn up for the government and the institutions (Chapter 4). The final chapter (5) examines the implementation of the recommendations and the consequences for the adjacent education sectors of senior secondary vocational education (MBO) and secondary education (VO).



## **Problem analysis: what is the state of affairs of Dutch higher education?**

**The Dutch government's ambition is to be among the top-5 knowledge economies of the Organisation for Economic Cooperation and Development (OECD) as measured in the Global Competitiveness Index (OCW/EZ), 2009). Higher education and research fulfil a key role in achieving this goal. The Committee underscores this ambition but notes that the Netherlands, after an initial improvement, dropped from 8th place down to 10th place on the index referred to above (Schwab, 2009). In this chapter, the Committee outlines the state of affairs of Dutch higher education and where its weaknesses lie. To this end, Dutch achievements are set against those of other countries that are leaders in the aspects concerned. Annex I provides detailed analyses and comparative overviews. This chapter will deal successively with: enrolment in higher education (2.1), professionals in higher education (2.2), quality and success rates (2.3), contribution to the knowledge society (2.4), internationalisation (2.5) and the structure of the system (2.6).**



## 2.1 Enrolment in higher education

### *Continued growth in higher education*

From 1950 onwards, more and more people in the Netherlands have been participating in higher education. From the mid-1990s, spectacular growth has been seen, particularly in professional higher education (CBS, 2010; cf. Diagram I.1 in Annex I). And the end of this growth is not yet in sight. In 2020, the universities of applied sciences (HBO) will have some 20% more first-year students, while the research universities (WO) will have some 40% more compared to 2007 (OCW Pupil/Student Forecast, 2009). In terms of total enrolment, the growth percentages are 25% for HBO and 40% for WO.

### *Drop in secondary vocational education*

The number of first-year MBO students, on the other hand, will fall considerably until 2020, by 17% compared to 2007. This raises the question of whether an education-labour market problem will arise at the MBO level. The Committee is advising on higher education but cannot view this sector separate from what is happening in MBO. MBO graduates take up vital positions in our society, constitute part of our ambition of

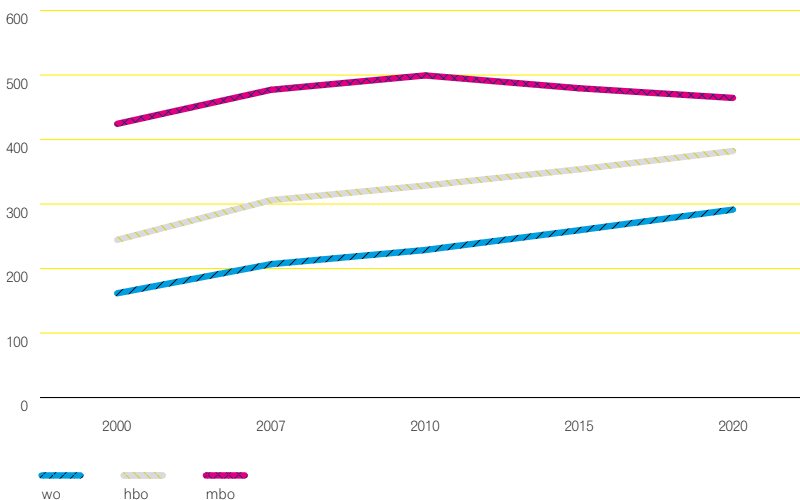
becoming a knowledge economy and are thus urgently needed on the labour market. It is essential, therefore, that MBO not develop into purely a transfer qualification for professional higher education. Although this subject goes beyond our task, the Committee would ask for it to be paid particular attention.

### *The goal of 50% is not being achieved*

Despite the strong growth that is expected for higher education, it will be difficult to realise the goal of 50% of the Dutch population (age bracket 25 – 44) having higher education qualifications in 2020 (OCW / EZ, 2009). According to the indicator used by the OECD in 2009 (the percentage of higher education graduates in the population aged 25-34) the Netherlands is at the median with 37%. Although this percentage rose from 24% in 2001 to 37% in 2007, many other countries – like Switzerland, France, Austria, Finland, Sweden, Canada and Ireland – show stronger growth. In several countries, however, programmes that compare to the Dutch MBO 4 level rank under tertiary education (cf. Annex I.1). The fact that our MBO 4 ranks under secondary education has a negative effect on the position of the Netherlands. The expected growth in student numbers in higher education is thus very welcome in so far as this is not at the expense of

**Diagram 2.1: Estimated enrolment numbers in MBO, HBO and WO (excl. "green"), 2000-2020**

Source: Pupil/Student Forecast 2009.



sufficient graduates at the MBO 4 level. The question remains, however, of whether or not the system is capable of adequately accommodating the continuing growth in higher education.

#### *Diversity*

Although children of highly educated parents and native Dutch families still remain over-represented – more strongly so in WO than in HBO – the differences in enrolment among various social groups have become smaller over time (OCW, 2009d). In international terms, the Netherlands scores relatively well, with the lowest under-representation of students from lowly educated families (Eurostudent, 2009). Regarding diversity, it is most striking that the number of non-Western ethnic-minority students has trebled since 1995, from 27,000 in 1995 to 81,500 in 2008 (Statistics Netherlands, 2009). And yet the relatively low representation of students from socially weak environments remains a point for concern. Significant steps still have to be taken to involve these groups more proportionately in higher education, particularly in the large cities with relatively high concentrations of ethnic-minority young people. Recent initiatives aimed at improving success rates among ethnic minority students at large universities of

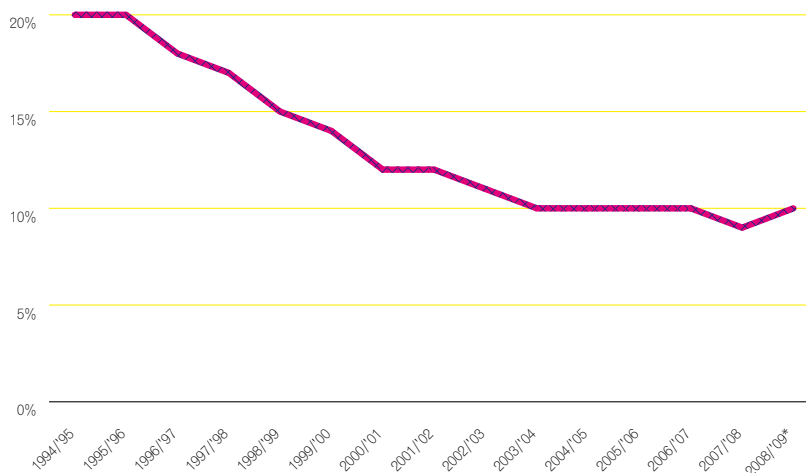
applied sciences in the *Randstad* conurbation have demonstrated that improvement is possible.

#### *Prior education*

Students transferring directly after general secondary education (HAVO) or pre-university education (VWO) still constitute the major inflow into higher education. In professional higher education, HAVO graduates still account for 39% of the intake, while the number of MBO graduates is increasing (their share is currently almost 30%). In academic higher education, 72% of the intake is made up of VWO graduates. It is worth noting that the percentage of VWO graduates in professional higher education dropped from 20% in 1995 to 9% in 2008 (HBO-raad, 2010). VWO graduates apparently regard professional higher education as an increasingly less attractive alternative to an academic higher education programme, although some programmes have been popular with this category of students for many years in the past. This development is leading to increased intake at the research universities. Professional higher education graduates constitute one-quarter of the intake into academic higher education; about one-third of them enter the research university after completing a HBO propaedeutic year (HBO-p).

**Diagram 2.2: Intake of VWO graduates into professional higher education (1995-2008)**

Source: 1 HE Figure CBS, 2010



**Threefold differentiation**

Recommendations of the Committee on the Future Sustainability of the Dutch Higher Education System

*Lifelong Learning*

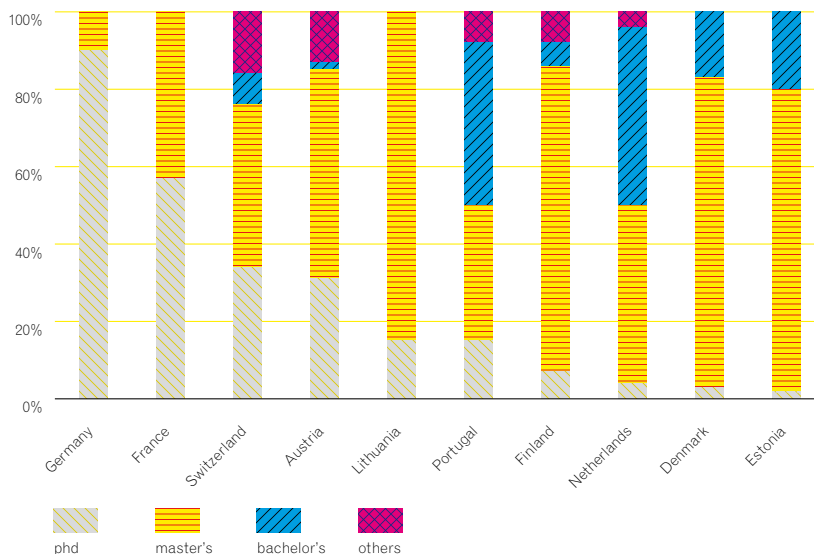
The Netherlands scores downright poorly regarding lifelong learning, despite the fact that it has been on the political agenda for years. The institutions themselves are aware of their shortcomings in catering for this category (HBO-raad, 2009b). Since 1990, the number of over-30s in higher education has grown by 10%. This is lagging far behind the growth of 42% in higher education overall (OCW, 2009b). Neither is the Netherlands performing well in terms of participation in part-time higher education programmes. With 15.6% of students studying part time, the Netherlands occupies a position in the middle. This percentage has been falling uninterrupted for almost ten years (OECD, 2009). The Netherlands' score is also low regarding the percentage of employees taking training and refresher courses. With 17%, we remain far behind the envisaged 35% (Innovation Platform, 2010). Another cause for concern is that the Open University (OU) is not properly fulfilling its role of providing second-chance education: two-thirds of its students already have a higher education qualification and, moreover, the diploma success rate is too low.

## 2.2 Higher education and its professionals

The professional higher education sector in the Netherlands is relatively large. Two-thirds of all higher education students in the Netherlands are in professional higher education and this makes the Netherlands – together with Flanders – quite unique. In most other countries with a binary system, this sector is smaller in size in relative terms (ranging from 5% in France to 46% in Finland). This not only means a relatively low research intensity for a relatively sizable part of higher education, but also, in international terms, the teaching staff at Dutch universities of applied sciences have exceptionally low qualifications: only 46% of teachers have a master's degree and no more than 4% hold a PhD (De Weert and Soo, 2009). In most other countries with a binary system, these percentages are much higher. Even if we allow for a certain differentiation because some of our programmes are categorised under professional higher education while in other countries they are regarded as academic higher education (such as occupational therapy), this remains a weakness, especially if universities of

**Diagram 2.3: Qualifications of teaching staff at universities of applied sciences**

Source: De Weert and Soo, 2009





applied sciences have the ambition to strengthen their research function. The Netherlands Association of Universities of Applied Sciences (HBO-raad) quite rightly has given this issue high priority on its agenda (HBO-raad, 2009b).

In this context, the teachers' unions have indicated, in their statements and personal explanations to the Committee, that teachers should be given more room to expand their professional competencies. Teachers need a broader scope in order to be able to teach well, which includes conducting research. They must be able to interpret developments and select what is important for future professionals. The unions regard the educational level and the training of teachers as one of the most profitable investments in higher education.

More specific to research universities but in the long run increasingly important for universities of applied sciences, is the importance of having a breeding ground for talented young researchers. For years research universities and unions have been arguing for more PhD places and more career prospects for young talents (VSNU/PNN and ABVAKABO FNV, 2006). The percentage of researchers and holders of PhDs in the Netherlands is below the European average (European Commission, 2008). This means that more attention is required for the recruitment, selection and coaching of young researchers.

In addition, women are seriously under-represented in the academic staffs of research universities, particularly among professors. Whereas the number of female students is outstripping the number of male students, the situation is reversed among PhD candidates, university lecturers, senior lecturers and professors. The Netherlands has not achieved the European ambition of raising the proportion of female professors to 25% by 2010. The expectation is that this will only be realised in 2030 (Stichting de Beauvoir, 2009). In 2008, the Netherlands had achieved only 11.5%. In this area the Netherlands is one of the worst performing countries in Europe. The EU average is almost 20% with Ireland leading with 35% of professors being female. The initiatives of Dutch research universities to better counsel female colleagues for higher academic positions constitute a

step in the right direction. However, to qualify as a knowledge-intensive society the Netherlands needs to do more justice to its many talented women.

## 2.3 Quality

### *Good generic quality but excellence as a sideline*

The outcomes of the Dutch quality assurance and accreditation system show that the generic quality of Dutch higher education is good. Virtually all programmes satisfy the minimum requirements. The (limited number of) internationally accredited Dutch programmes also confirm this picture: Dutch programmes satisfy generic quality requirements very well. Whether or not top quality is being provided is unclear. Unfortunately, there are as yet no good international frames of reference in this regard. A few years ago, the Accreditation Organisation of the Netherlands and Flanders (NVAO) introduced the endorsement of "distinctive feature" or "distinctive quality" in its national accreditation procedure. Until now, only 15 and 16 programmes respectively have qualified for such endorsements (NVAO, 2010).

Across the board, students themselves take a positive view of the quality of higher education (Student Monitor 2008). And yet the student satisfaction survey showed that some 20% of HBO students are dissatisfied (HBO-raad, 2009a). The main points of criticism involve assessment methods, poor information provision and timetables, and the insufficient involvement of teachers. Many institutions fail to come up to the mark as regards teaching logistics (HBO-raad, 2009b; ISO, 2009). The LSVb website shows that 43% of students are dissatisfied and 51% assess the quality as mediocre. Moreover, students and graduates find Dutch higher education has little prestige and is not very demanding (Van der Velden, 2009). Talented students in particular are challenged too little (Waterreus, 2008). Over 5% of students indicate that they are unmotivated and 20% are underperforming (Student Monitor, 2008). In addition, Dutch students rarely attempt to excel with high grades and, compared to their European counterparts, they spend relatively little time on their studies (HIS, 2008).

Although the generic quality of higher education is in good order, it must also be concluded that there is a lot of room for improvement; Dutch students are not getting the best out of themselves; the available talent is not being used to the full. Perhaps the desire not to stand out is deeply rooted in the nature of the Dutch. It is, however, evident that higher education is facing a challenge with this issue.

*Success rate too low and drop-out rate too high*

The drop-out rate in higher education is high, too high. This was also the conclusion reached by the research universities and universities of applied sciences themselves (HBO-raad, 2009b; VSNU, 2008). Although the international statistics show that with a success rate of 70% the Netherlands occupies a position in the middle of the list (HIS, 2009), it is unacceptable that only a bare two-thirds of students in higher education obtain a qualification after 6-7 years. In this regard, several groups stand out in an unfavourable sense:

- The success rates of non-Western ethnic-minority students are alarmingly lower than those of native Dutch students (CBS, 2009; Education Inspectorate, 2009). This particularly applies to male ethnic minority students. The success rates of non-Western ethnic-minority students at universities of applied sciences are lower than at research universities (CBS, 2001 student cohort).
- Within professional higher education, drop-out rates are highest among MBO and HAVO graduates. Moreover, HAVO graduates more often switch to another programme than do MBO graduates (HBO-raad, 2009; Onderwijsraad, 2009).
- In academic higher education, MBO graduates who transfer after a HBO propaedeutic year (HBO-p) run the highest risk of dropping out (CFI, 2009).
- In general, academic higher education students spend more time studying than do professional higher education students. The first take over one and a half years longer than the nominal duration to complete a bachelor's programme, the latter take six months longer. In addition, male students spend far more time studying than female students (CBS, 2010).

A positive note is that the success rate in academic higher education has improved significantly in recent

years (currently 68% after 7 years). However, in professional higher education the rate has remained more or less stable (63% but then after 6 years). It is likely that diploma funding and performance-based grants as well as the attention given to shortening study durations have had a positive impact in academic higher education. The reasons for dropping out can generally be traced back to a poor choice of study, deficiencies in prior education, the social background of the students, the perceived quality of the programme and the social bond between the student and the study programme (Severiens, 2009; Education Inspectorate 2009b).

*Quality of research*

Dutch research is of a high and well-respected quality. With only 0.3% of the world's population and 1.4% of global GDP, no less than 2.8% of all publications and 3% of citations are generated by the Netherlands (NOWT, 2010). With over 1.8 publications per researcher annually, the Netherlands is in second place globally and scores considerably higher than Denmark, Germany, France and England (NOWT, 2010; Van der Meulen et al., 2009). Due to its high percentage of research publications, the Netherlands is 4th on the citation index (NOWT, 2010). Up until last year, the Netherlands was in 3rd place (CWTS, 2009) but Denmark has now passed us. Dutch research universities score high in international rankings with 9 institutions in the top-200 on the Shanghai Rankings. However, the goal of having three research universities in the top-50 on the Shanghai Rankings in 2020 (OCW/EZ, 2009) still seems a long way off.

There is a **knowledge paradox** in the Netherlands: although the Netherlands has a lot of top researchers at its disposal, it fails to reap any substantial commercial benefit from this research. The Netherlands scores above average where patent applications are concerned (European Commission, 2008; NOWT, 2010) but it is unable to convert these into many small, innovative start-up spin-off companies (GEM, 2009). The United States, for example, appears to profit much more from the outcomes of research. The involvement of private parties in research in the Netherlands is average, but given that most of this funding is incidental, the traffic lights in the KIA (Knowledge Investment Agenda) Photos are on orange (Innovation Platform, 2010).

The interaction between higher education institutions and the SME sector is not being used to the optimum (Innovation Platform 2010; NOWT, 2010). Innovation requires both specialists engaging in in-depth research (“glass-head pins”) and people who can bridge the boundaries between disciplines (“thumb-tacks”) (Jacobs, 2009). This view was voiced many times in the interviews the Committee conducted with stakeholders: Dutch programmes are relatively narrow, they need to be broadened and more attention needs to be paid to other disciplines.

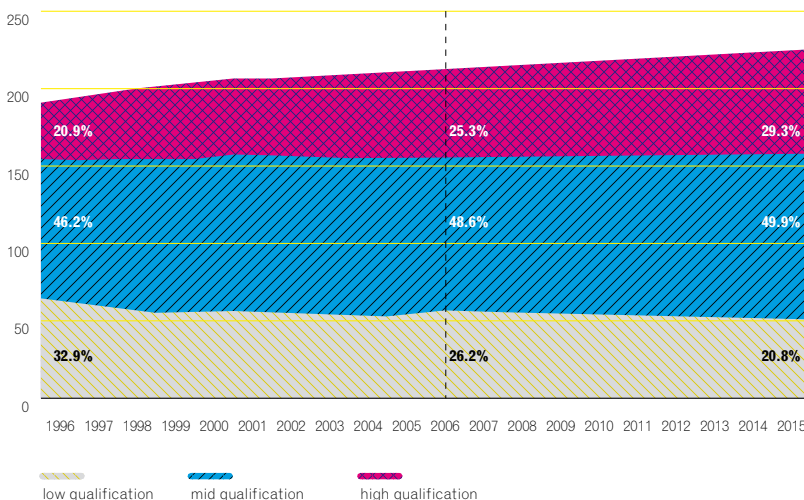
The conclusion seems to be justified that entrepreneurship and the translation of research into application need to be strengthened. Particularly for professional higher education, this is an important point for development because it is precisely the universities of applied sciences that enter into intensive relationships with SMEs. However, the underdeveloped research function at universities of applied sciences is resulting in gaps in the competencies of HBO graduates and is a barrier to the contribution of universities of applied sciences to innovation in the SME sector (Abrahamse, 2005; OECD 2008). This is a point for particular attention given that, as mentioned earlier, by far the majority of students are enrolled in professional higher education.

## 2.4 Contribution to the knowledge society

The Dutch ambition to be among the top-5 on the Global Competitiveness Index (GCI) (OCW/EZ, 2009) is unlikely to be achieved with the current level of investments in higher education and research. On average, countries in the top-5 are spending a full percentage point more of their GDP on knowledge and innovation, in part within the framework of tackling the economic crisis (OECD, 2009b). With an expenditure of 1.67% of GDP on research and development, the Netherlands is below the European Union average (1.84%). Within this figure, compared to many developed countries, the Dutch percentage of R&D resources from the private sector (51%) is low and far below the OECD average of 60%. An even greater cause for concern is that the Netherlands is steadily dropping further behind because our investments in research and development from 2000 to 2006 showed no growth at all, while other EU countries spent an average of 15% more (European Commission, 2008). The Netherlands is lagging behind regarding R&D expenditure; both the government and the business community are failing to perform (NOWT, 2010). Knowledge and innovation – on which we will depend in the future – are being neglected.

**Diagram 2.2: Need for qualified persons in Europe**

Source: Cedefop, 2008. Figure 11, p. 60.



*Weaknesses: innovation, entrepreneurship  
and the number of researchers*

The Knowledge Investment Agenda photos (KIA) show that the Netherlands needs to catch up in terms of innovation, entrepreneurship and its number of researchers. For example, the percentage of innovative start-ups that make use of new technologies is, at 20%, behind the goal of 30% (Innovation Platform, 2010). The European Innovation Scoreboard shows that in 12th place the Netherlands only belongs to the group of innovation followers (EIS, 2010). The Netherlands also has relatively few researchers per 1000 persons in the professional population: with only 10.4 R&D staff and 5.7 researchers, the Netherlands occupies a low position within the OECD (NOWT, 2010).

*Need for more highly qualified persons*

The European Centre for the Development of Vocational Training (Cedefop, 2009) forecasts that in the future, the European labour market will need more highly qualified persons and fewer employees with lower qualifications. This also applies to the Netherlands (Cedefop, 2008). The expected growth in the numbers of students and graduates in the Netherlands is thus essential, especially at the level of higher education but also at the level of senior secondary vocational education. It was pointed out earlier that tensions could arise between the different quantitative objectives of these education systems.

It is definitely positive that the number of graduates in the Netherlands has increased by 54% compared to 1998 (Eurostat, 2009). However, despite this growth, the number of Dutch graduates per 1000 inhabitants aged 20-29 is below the EU average of 56 (European Commission, 2008). It is cause for additional concern that, at 8.6 per 1000 inhabitants aged 20-29, the number of Dutch graduates in the sciences and technology is far below the European average of 13. Countries such as Denmark (15), Switzerland (16), Finland and the United Kingdom (18), France (22) and Ireland (24) score much higher. The number of Dutch PhD graduates (1.3 per 1000 inhabitants aged 25 to 34) is also lower than the EU average. Here too some countries score much better, including Finland, Switzerland, Germany, Portugal, Sweden, Austria and the United Kingdom (European Commission, 2008).

*Alignment with the labour market*

Highly qualified people in the Netherlands do relatively well on the labour market with low unemployment and a high percentage gaining permanent employment within five years (Allen en Van der Velden, 2007). However, they are not very mobile, which is a hindrance to a flexible labour market. Entrepreneurship is not very well developed amongst Dutch graduates either and they are not well trained for top positions on the labour market (ROA, 2009). An important observation is that Dutch graduates regularly work outside their own specialised field (ROA, 2009). At the sector level, this applies to 20-30% of HBO graduates and to 20-40% of WO graduates (HBO-Raad 2009; VSNU, 2009). Many students thus have broader competencies than are necessary for their own field of expertise.

## 2.5 International context

*International competitive position*

Both Dutch companies and the higher education sector need to fight for their positions on a highly competitive global market. The greatest economic growth is currently taking place in South East Asia; it is now mainly focused on manufactured goods but in the very near future this will shift to knowledge intensive sectors (OECD, 2010b). The globalisation of the economy also demands a more international perspective on the part of the higher education sector. Cooperation in teaching and research, encouraging outbound mobility and attracting talented students and researchers are becoming increasingly important. The following points should be noted in this regard:

- Although the Netherlands has a very open economy, in international terms few Dutch students study abroad, either for a complete programme or for part of a programme. With 17% of students following part of their studies abroad, the Netherlands occupies 7th place among European countries (HIS, 2008; HIS/Eurostat, 2009).
- Regarding inbound mobility, the Netherlands' score is average within the Bologna countries. However, of the inbound foreign students, over 40% come from Germany (19,000 in 2008/09) and that number is increasing by 7% per year (Nuffic, 2009).

- 77% of foreign students study here at the bachelor's level and 22% at the master's level.
- Some 20% of teachers and researchers at Dutch research universities come from abroad (Nuffic/Research for Policy, 2005). These foreign academics are mainly active at the universities of technology and are often taken on as PhD candidates. A Eurostat study (2009) shows that the Netherlands has relatively few highly qualified migrants working in the fields of science and technology.
- Conversely, almost 8% of highly qualified Dutch people are working abroad (OECD 2008), giving the Netherlands a position along the median within the OECD.

In terms of brain drain versus brain gain, it is immediately noticeable that bachelor's programme students dominate inbound mobility. This is fine with a view to the international classroom function, but less positive if we want to attract potential knowledge workers such as PhD candidates and master's programme students. Of relevance for future policy is that countries whose investments in research facilities are below par run an increased risk of brain drain (OECD, 2009c).

#### *Bologna process*

The Bologna process has ensured that higher education within the European Higher Education Area has become more coherent. More than ten years after the start in 1999, we have a comparable degree structure and agreements have been made among the participating countries regarding the use of quality assurance systems, a common credits system (ECTS), the Diploma Supplement and the European Qualification Framework. When adapting their traditional higher education programmes and structures to the new European trends, many countries encounter problems that are similar to the ones the Netherlands is facing. These problems involve questions regarding the duration of bachelor's and master's programmes, the orientation of programmes, titles to be awarded, and recognition problems regarding competencies acquired elsewhere, credits and diplomas (Westerheijden et al., 2009). This underscores the necessity of securing an adequate position for Dutch institutions on the European playing field.

During the ministerial conference in Leuven/Louvain-la-Neuve in May 2009, the countries participating in the Bologna process formulated new goals:

- a substantial increase in international student mobility to 20% of the total student population;
- increasing participation and success rates among groups that are under-represented;
- promoting Lifelong Learning by increasing the flexibility of learning pathways;
- providing transparency regarding the diversity of institutions and programmes within the EHEA;
- reinforcing research and innovation at all levels of higher education;

Each of these goals is in line with what the Committee envisages for Dutch higher education.

#### *Lessons from abroad: California*

For various subjects of this report, reference is made to relevant elements of well functioning systems elsewhere in the world. Given that California was repeatedly mentioned in the lead-up to this request for recommendations, we will examine its system in more detail.

With almost 37 million inhabitants, i.e., almost two and a half times the population of the Netherlands, California is the largest American state. It has for some time been regarded as an enlightening example: a higher education system with great diversity which offers access to higher education to a broad and highly diverse student population of no fewer than 2.5 million students. The system is based on a master plan that was drawn up in 1960, which breaks down into three sectors, each with its own purpose. At the top, there is the highly selective University of California (UC), a true research university with 10 different campuses, including Berkeley, Los Angeles, San Diego and Santa Barbara. Together, these accept 12.5% of the best qualified high school graduates in California; they accommodate more than 200,000 students to whom they offer prestigious degrees at all levels. In addition, there is California State University (CSU) that has

**Threefold differentiation**

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the primary task of providing undergraduate programmes and graduate master's programmes. Here, research is primarily education related. At its 23 campuses, CSU accommodates some 33% of high school graduates, which comes to over 400,000 students. All other students find places at the 109 Community Colleges, or at other public or private institutions. In total, over 1.7 million students study there. Community colleges mainly focus on the first two years of undergraduate programmes and professional programmes. A distinguishing feature of the Californian system is that students can smoothly transfer to the next level. The admission procedures guarantee these smooth transfers; this requires close cooperation between the three separate sectors.

*Lessons for the Netherlands*

A number of features of this model are of interest. *First of all*, it is striking that the upper tier of the system is highly selective and that the transfer rate to UC is quite comparable to the transfer from VWO to the Dutch research universities. In the Netherlands, almost 48% of secondary education graduates (from MBO, HAVO and VWO) transfer to either professional or academic higher education (CBS, 2009). Roughly 13.5% go to a research university and 34% to a university of applied sciences. This picture is reasonably in line with the situation in California. There, 12.5% of high school leavers go on to the prestigious University of California (UC, that offers degrees through to the PhD level) and 33% go to California State University (CSU, that offers degrees through to the master's level and conducts applied research).

A *second* interesting element is the way in which access to the system is structured. Open access to Community Colleges means that they attract a very wide group of students, the majority of whom, like in many other American states, follow all kinds of one or two-year programmes. In 2008, some 1.7 million students were enrolled in Community Colleges in California, of whom approximately 83,000 graduated with an

AD. That is about 10% of all the graduates. More than 45,000 of these students transferred to a 4-year bachelor's degree programme, most of them at CSU and 30% at UC. Unlike in the Netherlands, California offers ADs together with numerous other short, professionally oriented (sub)programmes at the same institution – the community college. These “learning continuity pathways” at the community colleges seem to indicate that the institutional distinction between MBO 4 and short higher education programmes in the Netherlands is due to as yet exclusive organisation within the universities of applied sciences. Another noteworthy trend is that in California, increasingly more high school graduates are opting for direct transfers to CSU or UC. At the same time, the community colleges are offering an increasing number of short professionally-oriented programmes, as a result of which the original transfer function of the community colleges is coming under pressure (LAO, 2010a). Access to higher education is also safeguarded via the manner of funding. Since the introduction of the master plan, there has been a relatively generous public funding of higher education in California. This has, however, been coming under pressure since the end of the 1990s and this has consequences. Per capita expenditure is being reduced, tuition fees are increasing and approaching the American averages of over \$10,000 for UC undergraduates and \$4,400 for CSU undergraduates (LAO, 2010b). Only the tuition fees of community colleges are still very low (\$26 per credit/unit). This also means there is still wide access to community colleges. In order to increase accessibility and encourage transfers, UC and CSU are required to assess more potential candidates in terms of their suitability with effect from 2012. In addition, a study will be conducted to ascertain whether the selection targets (12.5% and 33.3%) are still realistic and whether the transfer possibilities to the universities are still up to par (LAO, 2010c).

The *third* interesting element of the Californian model that we would like to highlight is the layered nature of the system, in which each institution has a clear mission. An important difference to the Netherlands is that three sectors are defined rather than two, i.e., trinity versus binarity. In its recommendations, the Committee does not, however, draw the conclusion

that a third institutional tier should be woven into the Dutch system but rather finds that short higher education programmes should not solely be regarded as part of professional higher education. An adequate relationship with MBO is desirable; the Committee will return to this matter in Chapter 4.

A *fourth* element involves the role of the government and the relationship between the government and the institutions. In a recent report by the Legislative Analyst's Office (LAO, 2010a) the conclusion is drawn that the absence of active government steering at the level of the state is a weakness in the Californian model. The core of the model as it was set down fifty years ago in the master plan with a strong individual mission for each of the three sectors has been eroded. The indirect approach with autonomous institutions worked well in a period of strong growth of the system, but has come under pressure in recent decades. Because of the limited steering and low accountability for performance, institutions could set their own priorities without consent at the national level. This resulted in more mission creep in the range of programmes offered and overlap of student target groups as well as growing transfer problems between the community colleges and universities. The LAO (2010a) argues for active government steering in the harmonisation of institutional priorities and programmes offered to policy aims. To add strength to this harmonisation, (a part of) the funding will need to be linked to the agreed missions and corresponding achievements. These are recognisable elements for the Committee which will be return in the solutions and recommendations listed further on in this report.

## 2.6 Structure of the system

### *Binarity: HBO is relatively large*

The binary nature of the Dutch higher education system is not unique. Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Ireland, Lithuania, Portugal and Switzerland also have binary systems. Unique to the Netherlands is that the professional higher education (HBO) sector is relatively large with 65% of higher

education students. In the majority of binary systems, this ranges from 5% (France) to 46% (Finland) (Weert & Soo, 2009). Neither Dutch nor foreign experts regard binarity as a problem as such. However, they do find compartmentalisation to be a problem within the Dutch system. Early tracking forces young people to choose for a particular career in secondary education at the age of 11 or 12. Once they have made their choice, they are stuck with it. Because VMBO, HAVO and VWO have different durations, the duration of bachelor's programmes also differs (4 years in professional higher education, 3 years in academic higher education). Most other countries have a more uniform secondary education system allowing students to take different subjects at different levels, which makes it easier for them to demonstrate their talents (Eurydice, 2010). In Anglo-Saxon and Scandinavian countries, the programmes with a more professional orientation and of a more general training nature run parallel, and students can combine components from both streams. The Education Council (Onderwijsraad, 2010) also argues for a similar system for the Netherlands in due course.

### *Short higher education programmes*

The Netherlands has few students in short higher education programmes, in part as a result of the abolition of short HBO programmes with the introduction of the bachelor's – master's system. Currently, some 1500 students are enrolled in an Associate Degree programme while only 2% of higher education graduates on the labour market have a short qualification (mainly the former short HBO). Within the OECD, this is a very low score (OECD, 2009). There are opportunities here for the Netherlands to involve new target groups in higher education. This particularly applies to MBO graduates and working people who desire to take a further step along the lifelong learning path.

### *Master's programmes*

In international terms, the Netherlands has a limited number of master's programme students. With just over 13% of students in a master's programme, we have a below average score together with Austria and Germany. The figures for Flanders, Australia, the UK and Finland range from 18% to 33%. Regarding the number of degrees awarded, 26% of the degrees



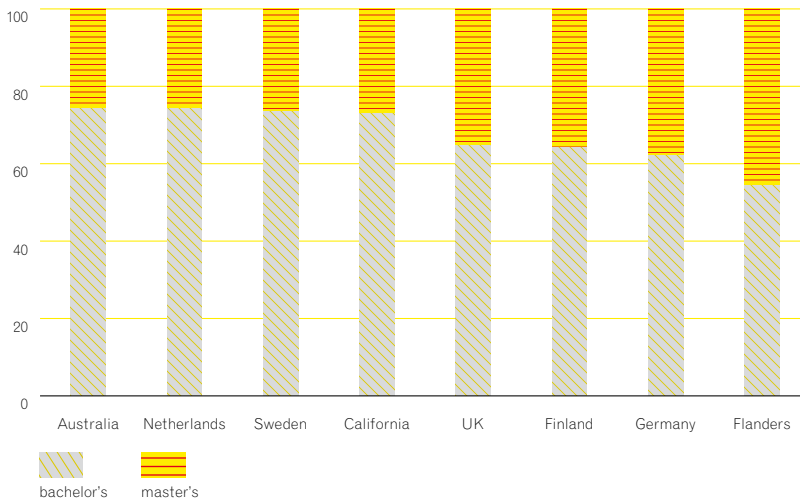
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2 A recent study (Overdiep et al., 2010) shows that virtually all sectors in the Netherlands have a need for people who are capable of directing complex projects at a higher level with a broader view. The Committee regards this as a confirmation of the need for developing more professionally oriented master's programmes. The study also confirmed that the effectivity of these master's programmes, in terms of learning effects, increases when such programmes are not followed immediately after bachelor's programmes but rather after several years of

work experience. Although this constitutes a recognition for this type of master's programme, the study also shows that there is no explicit demand for HBO master's programmes among graduates. Apparently, the limited range of HBO master's programmes offered and the continuing discussion about their status (among other things, in combination with the debate on titles) have resulted in recognition of the importance of developing such master's programmes, but this is not (yet) associated as a matter of course with HBO.

**Diagram 2.5: Relative numbers of graduates of bachelor's and master's programmes in various countries**  
Source: CHEPS, 2010



awarded in the Netherlands are at the master's degree level versus 35% in Germany, Finland and the UK (CHEPS, 2010). The Netherlands is thus training a limited number of people at the master's degree level.<sup>2</sup> In a growing number of countries, master's programmes can also be offered at the equivalent of universities of applied sciences. Some countries are consciously investing in professional master's programmes in response to developments on the labour market such as increasing knowledge intensity, complex professional practice, internationalisation, innovation and the need for lifelong learning (Beerkens-Soo et al., 2010). In Finland, professional master's programmes constitute one of the ways of training as many people as possible to the highest possible level in order to avoid a shortage of highly qualified workers. From the international perspective, Dutch policy regarding the funding of professional master's programmes is restrained.

#### Titles

Internationally speaking, there is no standard for the application of titles and degrees (Vossensteyn, 2010). In most European countries, the titles of bachelor and master are now awarded but the use of affixes is very

varied. In Anglo-Saxon countries and Germany, for example, the affix "of Arts" or "of Science" indicates a discipline rather than a level. From the international perspective, the strict distinction between professional and academic higher education regarding degree affixes seems rigid and it has an unnecessary adverse effect on professional higher education.

## 2.7 Conclusions: the state of affairs of Dutch higher education

The analyses in this chapter and the underlying annex (Annex I) give a mixed picture. Although Dutch higher education is basically good, the system has too many weaknesses to achieve the high ambition:

- The Netherlands has a small and open economy. Economic globalisation requires knowledge production to an increasing degree as well as innovation on the part of highly qualified knowledge workers. There is worldwide competition for talent. Therefore, the quality of Dutch higher education must be raised significantly to retain local talent and attract



- good master's programme students and PhD candidates from elsewhere.
- This fact has not led to the envisaged volume of investment in education and research: in international terms the Netherlands is falling behind.
  - The *diversity* of and *enrolment* in higher education are still growing but are insufficient to achieve the goal of 50% higher education graduates in 2020. In short: from that perspective, the Netherlands needs more highly qualified people but the Committee believes it is important that this is not achieved at the expense of sufficient high-quality graduates from MBO moving onto the labour market.
  - The Netherlands is not performing well in lifelong learning. The volumes we are realising are sub-standard. The lifelong learning policy needs to be greatly improved.
  - *Participation* in higher education is unbalanced. Students from weaker socio-economic backgrounds are under-represented as are ethnic-minority and mature students.
  - The *generic quality* of the education provided is in good order. However, at the same time, there are many weaknesses and *talent is not used to the full*. The way in which the programmes are organised does not appeal to many students. The drop-out rate is too high. In particular the difference between the success rates of ethnic-minority and native Dutch students is too great. In this regard, the transition from HAVO and MBO to HBO and from HBO/HBO-p to WO requires additional attention. Students feel they are insufficiently challenged and there are too few programmes for excellent students. The level across the entire spectrum must be raised and specific groups need to be served in a more tailored fashion, for example with intensive and/or excellent programmes. We need to consider whether perhaps our programmes are too narrow in nature.
  - Universities of applied sciences have rightly raised the question of whether they should make a greater effort to acquire *more highly qualified teachers* with a master's degree or PhD. Internationally, the Netherlands is well off the pace in this regard.
  - The link with the *labour market* is good except for a continuing shortage of science and technology graduates. Professional specificity is falling and graduates need to be more flexible on the labour market. Consequently, there is an increased need for generic skills and broad programmes. From the perspective of the labour market too, the question is whether our programmes are too narrow in nature.
  - Dutch *research at academic universities* performs very well internationally but many other countries are making an effort to catch up and are making large investments. Moreover, the Netherlands has relatively few researchers and PhD candidates. Research at academic universities thus needs to be strengthened.
  - Compared to other countries, Dutch HBO constitutes a relatively large proportion of higher education yet it lacks a solid foundation in applied research and knowledge development. Research in HBO needs to be expanded.
  - Research in the *Netherlands is insufficiently exploited* and applied. More entrepreneurship is required as well as interaction with the business community. This is an important point for development, particularly for HBO, due to the importance of the universities of applied sciences for the SME sector.
  - The *binary structure* of the Dutch system is recognisable in international terms but has its shortcomings – again from the international perspective – as far as the variety in the types of programmes and levels is concerned, particularly in light of the increasing diversification of the demands of students and employers.



## Quality improvement across the entire spectrum: threefold differentiation

The analysis of the Dutch higher education system has demonstrated that its generic quality is up to par. However, a number of pressing issues need to be resolved. If our goal is to rank among the top five of competitive economies, Dutch higher education needs to be placed much higher on the political and social agenda. A substantial quality improvement is called for, within a short space of time. Drop-out rates are too high, talent is being insufficiently challenged and the system is not flexible enough to properly cater for the diverse demands of students and the labour market. And this while universities are faced with a highly competitive international context in which to gain a position. That is why the Committee takes the view that the current system *is not future-proof*. If we continue like this, we will not pull through.

For that reason, the first and *most essential recommendation of the Committee reads: give a powerful impetus to the quality and diversity of Dutch higher education*. Its leading perspective is that quality needs to be improved across the entire spectrum of higher education and research (see paragraph 3.1). It must be boosted in a manner that is recognisable in international terms and ties in with the European context as outlined by the Bologna process (3.2). In order to realise the intended quality improvement, the Committee argues in favour of threefold differentiation: in the structure of the system, in the distinctive features (profiles) of the institutions and in the programmes on offer (3.3).

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- 3 A similar conclusion has been drawn in Germany. For example, Strohschneider, Chairman of the Wissenschaftsrat, recently stated: "Das neuhumanistische Seminar war ja programmatisch eine Verknüpfung von Forschung und Lehre. Heute ist es vielerorts kaum mehr als eine Abfolge mehr oder weniger langweiliger Referate. ...Ich will die Individuelle Betreuung neben dem Seminar intensivieren. Und ich überlege mir, wie man die intellektuelle Verbindlichkeit der Lehre erhöhen könnte...". And in that same interview, DFG president Kleiner added: "Ich werde meine Lehre viel stärker auf den Dialog orientieren, die Studierenden stärker einbeziehen und in die Verantwortung nehmen...". "Lehren muss man genauso lernen wie forschen. Bisher sind Professoren in dieser Hinsicht ja eher Autodidakten." (Spiewak, 2010)
- 4 "improving the conditions for research and development, in particular with the aim of bringing combined public and private investment levels in this sector to 3% of GDP; the Commission

### 3.1 Quality improvement across the entire spectrum

#### *Quality*

In the opinion of the Committee, radical measures are needed to tackle the bottlenecks in the quality of higher education referred to in the previous chapter. We need a quality boost. This requires more intensive teaching as well as increased motivation and involvement among students and teachers. The programmes offered should take far more account of the differences between students. Students are highly diverse with regard to background and motivation. It is of paramount importance that students find a programme that suits them and that subsequently challenges them to perform well. That is why a better match between students and programmes should have top priority.

#### *Accessibility and success*

A better match between programmes and students will also be conducive to improving the accessibility of higher education. This is currently substandard, even though we flatter ourselves that we have opened up higher education to many. Too many young people are (as yet) unable to find their way into higher education. Research universities and universities of applied sciences have an important task in raising both the intake and the success rates among students from lower socio-economic and/or ethnic-minority backgrounds, which are currently lagging behind. The task with which the higher education system has been charged is doing maximum justice to talent-related differences while minimising differences on other grounds.

#### *Levelling up by linking up to research*

Any form of higher education needs research in order for students to acquire academic and practical skills. These skills can only be mastered in an educational environment of which research constitutes an integrated component. Furthermore, driven researchers usually make inspiring teachers (AWT [Advisory Council for Science and Technology Policy]: 2009). The level of education can be raised by once more reinforcing the interrelation between research and

education at the research universities.<sup>3</sup> Many programmes could stand to tighten up their academic profile.

Not just at those universities, however; all forms of higher education need a certain tie with research. Gaining experience with applied research is important for students in professional bachelor's programmes as well. It increases the depth of their professional skills, sharpens their reflective and cognitive skills and enables students and graduates alike to contribute to the innovation of their professional practice. It is of paramount importance that diversity is fostered in this development as well. Universities of applied sciences need to (be able to) develop their research function in their own manner: research in a wide definition of developing knowledge, focused on application and/or design, aimed at furthering the quality of bachelor's and master's programmes as well as the valorisation of knowledge for the benefit of small and medium-sized businesses.

#### *International appeal*

This focus on quality improvement and the interrelation between research and education will also enhance the *international appeal* of Dutch higher education. Talented students and researchers from abroad enhance the quality of the education provided and boost the competitive strength of our economy. An important precondition, however, is that the institutions need to realise that we should form a united front when entering into international competitive warfare. It is imperative to enhance our appeal as a country. To that end, individual programmes and institutions need to distinguish themselves in international terms, while research universities and universities of applied sciences need to join forces and make choices. Competition within the Netherlands must slack off, in order to strengthen our international competitive position.

will elaborate an indicator reflecting R&D and innovation intensity;" and "improving education levels, in particular by aiming to reduce school drop-out rates and by increasing the share of the population having completed tertiary or equivalent education; taking into account the Commission's proposal, the European Council will set the numerical rates of these targets in June 2010."

5 In this respect, Benneworth et al. (2010) refer to a large number of collaborations between higher education establishments and research institutes recently launched in Europe, for example the Karlsruhe Institute of Technology (Germany), the Technical University of Denmark, the Swiss Federal Technical University, the Operation Campus in Lyon (France), the Aalto University in Finland, the Danish-Swedish Öresund University and the British Universities for the North East.

## 3.2 International context: choosing for European embedding

### *Correspondence to the Bologna process*

Just as the Dutch economy is closely intertwined with the global economy, Dutch higher education is increasingly becoming part of an international playing field. The preceding chapter outlined the international developments in higher education. The Bologna process and the EU were found to be particularly dominant environmental factors in this regard. In this chapter, the Committee sketches a perspective for the future development of the Dutch system. Crucial in this perspective is the Committee's recommendation that we, as the Netherlands, should want to be a part of the European Higher Education and Research Area. The individual strengths of the Netherlands and those of Europe are equally valuable, but mutual enhancement is essential. Europe is engaged in a competition with Asia and the US. That is the level of the game. That is why the Committee explicitly underscores the objectives of the Bologna process. This means that Dutch institutions, programmes and degrees must be able to be acknowledged and recognised within Europe. It also means that our future higher education policy must tie in with the new 2020 strategy of the EU.

### *The knowledge triangle: Lisbon objectives and the 2020 strategy*

Over the past decade, the Lisbon objectives, formulated in 2000, have driven a positive trend with regard to the higher education, science and technology policies. Although the Lisbon targets have not been achieved, the ambition to turn Europe into one of the strongest knowledge economies of the world still prevails. However, the growth potential within the EU is under severe pressure because of ageing populations, productivity which is lagging behind that of the US, and the EU share on the global export market which is giving way to China and India (Barosso, 2010). The EU strategy to overcome the current crisis focuses on sustainable economic growth based on knowledge and innovation. Higher education is envisaged as playing a key role in this process. Quite recently, the Council of

Europe (European Commission, 2010) decided to make education and research two of the five key targets in its new strategy.<sup>4</sup> This means that many new initiatives will follow in order to reinforce the European higher education and research area, probably involving considerable budgets for the Framework Programmes, the European Research Council and the European Institute of Innovation and Technology (EIT). In the EU analyses, the SME sector is regarded as a significant source of innovation, which provides the universities of applied sciences with a major challenge in their collaboration with SME companies. Operating successfully in this European arena requires collaboration, both between knowledge institutions and with the business community.<sup>5</sup>

### *International orientation*

Worldwide, mobility in higher education is increasing but the EHEA and the Bologna process, in particular, have made internationalisation an inseparable aspect of any form of higher education. Students must be equipped for a career in an international environment. Curricula and qualifications must correspond to international standards. The Accreditation Organisation of the Netherlands and Flanders (NVAO) regularly draws urgent attention to this issue. This requires an active internationalisation policy on the part of the institutions. At the national level, sector organisations and the government bear a significant responsibility with regard to mutual harmonisation and coordination. With Nuffic – a unique organisation from an international perspective – the Netherlands holds a major trump card when it comes to securing a coherent position for Dutch higher education on the international market. To that end, however, the ties between the institutions and Nuffic need to be tightened, while the services Nuffic provides to institutions and students need to be professionalised in a manner with which the institutions can identify.



### 3.3 Threefold differentiation

According to both the national problem analysis and international references, the Dutch higher education system is uniform in nature. Uniformity, for that matter, is quite valuable when expressed in an average high level. That, too, is one of the distinctive features of Dutch higher education. However, in order to achieve the intended quality improvement, creating more diversity across all levels in the system would be essential, in the opinion of the Committee. The quality issue in higher education is inextricably bound up with the wide range of challenges the higher education sector is facing. Only by expanding the diversity of institutions and raising the quality of programmes can we meet the various demands of students and the needs of the labour market. Institutions and programmes should want to distinguish themselves far more explicitly. The current relatively uniform system offers insufficient opportunities to that end. That is why the Committee advocates a – perhaps “un-Dutch” – threefold differentiation:

- increased differentiation in the structure of the system (3.3.1);
- increased differentiation between institutions (3.3.2) and
- increased differentiation in the range of programmes offered (3.3.3).

#### 3.3.1 Differentiation in structure

##### *Binarity: a valuable distinction*

The Committee regards the binary distinction as valuable and practical. Binarity refers to the distinction between two basic orientations in the system, i.e. a focus on research and a focus on professions. It is not, however, a distinction in an absolute sense, as in fact more subtle differentiations are hidden below the surface of the range of programmes on offer. Research universities also train a great many students for a profession, while research is essential at universities of applied sciences as well. As a design principle, however, the distinction is of crucial importance. Such a *first-order diversification* will enable us to strengthen the essence of each type of education in order to

improve its alignment with the various levels and learning styles of its students. This ties in with employers' wishes to maintain the current distinction between WO [academic higher education] graduates and HBO [professional higher education] graduates. Companies and organisations regard this distinction as particularly useful in outlining job frameworks. However, we do need to adapt the manner in which this binarity is validated in rules and regulations as well as the manner in which this has contributed to the substantiation of binarity.

##### *Research universities: focus once more on research and academic training*

A number of issues facing Dutch research universities ensue from the fact that the manner in which their position in the binary system is transposed to education is not always adequate. It is important to recognise the large differences between departments. This issue forces itself to the fore especially in departments that are labouring under the massiveness of enormously increased intake levels while working, either by choice or by virtue of obligation, with educational concepts such as reduced face-to-face instruction, uniformity and narrowing the range of programmes offered. In some cases, budget restraints do not leave the departments any choice. For many university departments, this has resulted in mass-natured teaching and a depletion of their interrelation with research. From an academic perspective, academic higher education and its quality are under pressure. Not all university programmes are of the same level and equally academic in nature. This is illustrated by the criticism regarding their large-scale approach, overcrowded lecture halls and insufficient face-to-face instruction.

In recent years, research universities have had to accommodate an increased intake without a proportional rise in funds. Moreover, the research university sector will be up against a substantial growth in the decade ahead, which is double that expected for the professional higher education sector. This forces the research universities to reflect on organisational forms that safeguard the level of the education they provide, but also directs a question at Dutch politicians. How can the proper conditions be created to

6 "The German vocational model, including the mechanisms used to involve industry, cannot be replicated in the Netherlands as Germany has a more manufacturing-based economy. However the principles of near-parity of esteem and parity of academic qualifications might be worth imitating."

7 For example, Academic Primary School Teacher-Training Programmes (joint ventures between Utrecht University and University of Applied Sciences Utrecht, HAN University of Applied Sciences and Radboud University), the collaboration between Hogeschool Zuyd and Maastricht University (in the field of physical therapy and music) and the Twente School of Education (joint venture between the University of Twente, Edith Stein and Saxion University of Applied Sciences). Conversely, the Open University is developing HBO programmes.

shift the focus once more to the essence of academic higher education: academic training intertwined with research? During the Committee meetings, pleas were made for more selective and thus smaller research universities. The Committee does not want to take this as far as suggesting that the government make a direct move towards downsizing Dutch research universities. However, if accentuating the academic higher education profile and increasing the appeal of professional higher education would result in Dutch research universities becoming smaller and more selective, we would welcome such a development.

*Universities of applied sciences: reinforcing professional higher education at various levels*  
Over the past decades, professional higher education (HBO) has accommodated the bulk of the growth in student numbers. That the universities of applied sciences managed to do so while retaining the current quality of education is a major achievement, especially in view of the budgetary frameworks within which they had to operate. At the same time, however, this has resulted in a scale issue in this sector too. At the universities of applied sciences, the quality of education is under pressure as well. The "organisability" of education, in a context of massiveness and increasing complexity perhaps ensuing from educational reforms, is an issue that raises particular questions, as students have expressly indicated in various student satisfaction surveys. Moreover, the intake into the HBO sector is highly diverse (MBO, HAVO, VWO graduates and working people). In the major cities, the proportion of ethnic-minority students is soaring. Universities of applied sciences are faced with a twofold task: raising the quality of bachelor's programmes and increasing differentiation in the education routes for the various target groups. The quality of bachelor's programmes must be improved by strictly monitoring intake levels, focusing on the key task, i.e. professional bachelor's programmes, intensifying teaching and paying attention to what is frequently unjustly referred to as minor quality aspects.

Equally important, however, is reinforcing research as a quality boost to education. Lectorates are obviously of eminent importance in this regard. Research is

essential in education, as it teaches students to reflect on their professional practice and instils an exploring attitude. It also leads to reforms in the curriculum and can contribute to innovation within businesses and social organisations. Apart from that, research is needed to be able to compete at the international level. A side effect of such a quality impulse could be that professional higher education will once again become attractive to VWO graduates: it will allow them to study in a high-quality, challenging learning environment in which application-oriented research is a standard component.

Trends involving increasing knowledge intensity, more complex professions, ever expanding internationalisation and the urgency to continue to innovate are setting new requirements for professionals. This does not just manifest itself in the top tier of HBO with the development of the professional master's programmes. A similar trend underpins Associate degrees. ADs meet a new need on the labour market. They are aimed at various target groups, such as HAVO and MBO graduates but also (older) working people who would like to expand their qualifications within the framework of lifelong learning by enrolling in short programmes.

*Initiatives at the interface between sectors*  
To an increasing extent, the difference in orientation between academic and professional programmes will not just be pinned down to the types of institutions. Mixed formats and collaborations will develop at the interface between the two sectors. For example, some universities of applied sciences will start to focus on professional higher education dominated by research and professional master's programmes. The OECD (2008) already suggested that the Netherlands take its lead from the German *Fachhochschulen*.<sup>6</sup> In the opinion of the Committee, this would be a good example, at least for some of the universities of applied sciences. The object is not, obviously, for them to develop into a fully-fledged research university but rather a levelling-up within their own professional higher education frameworks. Interesting mutual joint ventures are already underway<sup>7</sup> and these are likely to be shaped even further. In addition, some universities of applied sciences are already offering academic programmes

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- 8 Breda University of Applied Sciences (NHTV), for example, aims to establish itself as a knowledge centre encompassing all the disciplines that are relevant for its field. This implies developing a comprehensive programme continuum comprising both professional and academic programmes.
- 9 For example, many countries offer journalism up to and including PhD level. In the US, the most prestigious programmes are offered by Columbia University, Northwestern University and the University of California at Berkeley.

as well.<sup>8</sup> Furthermore, other programmes, for example those in the field of the fine and performing arts, have a need for development in the second – and in some cases, the third – cycle. This can be achieved by joining forces with research universities. However, given the unique nature of this type of education, a long-term option could be a more independent position in which fine and performing arts institutions could acquire the right to award PhDs of their own accord (cf. chapter 5). Provided the research function is developed to a sufficient extent – and safeguarded by means of international quality standards – in the long term some universities of applied sciences might be allowed to offer *professional doctorates*, especially if such programmes have no counterpart in academic higher education. Other countries already have various examples of such arrangements.<sup>9</sup> If universities of applied sciences wish to have international appeal, they should be able to compete at this level. Obviously, such a move must be made in a selective manner: only in cases in which it would be relevant and appropriate, considering the sector. If, in the long run, universities of applied sciences were to develop a research function based on their professional identity that demonstrably “grazes” the binary division, the implications for the right to award PhDs – which is currently and continues to be reserved for the research universities – could be reconsidered.

*No new partitions*

The Committee wishes to reconfirm the importance of the binary distinction wholeheartedly. Each of the two types of education has a different core identity and we intend to put a process in motion that further accentuates this distinction. On the other hand, however, we need to be wary of rigid and non-functional partitions between the two sectors. Research universities and universities of applied sciences operating in the borderland of the WO and HBO sectors may start to exhibit similarities in several dimensions. This does not constitute a threat to or watering-down of the above distinction but fits in perfectly with the target of a more diverse system envisaged by the Committee.

**3.3.2 Differentiation between institutions: finding a profile**

*A second-order diversification* involves differentiation between institutions. Each research university and each university of applied sciences is different. Each has its own distinctive features with regard to size, mix of disciplines, regional involvement, internationalisation, research intensity, etcetera. Yet the system is also under an enormous pressure to converge. Enrolment-based funding provokes copying behaviour; popular programmes are repeated elsewhere. A similar trend can be observed in the area of research: too many institutions want to get their hands on priority research funds, which leads to the fragmentation of investments. In addition, mainly as a result of global rankings, research universities tend to focus unilaterally on (top) research, rendering their other activities subordinate. Such a focus on top research is excellent but precisely in order to reach the top it should be coupled with making choices, seeking collaboration and not wanting to take on everything at the same time. Moreover, research universities and universities of applied sciences have more to offer to society than research alone. The Committee believes that appreciation for institutions opting for a different mission must increase. Higher education institutions can excel in a great many domains. *“There is insufficient scope across the system for diversification and specialisation. Differences in mission and modus operandi are restricted to those flowing from the binary line and this is relatively inflexible.”* (OECD, 2008).

*Transparency*

Stressing distinctive features not only benefits the diversification but also the transparency of higher education. Students and employers know where to expect which type of programmes and graduates. A number of countries are currently working on the development of a multi-dimensional classification and ranking structure which would provide a better picture of the diversification in the system. The European U-map project (<http://www.u-map.eu/>) is currently working with six dimensions to typify higher education establishments.



*More relief in the system*

Profiling creates preconditions conducive to the formation of emphases. It means that each institution can focus on other things, which bolsters the efficiency of the system and increases the chances of excellence. Institutions cannot perform equally well in everything. A clear division of tasks at the system level and a sharp focus on distinctive features will yield a considerably better chance for them to excel at something. This produces more relief in the system.

*European classification*

A European classification system has been devised in order to improve the understanding and utilisation of diversity in European higher education. This enables students to make better choices and institutions to compare themselves with institutions whose distinctive features are similar. The aim of a multi-dimensional classification is to define and compare similarities and differences between higher education institutions. An institutional profile is a set of positions on various dimensions and indicators. The following six dimensions are involved:

- Teaching and learning profile
- Student profile
- Research involvement
- Involvement in knowledge exchange
- International orientation
- Regional engagement

The institutions use these profiles in the development of their internal strategies, external benchmarking, collaboration with other institutions and external communication.

student full scope to develop their talents, in whatever discipline or at whatever level, by ensuring they end up in the right place. Unsuitable specialisations and dropping-out entail a great deal of frustration, disappointment and unnecessary expenses. The Committee has drafted four proposals. The first two pertain to achieving a better match between programmes and students (selection and broad programmes), the latter two involve improved transfer options and flexible learning pathways (taking multiple degrees and LLL).

*Selection*

First of all, the Committee takes the view that institutions should have more options for selection, on account of its positive effects on students' motivation. Programmes with selective admission stand out from other programmes and assemble a highly motivated group of students. This reinforces differentiation in the programmes offered. In the next chapter, this proposal will be elaborated in more detail as the first recommendation.

*Promoting broad-based programmes*

The second proposal concerns the broadening of programmes in the bachelor's phase. Although good information is provided regarding the choice of studies, many students still find it difficult to make a clear and final choice when they are still at secondary school. Early selection in secondary education and excessive programme specificity in higher education put Dutch pupils and students on a narrow railroad track which is subsequently very hard to get off of.

Broad-based programmes counterbalance the fragmentation in the jungle of disciplines. They enable students to postpone a specific choice of studies until an opportune moment and to explore their options at the research university or university of applied sciences.

### 3.3.3 Differentiation in the range of programmes offered: expanding opportunities

The third form of differentiation is introducing a wider diversification in forms of programmes, tailored to the various target groups in higher education. The object of this *third order diversification* is to offer each and every

A broad-based programme also contributes to academic formation as an essential component of a research university education and to citizenship (*Bildung*) at universities of applied sciences. Moreover, broadening sets off the decreasing professional specificity on the labour market. Highly-educated job

seekers fan out across an ever expanding range of professions (see Annex I.4). That is why the Committee is convinced that broad-based programmes should feature far more prominently in the courses on offer.

It goes without saying that there is a limit to the diversity within broad programmes. Some measure of coherence will be essential. Another contributory factor in the substantiation of these programmes will be the master's programme the student intends to embark on. The Committee does not mean to suggest that broad-based programmes should become the new standard. If a student prefers a specific programme or if a discipline calls for specificity, they should have that option. Such programmes should definitely not be abolished; they are valuable and enable students to achieve a great depth of knowledge in a short period of time. Yet these programmes also need broadening to a certain extent with competences such as the ability to work at an interdisciplinary level and general education.

#### *Building up degrees via the successful routes*

The selective nature of Dutch (secondary) education tends to force young people into a wide-mouthed funnel. This early selectivity entails the risk that students are deadlocked in wrong choices. Smooth and efficient opportunities to take obtain one qualification on top of another are crucial in order to prevent such deadlocks. However, the Committee recommends that a critical look be taken at the various routes by which the qualifications are built up: students must have a fair chance of success. This puts the route from the HBO propaedeutic year to research university programmes in a questionable position. The Committee advocates that this route be closed off. Currently, the professional higher education sector is developing many efficient transfer courses from HBO bachelor's programmes to academic master's programmes, many of which provide schooling in more academic skills. This perspective makes it possible to drop the HBO propaedeutic route, as it provides students with a realistic option of completing their educational career at the academic master's level, should they so desire.

- 10 In the first Keuzegids Deeltijdstudies 2009 [Guide to Part-time Programmes], the editors referred to the range of part-time programmes offered as a 'Swiss cheese' (HBO) and a 'battlefield' (WO). In many disciplines, studying on a part-time basis appeared to be difficult or even impossible. In some disciplines, the range of part-time programmes declined even further in 2010 (HOP [Higher Education Press Agency], 2010).

Drop-out rates are also high in the transfers from MBO to HBO, which is in part due to the fact that every MBO graduate is entitled to admission, even when transferring to a non-related programme. In the opinion of the Committee, in such non-related transfer cases the right to admission would have to make way for admissibility, in line with its proposals regarding the theme of selection. Apart from that, it calls attention to the relatively high drop-out rates among HAVO graduates, who, unlike MBO graduates, have not yet attained labour market qualifications. As yet, these dropouts have received insufficient policy attention, despite their vulnerability because of their lack of labour market qualifications. The Committee recommends that universities of applied sciences develop schemes, in concert with ROCs, aimed at students dropping out after HAVO.

In addition, the Committee calls on institutions to continue to invest in continuous learning pathways. Thus, bridging programmes can confine themselves to teaching the additional competences that are absolutely essential. This is not only effective but also motivating for students, as it allows them to attain a higher qualification level within a shorter space of time. And in cases in which students have failed to build up their qualifications in time, an attractive Lifelong Learning arrangement must be available as a last resort.

#### *The Green Lyceum*

In the green sector, the continuous learning pathway VMBO – MBO – HBO is gaining in significance. There is an increasing awareness that, from the perspective of the student, transitions between the various school types in vocational education are cumbersome and frequently cause delays or dropping out. In collaboration with professional higher education, several AOCs [Agricultural Training Centres] have developed new programmes redesigning the VMBO – MBO – HBO learning route as if it were a single programme. These programmes enable students to gain several years time across the

entire route, up to and including HBO. These initiatives are referred to as the “Green Lyceum”. (AOC 2009)

*Lifelong Learning: new incentives*

Knowledge is becoming outdated at an ever faster pace. For example, most jobs in the current top 10 in the US require higher education qualifications. Many of these jobs did not even exist ten years ago (Monthly Labor Review, 2009). This presents regular full-time education but especially lifelong learning with a challenge, especially (institutions in) areas faced with a decreasing and ageing population; here, mature students constitute an indispensable complement to regular intake.

The growth in the number of students aged thirty and older is lagging considerably behind the growth in overall enrolment in higher education. Enrolment in part-time education has been declining for years.<sup>10</sup> Neither the current nor the new funding model provide any LLL incentives. A LLL student is not a standard student; he or she wishes to be able to study in a flexible manner. However, the funding model is and continues to be focused on completing a full bachelor’s and/or master’s programme in one go and at the same pace as full-time students. This prompted the OECD to conclude (2008):

*“The Netherlands makes only limited efforts to encourage lifelong learning. The experiences of other countries indicate that the Netherlands could raise its participation rate by being more accommodating to older learners.”*

In view of the steadily growing influx of young students at most government-funded institutions, the chance that they will give priority to older students in the years to come is rather slim. At the same time, the Netherlands has a relative large number of private providers, offering programmes that are more tailored to this target group. This situation lacks balance. The Committee deems new incentives necessary; a recommendation specifically targeted to this issue is provided in the following chapter (paragraph 4.1.5).

Relevant in this regard is the position of the Open University (OU). For more than 25 years, the OU has been the pre-eminent institution for second-chance education. It was and is intended to expand the accessibility of higher education for broad groups other than the traditional higher education target groups. It does not have any minimum admission requirements and its programmes feature a flexible, modular structure. The figures show, however, that the OU is falling short of expectations. Lagging research funding has impeded the OU in its development of academic programmes. Well over two-thirds of students enrolled in the OU already hold higher education qualifications and the success rates are quite low. In addition, the trend is not favourable. The number of active students has more than halved, from some 36,000 in 1991 to less than 14,000 in 2008. A reorientation is called for, if only because under the new funding model government funding is only provided for students who do not yet have higher education qualifications. This will allow the OU to capitalise on its strengths (educational technology, part-time programmes) and perhaps develop ties with new target groups in concert with other providers.

The OU is currently taking a number of first steps, predominantly in its collaboration with universities of applied sciences. This could cause some tension with private providers of HBO programmes.

The Committee recommends that the position of the OU in our system be subjected to a more fundamental reconsideration. In its opinion, such a reconsideration would be beyond its assigned task, but it is convinced that the large discrepancy between the actual and the desirable position of the OU must not be left out of the discussion.



# A future-proof higher education system: recommendations

**The Committee recommends that a quality agenda for Dutch higher education be drafted. This presents the institutions, in particular, with a stiff challenge. The choices made by the institutions must lead to increased diversity and thus improved quality. To this end, however, the institutions need to be provided with the proper instruments enabling them to make such choices. This results in a political agenda, an agenda to be heeded by the government. The Committee has formulated recommendations for the government (4.1) as well as for the universities (4.2). The entire set of recommendations is aimed at procuring the desired diversity in structure, profiles and learning pathways.<sup>11</sup>**

## **Recommendations for the government:**

1. Make selection possible across the entire higher education sector
2. Reward achievements based on profiling
3. Reduce the student-based funding component at the research universities
4. Continue investments in research, in HBO as well
5. Definite introduction of *associate degree* (AD) programmes
6. Consider a new arrangement for master's programmes
7. Introduce titles ensuring proper recognition in international terms

## **Recommendations for the institutions:**

8. Choose a distinct profile
9. Focus more attention on education, broadening of programmes and flexibilisation
10. Professional development of staff

The Committee is aware that it is beyond its task and terms of reference to make a statement regarding the future financial frameworks of Dutch higher education. Nevertheless, it emphatically states that – if the Netherlands wishes to strengthen its position as a knowledge nation – an adequate implementation of the Committee's recommendations will require new financial impulses from the government and the private sector. We cannot have our cake and eat it too: improved quality and increased diversity with the same or less money is not feasible.



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- 11 The recommendations pertain to various aspects of differentiation. Differentiation in structure is mainly served by recommendations 3, 5 and 6. Differentiation in profile is supported by recommendations 1, 2, 4, 5, 6, 7 and 8. Differentiation in learning pathways, finally, is reflected primarily in recommendations 5, 6, 9 and 10.

## 4.1 Recommendations for the government

### 4.1.1 Making selection possible across the entire higher education sector

One of the main goals of these recommendations is to raise the quality and increase the flexibility of education across the entire spectrum. This goal would be served by getting the right students into the right programmes. The Committee therefore argues for more room for selection in Dutch higher education. This is not to make access to higher education more difficult – on the contrary, the Committee is charging the institutions with the task of making higher education more accessible for certain groups – but rather to assist the institutions to distinguish themselves and to give students the right place, taking into consideration their own learning style, motivation and interests in terms of content. In addition and in part as an extension of this, the Committee believes that selection – as long as it is performed with due diligence – would have a positive effect on outcomes. We are well aware that this is a subject about which opinions differ widely. We took these viewpoints into consideration and this resulted in the following approach:

#### *Positive effects of selection*

Selection has positive effects that would counter several of the flaws in the Dutch higher education system mentioned earlier:

- Selection furthers the *motivation and commitment* of students (Warps, 2009). Selection indisputably encourages conscious choices, self-selection and motivation. It leads to mutual commitment between the institution and the student (Korthals, 2008, p. 16).
- Selection leads to *higher success rates* and lower drop-out rates. A few figures: the *Hotelschool Den Haag* (International University of Hospitality Management) has an 8% drop-out rate in the first year compared to a rate of 20-30% in other economics higher education programmes (Dooge, 2005). The experiences of the Utrecht University College – with a success rate of about 85% after three years

– also bear witness to this. Recent research has shown a 60% reduction in the drop-out rate among selected medical students (Uurlings-Strop, 2009).

- Selection leads to a *higher quality* of programmes. Through selection, student groups often become more homogenous in composition or motivation which furthers the achievements of all students. Study success rates and high quality attract better students, which means the quality goes up even further (Korthals, 2008).

#### *Taking the Dutch context into account*

Early selection in secondary education makes it difficult to design an effective system for selection for admission into higher education (Drenth, 2004). It entails the risk that students will be refused while having earned a diploma in selective secondary education while in fact they are deemed capable of obtaining a qualification in any higher education programme, taking into consideration the subject clusters they have completed in secondary education. In this way, additional selection for admission entails the risk that the significance of the secondary education diploma would be eroded. The *Ruim Baan voor Talent* [Room for Talent] Committee concluded that in most cases, selection after admission based on initial interim exam scores appears to offer a more accurate prediction of success than selection for admission (Korthals, 2006). Another risk of selection for admission is that it could erode the value of secondary school final exams. Nevertheless we are convinced that selection could have an added value.

#### **Recommendation 1: Selection**

The Committee proposes that, in principle, each institution be given the right to select. Not just after a student has been accepted but also prior to admission. The government must set this down in legislation and regulations but also stipulate limiting conditions.

#### *Limiting conditions*

Selection must be couched in a number of strict limiting conditions:

- Selection must be complementary to the final exam in secondary education and its criteria must ensue

- 12 This means that selection cannot be used to balance out gaps in students' prior education, for example, in the fields of language/arithmetic, or a lack of generic pre-sorting measures such as are used in the transfer from MBO to HBO.

from the programme's educational concept. The secondary school subject clusters<sup>12</sup> will in principle continue to entitle students to admission, unless the educational concept justifies additional requirements. The key objective is mutual coordination of the level and concept of the programme with the (motivation of the) target group. This means that selection will not only apply for top programmes, but also for other target groups and orientations (such as practice-oriented students, students with a broad scope of interests, students excelling in crucial subjects, etcetera). Intake interviews are an important first step, but it is up to institutions and programmes themselves to set additional requirements and selection methods geared to the programme and target group concerned.

- Selection cannot exclude students at the system level. Selection must facilitate the growth and success rates of higher education by achieving a better match between students and programmes. It should not result in students being excluded; they should be able to enter a programme of their choice. And that will happen, in the opinion of the Committee: firstly, due to the condition of correspondence to a specific educational concept. Secondly, the burden of proof for exclusion will lie with the institution, and students will have possibilities for appeal. This by analogy with the selection principle in the Lisbon Recognition Convention (2008), ratified by the Netherlands within the framework of the Bologna Process. Finally, the Committee would like to call on the institutions to take up collective responsibility for guaranteeing that every student can find a study placement that suits him/her.
- The institutions must continuously check the effectiveness of the selection instrument chosen. The institution is obliged to verify that the predictive value of the instrument used can be demonstrated in retrospect. Its effect on quality and success rates must also be set down.

Further to these limiting conditions, requirements are also set at the process level, such as timely and proper communication regarding the selection method, the corresponding criteria and the procedures. The government needs to set out the effects at the system level by means of a long-term research programme.

The Committee emphasises that with this form of selection, institutions have the choice of giving programmes a specific colour (*couleur locale*) in terms of content, specialisation, level and educational concept. The selection instrument offers them the possibility of admitting those students who feel attracted to the "colour" of the programme and for whom it is estimated that they will flourish within the specific concept. The accreditation process verifies whether the educational concept and/or the specific character of the programme justify the selection method used. This is not only a safeguard but also encourages institutions to distinguish themselves by the programmes they offer.

#### 4.1.2 Reward profiling and performance

In order to enhancing the differences in the system, research universities and universities of applied sciences must profile themselves by making more distinct choices regarding the type of institution they wish to be and which target groups they wish to accommodate. The government must encourage this profiling. Firstly, by making the various types of performance visible. Secondly, by rewarding these performances. This is the only way in which the envisaged diversity can be anchored in the dynamics of the system. These measures need to tie in with the multi-dimensional classification system discussed in the previous chapter.

##### *Recommendation 2: Encourage profiling by institutions and reward performance*

The Committee proposes that the government challenge and encourage the institutions to tighten up their profile. This requires a further development of the European multi-dimensional classification system for application in the Dutch context.

The proportion of student-based funding must gradually decrease in favour of a growing share of mission-based funding. Relatively good performances that correspond to the mission chosen by the institution are to be rewarded.

The further development of this system must be thoroughly thought through with the involvement of the institutions. After all, such a method of steering tends to give rise to bureaucratic tendencies. Neither should it lead to such government intervention in the programming of the universities as would not be recognised as useful or could even be perceived as undesirable meddling in the academic and professional freedom of research universities and universities of applied sciences. The Committee is therefore of the opinion that the government should exercise restraint in direct forms of performance funding; these could bring about undesirable strategic behaviour or even lead to a new sort of uniformity once more. A promising development in this field has been initiated by the Science and Technology Platform. This best practice shows that outline agreements suffice if the system ties in with the missions of the institutions and the intrinsic motivation of managers and staff. Retrospective accountability will preclude any unnecessary red tape.

The Committee calls on all the parties involved to check in concert if forms of performance funding or perhaps better still, mission funding, can be developed that would provide a positive way to further the profiling deemed desirable. Such an exploratory study into mission funding could serve as preparation for the social contract mentioned in the introduction.

*Accelerate the reduction of the proportion of student-based funding at research universities*

To a significant extent, the mass nature the research universities and universities of applied sciences are currently struggling with has ensued from the enrolment-based funding model. This model, therefore, entails a substantial incentive for institutions to opt for growth. In light of "Higher Education for Many", this is an excellent stimulus (OW, 1978), but it is essential that quality is safeguarded. With regard to research universities, in particular, this presents the question of whether the increased intertwining of education and research, as advocated by the Committee, will be realised. If the research universities are expected to focus on a more penetrating interweaving of research and education, making the currently large-scale faculties more selective and teaching in a more intensive manner, student numbers will go down. It cannot be the case

that research universities suffer negative financial consequences if they set such a desirable development in motion. For that reason, the Committee believes that the proportion of student-based funding at research universities must be reduced. Forms of capacity funding must be worked out, based on an institution's mission. A condition is, however, that the research universities make crystal clear agreements with the government regarding their performances in improving the education they provide. In addition, they will need to be prepared to put the issue of improving the efficiency of academic education on the agenda. This could entail regional forms of collaboration and harmonisation and/or national clustering of certain programmes. Capacity funding should not lead to the loss of incentives for increasing efficiency.

**Recommendation 3: Reduce the proportion of student-based funding at research universities**

To give universities the opportunity to more clearly define their academic profiles in the short term, they should, as soon as possible, become less dependent on funding primarily based on student numbers.

### 4.1.3 Strengthening more profile-aligned research

The Committee advocates additional investments in the research performed by research universities and universities of applied sciences. These investments must be selective and contribute to the institutions' distinctive profiles.

**Recommendation 4: Invest in research**

Convinced that a proper utilisation of research is essential to a country's competitive position and all higher education should be intertwined with research, the Committee argues for a specific investment impetus be given to research performed by research universities as well as applied research performed by universities of applied sciences.



13 As repeatedly advocated in the past (OCW, 2004; OECD, 2008; Rathenau, 2010).

*Strengthening research in academic higher education: an investment incentive*

With a view to our international competitive position, we need to turn the tide when it comes to Dutch investments in R&D. This applies primarily to the private sector; the private expenditure on R&D in the Netherlands is lagging behind the international average (see Annex 1.4, diagram 24). However, the government is remiss as well. Our investment level is below the European average and has not risen over the past decade, unlike the investment behaviour of other countries (European Commission, 2008).

The Committee already argued that investments are essential in order to improve the quality of higher education. This is particularly true here. With a view to the reinforcement of the interrelation between academic education and research envisaged by the Committee, the first flow of funds should be given an investment incentive. The Committee wishes to structure this through the approach outlined in recommendation 2: rewarding institutions for proven performances corresponding to the profile chosen. This means that the Committee deliberately chooses not to encourage one or two Dutch institutions to strive for the absolute top, however desirable that can be. Instead of aiming at one or two top universities,<sup>13</sup> several disciplines and programmes within research universities will be afforded a chance to excel. The institutions need to focus their efforts on achieving that goal by setting priorities and seeking collaboration with one another. Thus, focus and mass can develop at several locations. Good performances will be rewarded additionally, which will give another impetus to research. This in its turn will attract good staff and students – from abroad as well – which will generate an upward spiral.

With regard to this profiling, some disciplines could link up with some form of a European division of tasks. The collaboration between research institutes, research universities and universities of applied sciences must be reinforced with a view to the utilisation of research for education (AWT, 2009).

*Strengthening research in HBO*

In paragraph 3.3.1, we indicated that research in the professional higher education (HBO) sector needs strengthening, while keeping a sharp eye on the specific character of HBO research. Precisely because of the desired differentiation in the system, a clear distinction between the activities of the universities of applied sciences and research performed by academic universities is important. At the academic universities, research is focused on fundamental understanding, sometimes in combination with application. In professional higher education, research is focused on application: design and development, rather than fundamental understanding (AWT, 2005). The Committee advocates a development of HBO research along the following three tracks:

- First of all, universities of applied sciences should develop a basic infrastructure to provide a base for education and knowledge circulation. The valuation but also the assessment of performances must be tailored to the unique nature of this type of research. An Expert Group set up by the DG Research of the European Commission recently published a report (EC, 2010) arguing for a different approach in the assessment of various types of research. Criteria and indicators must depend on the object and the users of each type of research.
- Because the universities of applied sciences do not have a long research tradition, they are faced with a major challenge. In addition to building up research capacity, they will have to gear their strategies, HRM policies, organisation cultures, management and administrations to these research activities. More highly qualified teachers (with master's degrees and PhDs) are essential. This is already high on the agendas of the HBO-raad [Netherlands Association of Universities of Applied Sciences] and the Ministry of OCW and needs to be encouraged even further. Supplementary to this proposition, the Committee supports the idea of incorporating a lectorship in the career prospects of an institution's own teaching staff. This could also reinforce the effects of research in the programmes, as an institution's "own" lecturers will bear more responsibility for a programme than they currently do.

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- 14 To give an example: research in the technical domain – which, for that matter, does have a long tradition – is obviously of a different nature from research in physical therapy, in which the professional field advocates the importance of evidence-based working.

- Finally, the Committee advocates developing a second flow of funds for applied research at universities of applied sciences. Social relevance and co-funding from the private sector and the professional field are conditions for funding in order to generate the desired types of projects. In this respect, the Committee endorses the recommendations of the De Boer Committee (2009), which argues for developing a limited number of emphases in the technical professional higher education sector. Getting a substantial research function off the ground at all the universities of applied sciences would be impossible and undesirable. In this respect, too, our point of departure is: profiling on distinctive features and rewarding on the basis of proven performance. The other side of the coin is obviously that the universities of applied sciences should not all aim for the same thing, with regard to both their research ambitions and the fields in which they want to excel.

As a final remark on research in professional higher education, universities of applied sciences are advised to pay close attention to two matters. The first concerns the interweaving of research with education, in particular bachelor's programmes. If research does not have a salutary effect here, then all those efforts and investments will overshoot the mark. The second concerns the continued reflection on the nature of the research they are conducting, which also needs to tie in with the demands of the relevant professional field. This, too, produces diversity.<sup>14</sup>

#### 4.1.4 Definite introduction of Associate Degrees

The definite introduction of short higher education programmes – i.e. Associate Degrees (ADs) – will fill a considerable gap in the Dutch higher education system. ADs appeal to new target groups and therefore can contribute to achieving the 50% goal. Pilot projects have demonstrated a demand for AD programmes, both from students and on the part of the business community, under certain conditions. Students in part-time or dual (work-based learning) programmes account for nearly half of the current enrolment in Associate Degree programmes in the Netherlands (Graaf & Berg, 2008).

#### *Recommendation 5: Associate Degrees*

The Committee proposes that the Minister of Education, Culture and Science ratify the definite introduction of Associate Degree programmes during the course of 2010.

In international practice (cf. Chapter 2), the AD has been shown to serve a dual purpose: a labour market qualification and/or a leg-up to a regular four-year bachelor's route in a university of applied sciences. Accessibility can be a motive for enrolment in an AD programme; such programmes can be attractive to students who need additional backing to move to a higher level. This dual qualification (labour market and transfers) could create tension in the implementation of ADs.

The Committee believes that a distinct choice is called for here. According to the Committee, ADs are only justified if the labour market has a clear need for such programmes. So, an AD must have a clear civil effect and not be introduced in cases in which MBO-4 qualifications would be perfectly sufficient. Erosion of the MBO sector as exit level programmes would be undesirable. Similarly, this could put pressure on HBO qualifications. This means that ADs must not be launched across the entire spectrum of the HBO sector but only in disciplines in which a clear civil effect can be defined. As regards the choice between objectives of an educational nature (aimed at transfer) and objectives relating to labour market considerations, the Committee gives express priority to the latter: no AD without a clear labour market relevance.

#### *Implementation*

In many countries, short programmes are provided by independent colleges. The Committee takes the view that the AD ranks under higher education (viz., level 5 EQF). For that reason, universities of applied sciences should bear final responsibility for awarding the diploma and the AD should be accredited by the NVAO based on a reference framework that – mutatis mutandis – compares to the framework currently used for four-year bachelor's programmes. For many MBO students, continuing their studies in a higher education environment holds a certain appeal. This does not alter

- 15 Collaboration with ROCs leads to a more gradual transition for MBO graduates. Young people from lower-educated families or lower socio-economic backgrounds need more time for a successful transfer to another educational environment. This means that ADs, in that case, need a stricter structure and a different educational approach from regular HBO bachelor's programmes in order to accommodate these MBO graduates.

the fact that the AD is a logical tailpiece to the vocational track, due to the intended labour market qualification and its strong ties with the professional field. That is why flexibility is called for in its implementation, in order to foster close collaboration between universities of applied sciences and ROCs.<sup>15</sup> In the opinion of the Committee, a uniform prescribed model would not be appropriate here. The suitability of the environment depends on the content of the AD programme and the profile chosen by a university of applied sciences. This could mean that ADs will be offered by universities of applied sciences or (independent) joint ventures between ROCs and universities of applied sciences (for example, in the form of an *Associate College*). It is up to the government to facilitate the various administrative options in legislation and regulations. In addition, a more liberal establishment policy for AD programmes could be considered. The fact that ADs are distinctly linked to the wishes of the professional field appears to offer sufficient guarantee against an unbridled growth of AD programmes.

#### **4.1.5 Towards a new structure for master's programmes: professional master's programmes and Lifelong Learning**

##### *More differentiation in the master's phase*

The Committee believes that it is of great importance that Dutch higher education offers high-quality master's programmes. Continuing to pursue a form of differentiation is essential in this respect. This means offering a sufficient range of both research master's programmes and professional master's programmes. The Committee rates research master's programmes under the domain of the research universities but sees a role awaiting both research universities and universities of applied sciences in offering professional master's programmes.

An added advantage is that an increased number of master's programmes would make HBO more attractive and give young people the choice of enrolling in either an academic or a professional master's programme. This is important because in the current situation, the absence of an alternative forces HBO

students to enrol in academic master's programmes that frequently are not quite tailored to their own learning style and/or do not dovetail with the needs of society. Moreover, bridging courses entail additional inefficiencies. We already indicated why professional master's programmes are in line with the future development of HBO (paragraph 3.3.1) and with developments abroad (Chapter 2 and Annex I).

With this assumption, the Committee agrees with the decision of the government to fund master's programmes offered by universities of applied sciences, albeit that this funding is currently provided on a temporary basis. The Committee would like to go further and recommends that a final solution be reached: universities of applied sciences should also be allowed the opportunity, under conditions similar to those that apply to research universities, to offer professional master's programmes. This means regular funding and accreditation by the NVAO. The accreditation will assess the (same) master's level but the accreditation frameworks should reflect the unique nature of the research universities and universities of applied sciences. Furthermore, the Committee advocates that measures be taken to prevent proliferation in the development of professional master's programmes. In addition to level and quality, labour market relevance must be the ultimate argument for establishing professional master's programmes in HBO as well.

##### *Equality in funding conditions:*

##### *towards a system of learning entitlements*

For the short term, the existing funding regulations would have to be amended to accommodate this expansion. The Committee proposes that this responsibility be structured differently in the long term. It recommends developing a form of learning entitlements that could constitute a (partial or at some time complete) embodiment of the individual right of every Dutch person to the public funding of his or her education programme.

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- 16 The recommendations drawn up by the CEOB (Open System Experiments Committee, 2009) point out that there are no criteria for inclusion on (or removal from) the list of publicly funded institutions (annex to the Higher Education and Research Act). To create the desired dynamism in higher education, the CEOB argues for a procedure with clear criteria

for admission to public funding. The current distinction of initial and post-initial has become increasingly diffuse and is thus less workable (CDHO, 2009). Programmes that are comparable in terms of content are currently funded differently: some are publicly funded, some are not (CEOB, 2009, p. 4).

**Recommendation 6: A new structure for master's programmes**

The Committee proposes that the range of master's programmes be expanded and that professional master's programmes be embedded in a more structural manner. In this regard, it argues for a careful expansion of government-funded professional master's programmes.

In line with this proposal, the Committee proposes that an exploratory study be conducted into the introduction of learning entitlements with a view to the desired flexibility for lifelong learning, initially aimed at students aged 30 and older.

It is a good thing to put *students* in the *position* or to *invite* them, more emphatically than now, to choose the master's programme that best suits them. A learning entitlements system will require students to make a more conscious choice not only regarding the master's programme they wish to enrol in but also regarding the phase of life in which they would like to do so. In particular students who choose professional master's programmes – and definitely HBO master's programmes – often benefit from gaining work experience first. This work experience enables them to amass a much richer learning experience at a higher level than is if they were to enrol in a master's programme directly after a bachelor's programme. Although in the view of the Committee this should not become the new standard, it could be an interesting route for some students. It is comforting to know that if you go into employment after completing your bachelor's degree, there is always the option of following a master's programme later on. Formally, that entitlement also exists today, but it definitely does not play a big enough role in the perception of students.

*Learning entitlements for students aged 30 and older*

The concept of learning entitlements can also substantiate the idea of *lifelong learning*. In the international perspective, the Netherlands lags behind on this point and it is essential that we make an effort to make up ground. This is obviously a matter for employers and employees to consider but it is also a question for the

government and the universities. The institutions need to explore how they can programme an interesting range of courses and the government needs to create conditions that make it easier to break out of obvious continuous learning pathways.

Neither the current model nor the new funding model that is being developed facilitate such breaks. On the contrary, they are aimed at full-time students completing their programme in an uninterrupted process. This is not a future-proof mechanism and therefore change is needed. LLL students are not standard students; they prefer to study in a flexible manner. This flexibility is particularly wished for among older students. For that reason, the Committee recommends that the possibilities for introducing learning entitlements be explored, initially for students aged 30 and older, in the bachelor's phase as well. This is killing two birds with one stone: the students can use their financial resources in a flexible (modular) manner and look for institutions that actually factor in the wishes of mature students in the programmes they offer (both as regards content and in terms of organisation). Similar proposals for a demand-driven structure have been put forward by the RWI [Council for Work and Income] (2008), the *Denktank* [ThinkTank] LLL (2009), the CEOB [Open System Experiments Committee] (2009), the HBO-raad [Association of Universities of Applied Sciences] (2009b) and the *Innovatieplatform* [Innovation Platform] (2010).

In this respect, the Committee does not exclude that such entitlements need to be able to be safeguarded at *private institutions* too.<sup>16</sup> Private institutions are also developing a range that fulfils the same social function as publicly funded master's programmes. Needless to say, these master's programmes must be accredited by NVAO and must satisfy the requirements of the Higher Education and Research Act (WHW). This is the only way to create a level playing field, which is important as private institutions, through their market focus, have learned to respond accurately to the wishes of older and/or working students. The Committee would like to emphasise this as an area for thought and sets great store by a thorough study into how this can be substantiated into a realistic and practical path,

without watering down government resources. The legal form and possible consequences (competition legislation) will also have to be examined before any action is taken.

#### *Exploration*

The Committee realises that there is a long history of discussions about learning entitlements that were often deadlocked by matters of principle but also by feasibility issues. Moreover, higher education is in the middle of the completion phase of a long process that has led to a new funding model. However, the fundamental question that must be answered at some time is whether a future that is marked by many forms of differentiation – a future which the Committee firmly supports – can be realised with a relatively uniform funding model that does not invite varied study patterns. The Committee regards learning entitlements as a concept that is full of opportunity and therefore advocates a serious study into the possibilities for introducing learning entitlements into the Dutch higher education system in the long term.

#### *Master's programmes: a continuing public responsibility*

With learning entitlements, the Committee foresees a future in which the government will not only give students the permanent entitlement to follow a master's programme, but also expressly place that entitlement in the hands of the participants themselves. In this regard, the Committee wondered whether the learning entitlements taken up should by definition have to be cost-effective for all the programmes concerned. A further study would have to demonstrate whether and how the public interest in and private yield from master's programmes could play a role. In our view, it is conceivable that a form of differentiation in the contributions from the students, beyond standard tuition fees, will be considered in the future but this would be subject to the strict condition that these contributions are used directly to fund innovation in the programme concerned. According to the Committee, this is an interesting line of reasoning, as it enables the government to structure the funding of the programmes on offer in a more balanced manner. Tuition fee differentiation would offer institutions

more room to manoeuvre in achieving more of the desired variety in their range of programmes. Nonetheless, in the opinion of the Committee the time is definitely not yet ripe for this. To start with, such a step would have to be embedded in a possible *European* movement towards more differentiation in the fees structure, certainly if this was prescribed by the government. After all, if only the Netherlands were to implement this, it could have negative effects on intake in and the international competitive position of Dutch institutions. In addition, differentiation could quickly lead to an increase in the financial burden on students. The Committee does not want to bring up measures that would have this effect. The recommendations that have now been formulated should be given predominant priority.

The introduction states that the Committee is aware of the fact that it is presenting a report at a time of discussion regarding substantial cutbacks in government spending. The Committee has indicated that it does not want to engage in this debate but acknowledges that it does not want to give any reason for cutbacks in the funding of higher education. Combining a learning entitlements system with a discussion of differentiation in tuition fees and/or public funding entails the risk of prompting such cutbacks. The Committee would consider it unacceptable if its thoughts on the matter were to lead to financial problems being shifted on to students and institutions. Such interventions cannot go hand in hand with the improvement in quality that the Committee envisages. The quality agenda in this report requires substantial investments. The social interest of master's programmes must, in the view of the Committee, be expressed in the form of continuing – and, for HBO, even increasing – government responsibility in this regard.

#### *Duration of master's programmes*

This responsibility must also be reflected in the room that institutions need to have in order to offer internationally competitive master's programmes. From the international perspective, Dutch master's programmes are fairly short. As a rule, they carry 60 credits; exceptional cases – science, technology and research master's programmes – carry 120 credits. In other countries, the ratios are usually the other way around;

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- 17 The committees proposed a distinction at the programme level, based on the criterion of research intensity (Abrahamse Committee, 2005) or training level of teaching staff (Committee on titles in HBO, 2009).

some countries opt for 90 credits. With a view to both the international competitive position and the necessary quality of master's programmes, the government must ensure adequate funding including – wherever necessary – an extension of master's programmes.

**4.1.6 Titles**

With a view to the international positioning of HBO, the Committee recommends that steps be taken to make headway with the protracted titles file. The Committee takes the view that the Netherlands feels too strongly about this subject. The government needs to close this file as soon as possible. The Committee has observed that this issue is emotionally charged, because debates on binarity have wrongly intervened in debates on appropriate titles. In its recommendations, the Committee acknowledges the importance of binarity as we know it, while opining that the distinction between universities of applied sciences and research universities should not be safeguarded by way of the system of titles.

*Legal protection of Bachelor's and Master's titles, not of affixes*

Proper titles are indispensable for the recognition of quality and recognisability of the value of programmes within the European higher education area and beyond. The current undervaluation of (some) professional higher education programmes must be tackled. In the (recent) past, two committees have explored solutions to the titles issue. In both cases, they concluded that at least some professional higher education programmes are undervalued in the international perspective because they are not permitted to use the affixes of *Arts* or of *Science*.<sup>17</sup> Furthermore, in Anglo-Saxon countries and Germany, these affixes tend to reflect the orientation of a programme rather than its level. For that reason, and in light of a further upgrading of professional higher education, the Committee argues in favour of a similar title system as used by the research universities. The legal protection of the Bachelor's and Master's titles serves as a guarantee of quality. The affix, if any, and the diploma supplement subsequently specify the content and orientation of the programme.

**Recommendation 7: Introduce unequivocal titles**

The Committee recommends that only Bachelor's and Master's titles continue to be set down in law and legally protected, both for professional higher education and for academic higher education. The institutions are to choose an affix corresponding to a programme's profile and give account in the accreditation process. The diploma supplement specifies the content of the programme and the institution offering the programme. Institutions offering comparable programmes are called on to decide on an affix by mutual agreement.

*Assessment during accreditation*

To prevent misunderstandings: this proposal does not envisage that all programmes are rendered equal. The Committee is convinced that, in the context of increasing diversity and European embedding, the content of a programme and the name of an institution will carry more weight than a title. The accreditation process verifies (in a marginal manner) whether the affix chosen is in keeping with a programme's profile. In this respect, the NVAO can invite research universities and universities of applied sciences to take their lead from relevant institutions abroad.

**4.2 A policy agenda for the institutions: recommendations**

An agenda for the higher education sector, aimed at quality improvement and diversification, is predominantly an agenda for the institutions themselves. The Committee suggests that this task be implemented in close dialogue between professionals, students and the boards of the respective institutions. The recommendations for the government focus on the preconditions under which the institutions operate. They are intended to give the institutions more latitude, facilitate their operations and provide specific incentives. Subsequently, the Committee wishes to call on the institutions to respond to the demand for quality



18 3TU: Federation of the three leading Universities of Technology in the Netherlands: Delft, Eindhoven and Twente.

improvement and differentiation on the basis of three recommendations: *choosing a profile, focusing more attention on teaching and investing in teachers and researchers.*

#### 4.2.1 Choosing a distinct profile

Institutions are asked to make a clear choice as to what they stand for, to nail their colours to the mast and to radiate their qualities. Differentiation in the programmes on offer needs to cater for differences between students and meet different demands from the labour market. With regard to students, the differences pertain, for example, to the teaching-learning environment: more traditional teaching, problem-based learning, interactive learning, education with a focus on practical components, an academic or a professional focus. The professional field will mainly benefit from differences in the unique strengths of the programmes. Important elements of research include making choices and prioritising but also its orientation: e.g., fundamental, applied, aimed at valorisation or subject-related.

##### *Recommendation 8: Choose a profile*

The Committee recommends that institutions and their departments choose a distinct profile on the basis of proven or envisaged strengths, focusing on one or more of the dimensions outlined in the European classification system.

##### *Profiling of research universities*

The research universities should take account of the type of education and students they wish to focus on: graduate or undergraduate students, a broad-based or a more selective institution. One of the important tasks set for research universities, with a view to the strong international competition, is to collaborate with other Dutch research universities in order to collectively ensure a proper national spread of emphases. Fragmentation of money and talents is not conducive to the international competitive position. This also means that institutions should not hesitate to phase out weaker elements. This does not always appear easy but it is an essential precondition to take a step forward. The 3TU process<sup>18</sup> illustrates the measures that

should be taken. It also shows, however, that it takes time to learn to identify and recognise one another's strengths and weaknesses, and that it turns out to be difficult to focus on differences, to not begrudge profiles and to enter into collaboration on that basis. The Committee recognises the complexity of such a move but believes that it is inevitable to structure the range of (technological) academic programmes from a more collective perspective. We cannot afford scale disadvantages like we have in the current system, considering the tight budget and the challenge we are facing. We need to look for functional differentiation, encompassing agreements on tasks, priorities and large infrastructural investments.

The research universities have already taken quite a few steps to cluster research projects, sometimes at a regional level and sometimes at the programme level. However, this clustering and collaboration merits an additional incentive. Not by centralised decision-making but by collaboration at the sub-system level based on multi-year agreements between the universities concerned. The Committee does not comment on the dimension in which the universities should look for this collaboration and harmonisation. A line of approach could be correspondence in the range of programmes offered, such as with the three technical universities. Another could be a regional perspective, with universities within a particular region considering how they can achieve optimum alignment between their respective programmes. Obviously, all this cannot be arranged with a single stroke of the pen, but the Committee emphatically recommends enhanced collaboration as a line of thought, especially if the universities will be implementing the capacity funding model recommended by the Committee. After all, when funding is based on capacity, the subsidiser must be certain that this capacity is organised efficiently.

##### *Profiling of universities of applied sciences*

For universities of applied sciences it is also important to want to distinguish themselves and reinforce their own identity. It is even imperative, given the considerable task that is facing the HBO sector. A survey of everything that is expected of professional higher education produces an agenda for change that is



impressive, probably even bordering on what is unfeasible. The universities of applied sciences have drawn up a stiff quality agenda and have to accommodate an intake that is already highly diverse; this diversity will only increase. Additional tasks include reinforcing research, training staff to a higher level, contributing to innovation in the SME sector, developing professional master's programmes and promoting internationalisation. It is out of the question that every single university of applied sciences will be capable of tackling everything at the same time. It would be highly undesirable as well, as this could lead to a scenario in which they all fall slightly short of the mark. For example, if some universities of applied sciences choose to profile on the vocational route and the development of ADs, while others prefer to focus on applied research and HBO master's programmes, this would give both categories their due. Another example concerns the choice of target group. It is quite conceivable that some universities of applied sciences choose to make lifelong learning an explicit element in their missions, while others focus on three-year routes for VWO graduates. The quality improvement envisaged by the Committee can only be achieved if the institutions capitalise on their strengths, make choices and subsequently concentrate their efforts on realising these goals.

#### *Profiling beyond "binarity"?*

Emphasising the differences within higher education should not be interpreted as if the Committee were an advocate of "anything goes". After all, "binarity" constitutes the starting point for the profiling of the universities. To this end, the system comprises permanent safeguards ensuring that the institutions will establish a profile within that framework. In the eyes of the Committee, accreditation will gain in significance in order to guarantee that distinction, the funding model will continue to differ, particularly with regard to the funding of research, and the right to award PhDs will continue to be reserved for research universities. However, an effect of the development we are entering could be that institutions run up against the boundaries of "binarity". In that case, it would be unwise to stop those institutions beforehand and squeeze them back into their former straitjacket. At such a time, a careful assessment process is needed to consider the best

positioning of the institution concerned in light of the overall system and its relationship to the professional field (cf. paragraph 3.3.1).

#### **4.2.2 More attention for teaching**

For quite some time, the Dutch higher education system has been dominated by the pursuit of accessibility for many. The emphasis is on quantity. This is good, as it has encouraged many young people to go to university and because the economy needs a large number of higher education graduates. In these recommendations, the Committee underscores that it is important to continue on the same foot and focus attention particularly on those groups in Dutch society in which enrolment is lagging behind.

The Committee has already established that Dutch higher education is in good shape, in some cases even in excellent shape. However, criticism is also levelled against its quality, drop-out rates and success rates, which is justified on several grounds. First of all, the institutions have had to accommodate the growth in student numbers within a limited budget framework, resulting in an extensification and massification of teaching which has put quality under pressure. A second reason is the relatively low priority given to teaching tasks at research universities in relation to the research function. A third reason is the dominance of certain educational views in which independent work and the students' own responsibility have become the pre-eminent core values around which teaching has been designed. The funding system, finally, is based on enrolment and graduates. This has contributed to the subordination of quality, as it encourages the institutions to attract as many students as possible. This does have its positive sides but it also prompts institutions to tempt students with fashionable disciplines and give priority to quantity above quality. The institutions should take a collective critical look at the growth in the range of programmes offered. Quantity should not be achieved at the expense of quality or lead to a watering down of the fundamental identity of academic or professional higher education.

In this context, it is relevant to record that research universities have meanwhile put teaching and the

- 19 In the United Kingdom, for example, the "Aim higher" project resulted in improved social inclusion.

related issues of level, quality and outcomes high on their agenda (VSNU, 2008). The recommendations put forward by the Committee (paragraph 4.1) are aimed at supporting the institutions in this by countering the aforementioned negative effects of the current funding system.

Students are taking an increasingly independent and exacting stance in this quality debate. They adopt a critical attitude in monitoring the content and the organisation of the teaching and the teachers. HBO students, in particular, complain about preconditional issues such as timetables. In some cases, this is understandable, given the growth figures. However, the Committee firmly supports the universities of applied sciences in their ambition to devote attention to these preconditional matters. The institutions need to take more account of the possible organisational implications of certain educational concepts (HBO-raad, 2009b).

This issue, incidentally, might be rooted in the Dutch educational culture. Are the higher education establishments making their students sufficiently aware of the importance of motivation and ambition? Could it be that the typical "culture of mediocrity" is not sanctioned because the standards set for the students are too low? Yet the Dutch higher education sector encompasses plenty of cases in point for motivating learning environments: from the University College to certain teacher-training colleges with their intensive courses, from full curricula in certain science and technology programmes to extremely high study loads in certain fine and performing arts programmes.

**Recommendation 9: Give more attention to teaching as a core task of higher education institutions**

Give more attention to teaching, gear programmes to the learning styles and backgrounds of students, make education programmes more flexible and improve the organisation of teaching. Institutions and students are called on to make mutual agreements on the steps to be taken.

**Catering for learning styles and the backgrounds of students**

The diversity in the student population calls for a variety of learning routes, each with its own approach. Some students need more structured teaching, others require a more challenging learning environment or more intensive shorter tracks. For groups that are currently under-represented, an active "outreach" strategy<sup>19</sup> might be developed. The initiatives taken by the universities of applied sciences to improve the success rates among ethnic minorities are worth following by research universities in the major cities. Male students are performing (increasingly) worse but this has not yet prompted a goal-oriented approach. Full-time education means that students need to concentrate on their studies all week long. Education for older and/or working students, on the other hand, requires longer and more flexible programmes.

In line with one of the key elements in the recommendations ("make universities of applied sciences more appealing to higher-level students, for example, VWO graduates") three-year bachelor's programmes could be developed which allow students to transfer to a master's programme or the labour market within a shorter space of time. If universities of applied sciences wish to increase their appeal for VWO graduates, a research-imbued teaching environment, equivalent titles and the prospect of continuing on to a master's programme are important but not sufficient. In principle, VWO graduates should be able to complete a bachelor's programme within the same period of time as they would at a research university and at a comparable level. This is a task for the universities of applied sciences rather than something to be enforced by legislation.

Selection can play a key role here because it is linked to programmes with a clear educational concept. Students who consciously opt for a specific programme and have to make an effort to get accepted, can be expected to do their utmost to study hard and complete the programme. Obviously, these students may expect something in return: inspiring and high-quality education, provided by committed teachers. Institutions and programmes can be held to account in this respect.

*Broad-based bachelor's programmes*

The importance of broad-based programmes has already been pointed out in paragraph 3.3.3 of these recommendations. Research universities but also universities of applied sciences have already taken a great many steps in this regard. The university colleges are an excellent case in point. However, "broad education" can also be organised in lighter forms in which the student population does not necessarily have to be international or live on campus. In addition, a broad first year can be offered. This would do justice to the orientation function of the propaedeutic year. Many variants are possible. It is the task of the institutions to deal with this in a creative manner within the programmes that lend themselves for this purpose. It is up to the research universities and universities of applied sciences themselves to assess what mix of broad with disciplinary best suits the range of courses they offer.

*Unnecessary barriers*

The Committee, however, wishes to call on the research universities to take a far more tailored approach to transfers to master's programmes, with regard to both HBO bachelor's and WO bachelor's holders. Currently, far-reaching "bridging requirements" raise unnecessary barriers that, in some cases, force students who have put up an excellent performance in completing a broad track to re-take extensive components of a bachelor's programme. We have even encountered examples of students who – after completing a WO bachelor's programme! – had to start all over again in the first year. The broadening argued for must not result in such practices. The institutions must make a greater effort towards the mutual recognition of credits obtained.

*More flexibility*

Broad-based programmes give students more freedom. Students should also be given the freedom to compound cross-institutional learning routes or make non-standard combinations of disciplines. In such cases, the institution awarding the diploma would be responsible for providing a sufficiently cohesive course programme. The institutions are called upon to make better arrangements regarding mutual recognition. Downright practical issues are also important,

such as properly harmonised annual schedules or educational modules of equal duration. LLL students also require a similar flexibility with a more modular educational structure. In addition, they require flexibility in organisation, pace and the availability of facilities. For students taking one degree on top of another, collaboration between institutions is essential in order to achieve a better interface. Follow-on minors are a good case in point.

Compared to other countries, the Dutch education system offers relatively few possibilities for combining different types of programmes, such as HBO students taking a few academic subjects at a research university and having these credits acknowledged, or research university students taking some subjects at a university of applied sciences. This would be a valuable opportunity to diversify the range of programmes on offer. It would enable students to consider early on in their programme which orientation would suit them best or shift the emphasis of their studies later on in their programme. Here, too, the Committee would applaud joint initiatives by research universities and universities of applied sciences.

*Smart organising*

Lessons learned over recent years indicate that there appears to be a particular measure for effective and inspiring education. Examples from abroad sufficiently show that this measure is not related to the actual size of the institutions (Annex I, diagram I.29). However, students seem to benefit from a well-organised learning environment and institutions that present themselves in a small-scale fashion. A small-scale set-up enhances the commitment of students and teachers to the learning process and to one another. This mutual commitment has long been regarded as an essential condition for appealing, challenging and effective education (De Moor, 1995). From that same principle – a small-scale approach to education – the Committee would want to explore possible merger movements in the professional higher education sector. HBO encompasses a multitude of relatively small institutions that provide good-quality education but are vulnerable from a business economics point of view. For that reason, such institutions may seek alliances with

large, multi-sectoral institutions. The Committee regards this as the responsibility of the institutions concerned, but advocates that in such amalgamations an organisational form be selected that will maintain the programmes' own identity and quality. In order to differentiate to a greater degree, it is essential that the significant differences between the institutions be retained.

#### *Internationalisation*

Last but not least, the Committee calls on the institutions to adopt a more active attitude with regard to the internationalisation of education. Students and staff must be encouraged to take a step abroad, proceeding from an international culture within the institution. That is why institutions must operate with international instructional materials, highly qualified staff from abroad and joint degrees. The government needs to put this higher on the agenda (OECD, 2008). Collaboration between the institutions and collaboration with Nuffic should be bolstered.

#### **4.2.3 Room for professionals**

Committed teachers are essential to achieve the goals of more attention for teaching and an upgrading of education. The quality of education and research depends on the quality of teachers, who are facing an increasingly complex task. Students differ as regards their prior education and cultural background. The professional field requires insight into professional practice. In some cases, student numbers are in fact too large for a teacher to handle in an adequate manner. The qualifications, efforts and creativity of the teachers are, therefore, decisive factors. Teachers need sufficient time and space to be able to devote their talents to teaching. Research universities still tend to derive their prestige mainly from their research results. A revaluation of teaching versus research, as argued for above, is sorely needed. Whereas universities of applied sciences can place more emphasis on research in their career policies, research universities could attach more importance to teaching performances and provide opportunities for distinct career tracks. A second point for attention involves the intake and retention of young talented staff. A clear career policy with prospects is needed in light of the ageing of

staff. An aim for the universities of applied sciences is raising the training level of their teachers. A joint ambition has been formulated with the government to increase the proportion of teachers qualified at the master's level to 70% by 2014 and the proportion of PhD holders to 10%. Research universities, finally, will have to take radical measures to boost the proportion of female professors in order to reduce their current under-representation.

#### **Recommendation 10: Invest in staff qualifications**

The quality of the education provided depends on the quality and recognition of the teachers. The Committee calls on institutions to give teachers more room and pay attention to their careers policy with separate career tracks for education and research.

The culture of the institution should be one in which teaching and research are the primary process, with administration and management playing a subordinate role. This is not to say that every teacher can go completely his/her own way or that institutions are not entitled to steer their own course and choose their own profile. Nonetheless, professionals should be properly involved in devising that profile and that course, for they bear responsibility for them. A programme's profile should correspond to the areas of special interest of its teachers and researchers. Managers of an institution who are blind to a research group's or tutorial group's own identity runs the risk of ruining things. Conversely, an institution that heeds these separate identities will be able to point out to the academics that this individual professional autonomy is obviously bound by frameworks and rules, some of which are established outside the institution (a case in point is the fierce competition in the research domain, which leaves researchers no other option but to want to be the "best"). Consequently, the Committee argues in favour of a two-sidedness that is essential for a proper functioning of the institution as a whole.



# Implementation

**The proposals of the Committee for making the higher education system future-proof are not a blueprint for the future. However, together with all the parties involved, the Committee would like to put a process in motion that will lead to the envisaged improvement in quality (cf. paragraph 5.1). For the swift implementation of the proposals it is, however, necessary that the government takes the reins more than in the past (cf. paragraph 5.2). The recommendations of the Committee have consequences for the accreditation procedure in higher education as well as for secondary education and senior secondary vocational education (cf. paragraphs 5.4 and 5.5). Although it would exceed the task of the Committee to go into detail about the financial consequences of the plans, the Committee would like to make several observations regarding the investments in higher education that it considers necessary (cf. paragraph 5.6).**

**In conclusion: to realise the ambitions for higher education, public support and enthusiasm are particularly needed. However, the higher education system cannot be made future-proof without significant financial support. The credo “More Value for Less Money” could not guarantee the continued existence of the former Dutch green grocer’s firm De Gruyter. The Committee is convinced that investments will more than pay for themselves in the long term, as is substantiated in paragraph 5.6.**



**Threefold differentiation**

Recommendations of the Committee on the Future Sustainability of the Dutch Higher Education System

20 Cf. the international examples in Annex I.6.

## 5.1 Dynamism rather than a blueprint

The Committee hopes that its proposals will set a process in motion among the stakeholders. It does not want to set down a blueprint or reclassify programmes across the two sectors of the binary system. For example, in the debate that arose from the task assigned to the Committee, the question was raised of whether the Business Administration academic university programme should not actually be categorised under HBO. In the view of the Committee this is not an appropriate question. The question is rather whether the Business Administration programmes are sufficiently linked to research making them justified as research university programmes. It is up to the institutions themselves and the accrediting body (NVAO) to pay attention to this matter and safeguard the related quality. The Committee would applaud any efforts by the professional higher education sector to develop an attractive alternative for VWO graduates, who may currently choose for the academic university option for reasons of prestige. What needs to be avoided is the development of HBO or WO programmes that are far removed from the true-to-type programmes of each sector. Within this context, the positioning of Fine & Performing Arts programmes presents an interesting case.

### *Fine & Performing Arts*

Dutch Fine & Performing Arts programmes are of a high quality and occupy a special position within the Dutch higher education system. In order to retain its position among the world's best, the institutions are increasingly called on to offer more master's programmes in the Fine & Performing Arts and strengthen research. Research into the arts, design and media is of growing importance for the creative industry. Lectorates have already added important impetus to this, but there is a need to go a step further, including possibilities for PhD programmes. Such research must be expressly integrated so that it benefits the education provided in the

21 A good example of an independent institution that can award PhDs, is the University of the Arts London (UAL) in which six leading international institutes are combined: Camberwell College of Arts, Central Saint Martins College of Art and Design, Chelsea College of Art and Design, London College of Communication, London College of Fashion and Wimbledon College of Art. Programmes are offered at the bachelor's level (honours) and the master's level, in visual arts, design, fashion,

bachelor's and master's phases. This has also led to a discussion of whether Fine & Performing Arts programmes should be categorised under academic higher education as is often the case abroad, although by far not everywhere.

First of all, the differences in quality and profiles are great within the Fine & Performing Arts programmes. This makes it difficult to draw one conclusion for the whole spectrum. Placing Fine & Performing Arts programmes either in HBO or in WO is no matter of course.<sup>20</sup> Such standardisation makes little sense. If the top segment wants to work closely with WO, or even wants to be part of WO, then this should be possible. A case in point is the cooperation between the Royal Academy of Art, the Royal Conservatoire of The Hague and the University of Leiden. However, if an institution wants to be part of the professional tier or wants to pursue a more independent position, this should also be possible. Further study would have to demonstrate whether there are concrete obstacles to a good positioning of the Fine & Performing Arts programmes and the extent to which these are related to the current under-valuing (titles) and facilitation (research) of HBO. The Committee does not exclude that this may now be the case, but intends through its proposals to remove any possible disadvantage.

Ultimately, it is up to the institutions to choose how they wish to position themselves. The Fine & Performing Arts programmes have a unique nature. Due to the specific nature of artistic research, several Fine & Performing Arts institutions – that are able to cope with this – should be allowed to acquire the right to offer PhD programmes under their own strength.<sup>21</sup> This option could be included in the study referred to above. The message of the Committee is clear: standardisation is not a



textiles, communications, media, drama and the performing arts. Furthermore, there is a PhD programme (research degree or a degree based on published work). From 2010, the entire range of postgraduate programmes of the six institutions will be incorporated into a single graduate school. Research at the UAL is subject to the Research Assessment Exercise (RAE) as is applicable at all universities in England. Research based on practice will further contribute to the academic profile of the UAL.

solution for this type of discussion. It is far more sensible to allow individual institutions to choose for themselves in a positive way based on their desired profile. Classification in more dimensions creates room to do justice to the individual character of this type of institution.

## 5.2 A strengthened steering function for the government

Setting a process in motion does not mean letting things take their own course. The Committee points out to the government its responsibility for laying down the rules and invites the government to fulfil this responsibility more rigorously than in the past. The Committee hopes that the government will not respond in a constrained manner with the conclusions of the Dijsselbloem Committee (2008) in mind. Serious recommendations deserve a fresh approach and thorough consideration. In recent years, the government has desired to mainly steer educational institutions from a distance. As a result, a lot of policy and regulations were focused at the programme level. Relatively little attention was given to the higher education institutions themselves. The importance of research universities and universities of applied sciences with strong identities seems to have become neglected as a result (CDHO, 2009). The OECD Review (2008) points out that the Dutch higher education system is set too much on automatic pilot. It is now up to the government to dynamically implement the recommendations of the Committee and to take the lead in an authoritative manner in order to set the process of change in motion. This calls for clear direction on the part of the government.

The Committee would find it highly desirable for all the parties involved, the institutions and students, to commit themselves to the policy agenda outlined in these recommendations. The aim is for the parties to agree on the main points of these recommendations and to set this down in a social covenant. In this way, they will collectively put a process in motion that the

Committee believes is essential. The government can play an important role in this by initiating or directing the necessary consultation.

## 5.3 Consequences for the accreditation procedure

Transparency is an absolute precondition for making good use of diversity. If we want to achieve greater exposure and higher profiles, differences have to be identified and recognised. Currently, NVAO can make differences visible via the “distinctive quality” and “distinctive feature” endorsements. In the near future, there will be four categories of accreditation: unsatisfactory, satisfactory, good and excellent. This is a positive development that will improve the visibility of the variety in the system.

The proposals of the Committee also have several consequences for the accreditation procedure. The institutions will be held to account retrospectively on two points:

- Programmes that are selective should consider whether or not the chosen educational concept is sufficiently distinct from that of other programmes in the sector to justify the selection of students. In other words: are the chosen selection criteria and method in line with the chosen educational concept?
- With regard to any affixes to the titles awarded, the accrediting body should examine whether the title covers the content of the programme. In this respect, reference should be made to comparable programmes at home and abroad.

This (light) assessment entails an additional task for NVAO. The government should take the initiative of adapting the accreditation framework accordingly.

Something that is possibly even more important than these two specific policy points is the following. The introduction of accreditation in the Netherlands was in part intended to make the differences in the profiles of the various programmes visible and recognisable (Westerheijden et al., 2008). At its core, accreditation

means that programmes and institutions are invited to choose a profile and that NVAO subsequently assesses whether or not that profile is legitimate and is being lived up to. This invitation feature of accreditation has not yet been adequately developed. Institutions perceive accreditation as something unifying instead of something with which they can demonstrate their own identity or *couleur locale*. The Committee recommends that NVAO explore the role it could play in order to contribute to a new dynamism in profiling within Dutch higher education.

## 5.4 Consequences for VO and MBO

Changes to the higher education system also have consequences for secondary education and senior secondary vocational education. The Committee therefore asks for attention to be paid to the exit levels of secondary education (VO) and senior secondary vocational education (MBO), the harmonisation between secondary and higher education and the duration and strict separation of secondary education routes. Finally, the Committee would like to once more underscore the importance of MBO as an outstanding labour-market qualification.

### *Higher exit levels in VO and MBO*

The quality improvement envisaged by the Committee requires high exit levels in secondary education (VO and MBO). Today, both research universities and universities of applied sciences have to deal with an intake of students that have an insufficient command of several basic subjects (Dutch and Maths in academic higher education; language and arithmetic skills in professional higher education) In general, the level of prior education should be raised or final exam requirements should be tightened. The government has already taken steps by setting reference levels but a close eye should be kept on whether these have the desired effect: higher school-leaving levels. Here, we would also like to refer to the recent OECD research results (2010) that show that high PISA scores have a highly positive impact on society as a whole.

### *Improving the harmonisation between secondary and higher education*

The Committee also asks for attention to be paid to the harmonisation between secondary and higher education. Research universities have developed many initiatives such as trial study, pre-university, summer campus, etc. to introduce VWO students to tertiary education at an early stage. Universities of applied sciences are doing a great deal to make the distance between MBO and HBO as small as possible. Harmonisation is also being worked on in the HAVO-HBO route, for example, the many summer courses that have been created as preparation for the language and arithmetic tests at teacher-training colleges for primary education (PABOs) – but there is still much to be gained here: the alignment between didactics and content could be improved.

### *Duration and strict separation of VO routes*

In international comparisons of the structure of higher education, the combination of four-year HBO bachelor's programmes and a five-year HAVO programme turns out to be an exception. Some therefore argue for a six-year HAVO programme, while others point out the benefits of an additional year of HBO. A six-year route for both HAVO and VWO would afford pupils the chance to take subjects at both levels. This would offer them more flexibility at an early stage. The Education Council (Onderwijsraad, 2010) argues for this too. In this way, pupils can develop their talents at different levels, which would partially counterbalance the disadvantages of early tracking. The Committee would like to leave this discussion to the secondary education specialists. In any case, it is clear that the differences in duration in secondary education have knock-on effects on the structure of HBO and WO and are causing imbalances there.

### *Importance of MBO*

Finally, the Committee would again like to stress the importance of the labour market relevance of MBO levels 3 and 4, even more so given that the intake into MBO will fall dramatically which can lead to a shortage on the labour market. International practice shows, moreover, that MBO level 4 programmes, in particular, are considered tertiary education in many

**22** In Finland, the PISA scores have increased by 25 points over 20 years (OECD, 2010).

countries. The 50% goal of having young employees highly qualified should therefore not lead to unrelenting pressure on HBO graduates to transfer immediately to HBO.

## 5.5 Funding higher education

Although the Committee was not explicitly charged with making a statement on the funding of higher education, this is a topic that cannot be avoided. Without continuity in the current financing and without additional (financial) resources, the ambitions cannot be realised.

Over the past decades, higher education has delivered a great achievement and made many efficiency gains in accommodating an enormous growth in student numbers with little additional funding. However, this capacity will be exhausted some day. The Committee would like to point out two crucial points. Firstly, investing pays off. Secondly, many other countries are making very large investments in knowledge and innovation with the aim of furthering participation and excellence in their systems. The Netherlands cannot allow itself to be left behind in this.

### *Investment pays off*

Spending on higher education is an investment that pays off, from the private as well as the civil society viewpoint. This is also the outcome of a recent study conducted by the OECD Lisbon Council (OECD, 2010). If other countries were to invest heavily in education and knowledge development, just like Finland, and if that would be reflected in a substantial rise in the PISA scores,<sup>22</sup> it would be worth thousands of billions of euros to the economy. The knowledge and creativity amassed in highly developed societies have a long-term profitable impact.

Traditional rate-of-return studies also show that society as a whole benefits greatly from higher education. This is mainly expressed in the increased productivity of employees, higher salaries and higher tax revenues. However, there are external, non-financial effects too,

such as increased social cohesion and health, a better functioning democracy, greater political participation and increased labour market flexibility (OECD, 2008; Psacharopoulos, 2010; CPB, 2009).

### *The proposals of the Committee will partially pay for themselves*

The proposals in these recommendations not only cost money, they also lead to revenues. The findings of the recent OECD report (2010) also apply for the Netherlands: a growing proportion of higher education graduates in the professional population forms the basis for the recovery and further growth of the Dutch knowledge economy. More specifically, there are several positive effects that can still be expected. The costs of matching and selection pay for themselves in a reduced drop-out rate, less study delay and less switching. Broad programmes lead to efficiency gains and contribute to the retention of unique, small programmes by incorporating them into bigger and broader programmes. The creation of areas of key competencies and the distribution of tasks in research lead to greater efficiency and a better chance of success in obtaining European subsidies. The strengthening of HBO research will contribute to innovation, particularly in the SME sector. More selective education will lead to more commitment between the institution and the student which will further the growth of an alumni policy and, in the long term, can result in the donation culture that the Netherlands currently urgently needs.

### *Foreign countries are investing in their higher education*

The financial-economic crisis has led to a temporary fall in the growing demand for highly qualified people. This does not, however, affect the goals of higher education for the medium to long term. For the Netherlands, the objective of having “50% of the professional population highly qualified” still stands as does the ambition of becoming one of the world’s top-5 knowledge economies. Other countries have ambitious target figures as well and a sometimes unparalleled growth in the number of highly qualified people. This translates into ambitious plans for higher education and research and large investments.

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**Investing in excellence**

(Cremonini et al., 2009).

Many countries are investing millions of euros in converting existing universities into “World Class Universities”.

**Germany** is spending an additional sum of € 1.9 billion on interdisciplinary research clusters, research schools and institutional strategies over the period from 2006 to 2011 via the Excellence Initiative. 50% of the resources go to the latter category.

**France** is unhappy with the international performances of the French universities.

A new investment programme is pumping € 5 billion into competitive research clusters in order to create “super campuses”.

Ten higher education and research federations have been selected for this “Opération Campus”. They are to attain a high position in the world rankings (Marshall, 2008). In addition, President Sarkozy has agreed a state loan amounting to € 35 billion, more than half of which will be spent on higher education and research.

**China** has set up Project 211, providing additional support to 100 higher education institutions in order to accelerate their development. Since 1996, the Chinese have spent an annual sum of some € 2 billion on this project.

**Denmark** allowed its 12 universities and 13 research institutes with additional budgets to merge into 8 universities and 5 research institutes within its Globalisation Strategy in the period from 2006 to 2009. In this way, the country wants to generate a “World Class University System” to add new impetus to teaching and research.

**The United States** is investing \$100 billion in education and science under the flag of the Recovery and Investment Act initiated by President Obama. Converted into Dutch terms this would come to € 5 billion.

**Investing in accessibility**

Many countries are investing in stimulating participation in higher education:

In the **UK**, between 2001 and 2007, millions were spent on “widening participation” at universities. This amount grew steadily from €71 million in 2002 to €510 million in 2006 (House of Commons, 2009).

In Australia the Bradley Review recommended that participation in higher education be expanded from 29% of the age bracket of 25-34 to 40%. Moreover, an additional \$5.4 billion is being spent on supporting research in the coming four years. A Capital Development Pool has also been set up to inject \$75 million into the infrastructure of **Australian** universities.

In **Germany**, a strong rise in student numbers is expected. Together with the introduction of the bachelor’s-master’s structure, this is leading to tremendous pressure on the system. For that reason, in the Hochschulpakt 2020 the decision was made to generate 90,000 new study places as of 2010. From 2007, the Bund and Länder have set aside an annual sum of € 1 billion to this end.

*A matter of urgency: look around you and beware!*

If the Netherlands wishes to actually be among the world’s top knowledge economies, the matter is urgent. The Netherlands is steadily falling further behind those at the vanguard. At \$9,700, Dutch expenditure per student is still slightly above the OECD average of \$8,418. However, the Dutch per capita expenditure remained the same from 1995 to 2006 while spending in other countries rose (OECD, 2009). Moreover, the Committee is concerned about the fact that the amount per student will fall when student numbers rise and the macro-budget does not rise correspondingly.

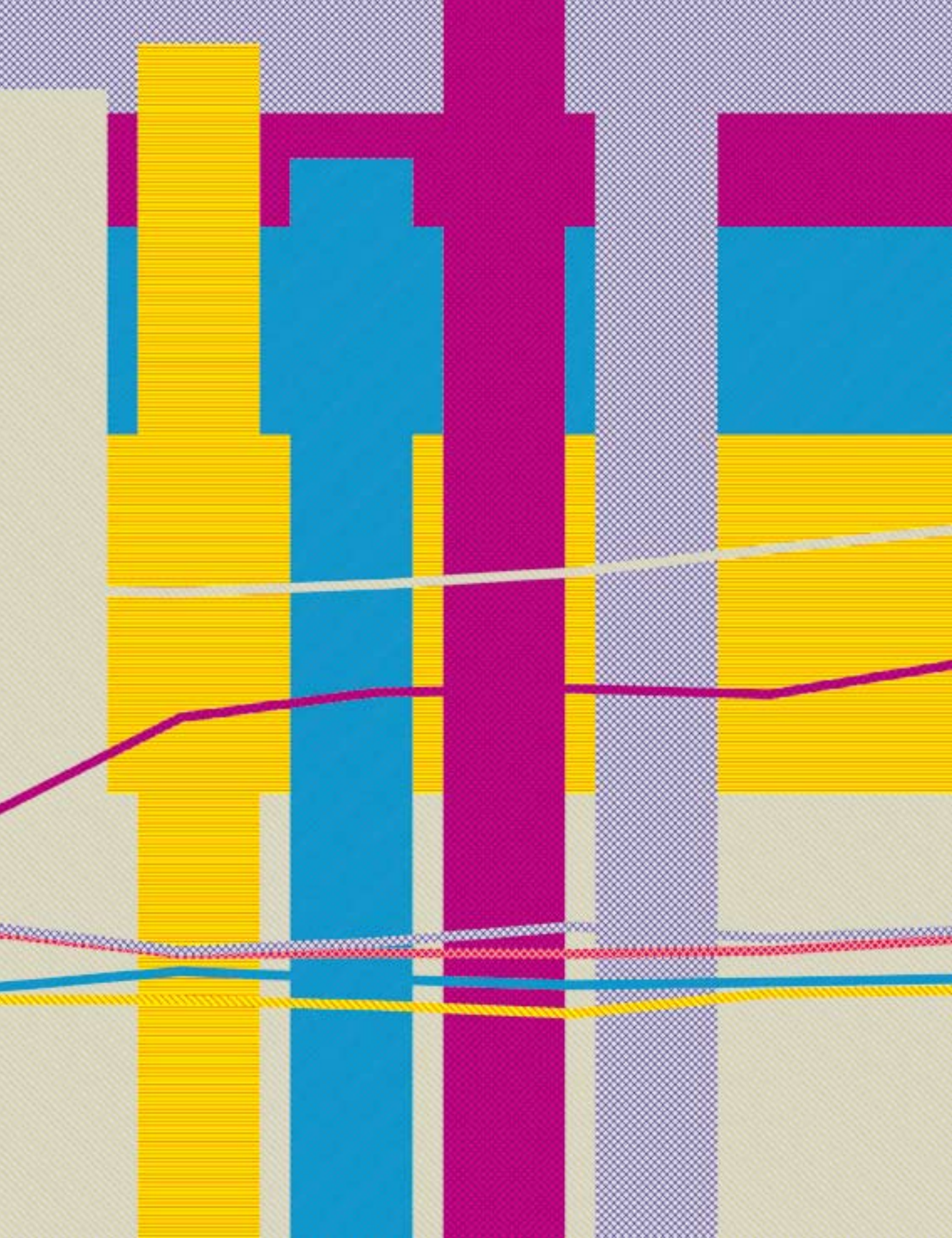
If we look at spending per student including Research & Development (R&D), at \$15,200, the Netherlands is actually below the OECD average of \$15,800. Expenditure per student by the top-5 countries on the *Global Competitiveness Index* (GCI) is considerably higher: \$15,400 in Denmark, \$17,000 in Sweden, \$22,250 in

Switzerland and no less than \$25,100 in the United States. Combined with the fact that Dutch expenditure on R&D did not rise from 2000 to 2006 while other countries spent an average of 15% more (European Commission, 2008), then it must be concluded that the Netherlands has a serious investment shortfall. Between 2000 and 2006, the top-5 GCI countries showed a growth in R&D expenditure of between 4% and 19% (European Commission, 2008). Between 1995 and 2006 they also invested heavily in expenditure per student (OECD, 2009, Table B1.5).

#### *Conclusion*

If we are convinced that knowledge is the No. 1 competitive factor in the 21st century and that to this end we need a strong and future-proof higher education system, then the ambitions in these recommendations must be supported by sufficient funding. The Committee is aware of the tight public funds available and of the task of the Working Group on Reconsidering the Higher Education System to draw up options for cutting back spending. The Committee does not want to exclude that resources within higher education will have to be used differently or that the relationship between public and private contributions will alter. However, any savings must definitely be reinvested in higher education. This urgency has only increased with the economic and financial crises. Now is precisely the time for looking ahead: "This preserves and strengthens what we need to draw on in the future: our knowledge as equity" (AWT, 2009b).





# **ANNEX I**

## **The state of affairs of Dutch higher education: facts and figures**

**The Dutch government's ambition is to be among the top-5 knowledge economies of the Organisation for Economic Cooperation and Development (OECD) as measured in the Global Competitiveness Index (OCW/EZ, 2009). Higher education and research fulfil a key role in achieving this goal. The Committee underscores this ambition but notes that the Netherlands, after an initial improvement, dropped from 8th place down to 10th place on the index referred to above (Schwab, 2009). In this chapter, the Committee outlines the state of affairs of Dutch higher education and where its weaknesses lie. To this end, Dutch achievements are set against those of other countries that are leaders in the aspects concerned. We will successively deal with (I.1), the position of professionals (I.2), quality and success rates (I.3), contribution to the knowledge society (I.4), internationalisation (I.5) and the structure of the system (I.6).**



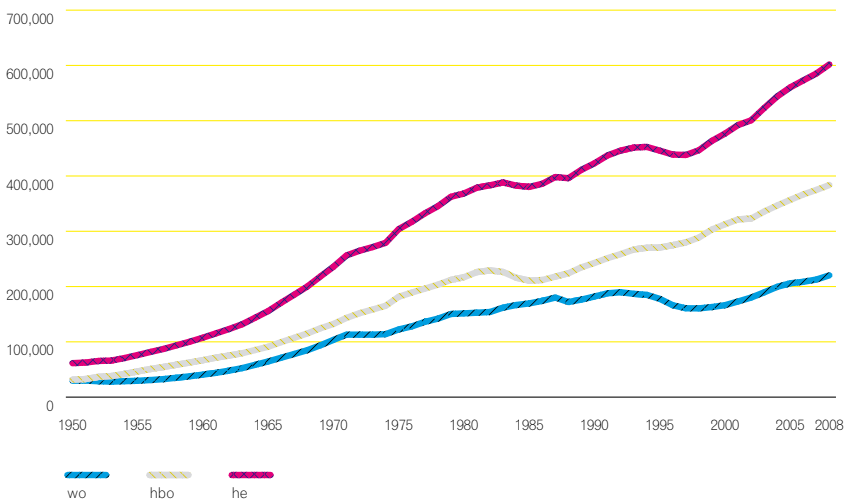
## I.1 Participation in higher education

### *Continued growth in higher education*

From 1950, more and more people in the Netherlands have been participating in higher education. From the mid-1990s, spectacular growth has been seen, particularly in HBO, professional higher education (CBS, 2010).

**Diagram I.1: Students in higher education since 1950 (1950-2008)**

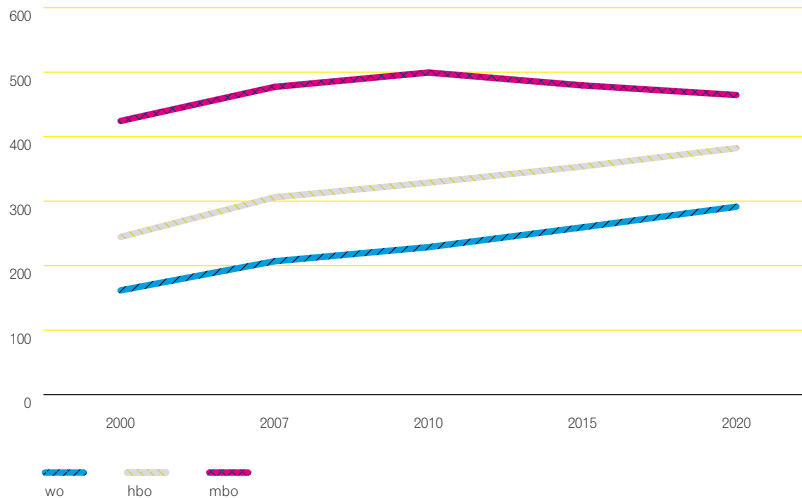
Source: CBS



And the end of this growth is not yet in sight. By 2020, the universities of applied sciences will accommodate some 20% more first-year students and the research universities some 40% more compared to 2007 (OCW Pupil/Student Forecast, 2009). In terms of total student numbers, the growth percentages between 2007 and 2020 are 25% for professional higher education and 40% for academic higher education (cf. Diagram 1.2).

- 23 Growth in the Netherlands amounted to 52% (OECD, 2009) but in many countries it ranged from 180% to 275% (Switzerland, France, Belgium, Luxembourg, Austria, Finland, Sweden, Canada, New Zealand and Ireland). Up to and including 2001, the percentage of highly qualified employees in these countries had been lower than in the Netherlands.

**Diagram I.2: Estimated total enrolment in MBO, HBO and WO (excl. "green") 2000-2020**  
Source: Pupil/Student Forecast 2009



#### *Drop in secondary vocational education*

The number of first-year MBO students, on the other hand, will fall considerably until 2020, by 17% compared to 2007. This raises the question of whether an education-labour market problem will arise at the MBO level, especially if the tendency continues of increasingly more MBO graduates choosing to transfer to HBO immediately after graduation. MBO graduates take up vital positions in our society, constitute part of our ambition of becoming a knowledge economy and are thus urgently needed on the labour market. For that reason, it is important for MBO not to develop into a mere transfer qualification for professional higher education.

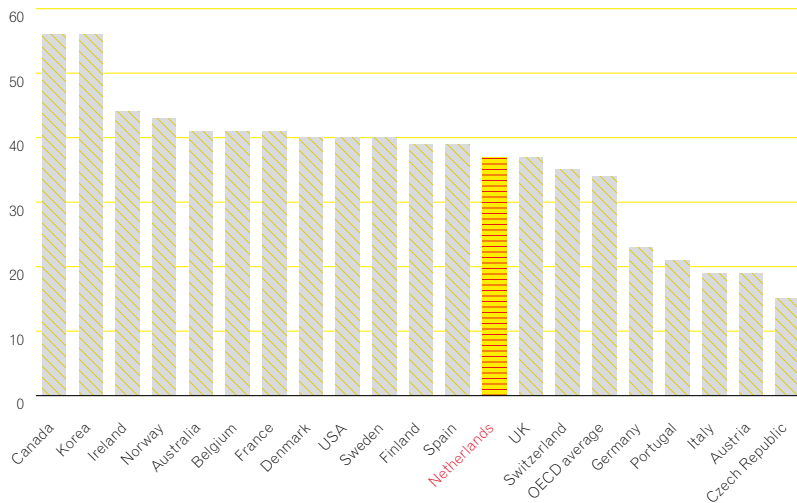
#### *The goal of 50% is not being achieved*

Despite the strong growth that is expected for higher education, it will be difficult to realise the goal of 50% of the Dutch population (age bracket 25–44) having higher education qualifications in 2020 (OCW / EZ, 2009). The goal will probably not be achieved even if current growth continues. According to the indicator used by the OECD in 2009 (the percentage of higher education graduates in the population aged 25–34) the Netherlands is at the median with 37%. Although this percentage rose from 24% in 2001 to 37% in 2007, in many other countries growth was higher.<sup>23</sup>

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**Diagram I.3: Percentage of higher education graduates in the age bracket of 25-34 (2007)**  
Source: OECD, 2009



It should be noted, however, that in several countries the equivalent of our MBO 4 is considered tertiary education, for example, the *Sections de Techniciens Supérieurs* and *Classes Préparatoires aux Grandes Écoles* in France, *Fachschulen* in Germany, Austria and Switzerland and several sub-degree programmes in the UK (OECD, 2004). The fact that our MBO-4 ranks under secondary education has a negative effect on the position of the Netherlands. The expected growth in student numbers in higher education is thus very welcome in so far as this is not at the expense of sufficient graduates at the MBO-4 level. The Committee considers a more precise international positioning of MBO 3 and MBO 4 to be desirable.

*Can the current system accommodate this growth?*

The general conclusion is that given the goal of 50% participation in higher education, the expected growth in student numbers in higher education is very welcome. It does, however, raise the question of whether or not the system is capable of adequately accommodating this growth. All the more so because not only are student numbers increasing enormously but the student population is also becoming increasingly more diverse. Dealing with this continuing growth and increasing diversity constitute the core of the Committee's task.

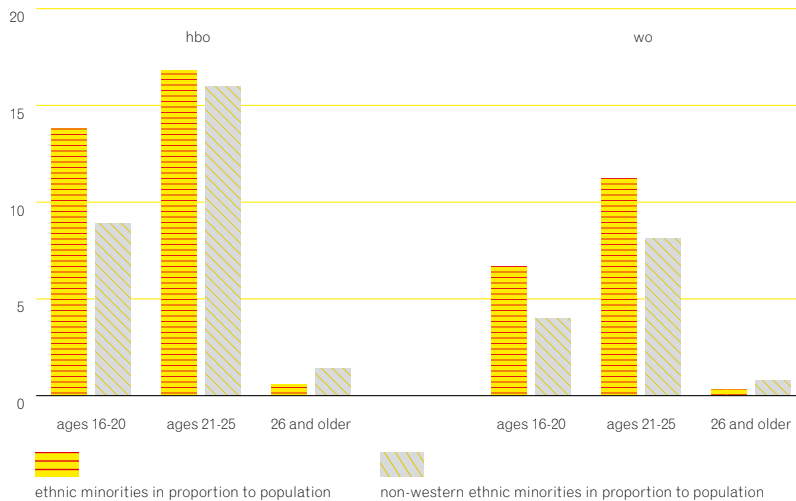
### **I.1.1 Diversity**

*Strong increase in ethnic minority students*

The most striking aspect of the composition of the student population is the growing percentage of ethnic minority students. In professional higher education, the number of non-Western ethnic-minority students tripled from 16,000 in 1995 to 54,000 in 2008. In academic higher education, the number grew from 11,000 in 1995 to 27,500 in 2008 (CBS, 2009). The percentage of ethnic minority students is higher in the large cities where universities of applied sciences in particular are developing successful programmes aimed at improving the success rates of this group (OCW, 2009b). From an international perspective, research into the school careers of ethnic minority students has shown that in the Netherlands, these young people relatively seldom enter the HAVO/VWO route (Crul et al., 2009) due to early tracking and to their language disadvantage. They tend to use indirect routes (MBO-HBO or MAVO-HAVO-HBO) to enter higher education. For this reason, the relatively low participation of students from socially weaker environments remains an area of concern. The percentage of non-Western ethnic minority students is lower in WO than in HBO.

**Diagram I.4: Participation of native Dutch and non-Western ethnic minority students in proportion to the size of the population group, 2008**

Source: 1 HE Figure CBS, 2008.



#### *Socio-economic backgrounds remains an influence*

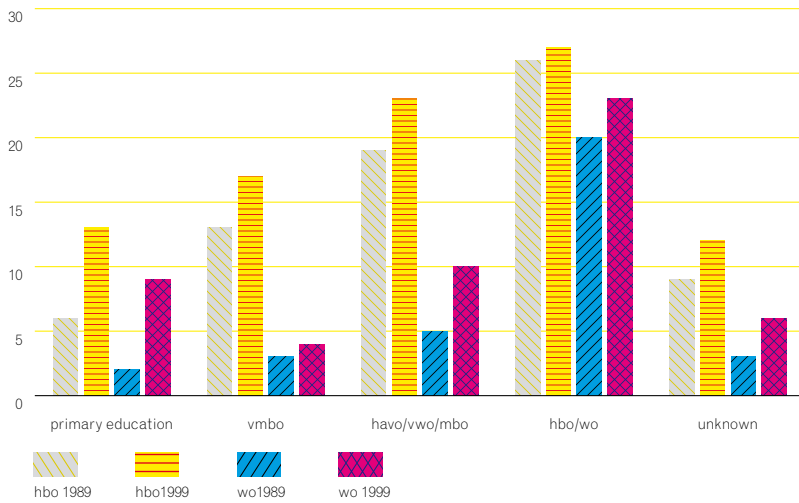
Although the children of highly educated parents and native Dutch families still remain over-represented – more strongly in academic higher education than in professional higher education – the differences in the participation of various social groups are becoming smaller over time. In 1989, some 15% of children of parents with a low educational background entered higher education. In 1999, that figure was roughly 20% (OCW, 2009d). In international terms, the Netherlands scores relatively well, with the lowest under-representation of students from families with a low educational background in higher education (Eurostudent, 2009). From the viewpoint of civil society and the knowledge society, however, the relatively low representation of students from socially weak environments remains a point for concern.

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**Diagram I.5: Intake into higher education by education level of the most highly educated parent**

Source: CBS (Secondary Education Cohort Students; first-year secondary school student cohorts 1989 and 1999, 2 years after the final secondary school exams).

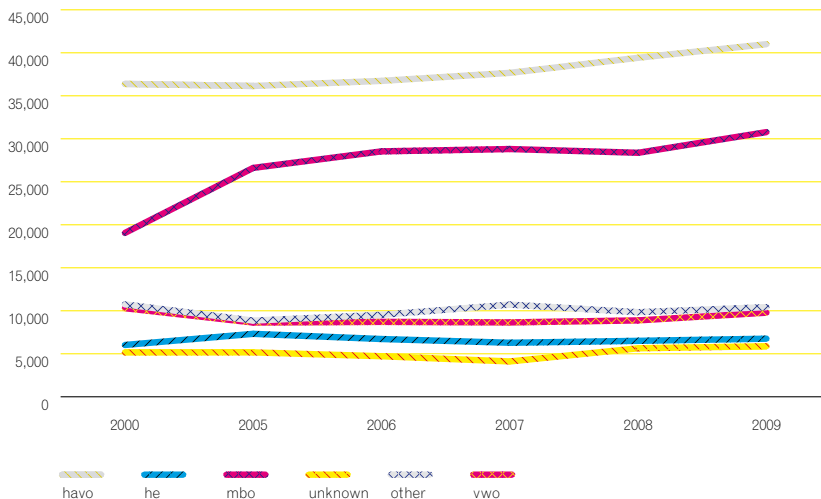


*Growing MBO-HBO transfers*

The largest portion of the direct intake into professional higher education comes from HAVO (39% in 2009), almost 30% comes from MBO, and some 10% from VWO. In part under the influence of professional tier initiatives, the direct intake of MBO-4 graduates into professional higher education rose from over 30% in 2000 to 50% in 2008. Including indirect transfers, in 2008 almost 65% of MBO-4 graduates entered HBO. The expectation is that as a consequence of the falling numbers of students entering and graduating from MBO, the percentage of MBO graduates in professional higher education will decrease in the years ahead.

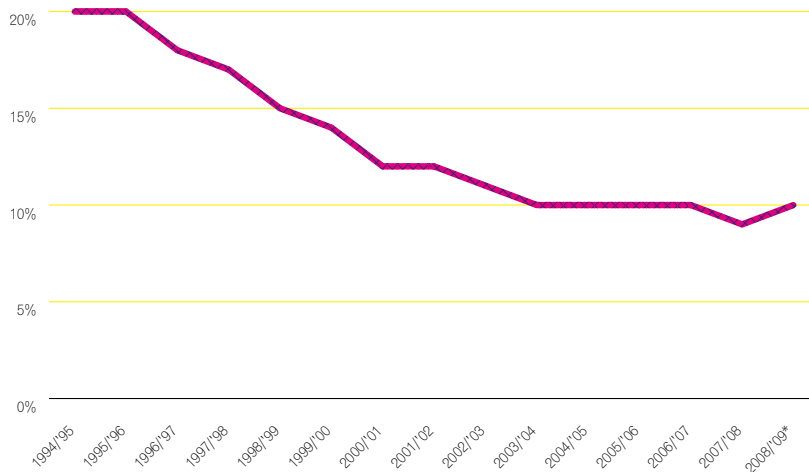
**Diagram I.6: Intake into HBO according to prior education (2000-2009)**

Source: HBO-raad, Facts and Figures, 2010



Percentage of VWO graduates in professional higher education is falling. It is worth noting that the percentage of VWO graduates in professional higher education dropped from 20% in 1995 to 9% in 2008 (HBO-raad, 2010). VWO graduates apparently regard professional higher education as an increasingly less attractive alternative to an academic higher education programme, although some programmes have been popular with this category of students for many years in the past. This development is leading to increased pressure on the capacity of research universities and is affecting the success rates negatively, as this group of VWO graduates perhaps has a learning style that is better suited to professional higher education. The impression is that opting for academic higher education is a result of prestige considerations and a perceived lack of level in professional higher education.

**Diagram I.7: Intake of VWO graduates into professional higher education (1995-2008)**  
Source: 1 HE Figure CBS, 2010



#### *HBO students constitute one-quarter of the intake into WO*

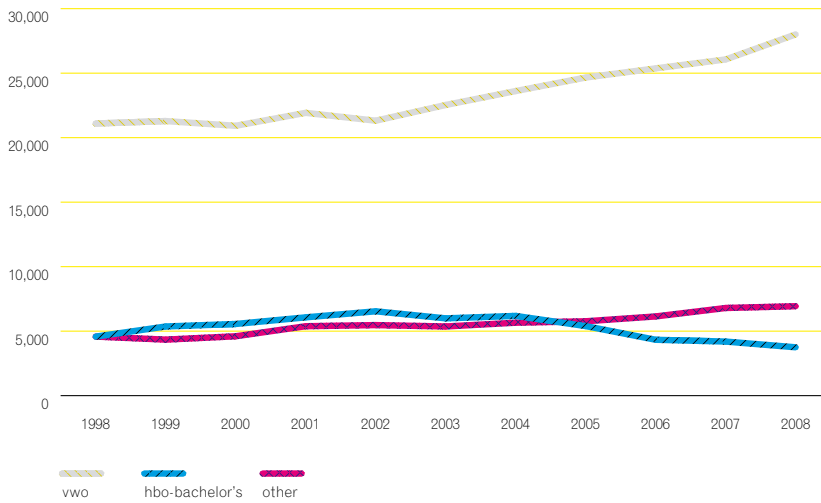
At research universities, we see a reversal of this trend: the percentage of VWO graduates in bachelor's programmes grew to over 72% of the intake in 2008 (OCW, 2009). The direct and indirect intake from professional higher education into academic higher education has been about one-quarter of the total intake into WO bachelor's programmes since the 1990s. Most of the students hold HBO bachelors' qualifications, and almost one-third have a HBO-p.

**Threefold differentiation**

Recommendations of the Committee on the Future Sustainability of the Dutch Higher Education System

**Diagram I.8: Intake into WO bachelor's programmes according to prior education (1998-2008)**

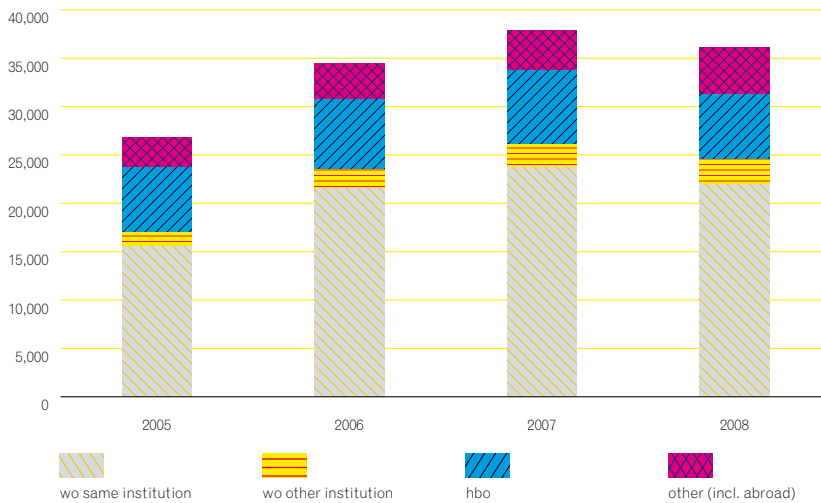
Source: 1 HE Figure, CBS 2009



The direct transfer from WO bachelor's programmes dominates the WO master's phase. Intake from the HBO bachelor's phase into the WO master's phase has grown slightly in absolute terms but has decreased in relative terms from 24% in 2005 to 19% in 2008 (VSNU, 2009). This transfer is, however, being accommodated increasingly more often via bridging classes and academic pre-master's programmes integrated into HBO programmes.

**Diagram I.9: Intake into the WO master's phase according to prior education (1998-2008)**

Source: 1 HE Figure 2010/VSNU





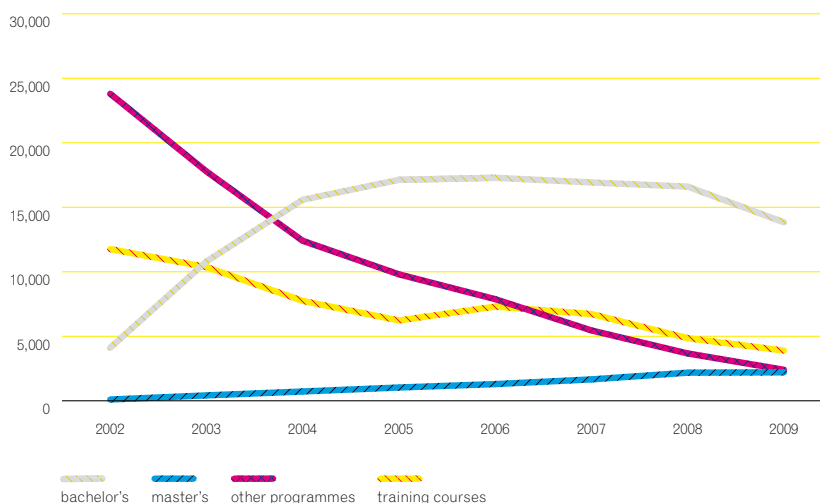
*Working people: lifelong learning*

Lifelong learning is also of great importance in the higher education sector, not only to reach the 50% goal, but also to compensate for the selective nature of secondary education. In addition, it is important to combat the ageing of knowledge and to keep employees up to date for the labour market. The current and future top-10 jobs in the US are predominantly to be found in the segment in which higher education is a requirement and many of these types of jobs did not even exist ten years ago (Monthly Labor Review, 2009). Finally, for institutions in regions that are faced with a decreasing and ageing population, mature students are an essential supplement to the standard intake. The Netherlands, however, scores more poorly regarding lifelong learning, despite the fact that it has long been on the political agenda. The institutions themselves are aware of their shortcomings in catering for this category (HBO-raad, 2009b). Since 1990, the number of over-30s in higher education has grown by 10%. This is lagging far behind the growth of 42% in total participation across the entire spectrum of higher education (OCW 2009b). The Netherlands' score is also low regarding the percentage of employees taking training and refresher courses. With 17% we remain far behind the envisaged 35% (Innovation Platform, 2010).

Neither is the Netherlands performing well in terms of part-time higher education programmes. With 15.6% of students studying part time, the Netherlands occupies a position in the middle and this percentage has been falling uninterrupted for almost ten years (OECD, 2009). In 2008, the number of part-time students in professional higher education rose slightly for the first time since 2003 to over 61,700, which amounts to 16% of the total. The number of part-time students in academic higher education, however, dropped further to 11,400, which is 5% of the total (OCW 2009d). Countries like Denmark, Germany, Japan and Spain score lower, while Australia, Norway, the UK and the US score significantly higher with 25% to 35%. Finland and Sweden score much higher still with 44% and 52%. This can be explained in part by the fact that students who fail to make it through the initial selection process embark on their studies at a later date; they are placed on a waiting list, as it were. They first take up employment and continue to work while they study.

Another cause for concern is that the Open University (OU) is not properly fulfilling its role of providing second-chance education: two-thirds of its students already have a higher education qualification and, moreover, the diploma success rate is too low. The trend can hardly be considered favourable: the number of active students has more than halved, from some 36,000 in 1991 to less than 14,000 in 2008.

**Diagram I.10: Enrolments in the different types of programmes of the OU**  
Source: OU and CHEPS, 2009

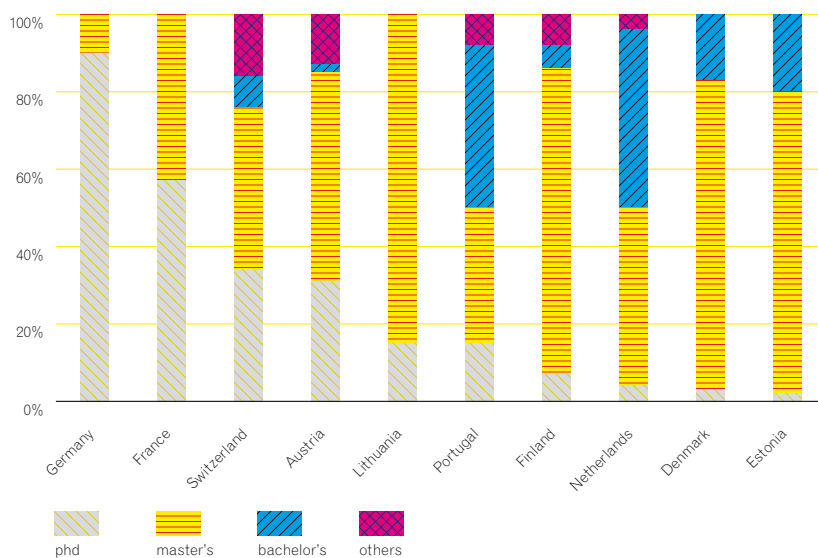


## I.2 The quality and qualifications of professionals

The professional higher education sector in the Netherlands is relatively large. Two-thirds of all higher education students in the Netherlands are in HBO and this makes the Netherlands – together with Flanders – quite unique. In most other countries with a binary system, this sector is much smaller in size in relative terms (ranging from 5% in France to 46% in Finland). This not only means a relatively low research intensity for a relatively sizable part of higher education; it also means that teaching staff at Dutch universities of applied sciences have low qualifications. With only 4% of teachers holding a PhD and 46% with a master's degree, in international terms the teaching staff at Dutch universities of applied sciences have very low qualifications (De Weert and Soo, 2009). In most other countries with a binary system, these percentages are much higher. Even if we allow for a certain differentiation because some of our programmes are categorised under professional higher education while in other countries they are regarded as academic higher education (such as occupational therapy), this remains a weakness, especially if universities of applied sciences have the ambition and pretension of conducting more research. The HBO-raad quite rightly has given this issue high priority on its agenda (HBO-raad, 2009b).

**Diagram I.11: Qualifications of teaching staff at universities of applied sciences**

Source: De Weert and Soo, 2009



### *Room for professionalisation*

In this context, the teachers' unions have stated – in letters and verbally to the Committee – that teachers need to have more room to expand their professional competencies. Teachers need a broader scope in order to be able to teach well, which includes conducting research. They must be able to interpret developments and select what is important for future professionals. The unions regard investing in the educational level and training of teachers as one of the most profitable investments in higher education.

In recent years, there has been too much emphasis on management positions at higher education institutions and the bureaucratic obligations of teachers have increased dramatically. Didactic and pedagogical broadening and achieving more in-depth content need to become priorities again. A greater say in the content of their own

classes and research themes would be of benefit to the main strength of academics, namely their creativity. Another sensitive issue is the need for more certainty and career prospects. Too many teachers and researchers are forced to regularly change jobs due to short contracts and “grants” and so are unable to build up strong ties with an institution. This is referred to as the phenomenon of “academic nomads”.

#### *A breeding ground for young research talent*

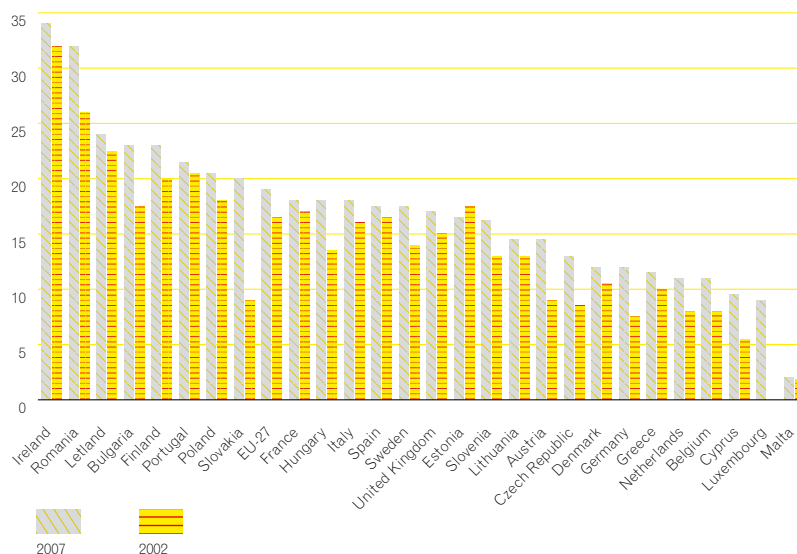
More specific to research universities but in the long run increasingly important for universities of applied sciences too, is the importance of having a breeding ground for talented young researchers. For years, research universities and the unions have been arguing for more PhD places and more career prospects for young talents (VSNU/PNN and ABVAKABO FNV, 2006). The percentage of researchers and holders of PhDs in the Netherlands is below the European average (European Commission, 2008). This means that more attention is required for the recruitment, selection and coaching of young researchers.

#### *Percentage of female academics too low*

In addition, women are seriously under-represented in the academic staffs of research universities, particularly among professors. Whereas the number of female students is outstripping the number of male students, the opposite applies to PhD candidates, university lecturers, senior lecturers and professors. The Netherlands has not achieved the European ambition of raising the proportion of female professors to 25% by 2010. The expectation is that this will only be realised in 2030 (Stichting de Beauvoir, 2009). In 2008, the Netherlands had achieved only 11.5%. In this area, the Netherlands is one of the worst performing countries in Europe. The EU average is almost 20% with Ireland leading with 35% of professors being female.

**Diagram I.12: Percentages of female professors in the EU-27 countries (2007 as against 2002)**

Source: Stichting de Beauvoir, 2009



The initiatives of Dutch research universities to better counsel female colleagues for higher academic positions constitute a step in the right direction. However, to qualify as a knowledge-intensive society the Netherlands needs to do more justice to its many talented women.

## I.3 Quality

### I.3.1 Quality of the education provided

#### *Good generic quality*

The Dutch quality assurance and accreditations systems assure that the generic quality of Dutch higher education is good. Virtually all programmes satisfy the minimum requirements. However, this only gives us a purely national frame of reference. There is little concrete international comparative data available regarding the quality of programmes and graduates. A few programmes have been internationally accredited alongside their Dutch accreditation, as is the case for the Business Administration programme accredited by the EAPAA. The assessments show that here too, the minimum requirements are met. There is, however, no assessment of additional quality. Furthermore, Dutch research universities score relatively often in the top 25% on the CHE Excellence Rankings for the disciplines of Biology, Physics and Medicine, regarding student satisfaction and counselling. In the future, the AHELO project (now still a feasibility study of the OECD) and the accreditation of international programmes (double degrees and joint degrees) could offer greater insight into quality from an international perspective.

**Diagram I.13: The performances of Dutch research universities in the CHE rankings**

Source: The CHE University Rankings (<http://ranking.zeit.de>)

Discipline	Number of Dutch universities ranked	# in the top 25% Overall satisfaction	# in the top 25% Counselling	# in the top 25% Equipment, facilities
Biology	7	5	4	4
Chemistry	2	2	1	1
Computer Science	4	1	0	0
Dentistry	3	1	1	na
Geography	3	3	0	1
Geoscience	2	2	0	na
Medicine	7	5	3	-
Pharmacy	2	1	0	1
Physics	4	3	0	1

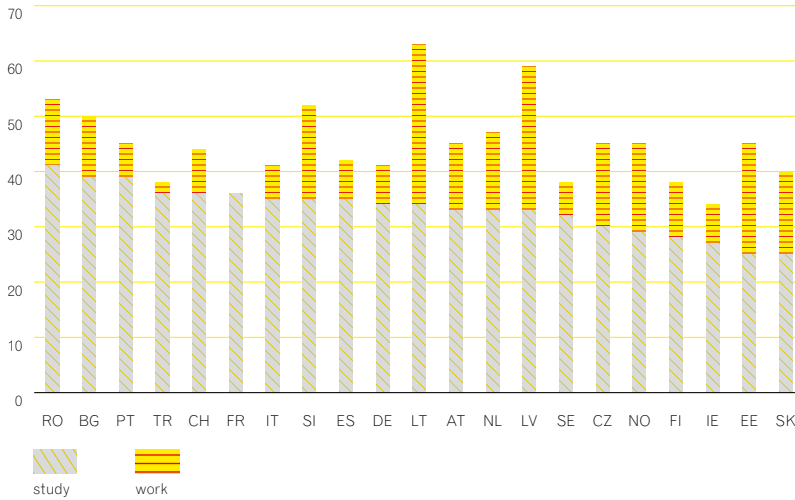
#### *Little excellence*

In addition to the accreditation of the generic quality of programmes, for a few years now, programmes have been eligible to obtain the endorsement of "distinctive feature" or "distinctive quality" from the Netherlands-Flanders Accreditation Organisation (NVAO). Until now, only 15 and 16 programmes respectively have qualified for such endorsements (NVAO, 2010). Moreover, students and graduates find Dutch higher education has little prestige and is not very demanding (Van der Velden, 2009). Research conducted by the CPB (2007) has shown that productivity in the Netherlands is relatively high due to the generally high level of skills of the Dutch population. However, if we invest more in top-level skills (higher education) productivity can be raised even higher.

#### *Students challenged too little*

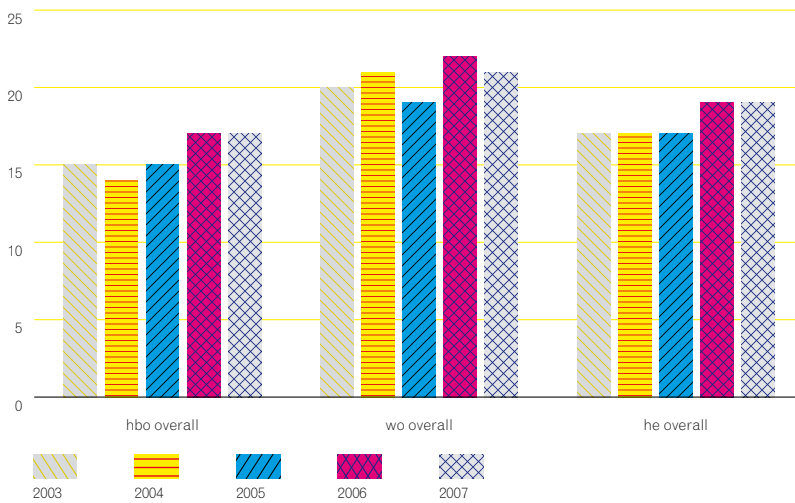
Dutch students are challenged too little and they spend relatively little time on their studies (HIS, 2008). Moreover, Dutch students rarely attempt to excel with high grades. Talented students in particular are challenged too little (Waterreus, 2008). Dutch students are not getting the best out of themselves; the available talent is not being used to the full.

**Diagram I.14: Time spent by European students (hours/week)**  
 Source: HIS, Eurostudent III, 2009.



Over 5% of students indicate they are unmotivated and 20% are underachieving (Student Monitor, 2008).

**Diagram I.15: Full-time students making an inadequate effort (percentage, 2003-2007)**  
 Source: ResearchNed, 2009



### Threefold differentiation

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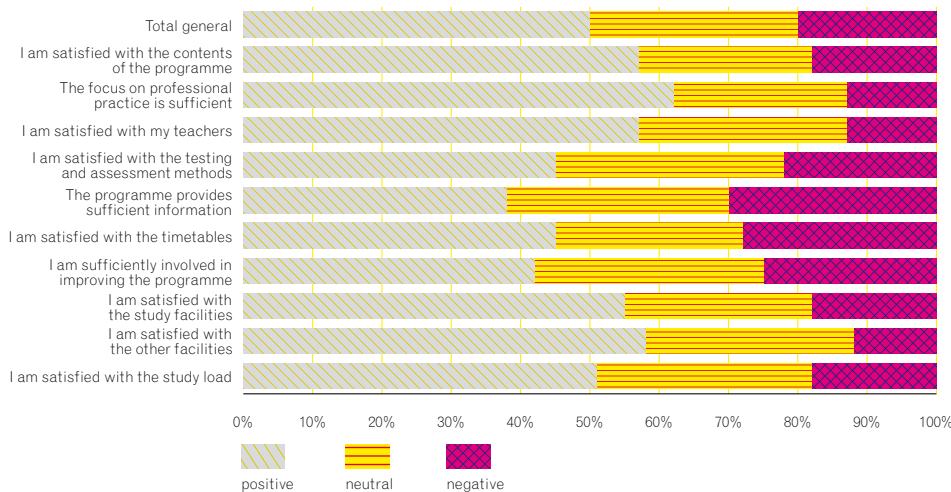
**24** Study success rates are higher in Germany (77%), Denmark (81%) and Ireland (83%). However, the study success rates in, for example, the US (56%) and France (64%) are lower. (HIS, 2009)

**25** Of the cohorts that entered HBO from 1995 to 2003, an average of 57% obtained a diploma within 5 years (CBS, 2009). Looked at more closely, 66% of HBO students obtained a diploma after 7 years, 2% obtained a WO degree and 10% was still studying. This means that in reality, 22% of students dropped out. Of the students who entered WO, 68% had obtained a WO qualification after 7 years, 7% had obtained a HBO diploma and 12% was still studying. 13% had definitely dropped out (Mapping Knowledge, 2009).

Across the board, the students themselves take a positive view of the quality of higher education (Student Monitor 2008). And yet the student satisfaction survey showed that some 20% of HBO students are dissatisfied (HBO-raad, 2009a). The main points of criticism involve assessment methods, poor information provision and timetables, and the insufficient involvement of teachers. Many institutions fail to come up to the mark as regards teaching logistics (HBO-raad, 2009b; ISO, 2009). The LSVb website shows that 43% of students are dissatisfied and 51% give a quality assessment of mediocre.

**Diagram I.16: Assessment of students of the quality of components of their programmes**

Source: HBO-raad (2009b), 2009 Student Satisfaction Survey



### I.1.2 Success rates too low and drop-out rates too high

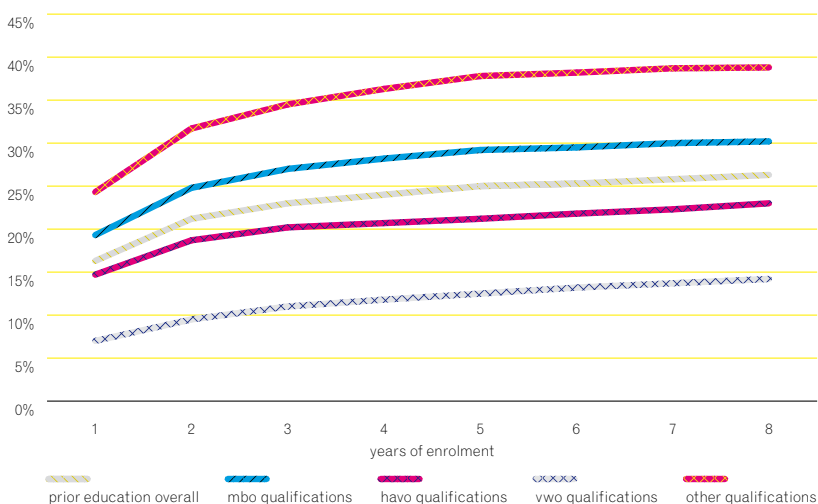
The drop-out rate in higher education is high. Although the international statistics show that with a success rate of 70% the Netherlands occupies a position in the middle of the list<sup>24</sup>, it is unacceptable that only a bare two-thirds of students in higher education obtain a qualification after 6-7 years.<sup>25</sup> The research universities and universities of applied sciences themselves confirm this conclusion (HBO-raad, 2009b; VSNU, 2008). In addition, several groups stand out in an unfavourable sense:

- The success rates of ethnic-minority students (particularly non-Western minorities) are alarmingly lower than those of native Dutch students (CBS, 2009). The size of the difference is cause for grave concern<sup>26</sup> (Onderwijsinspectie, 2009). Non-Western ethnic minority female students are doing relatively well and now have the same success rate as native Dutch male students. Male non-Western ethnic-minority students have the lowest success rate and the highest drop-out rate (CBS, 2009).
- Within professional higher education, MBO and HAVO graduates drop out the most often. Moreover, HAVO graduates more often switch to another study than do MBO graduates (HBO-raad, 2009; Onderwijsraad, 2009). The drop-out rate among VWO graduates is the lowest in both professional higher education and academic higher education (OCW, 2009d).
- In academic higher education, students who transfer after a HBO propaedeutic year (HBO-p) run the highest risk of dropping out: 15% drop out after 1 year, 8% of whom transfer to professional higher education while 7% leave higher education completely (CFI, 2009). Students with an MBO diploma or other prior education drop out considerably more often (20%) than holders of a HBO-p with a VWO diploma (10%).

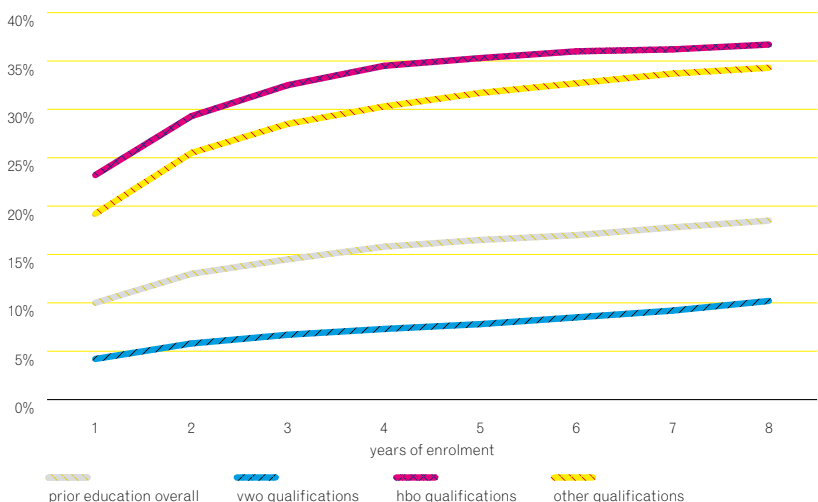
26 After five years, the success rate of native Dutch MBO students is 21% higher than that of ethnic minority MBO students. With regard to students entering WO after an HBO bachelor's programme, the success rate of native Dutch students after four years is 56% versus 33% among ethnic minority students.

- Currently, 41% of women and 36% of men enter higher education (OCW 2009d). Participation is not only out of balance but at the moment the success rates are consistently worse for male students. Native Dutch female students have the lowest drop-out rates in both professional higher education and academic higher education (CBS, 2010).
- The success rates of non-Western ethnic minority students in academic higher education are higher than in professional higher education, almost 60% against 50%. In particular, the definite drop-out rate for non-Western ethnic minority students is higher in professional higher education (CBS, Cohort 2001 students). Almost 60% of dropouts expect to re-enter higher education and 40% state they have definitely stopped (Student Monitor, 2008).

**Diagram I.17: HE drop-out rates for students who start out in HBO (full time)**  
Source: CBS



**Diagram I.18: HE drop-out rates of students who start out in WO (full time)**  
Source: CBS





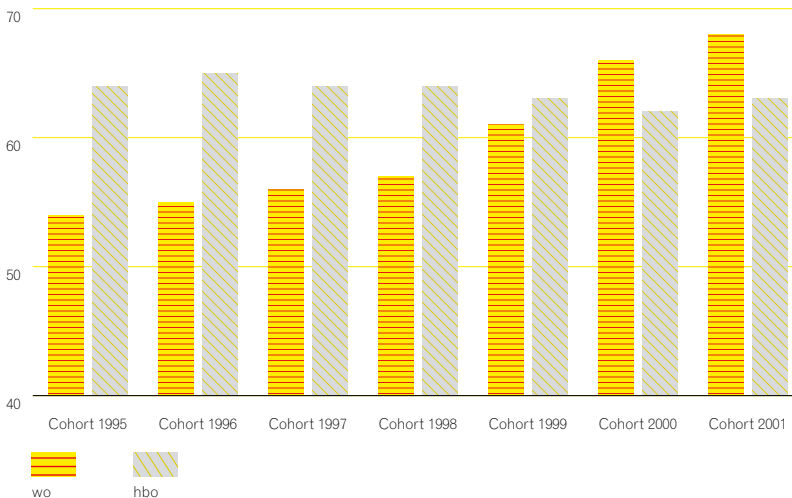
**Threefold differentiation**

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*WO success rates are improving*

Something positive is that the success rate in academic higher education has improved significantly in recent years. If we compare the cohort of 1995 with that of 2001, the number of WO graduates (after 7 years) rose from 54% to 68%. Most probably diploma subsidies and performance grants as well as attention for shortening the duration of studies have had a positive impact. In professional higher education, the success rates (after 6 years) of the student cohort that began studying between 1995 and 2001 have remained more or less stable at between 63% and 65% (Cfi, 2009). This is probably related to the relatively good performances of VWO graduates as opposed to the relatively high drop-out rate of HAVO and MBO graduates in HBO.

**Diagram I.19: Development of the success rates of WO and HBO students (after 7 years and 6 years respectively)**  
Source: CBS

*Reasons for dropping out*

The reasons for dropping out can generally be traced back to a poor choice of study, deficiencies in prior education, the social background of the students, the perceived quality of the programme and the social bond between the student and the study programme (Severiens, 2009; Education Inspectorate, 2009b). A much voiced opinion is that a more selective system would reduce the drop-out rate of students, among other things because the involvement between students and the institution would be increased. In some countries with high success rates this is the case, for example, the highly selective University of California and many British universities. Such institutions also have a regime of intensive counselling; if students cannot keep up with the fast pace, they have to leave the institution immediately after the first year. In Asian countries like Korea and Japan, high success rates are due to a highly competitive culture in which good qualifications are a basic requirement and are given a high priority within the context of the family.

*International comparison of selectivity in higher education (Cremonini et al., 2010)*

Currently, in the Netherlands anyone with a HAVO, VWO or MBO diploma can enter higher education. Apart from a few exceptions, the Netherlands' higher education system is one with open access. With this open access, the Netherlands achieves a success rate of 63% in professional higher education and 68% in academic higher education.

In **Germany**, the various Länder and institutions have different selection mechanisms and rules. In the past, students were distributed across the available places via a central placement mechanism (ZVS, Zentralstelle für die Vergabe von Studienplätzen). This often led to long waiting times (sometimes as long as 5 years) for the 20% of students with strong preferences. Several years ago, decentralised selection by the institutions was therefore made possible. This led to chaos and a considerable under-use of study places because many students were admitted to several institutions. Currently, Germany is returning to the ZVS system which allows students to indicate their preferences. The study success rate in Germany is approximately 77%.

In **Scandinavia**, equality is a high priority. However, as far as access to higher education is concerned, selection nonetheless applies. Despite a generally higher degree of participation, a considerable proportion of potential students are rejected or do not gain admission to the programme of their choice. Calculating any exact figures is quite impossible but in Finland, Denmark and Sweden between 20% and 30% of students are rejected. **Finland** is radically changing its selection system with the introduction of a central selection system and the streamlining of test scores. A big problem was that the students admitted rarely came directly from secondary education (30%), the rest had waited for long periods for a place in higher education.

In **the UK**, higher education is becoming increasingly more selective due to a growing demand for and a slight shortfall in the available places. In 2009, a net percentage of 75% of applicants were admitted against 78% in 2008 (UCAS, 2010). Via the central system of the UCAS, students can indicate five programmes in order of preference. The institutions indicate what final secondary school exam scores are expected for admission. Based on this, the UCAS allocates a large number of applicants to each institution. The institutions perform a further selection. To an increasing degree, this is done through intake interviews in which the motivation of students also plays a role. In addition to ambitious choices, students must thus also include less selective institutions on their lists to ensure being accepted somewhere. The system has tight deadlines. Ultimately, 25% of applicants are unable to find a place. However, once admitted, some 82% obtain a qualification, 3% obtain qualifications elsewhere and only 15% definitely drop out (HESA, 2010). These high success rates are the result of selection combined with intensive teaching and counselling.

In **Ireland** and **Australia** virtually the same system applies. The institutions themselves determine the number of places available and based on how "heavy" the study is, they determine the results required from students in the school leavers test or tertiary entrance test. Students register for several programmes at multiple institutions and are selected based on their test results. The students themselves can quite accurately gauge their chances of admission but nonetheless a significant proportion of students are not admitted to their top preference and a percentage of them miss out. In Australia some 25% of students fail to gain admission.

Despite the fact that higher education in the **US** is regarded as highly selective, students can always find a place somewhere, although in many cases this is not at the institution and programme of their first choice. In the **US**, within certain margins, the institutions are free to set their own standards. Community colleges actually have no selection for admission except to hold a high-school diploma. However, the universities require certain subjects and a good GPA. In California, by far the largest state in the **US**, there is a system of gradual selection that is set out in the California Master Plan for Higher Education. The University of California (with 10 campuses) must offer places to the top 12.5% of Californian high-school graduates. Subsequently, California State University (with 23 campuses) must accommodate the next 33% of high-school graduates. All other students can find places at the community colleges. The success rate at the highly selective UC is on average 80% after 6 years versus 47.5% at CSU. Success rates at the community colleges range from 40% to 85%.

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Higher education in Asian countries is highly selective. Although the degree of participation is high, students face strong competition for admission to a good university. In **South Korea**, the rate of participation is 70% and some 92% of the candidates are admitted into higher education. Over half the families of students spend a lot of money preparing their children for the entrance exam (as much as 30% of their monthly income). In Japan, 77% of young people enter higher education (58% are admitted to universities). Ultimately, 90% of the students are awarded a qualification.

*CHEPS study*

Recent research for the European Commission (CHEPS, 2010) into the relationship between higher education reforms and the achievements of higher education systems has shown that the degree to which institutions have the possibility of selecting their own bachelor's programme students has no bearing on the development of accessibility and the number of graduates. There are both selective and non-selective countries with high and low access and/or numbers of graduates.

**1.3.1 The quality of research***Research universities: high output and large impact*

Dutch research is of a high and well-respected quality. With only 0.3% of the world's population and 1.4% of global GDP, no less than 2.8% of all publications and 3% of citations are generated by the Netherlands (NOWT, 2010). With over 1.8 publications per researcher annually, the Netherlands is in second place globally and scores considerably higher than Denmark, Germany, France and England (NOWT, 2010; V.d. Meulen et al., 2009). Due to its high percentage of research publications, the Netherlands ranks 4th on the citation index (NOWT, 2010). Up until last year, the Netherlands was in 3rd place (CWTS, 2009) but Denmark has now passed us.

**Diagram I.20: Impact scores of academic research**

Source: NOWT, 2010

	Impact 1993-1996	Impact 2003-2006	Impact 2005-2008
Switzerland	1.43	1.41	1.46
Denmark	1.13	1.33	1.35
US	1.44	1.37	1.34
<b>Netherlands</b>	<b>1.19</b>	<b>1.34</b>	<b>1.33</b>
Belgium	1.09	1.20	1.27
UK	1.19	1.24	1.26
Ireland	0.88	1.17	1.25
Sweden	1.10	1.20	1.24
Canada	1.14	1.22	1.23
Norway	0.93	1.22	1.22

This means that Dutch research universities score high in international rankings with 9 institutions in the top-200 on the Shanghai Rankings. However, the goal of having three research universities in the top-50 on the Shanghai Rankings in 2020 (OCW/EZ, 2009) still seems a long way off. In the CHE rankings, Dutch scientific research and components of social sciences research score well. In the CWTS rankings too, many Dutch research universities occupy good positions in the top-40 of Europe (CWTS, 2009). However, there are no Dutch research universities in the top-10.

### Competition and collaboration

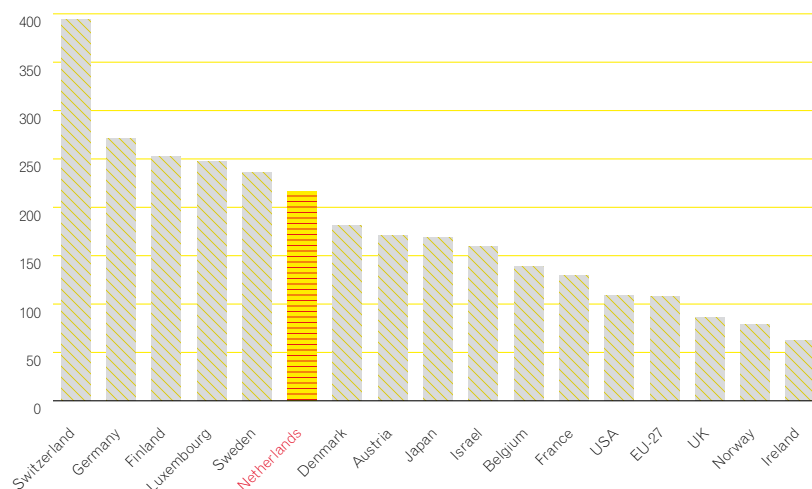
Compared to other countries, competition for funding via open competition is (sometimes too) high in the Netherlands. Initially, increased competition has a boosting effect on achievements and impact but after a certain point (inverted U-curve) the effect turns counter-productive. In England, the increase in output and impact has stagnated. On the other hand, cooperation in numerous inter-organisational ventures is hindering differentiation between universities in terms of quality and reputation (V.d. Meulen et al., 2009).

### Knowledge paradox

There is a *knowledge paradox* in the Netherlands: although the Netherlands has a lot of top researchers at its disposal, it fails to reap any substantial commercial benefit from this research. The Netherlands scores above average, for example, where patent applications are concerned (European Commission, 2008; NOWT, 2010) but it is unable to convert these into many small, innovative start-up spin-off companies (GEM, 2009). The United States, for example, appears to profit much more from the outcomes of research. An explanation is often sought in the relatively large size of the Dutch service provision sector in combination with a relatively limited number of innovative companies within research-intensive industrial sectors (Volberda, 2007). The involvement of private parties in research in the Netherlands is average, but given that most of this funding is incidental, the traffic lights in the KIA Photos (Knowledge Investment Agenda) are on orange (Innovation Platform, 2010). The interaction between higher education institutions and the SME sector is not being used to the optimum (Innovation Platform 2010; NOWT, 2010). Given that 75% of innovation successes are determined by social innovation, the recognition, acquisition, integration and application of knowledge is of increasingly importance (Volberda, 2007). In addition, innovation requires both specialists engaging in in-depth research (“glass-head pins”) and people who can bridge the boundaries between disciplines (“thumbtacks”) (Jacobs, 2009). This view was voiced many times in the interviews the Committee conducted with stakeholders: Dutch programmes are relatively narrow, they need to be broadened and more attention needs to be paid to other disciplines.

**Diagram I.21: Number of EPO patent applications per million inhabitants**

Source: European Commission, 2008



*Research in professional higher education*

The conclusion seems to be justified that entrepreneurship and the translation of research into application need to be strengthened. Particularly for HBO, this is an important point for development because it is mainly the universities of applied sciences that enter into intensive relationships with SMEs. However, the underdeveloped research function at universities of applied sciences is resulting in gaps in the competencies of HBO graduates and is a barrier to the contribution of universities of applied sciences to innovation in the SME sector (Abrahamse, 2005; OECD 2008). This is a point for particular attention given that, as mentioned earlier, by far the majority of students are enrolled in professional higher education.

*All forms of higher education must be linked to research*

Although the assigned task of the Committee does not cover science and technology policy, it must be noted that research is inextricably linked with every form of higher education. This involves academic and practical skills such as the capacity to assess ideas, set up experiments, interpret statistics and evaluate practices (AWT 2009). To learn such skills, research has to be an integrated component of the educational environment. Moreover, motivated researchers are usually inspiring teachers. The KNAW (2009) also argues for research at all levels of higher education.

*The type of research differs between academic higher education and professional higher education*

Research at academic universities is aimed at fundamental concepts, sometimes combined with application. In HBO, research is focused on application: design and development (AWT 2005, p. 28).

*Funding research at universities of applied sciences*

In other countries too, applied research is gradually becoming more important within universities of applied sciences. External sponsors are important in this regard but public funding of research at universities of applied sciences is also increasing.

**Austria** has a special fund for applied research from which €8 million are distributed across universities of applied sciences every year.

In **Denmark** universities of applied sciences collaborating with academic universities can receive funding from knowledge funds for specific projects.

In **Germany**, a limited proportion of the budget of the DFG (Deutsche Forschungsgemeinschaft) is available for the Fachhochschulen.

In **Ireland** universities of applied sciences are supported with specific reserves in the national research budgets. For example, 1.5% of the Science Foundation Budget and 2% of the Research in Tertiary Education Budget is available for universities of applied sciences.

**Lithuania** has also set up a special budget for applied research at universities of applied sciences that amounts to some 0.3% of the total budget of the universities of applied sciences.

**Switzerland** is investing large sums in research at universities of applied sciences. Every year, some € billion is made available via the funding programmes of the federal and cantonal agencies.

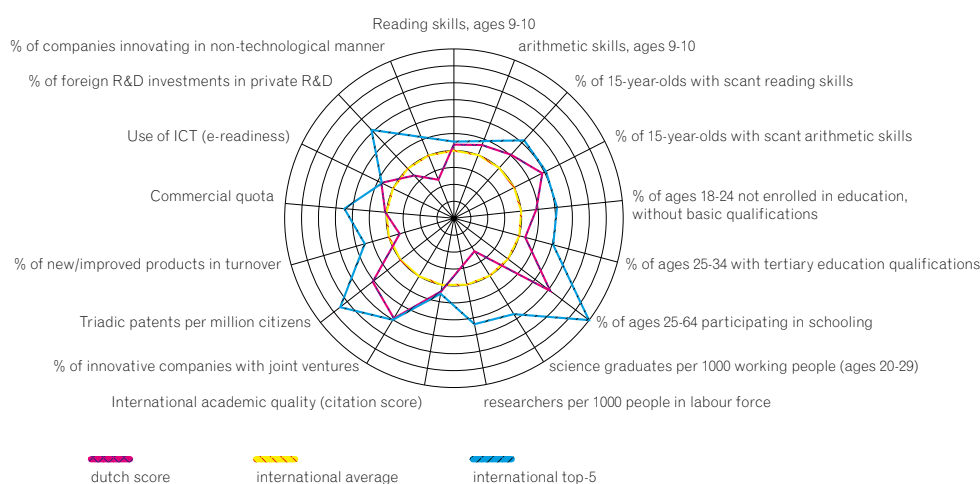
In **Estonia** and **Portugal** universities of applied sciences – like the new universities in the UK – can acquire national research resources through competitions with research universities. In practice this is proving very difficult due to the lack of proper research infrastructure.

The **Netherlands** is keeping pace reasonably well in international terms given the RAAK (Regional Attention and Action for Knowledge Circulation) subsidies that amount to some €5 million annually. However, this amount has to be divided across a very large professional higher education sector.

## I.4 Contribution to the knowledge society

Within the OECD, the Netherlands scores above average in many areas of the knowledge economy and sometimes even ranks in the top-5. However, the Netherlands scores below average with regard to researchers, science graduates and innovative strength.

**Diagram I.22: Dutch knowledge economy compared to international averages and the top-5**



### *Competitive strength: Dutch investments are lagging behind*

The Dutch ambition to be among the top-5 on the Global Competitiveness Index (GCI) (OCW/EZ, 2009) is unlikely to be achieved with the current level of investment in higher education and research. On average, countries in the top-5 are spending a full percentage point more of their GDP on knowledge and innovation, in part within the framework of tackling the economic crisis (OECD, 2009b).

**Diagram I.23: Global Competitiveness Index 2009-2010**

Source: Schwab, 2009

Country/Economy	CGI 2009-2010		GCI 2008-2009
	Rank	Score	Rank
Switzerland	1	5.60	2
US	2	5.59	1
Singapore	3	5.55	5
Sweden	4	5.51	4
Denmark	5	5.46	3
Finland	6	5.43	6
Germany	7	5.37	7
Japan	8	5.37	9
Canada	9	5.33	10
<b>Netherlands</b>	<b>10</b>	<b>5.32</b>	<b>8</b>

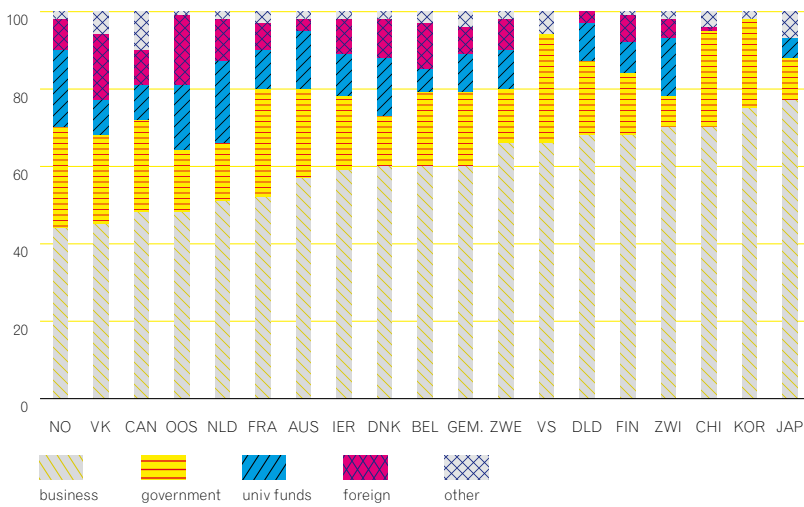
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With an expenditure of 1.67% of the GDP on research and development, the Netherlands scores below the European Union average of 1.84%. Within this figure, compared to many developed countries, the Dutch percentage of R&D resources from the private sector (51%) is low and far below the OECD average of 60%.

**Diagram I.24: International comparison of R&D funding (2007)**

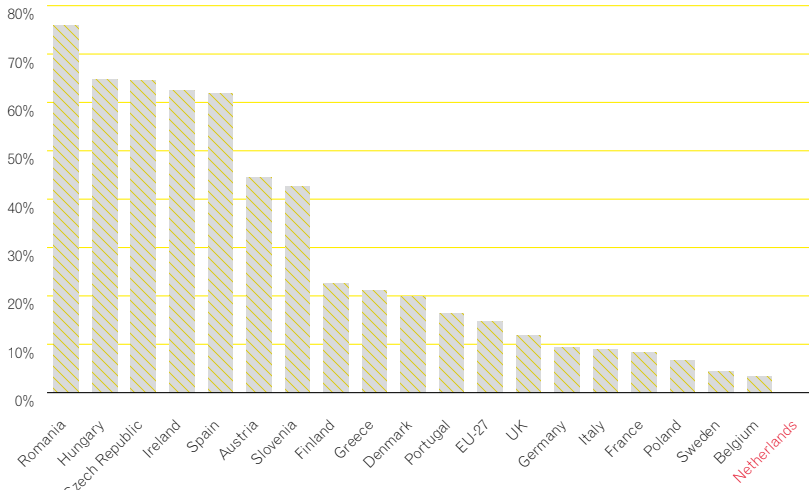
Source: NOWT (2010), based on OECD data. University funds mainly involve direct government funding.



An even greater cause for concern is that the Netherlands is steadily dropping further behind because our investments in research and development from 2000 to 2006 showed no growth at all, while other EU countries spent an average of 15% more (European Commission, 2008). The Netherlands is lagging behind regarding R&D expenditure; both the government and the business community are failing to perform (NOWT, 2010). Knowledge and innovation – on which we will depend in the future – are being neglected.



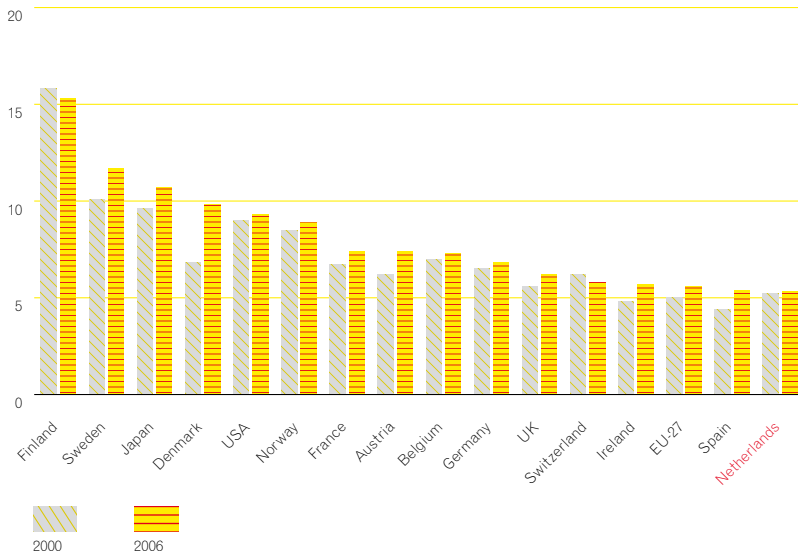
**Diagram I.25: Gross Domestic Expenditure on R&D, real growth (%) between 2000 and 2006**  
 Source: European Commission, Technology and Competitiveness, 2008.



*Weaknesses: innovation, entrepreneurship and the number of researchers*

The Knowledge Investment Agenda photos (KIA) show that the Netherlands needs to catch up in terms of innovation, entrepreneurship and its number of researchers. For example, the percentage of innovative start-ups that make use of new technologies is, at 20%, below the goal of 30% (Innovation Platform, 2010). The European Innovation Scoreboard shows that in 12th place the Netherlands only belongs to the group of innovation followers (EIS, 2010). The Netherlands also has relatively few researchers per 1000 persons in the professional population: with only 10.4 FTEs in R&D staff and 5.7 FTEs among researchers, the Netherlands occupies quite a low position within the OECD (NOWT, 2010).

**Diagram I.26: Number of researchers (in FTEs) per 1000 workers**  
 Source: European Commission: Science, Technology and Competitiveness, 2008.



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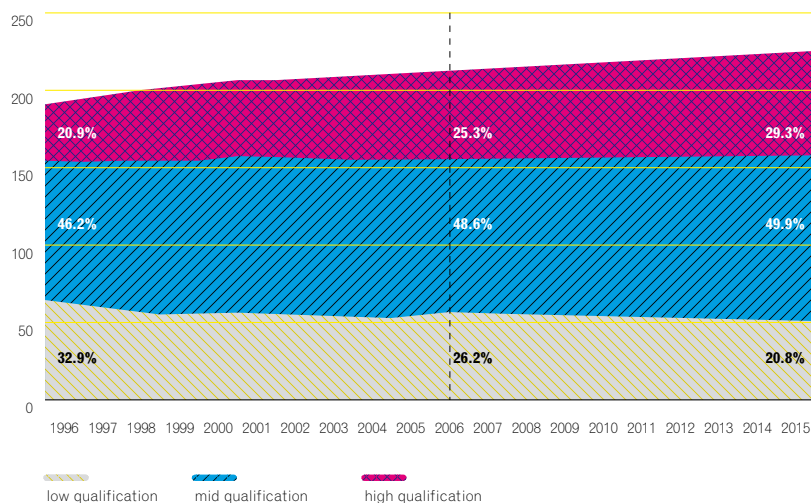
- 27 Other countries score considerably higher: Denmark (15), Switzerland (16), Finland and the UK (18), France (22) and Ireland (24).

*Labour market: strong increase in the need for highly qualified workers*

The need for highly qualified workers is increasing strongly. The European Centre for the Development of Vocational Training (Cedefop, 2009) forecasts that in the future, the European labour market will need more highly qualified persons and fewer employees with low and medium qualifications.

**Diagram I.27: Need for qualified workers in Europe**

Source: Cedefop, 2008, Diagram 11, p. 60.



This picture also applies for the Netherlands. In absolute values, the need for workers with low qualifications will remain stable until 2020 at some 2.2 million. The need for workers with medium qualifications will increase from 3.7 million to 3.8 million and the need for highly qualified workers will increase from 2.5 million to 3.2 million by 2015 (Cedefop, 2008). The expected growth in the numbers of students and graduates in the Netherlands is thus essential, not only at the level of higher education but also at the level of senior secondary vocational education. It was pointed out earlier that tensions could arise between the different quantitative objectives of these education sectors.

*Graduates and PhD holders: below the international average*

The number of graduates in the Netherlands has increased by 54% compared to 1998. This growth is larger than in most other Western European countries. However, the largest growth is taking place in South-Eastern, Eastern and Central European countries (Eurostat, 2009). Despite this growth, with 54 graduates per 1000 inhabitants aged 20 to 29, the Netherlands is below the EU average of 56 graduates (European Commission, 2008). Even more worrying is that Dutch graduates in science and technology, at 8.6 per 1000 20-29 year olds, is far below the European average of 13.<sup>27</sup>

The number of Dutch PhD graduates (1.3 per 1000 inhabitants aged 25 to 34) is also lower than the EU average. Countries including Finland (3.2), Switzerland, Germany, Portugal, Sweden, Austria and the United Kingdom are doing much better (European Commission, 2008). The conclusion is that the Netherlands is lagging behind in terms of growth in academic and innovative strength.

- 28 It is not known how many foreign PhD holders enter the Netherlands.

#### *Good links of higher education graduates with the labour market*

Highly qualified people in the Netherlands do relatively well on the labour market with low unemployment and a high percentage gaining permanent employment within five years (Allen en Van der Velden, 2007). However, they are not very mobile which is a hindrance to a flexible labour market. In addition, entrepreneurship in the Netherlands amongst graduates is not very developed and they are not well trained for top positions on the labour market. The labour market has a shortage of science and technology graduates (ROA, 2009).

#### *Broad competencies required*

In addition, Dutch graduates regularly work outside their own specialised field (ROA 2009). At the sector level, this applies to 20-30% of HBO graduates, except in the education, paramedical and technology sectors (HBO-Raad 2009). In academic higher education, the percentages range from 12% in the medical sector, to 19% (technology) and 37% for the arts disciplines (VSNU, 2009). At the programme level, the percentages are slightly higher and vary from 15% to 50% (with the emphasis on 25%-35%) (HBO-Raad 2009; VSNU, 2009). The relatively narrow Dutch programmes are probably the reason for this and many students probably need broader competencies than are required for their specialised field. In addition, the percentage of temporary jobs in the Netherlands rose from 9% to 15% during the period from 1987 to 2005 (OECD/CERI 2008).

## 1.5 International competition

Both Dutch companies and the Dutch higher education sector need to fight for their positions on a highly competitive global market. The greatest economic growth is currently taking place in South East Asia and is currently mainly focused on manufactured goods (OECD, 2010b). After the first phase of industrialisation, economic powers like China and India will shift to a knowledge economy. The OECD recently forecast that the Chinese economy will already take over from the US as the world's largest producer in 2016 and will be the world's largest economy in 2020 (OECD, 2010b). The BRICS economies (Brazil, Russia, India and China) are expected to have overtaken the G6 in 2045 in terms of GDP volume (Goldman Sachs, 2003).

#### *Internationalisation of education*

The globalisation of the economy also demands a more international perspective on the part of the higher education sector. Cooperation in teaching and research, encouraging outbound mobility and attracting talented students and researchers are becoming increasingly important. The following points should be noted in this regard:

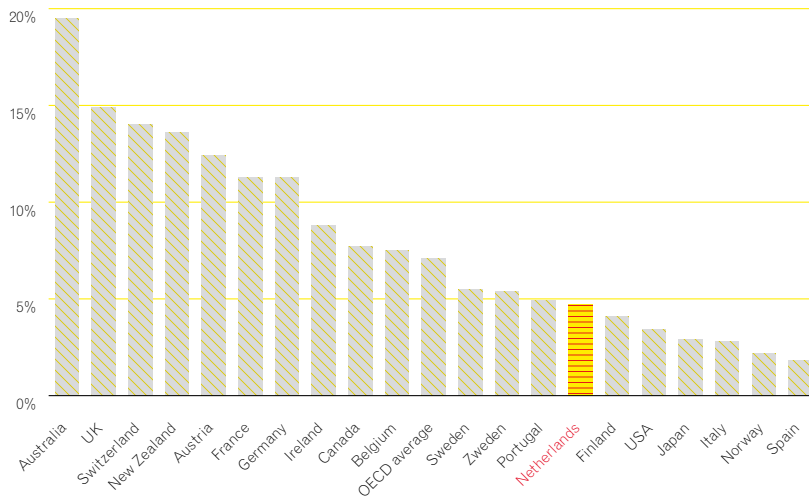
- At 1.7% the figure for Dutch students who follow a complete programme abroad is relatively low against an average of 3.2% in the Bologna countries (HIS/Eurostat, 2009). Only 17% of Dutch students follow part of a programme abroad (OCW, 2008). This puts the Netherlands in 7th place in Europe (HIS, 2008).
- Regarding inbound mobility, a relatively high number of foreign students from outside the Bologna region come to the Netherlands. At 6.3%, the figure is above the Bologna average of 3.8%. However, within the Bologna region the Netherlands scores below average: 2.1% against the average of 2.9%.
- 25,000 of the inbound foreign students study in professional higher education and 20,000 in academic higher education (Nuffic, 2009). This comes to 6.5% and 9% respectively of the total student populations of the two sectors. However, more than 40% of inbound foreign students come from Germany (19,000 students in 2008/09) and that number is increasing by 7% every year (Nuffic, 2009).
- 77% of foreign students study here at the bachelor's level and 22% at the master's level. In academic higher education this is 55% in the bachelor's phase versus 42% in the master's phase. In professional higher education it is 96% and 5% respectively. Every year, almost 9,000 foreign master's programme students come to the Netherlands.<sup>28</sup>

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- 29 Croatia and Britain have the highest proportion of people working abroad. In addition, Portugal and Switzerland have a higher emigration percentage among higher education graduates. Chinese higher education graduates usually return to China. Finally, the Netherlands has a modest position in the US with some 1000 Dutch academics working there. This figure has hardly changed in recent decades (Statlink).

**Diagram I.28: Percentage of international students in a number of OECD countries, 2007**  
Source: OECD Education at a Glance, 2009, table C2.1



#### *Teachers and researchers*

The composition of Dutch research universities is becoming increasingly international. In 2004, some 20% of teachers and researchers at Dutch academic universities came from abroad (Nuffic/Research for Policy, 2005). These foreign academics are mainly active at the universities of technology and are often taken on as trainee research assistants or PhD students on grants. At universities of applied sciences, the number of foreign staff members is much lower. Eurostat (2009) shows that there are relatively few highly qualified migrants working in the fields of science and technology in the Netherlands. Conversely, almost 8% of highly qualified Dutch people are working abroad (OECD 2008), giving the Netherlands a position along the median.<sup>29</sup>

#### *Brain gain and brain drain*

In terms of brain drain versus brain gain, it is immediately noticeable that bachelor's programme students dominate inbound mobility. This is fine with a view to the international classroom function. However, PhD candidates and master's programme students are preferable from the perspective of attracting talent and potential knowledge workers. Although more attention has been paid to this in the policy in recent years, the Netherlands is still attracting relatively little talent. Of relevance for future policy is that countries whose investments in research facilities are below par run an increased risk of brain drain (OECD, 2009c).

#### Lessons from abroad: California

For various subjects of this report, reference is made to relevant elements of well functioning systems elsewhere in the world. This has been done for various subjects in this report. Given that California was repeatedly mentioned in the lead-up to this request for recommendations, we will examine its system in more detail below.

### *Higher education in California*

With almost 37 million inhabitants, i.e., almost two and a half times the population of the Netherlands, California is the largest American state. It has for some time been regarded as an enlightening example: a higher education system with great diversity which offers access to higher education to a broad and very diverse student population of no fewer than 2.5 million students. The system is based on a master plan that was drawn up in 1960, which breaks down into three sectors, each with its own purpose. At the top, there is the highly selective University of California (UC), a true research university with 10 campuses, including Berkeley, Los Angeles, San Diego and Santa Barbara. Together, these accommodate over 200,000 students to whom they offer prestigious degrees at all levels. In addition, there is California State University (CSU) that has the primary task of providing undergraduate programmes and graduate master's programmes. Here, research is primarily education-related. At its 23 campuses, CSU accommodates some 400,000 students. All other students find places at the 109 Community Colleges, or at other public or private institutions. In total, over 1.7 million students study there. Community colleges mainly focus on the first two years of undergraduate programmes and professional programmes. A distinguishing feature of the Californian system is that students can smoothly transfer to the next level. The admission procedures guarantee these smooth transfers; this requires close cooperation between the three separate sectors.

An interesting aspect of the Californian system is its selectivity versus wide accessibility. UC is highly selective and only takes the top 12.5% of Californian high-school graduates. The next 33% are admitted to CSU and everyone else can find a place at one of the many community colleges. Selection is largely based on GPA scores (final exam results). The success rate at the highly selective UC is on average 80% after 6 years; at CSU they are 47,5%. At the community colleges the figures vary from 40% to 85%. Success rates are being given increasingly more importance and the priority in California is shifting from "access" to "access and success" (LAO, 2010).

A guiding principle in the Californian master plan was that transfers between the three sectors should be smooth. Open access to Community Colleges means that they attract a very large group of students, the majority of whom, like in many other American states, follow all kinds of one or two-year programmes. In 2008, some 1.7 million students were enrolled in programmes at Community Colleges in California, of whom approximately 83,000 graduated with an Associate Degree (AD). That is about 10% of all the graduates. More than 45,000 of these students transferred to a 4-year bachelor's degree programme, most of them at CSU and 30% at UC. The community colleges offer ADs together with numerous other short, professionally oriented (sub)programmes at the same institution; they constitute a type of "learning continuity pathways".

Since the introduction of the master plan, there has been a relatively generous public funding of higher education in California. This has, however, been coming under pressure since the end of the 1990s and this has consequences. Per capita expenditure per student is being reduced, tuition fees are increasing and approaching the American averages: over \$10,000 for UC undergraduates and \$4,400 for CSU undergraduates (LAO, 2010b). Only the tuition fees of community colleges are still very low (\$26 per credit/unit). This also means there is still wide access to community colleges. In order to increase accessibility and encourage transfers, UC and CSU are required to assess more potential candidates in terms of their suitability with effect from 2012. In addition, a study will be

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conducted to ascertain whether the selection targets (12.5% and 33.3%) are still realistic and whether the transfer possibilities to the universities are still up to par (LAO, 2010c).

Finally, it was recently observed that the absence of active government steering over the past 50 years has weakened the strength of the diverse and layered Californian higher education system as well as the relationship between the government and the institutions (LAO, 2010a). The core of the Master Plan with a strong individual mission for each of the three sectors has been eroded. The indirect approach with autonomous institutions worked well in a period of strong growth in the system, but has come under pressure in recent decades. Due to the limited steering and low accountability for performance, institutions can set their own priorities without harmonisation at the national level. This resulted in more mission creep in the range of programmes offered and overlap of student target groups as well as growing transfer problems between the community colleges and universities. The LAO (2010a) argues for active government steering in the harmonisation of institutional priorities and programmes offered to national policy aims.

## I.6 Structure of the system

### *Early tracking*

Dutch and foreign experts do not regard binarity as a problem as such. However, they do find compartmentalisation to be a problem within the Dutch system. Early tracking forces young people to choose for a particular career in secondary education at the age of 11 or 12. Once they have made their choice, they are stuck with it. Because VMBO, HAVO and VWO have different durations, the duration of bachelor programmes also differs: 4 years in professional higher education and 3 years in academic higher education. Most other countries have a more uniform secondary education system allowing students to take different subjects at different levels, which makes it easier for them to demonstrate their talents (Eurydice, 2010). In Anglo-Saxon and Scandinavian countries, the programmes with a more professional orientation and of a more general training nature run parallel and students can combine components from both streams. The Education Council (2010) also argues for a similar system for the Netherlands in due course. To correct the effects of early selection in the Netherlands, the Education Council proposed (2010) that a bridging class be introduced as an additional year between primary and secondary education, along with a combined first year for VMBO-tl and HAVO. The early selection of pupils in Dutch secondary education places extra responsibility with HBO in particular to afford MBO and VMBO graduates who missed out in an earlier stage, the chance to build up their degrees towards attaining a higher education qualification.

### *Swift harmonisation with the European Higher Education Area*

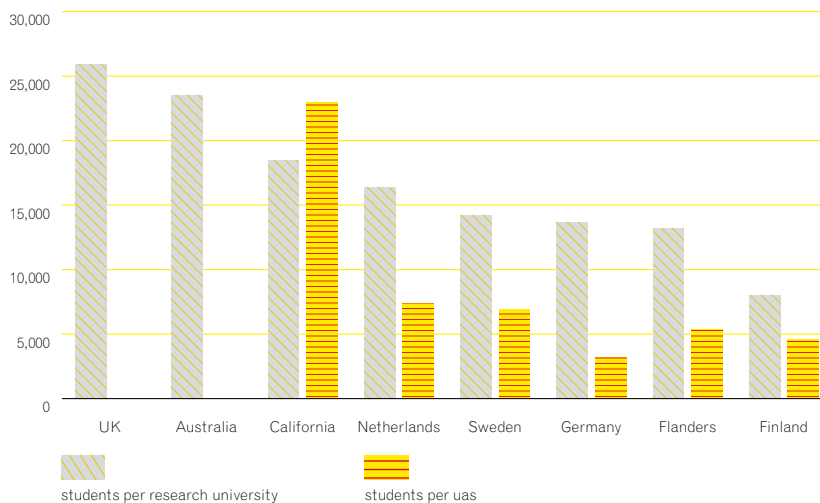
The Netherlands introduced the bachelor's-master's structure in a short space of time. Recent research has shown that the Netherlands experienced relatively few problems with this introduction and that the current Dutch higher education system is also appreciated internationally in terms of its structure, quality and graduates (Westerheijden et al., 2009). The Netherlands also implemented the EQF. Tensions are being felt, within the Netherlands, in other Bologna countries and among mobile students, concerning alignment issues arising from differences in the content, duration, competencies and levels of the various bachelor's, master's and PhD programmes (Westerheijden et al., 2009).

### *Binarity: HBO is relatively large*

The binary nature of the Dutch higher education system is not unique. Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Ireland, Lithuania, Portugal and Switzerland, also have binary systems. Unique to the

Netherlands is that the HBO sector is relatively large with 65% of higher education students. In the majority of binary systems, this ranges from 5% (France) to 46% (Finland) (Weert and Soo, 2009). In part, this is due to the fact that a number of Dutch HBO fields including the Fine & Performing Arts, teacher-training for primary education and nursing are often categorised under academic higher education in other countries. This raises the question of whether Dutch institutions are thus perhaps becoming relatively large, which could put quality under pressure. Diagram 29 shows that the relative sizes of Dutch universities of applied sciences and academic universities are in line with the international context.

**Diagram I.29: Relative sizes of institutions in various countries**  
Source: CHEPS, 2010



#### *Dividing line between HBO and WO: the example of Fine & Performing Arts programmes*

Due to the fact that Dutch higher education has for many years had a binary system in which there has perennially been a situation of academic drift versus professional drift, situations constantly arise in which programmes or institutions find themselves at the interface between the two sectors. In itself, this is not problematic, but such activities should not be justified with improper arguments such as names, competition for students, etc. Such activities must always be assessed on their content. The Fine & Performing Arts are a good case in point. International practice shows that various countries hold different points of view and that different structures are feasible for Fine & Performing Arts programmes. In the box below, several international examples illustrate that in practice, dividing lines between sectors should not be forcedly observed but rather that programmes and institutions should choose a profile that best suits their content, target group and labour market sector.

#### *Fine & Performing Arts programmes abroad (de Weert, 2010)*

An overview of Fine & Performing Arts programmes abroad reveals that the following institutional forms can be distinguished:

**A. A common form is Fine & Performing Arts programmes** in independently established institutions. They are designated as a separate kind of institution in integrated systems. In binary systems, they are usually allocated to the professional rather than the academic sector. Germany and Austria are exceptions; here, the institutions are categorised under academic universities rather



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than Fachhochschulen. Other countries do not make a distinction along binary lines and have mixed forms. For example, in Finland (binary system) several programmes have academic university status, such as those of the University of Art and Design in Helsinki, while on the other hand, many Fine & Performing Arts programmes fall under the Polytechnic sector (AMK).

**B. Fine & Performing Arts programmes as part of or a faculty within a university of applied sciences**

This type is also relatively common in many countries, obviously those with binary HE systems. In Switzerland, with the creation of the Fachhochschulsektor most Fine & Performing Arts programmes were incorporated into a Fachhochschule. In Flanders, various Fine & Performing Arts programmes have been brought under the HOBU [Higher Education Outside Universities] sector. In Ireland, apart from a few national arts institutions, various programmes in design, creative arts, media and the creative industry have been incorporated into Institutes of Technology (IoT).

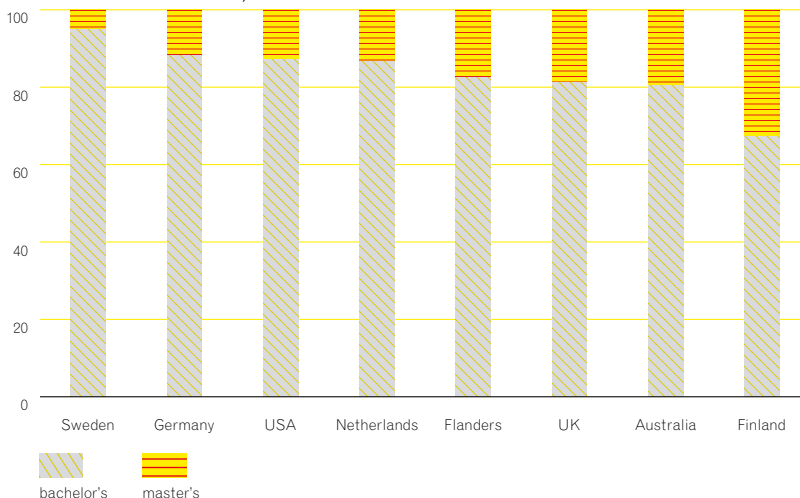
**C. Fine & Performing Arts programmes as part of or a faculty within a research university**

This type is most common in the American and Canadian higher education systems. Leading universities like Michigan, Stanford, etc. have a Faculty of Music or a School of Music, Theatre & Dance at which students are trained for a professional career at the bachelor's as well as master's and PhD levels (for example, Musical Arts in Performance). Liberal Arts Colleges also have a wide range of Fine & Performing Arts programmes. The main difference between Fine & Performing Arts programmes offered by research universities and those of the Liberal Arts Colleges is the awarding of PhDs.

*Master's programme students*

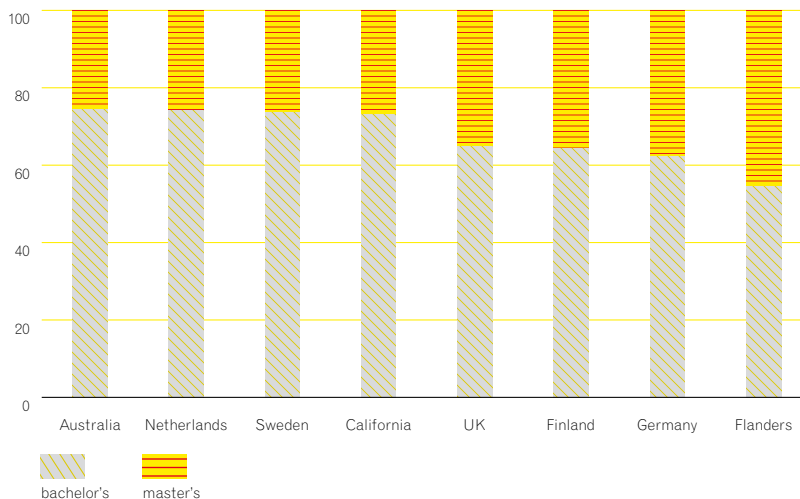
In international terms, the Netherlands has a limited number of master's programme students. In addition, a relatively large HBO sector translates into a disproportionate number of bachelor's programme students in higher education. Diagram 30 shows the relationship between the numbers of bachelor's programme and master's programme students in a number of leading systems. The Netherlands' position with 13.3% master's programme students is once again not against the grain but it is below the average. Austria and Germany are on 12%, Flanders, Australia and the UK on roughly 18-19% and Finland is actually on 33%.

**Diagram I.30: Relative numbers of bachelor's and master's programme students in different countries**  
Source: CHEPS, 2010



If we look at the ratios of students obtaining a bachelor's or master's degree (based on the degrees awarded in 2007/08 or 2008/09) the figures for the Netherlands are roughly 74% versus 26%. This broadly corresponds with the ratios in Australia, California and Sweden. In Germany, Finland and the UK, the percentage of master's degree graduates is, however, considerably higher, at 35% (CHEPS, 2010). The Dutch percentage of 26% master's degree graduates is thus on the low side.

**Diagram I.31: Relative numbers of graduates of bachelor's and master's programmes in various countries**  
Source: CHEPS, 2010



### *Professional master's programmes*

Developments on the labour market and in the economy (increasing knowledge intensity, complex professional practice, internationalisation and innovation) have led to new demand for obtaining higher qualifications and higher levels. Professional master's programmes are gaining in significance alongside academic master's programmes. The development of HBO master's programmes is an answer to this demand, a route that is also being taken by other countries. However, international comparative research into the role of professionally oriented higher education master's programmes delivers a diverse picture (Beerkens-Soo et al., 2010). In Germany, the UK and Sweden, such programmes run parallel to more research oriented master's programmes, are given within universities of applied sciences and research universities, and receive standard funding. In Finland and Switzerland, however, they are more specifically defined programmes that are mainly intended to fulfil a relevant need of the labour market in order to be recognised and receive funding, often within the context of lifelong learning. From the international perspective, Dutch policy regarding the funding of professional master's programmes is restrained.

### *Professional master's programmes*

In several countries with a binary system, professional master's programmes are offered by universities of applied sciences:

- In **Finland** professional master's programmes are highly professionally oriented, students must have a minimum of 3 years work experience and the programmes are by definition part-time. However, the government provides the same funding for these master's programmes as for other programmes because Finland is investing in overcapacity on the labour market.
- **Germany** offers professional master's programmes at both research universities and

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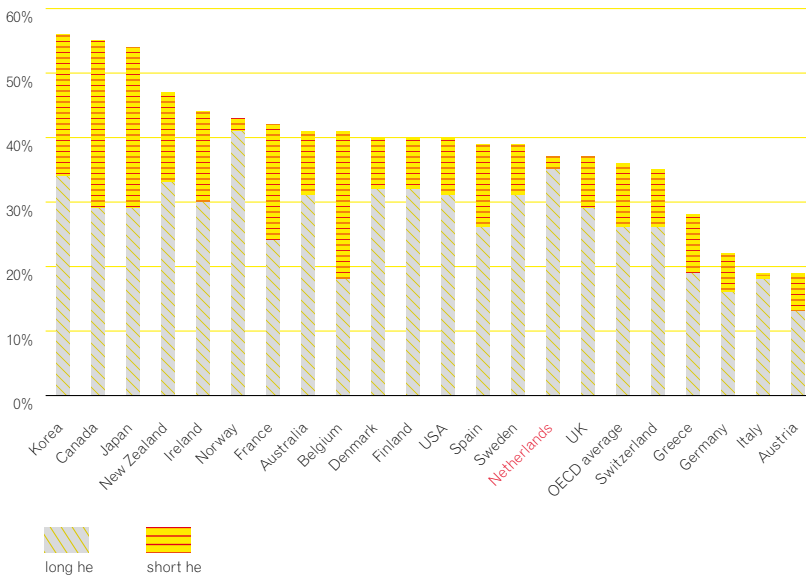
Fachhochschulen including work experience. Graduates of Fachhochschulen have the same status (and title) as university graduates but they receive a lower starting salary and have less chance of a PhD place. All master's programmes receive the same funding.

- **Sweden** has a limited number of professional qualifications linked to regulated professions in just a few fields. These programmes are sometimes offered by university colleges and also by research universities. All programmes receive equal treatment.
- **Switzerland**, like the Netherlands, has recently allowed a limited number of short professional master's programmes in the professional higher education sector. The development of such professional master's programmes is subject to stringent requirements. Government investment is dependent on the need for such programmes as demonstrated by several labour market surveys.
- Finally, in the **UK** the distinction made is not so much between professional master's programmes and academic master's programmes, but rather between research master's programmes versus taught master's programmes. The taught master's programmes comprise a significant group of programmes that have strong affiliations with professional organisations; these are known as professional master's programmes which subsequently receive another, domain specific affix in the title.

*Short higher education programmes*

The Netherlands has few students in short higher education programmes, in part as a result of the abolition of short HBO programmes with the introduction of the Bachelor's-Master's system. Currently, some 1500 students are enrolled in Associate Degree programmes while only 2% of higher education graduates on the labour market have a short qualification (mainly the former short HBO). Within the OECD, this is a very low score (OECD, 2009).

**Diagram I.32: Percentage of graduates (aged 25-34) of long and short HE programmes on the labour market**  
Source: OCW, 2010



There are opportunities here for the Netherlands to involve new target groups in higher education. This mainly concerns MBO graduates and working people who wish to take a step further within the context of lifelong learning.

#### *Short higher education programmes in other countries*

Various countries offer a variety of short higher education programmes (Cremonini, 2010):

**Canada:** Undergraduate Diploma, Undergraduate Certificate and Associate Degree

**Denmark:** Vocational Academy Degree

**Austria:** Diploma, Advanced Diploma and Associate Degree.

**UK:** Foundation Degree, Higher National Diploma, Diploma of Higher Education, Higher National Certificate, Certificate of Higher Education, Associate Degree and Associate Bachelor Degree

**US:** Associate Degree and Certificates.

#### *Titles*

Internationally speaking, there is no standard for the application of titles and degrees (Vossensteyn, 2010). Most European countries now award the titles of bachelor and master but the use of affixes differs widely. In Anglo-Saxon countries and Germany, for example, the affix “of Arts” or “of Science” indicates a discipline rather than a level. From the international perspective, the strict distinction between professional higher education and academic higher education regarding degree affixes seems rigid and it has an unnecessary adverse effect on HBO.

## I.7 Conclusions

The analyses in this annex give a mixed picture. Although Dutch higher education is basically good, the system has too many weaknesses to achieve the high ambition:

- The Netherlands has a small and open economy, while economic globalisation requires knowledge production to an increasing degree as well as innovation on the part of highly qualified knowledge workers. There is world-wide competition for talent. Therefore, the quality of Dutch higher education must be raised significantly to retain local talent and attract good master’s programme students and PhD candidates from elsewhere.
- This fact has not led to the envisaged volume of investment in education and research: in international terms the Netherlands is falling behind.
- The *diversity* of and *participation* in higher education are still growing. With the expected growth in higher education, the percentage of higher education graduates in the age bracket of 25-34 will be well above 40% in 2020 but the 50% goal will still not be in sight. The Netherlands needs more highly qualified people but this should not be at the expense of graduates from MBO. From that perspective, we could consider including MBO-4 in the tertiary education statistics (as is the case in many other countries).
- *Participation* in higher education is unbalanced. The participation of ethnic-minority and mature students in particular is lagging behind. Students from weaker socio-economic backgrounds are also under-represented. In this regard, higher education is highly dependent on the performance of secondary education institutions. However, once students from these group enter higher education, the research universities and universities of applied sciences have an obligation to raise their success rate to the same level enjoyed by other students. Optimising the MAVO-HAVO-HBO and MBO-HBO routes is one of the challenges for the future.
- The Netherlands is not performing well in lifelong learning. The volumes being realised are substandard. The lifelong learning policy must be improved considerably.

**Threefold differentiation**

Recommendations of the Committee on the Future Sustainability of the Dutch Higher Education System

- The *generic quality* of the education provided is in good order. However, at the same time, there are many weaknesses and *talent is not used to the full*. The way in which the programmes are organised does not appeal to many students. The drop-out rate is too high. In particular the difference between the success rates of ethnic minority and native Dutch students is too great. In this regard, the transition from MBO to HAVO and from HBO/HBO-p to WO requires additional attention. Students feel they are insufficiently challenged and there are too few programmes for excellent students. The level across the entire spectrum must be raised and specific groups need to be served in a more tailored fashion, for example with intensive and/or excellent programmes. We need to consider whether perhaps our programmes are too narrow in nature.
- Universities of applied sciences have rightly raised the question of whether they should make a greater effort to acquire *more highly qualified teachers* with a master's degree or PhD. Internationally, the Netherlands is well off the pace in this regard
- The link with the *labour market* is good except for a continuing shortage of science and technology graduates. Professional specificity is falling and graduates are becoming more flexible on the labour market. Consequently, there is an increased need for generic skills and broad programmes. From the perspective of the labour market too, the question is whether our programmes are too narrow in nature.
- Dutch *research at academic universities* performs very well internationally but many other countries are making an effort to catch up and are making large investments. Moreover, the Netherlands has relatively few researchers and PhD candidates. Research at academic universities thus needs to be strengthened.
- Research in the *Netherlands is insufficiently exploited* and applied. More entrepreneurship is required as well as interaction with the business community. professional higher education can play an important role here but, in international terms, it is still too underdeveloped. In this respect, the universities of applied sciences should be given considerably more room in order to make a larger contribution to applied research and innovation than is now the case, particularly in cooperation with SMEs.
- The *binary structure* of the Dutch system is recognisable in international terms but has its shortcomings – again from the international perspective – as far as the variety in the types of programmes and levels is concerned, particularly in light of the increasing diversification of the demands of students and employers.

# ANNEX II

## References

- Abrahamsen (2005), *Bridging the gap between theory and practice, possible degrees for a binary system*, The Hague, June 2005.
- Adriaansens, H.P.M. (2005), "Selectie als second best" [Selection as second best], in *Tijdschrift voor Hoger Onderwijs en Management (Thema)*, 2005, No. 4.
- Allen, J. and R. van der Velden (2007), *The Flexible Professional in the Knowledge Society: General Results of the REFLEX Project*, Maastricht: ROA, Maastricht University.
- AOC (2009), letter by M. Kooijman, director AOC-raad, Letter to Committee Veerman, The Hague, December 2009.
- AWT (2005), *Ontwerp en ontwikkeling, de functie en plaats van onderzoeksactiviteiten in hogescholen* [Design and development, the function and position of research activities in universities of applied sciences], recommendations 65, The Hague: AWT.
- AWT (2009), Kredietcrisis, recessie en kenniseconomie - Hoe houden we onze kennis als vermogen in stand? [Credit crisis, recession and knowledge economy - How do we maintain our knowledge resources?] Recommendations, The Hague, February 2009.
- AWT (2009), letter by J. Sijstermans, Chairman AWT, to Committee Veerman, The Hague, December 2009.
- Beerkens-Soo, M. (2010), *Quality of higher education in the Netherlands*, Enschede: CHEPS ([www.utwente.nl/cheps](http://www.utwente.nl/cheps)).
- Beerkens-Soo, M. (2010), *Higher education investments: International comparison*, Enschede: CHEPS ([www.utwente.nl/cheps](http://www.utwente.nl/cheps)).
- Beerkens-Soo, M., A. Dassen, L. Leisyte, J.J. Vossensteyn and E. de Weert (2010), *Professional masters, An international comparative study*, Enschede: CHEPS ([www.utwente.nl/cheps](http://www.utwente.nl/cheps)).
- Beerkens-Soo, M. and J.J. Vossensteyn (2009), *Higher education issues and trends from an international perspective, Basic document part II for the Committee Veerman*, Enschede: CHEPS ([www.utwente.nl/cheps](http://www.utwente.nl/cheps)).
- Benelux (2009), *Communiqué of the Conference of European Ministers Responsible for Higher Education*, Leuven and Louvain-la-Neuve, 28-29 April 2009
- Benneworth, P., A. Dassen, M. Faber, L. Leisyte and H. Vossensteyn (2010), *Models for university co-operation strengthening national knowledge economies, A policy analysis, Final report for the 3TU Governance Board*, Enschede: CHEPS.
- Berger, J. (2009), *Voorgesorteerd voor succes, nadere vooropleidingseisen en studiesucces in het hoger onderwijs* [In the right lane for success, further requirements regarding prior education and study success in higher education], Research voor Beleid, Zoetermeer July 2009.
- Boer, H. de (2009), *Sector investeringsplan HBO 2011-2016, Meer studenten hbo techniek via Centres of Expertise* [Sector investment plan HBO 2011-2016, More HBO engineering & technology students through Centres of Expertise], The Hague.
- Barosso, J.M. (2010), Presentation at the informal meeting of the Council of Europe, 11 February 2010.
- Broek, A. van den, *et al.* (2009), *Studentenmonitor 2007* [Student Monitor 2007], ResearchNed, The Hague: Ministry of OCW.
- CBS (2009), *Jaarboek onderwijs in cijfers* [Annual report on education in figures], The Hague: CBS.
- CDHO (2009), Letter by Chairman Verbraak to the Committee Veerman, November 2009.
- Cedefop (2008), *Future skills needs in Europe, Medium-term forecast*, Synthesis report, Luxembourg: Publications Office.
- Cedefop (2009), *Future skills needs in Europe, Medium-term forecast*, Background Technical report, European Centre for the Development of Vocational Training (Cedefop), Luxembourg: Publications Office of the European Union.
- CEOB (2009), *Letter of advice by Dr F.J. de Vijlder, chairman of the Commissie Experimenten Open Bestel*, Nijmegen, 8 January 2009.
- CFI (2009), 1 cijfer HO [1 Figure HE], Central Funding of Institutions Agency, The Hague: Ministry of OCW.
- CHE (2009), *The CHE university ranking*, Gütersloh: CHE (<http://ranking.zeit.de>).
- CHEPS (2009), *Verkenning marktpositie van de Open Universiteit Nederland* [Study into the market position of the Open University of the Netherlands], (Faber, M. and H. Vossensteyn), Enschede: CHEPS.
- CHEPS (2010), *Higher education reforms in Europe: Governance and funding*, Final report of the CHEPS Consortium for the European Commission, Enschede: CHEPS.
- Commissie Dijsselbloem (2009), *Brief van de commissie parlementair onderzoek onderwijsvernieuwingen* [Letter by the Parliamentary study committee for educational reforms, Dutch Lower House, meeting year 2007-2008, 31 007, no. 6.
- Commissie HBO-titulatuur (2009), *Betekenisvolle graden in het hoger onderwijs* [Meaningful degrees in higher education], The Hague.
- CPB (2007), *Excellence for productivity*, The Hague: Centraal Planbureau.
- CPB (2009), *Privaat en sociaal rendement onderwijs* [Private and social yield of education], CPB memorandum for the Kenniskamer, The Hague: Centraal Planbureau.
- Cremonini, L. (2010a), *Short cycle higher education, An international review*, Enschede: CHEPS ([www.utwente.nl/cheps](http://www.utwente.nl/cheps)).
- Cremonini, L. (2010b), *Student selection, an international overview, Germany, US, Australia, UK*, Enschede: CHEPS ([www.utwente.nl/cheps](http://www.utwente.nl/cheps)).
- Cremonini, L., W. van Niekerk and J.J. Vossensteyn (2010), *Selective admission to higher education: risks and limiting conditions*, Enschede: CHEPS ([www.utwente.nl/cheps](http://www.utwente.nl/cheps)).
- Cremonini, L., H. de Boer, J. Enders and D. Westerheijden (2009), *Promoting institutional excellence nationally, Initiatives in Four Countries*, Discussion Report for the Dutch Ministry of Education, Culture and Science, Enschede: CHEPS.
- Crul, M., A. Pasztor, F. Lelie, J. Mijs and Ph. Schnell (2009), *De lange route in internationaal vergelijkend perspectief. Tweede generatie Turkse jongeren in het onderwijs in Nederland, België, Duitsland, Frankrijk, Oostenrijk, Zwitserland en Zweden* [The long route in an international comparative perspective. Second-generation Turkish young people in education in the Netherlands, Belgium, Germany, France, Austria, Switzerland and Sweden], Amsterdam: Instituut voor Migratie en Etnische Studies (IMES), University of Amsterdam.
- CWTS (2009), *The Leiden Ranking 2008*, Leiden: CWTS (<http://www.cwts.nl/ranking>).
- Dawson, J., J. van Steen and B. van der Meulen (2009), *Science systems compared: A first description of governance innovations in six science systems*, The Hague: Rathenau-Instituut.

**Threefold differentiation**

Recommendations of the Committee on the Future Sustainability of the Dutch Higher Education System

- Denktank Leren en Werken (2009), *Tijd voor ontwikkeling* [Time for development], The Hague: Ministries of OCW and SZW.
- Dooge, W. (2005), Selectie aan de poort loont! [Selection for admission pays off!], in *Tijdschrift voor Hoger Onderwijs en Management* (Thema), 2005, No. 4.
- Drenth, P.J.D. (2004), Selectie aan de poort van het Hoger Onderwijs [Selection for admission to higher education], in *Tijdschrift voor Hoger Onderwijs en Management* (Thema), 2005, No. 4.
- Durst, S.S. (2009), *Short-Cycle Higher Education in the United States*, background report LEIDO, Amsterdam.
- European Commission (2008), *A more research-intensive and integrated European Research Area, Science, Technology and Competitiveness key figures report 2008|2009*, Brussels: EC, Directorate-General for Research.
- European Commission (2010), *Assessing Europe's University-Based Research*, Expert Group on Assessment of University-Based Research, Brussels: European Commission.
- Eurostat (2009), *Online statistics*, Eurostat: www.eurostat.com.
- Eurydice/Eurostat (2009), *Key data on education in Europe 2009*, Brussels: European Commission.
- GEM (2009), *Global Entrepreneurship Monitor 2008*, Executive report, Babson: Universidad del Desarrollo.
- Goldman Sachs (2003), *Global Economics Paper*, No. 99.
- Graaf, D. de, E. van den Berg, (2008), *Monitor Associate Degree, Tussenevaluatie*, Amsterdam: SEO.
- HBO-raad (2009), Letter by Chairman Terpstra to the Committee Veerman, The Hague: HBO-raad.
- HBO-raad (2009a), *Studenttevredenheidsonderzoek 2009* [Student satisfactory study 2009], The Hague: HBO-raad.
- HBO-raad (2009b), *Kwaliteit als opdracht* [Quality as a mission], The Hague: HBO-raad.
- HBO-raad (2009c), *Professionaliteit en professionele ruimte als uitdaging in het HBO* [Professionalism and professional scope as a challenge in HBO], discussion paper drafted for universities of applied sciences, The Hague: HBO-raad.
- HBO-raad (2010), www.hbo-raad.nl.
- HIS (2008), *Social and Economic Conditions of Student Life in Europe*, Synopsis of indicators, Final report Eurostudent III 2005–2008, Bielefeld: Bertelsmann Verlag.
- HIS/Eurostat (2009), *The Bologna Process in Higher Education in Europe: Key indicators on the social dimension and mobility*, Hannover: Hochschul-Informations-System.
- Högskoleverket (2008), *Swedish Universities & University Colleges*, Short version of Annual report 2008, Stockholm: Swedish National Agency for Higher Education.
- HOP (2010), *Keuzegids Deeltijdstudies* [Guide to part-time courses], The Hague: Hoger Onderwijs Pers.
- Innovatieplatform (2006), *Kennisinvesteringsagenda 2006-2016; Nederland, het land van talenten!* [Knowledge investment agenda 2006-2016; the Netherlands, country of talents!], The Hague: Innovatieplatform.
- Innovatieplatform (2010), *Bouw op talent! In vijf stappen naar de top 5* [Building on talent! To the top 5 in five steps], 3e jaarlijkse foto (evaluatie) Kennisinvesteringsagenda (KIA) 2006-2016 [Third annual photo (evaluation) Knowledge investment agenda], The Hague: Innovatieplatform.
- Inspectorate of Education (2009a), *Werken aan een beter rendement* [Working on improved outcomes], Utrecht: Education Inspectorate.
- Inspectorate of Education (2009b), *Aandacht voor diversiteit in het hoger onderwijs* [Attention for diversity in higher education], Utrecht: Education Inspectorate.
- ISO (2009), *Vijf ISO-normen voor betere aansluiting* [Five ISO standards for improved alignment], Utrecht: ISO.
- ISO/LSVB (2009), Letters to the Committee Veerman.
- Jacobs, B. (2009), *Kopspelden en punaises, observaties over de kennisdriehoek onderwijs-onderzoek-innovatie* [Glass-head pins and thumbtacks, observations on the knowledge triangle of education-research-innovation], essay for the OCW conference "De toekomst van het Nederlandse ho" [The future of Dutch HE], September 2009.
- Jongbloed, B.W.A and J.J. Vossensteyn (2002), *Financiering masters: argumenten en arrangementen* [Funding of master's programmes: arguments and structures], report for the working group on Funding of Master's Programmes, Enschede: CHEPS, University of Twente.
- Kirsch and Beernaert (2009), Short Cycle Higher Education in Europe. Presentation at Golden Sands Conference, 15 June 2009, EURASHE.
- KNAW (2009), letter by Director H. Chang to Committee Veerman, Amsterdam, November 2009.
- Korthals, B. (2006), *Tussenrapportage 2006* [Interim report 2006], Commissie Ruim Baan voor Talent, The Hague.
- Korthals, B. (2007), *Wegen voor talent* [Ways for talent], final report of the Commissie Ruim Baan voor Talent, The Hague.
- LAO (2010a), *The Master Plan at 50: Greater than the sum of its parts – coordinating higher education in California*, Sacramento: Legislative Analyst's Office.
- LAO (2010b), *Promise of California's Master Plan: Access through Affordability*, Sacramento: Legislative Analyst's Office.
- LAO (2010c), *Eligibility and Admissions in California Public Higher Education*, Sacramento: Legislative Analyst's Office.
- Ministry of Education (2008), *Higher education institutions 2007, Annual report*, Helsinki: Ministry of Education publications 2008:32.
- Monthly Labor Review, Vol. 123, Number 11, November 2009.
- Moor, R.A. de (1981), *Eenheid en Verscheidenheid van het hoger onderwijs* [Unity and diversity in higher education], report by the Committee De Moor, The Hague: Ministry of O&W.
- NOWT (2008), *Wetenschaps- en Technologie- Indicatoren 2008* [Science and technology indicators 2008], The Hague: Nederlands Observatorium van Wetenschap en Technologie.
- NOWT (2010), *Wetenschaps- en Technologie- Indicatoren 2010* [Science and technology indicators 2010], The Hague: Nederlands Observatorium van Wetenschap en Technologie.
- Nuffic (2009), *Internationaliseringsmonitor van het onderwijs in Nederland* [Internationalisation monitor of Dutch education], The Hague: Nuffic.
- Onderwijsraad (2009), *De weg naar de hogeschool* [The road to the university of applied sciences], The Hague: Onderwijsraad.
- OCW (2004), *Hoger Onderwijs en Onderzoek Plan (HOOP) 2004* [Higher education and research plan 2004], The Hague: Ministry of OCW.
- OCW (2007), *Het hoogste goed, Strategische agenda voor het hoger onderwijs* [The greatest good, strategic agenda for higher education], The Hague: Ministry of OCW.
- OCW (2008), *Internationaliseringsagenda – "Het Grenzeloze Goed"* [Internationalisation agenda – the boundless good], The Hague: Ministry of OCW.



- OCW (2009), *Referentieramingen* [Pupil/Student Forecasts], The Hague: Ministry of OCW.
- OCW (2009b), *Toekomstverkenning hoger onderwijs en onderzoek* [Study into the future of higher education and research], The Hague: Ministry of OCW.
- OCW (2009c), *Beleidsreactie op de Tussenevaluatie van de pilots met Ad-programma's in het hbo* [Policy response to the interim evaluation of the AD pilot projects in HBO], letter by Education Minister Plasterk to the Chair of the Dutch Lower House, The Hague, 16 October 2009.
- OCW (2009d), *Kennis in Kaart 2009* [Knowledge mapped out 2009], The Hague: Ministry of OCW.
- OCW/EZ (2009), *Naar een robuuste kenniseconomie* [Towards a robust knowledge economy], Letter to the Dutch Lower House, The Hague: Ministry of OCW & Ministry of EZ.
- OECD (2004), *OECD Handbook for Internationally Comparative Education Statistics*, Paris: OECD.
- OECD (2008), *Netherlands, OECD Reviews of Tertiary Education*, Paris: OECD.
- OECD (2008), *Tertiary Education for the Knowledge Society*, Volume 2, Special Features: Equity, Innovation, Labour market, Internationalisation, Paris: OECD.
- OECD (2009), *Education at a Glance*, Paris: OECD.
- OECD (2009b), *Policy Responses to the Economic Crisis: Investing in Innovation for Long-Term Growth*, Paris: OECD.
- OECD (2009c), *Higher Education to 2030, Globalisation*, Paris: OECD.
- OECD (2009d), *Science, Technology and Industry Scoreboard 2009*, Paris: OECD.
- OECD (2010), *The High Cost of Low Educational Performance, An estimation of the long-run economic impact of improvements in PISA outcomes*, Paris: OECD.
- OECD (2010b), *Policy Brief: Economic Survey of China, 2010*, Paris: OECD.
- Onderwijsraad (2009), *De weg naar de hogeschool* [The road to the university of applied sciences], The Hague: Education Council.
- Onderwijsraad (2010), *Vroeg of laat* [Sooner or later], The Hague, Education Council.
- Overdiep, I. et al., (2010), *Masteropleidingen in het hbo* [Master's programmes in HBO], The Hague: B&A; Utrecht: MvC.
- OW (1978), *Hoger onderwijs voor velen* [Higher education for many], Policy memorandum by the Ministry of Education and Sciences, Dutch Lower House 1977-1978, 15034.
- Psacharopoulos, G. (2010), *Returns to investment in higher education, A European survey*, Paper written for the EU Higher Education Reform Projects, Enschede: CHEPS.
- Raad voor Werk en Inkomen (2008), *Een open en flexibele infrastructuur voor Leven Lang Leren* [An open and flexible infrastructure for lifelong learning], The Hague: Council for Work and Income.
- Ritzen, J.M.M. (2010), *A Chance for European Universities, Or: Avoiding the Looming University Crisis in Europe*, (forthcoming).
- ROA (2009), *De arbeidsmarkt naar opleiding en beroep tot 2014* [The labour market by qualifications and profession until 2014], Maastricht: ROA, Maastricht University.
- Schwab, K. and Xavier Sala-i-Martin (2009), *The Global Competitiveness Report 2009-2010*, Geneva: World Economic Forum.
- Severiens, S. (2009), *Stoppen met de tweedegraads lerarenopleiding* [Abolishing grade two teacher-training programmes], The Hague: Sectorbestuur Onderwijsarbeidsmarkt.
- SIA (2009), Letter by Chairman L.M.L.H.A. Hermans to the Committee Veerman, December 2009.
- Spiewak, M., Wiarda, J.M., "Nur Druck schafft Bewegung", in *Die Zeit* No. 12, 18 March 2010.
- Statlink: <http://dx.doi.org/10.1787/746356032852>.
- Stichting de Beauvoir (2009), *Monitor Vrouwelijke Hoogleraren 2009, Stand van zaken vrouwen in universitaire functies en wetenschappelijke besluitvormingsorganen* [Female professors monitor 2009, state of affairs regarding women in university positions and academic decision-making agencies], [www.stichtingdebeauvoir.nl](http://www.stichtingdebeauvoir.nl).
- ResearchNed (2009), Studentenmonitor 2008 [Student monitor 2008], [www.studentenmonitor.nl](http://www.studentenmonitor.nl).
- Tieben (2008), *Wegen naar dynamiek in het hoger onderwijs* [Ways to dynamism in higher education], Amsterdam: SEO.
- UCAS (2010), *Decade ends with record student numbers*, Press release: Thursday 21 January 2010, <http://www.ucas.ac.uk/>.
- Urlings-Strop et al. (2009), *Med.Educ.*, 43:175-183, 2009 (in ScG25-11-2009)
- Van der Meulen, B., J. Dawson and J. van Steen (2009), *Feiten en cijfers: Organisatie en governance van wetenschappelijk onderzoek, een vergelijking van zes landen* [Facts and figures: organisation and governance of scientific research, a comparison of six countries], The Hague: Rathenau-Instituut.
- Velden, R. v.d., (2009), *Zijn hoog opgeleiden crisisbestendig?* [Are highly educated people crisis-proof?], Kennismarkt OCW, 1 December 2009, Maastricht: ROA.
- Vossensteyn, J.J. (2010), *Titulatuur, Internationale praktijk* [Titles, international practice], Enschede: CHEPS ([www.utwente.nl/cheps](http://www.utwente.nl/cheps)).
- VSNU (2008), *Naar een ambitieuze studiecultuur: Studiesucces in het wetenschappelijk onderwijs* [Towards an ambitious study culture: study success in academic higher education], The Hague: VSNU.
- VSNU (2009), *Eén cijfer HO* [One figure HE], 2009: [www.vsnunl.nl](http://www.vsnunl.nl).
- VSNU, PNN and ABVAKABO FNV (2006), *Talent in eigen hand, De positie van jonge wetenschappers in Nederland* [Talent in one's own hands, the position of young scientists in the Netherlands], The Hague: Association of Universities, Dutch Doctoral Students Network and ABVAKABO FNV.
- Warps, (2009), *Studiekeuze en studiesucces* [Study choice and study success], Nijmegen: ResearchNed.
- Waterreus (2008), Incentives voor extra onderwijskwaliteit [Incentives for boosting the quality of education], in: *Tijdschrift voor Hoger Onderwijs en Management (THEMA)*, Vol. 1, 2008, pp. 24-27.
- Weert, E. de (2010), *Het hoger kunstonderwijs, een internationale schets* [Higher education in the arts, an international sketch], Enschede: CHEPS ([www.utwente.nl/cheps](http://www.utwente.nl/cheps)).
- Weert, E. de and M. Soo (2009), *Research at Universities of Applied Sciences in Europe, Conditions, Achievements and Perspectives*, On the initiative of the European Network for Universities of Applied Sciences, The Hague/Enschede: HBO-raad/CHEPS.
- Westerheijden, D.F., L. Cremonini, R. Kolster, A. Kottmann, L. Redder, J.J. Vossensteyn, and E. de Weert (2008), *New degrees in the Netherlands, Evaluation of the Bachelor-Master Structure and Accreditation in the Netherlands*, The Hague: Ministry of Education, Culture and Science.

# ANNEX III

## Abbreviations

<b>AD</b>	Associate Degree
<b>AOb</b>	General Teachers' Union
<b>AOC</b>	Agricultural Training Centre
<b>AWT</b>	Advisory Council for Science and Technology Policy
<b>CDHO</b>	Efficiency of Higher Education Committee
<b>CEOB</b>	Open System Experiments Committee
<b>CHEPS</b>	Center for Higher Education Policy Studies
<b>CNV Onderwijs</b>	Christian National Trades Union
<b>DFG</b>	Deutsche Forschungsgemeinschaft [German Research Foundation]
<b>HAVO</b>	General secondary education
<b>HBO</b>	Professional higher education, provided at universities of applied sciences
<b>HE</b>	Higher education
<b>ISO</b>	Intercampus Students' Association
<b>KNAW</b>	Royal Netherlands Academy of Arts and Sciences
<b>LEIDO</b>	National Expertise and Information Centre for Work-based Learning
<b>LLL</b>	Lifelong Learning
<b>LSVb</b>	National Students' Union
<b>MBO</b>	Senior secondary vocational education
<b>MHP</b>	Trades Union Federation for Middle Classes and Senior Staff
<b>Nuffic</b>	Netherlands Organisation for International Cooperation in Higher Education
<b>NVAO</b>	Accreditation Organisation of the Netherlands and Flanders
<b>OECD</b>	Organisation for Economic Cooperation and Development
<b>OU</b>	Open University
<b>PAEPON</b>	Platform of Approved / Accredited Private Educational Institutions in the Netherlands
<b>ROC</b>	Regional Training Centre
<b>SER</b>	Social and Economic Council of the Netherlands
<b>UCAS</b>	Universities' Central Admissions Service
<b>VNO/NCW &amp; MKB NI</b>	Confederation of Netherlands Industry and Employers – Association of Small & Medium-sized Businesses in the Netherlands
<b>VO-raad</b>	Dutch Council for Secondary Education
<b>VSNU</b>	Association of Universities in the Netherlands
<b>VWO</b>	Pre-university education
<b>WO</b>	Academic higher education, provided at research universities

# ANNEX IV

## Organisations and experts consulted

### Organisations

<b>AWT</b>	J.F. Sistermans
<b>VNO/NCW &amp; MKB Ned</b>	B.E.M. Wientjes and L.M.L.H.A. Hermans
<b>VSNU</b>	Dr S.J. Noorda and C.P.A. van den Berg
<b>KNAW</b>	Prof. Dr R.H. Dijkgraaf and Dr W. de Haas
<b>Lsvb</b>	Ms J.A. Koets
<b>ISO</b>	H. van Horssen
<b>HBO-raad</b>	D. Terpstra and A.B. de Graaf
<b>NVAO</b>	Dr K.L.L.M. Dittrich
<b>MBO-raad</b>	J.P.C.M. van Zijl
<b>Nuffi</b>	Ms H. Teekens
<b>PAEPON</b>	Prof. Dr E.J. Fischer, Ms R. van 't Klooster MBA,
<b>Ms A.J.M. Bakker</b>	
<b>VO-raad</b>	S. Slagter, Ms W.G. van Velden
<b>AOB</b>	G.J.W.M. Stemerding, D.D. van der Zweep
<b>CNV Onderwijs</b>	J. Telleman, W.J. Berg
<b>MHP</b>	A.C. de Vries
<b>LEIDO</b>	H. Daale

### Experts

<b>O.G. Brouwer</b>	Chairman, Executive Board, Amsterdam School of the Arts
<b>Prof. Dr H.P.M. Adriaansens</b>	Dean, Roosevelt Academy, Middelburg
<b>Prof. Dr F. Leijnse</b>	Lector, Knowledge Circulation, University of Applied Sciences Utrecht
	Professor, Education and the Labour Market, Open University, Heerlen
<b>Prof. Dr F.A. van Vught</b>	President Neth-ER (Netherlands House for Education and Research)
	Honorary Professor, University of Twente
<b>P. Boekhoud</b>	Lector, Educational Theory of Vocational Training, University of Applied Sciences Rotterdam; Director, Rotterdams Offensief cooperation
<b>Prof. S.E. Stefanou</b>	Professor of Agricultural Economics, Penn State University, Pennsylvania, USA

# ANNEX V

## Terms of reference of the Committee



Ministry of Education, Culture and  
Science

The Chairman of the Lower House of the States General  
PO Box 20018  
2500 EA The Hague

**18 SEP. 2009**

Date:  
Subject: Draft task of the Committee on the Future Sustainability  
of the Dutch HE System

At the opening of the academic year at the University of Twente and subsequently at the opening of the university year at the *Hogeschool Zuyd*, I pointed out signals indicating that the Dutch higher education system is reaching its limits. In this light, I stated my intention to establish a committee that would examine the long-term future sustainability of the Dutch system.

With this letter, I would like to provide further details of the task with which I aim to charge the Committee and the envisaged composition of the Committee.

### *Task of the Committee*

The Committee will be asked to make an assessment of the long-term future sustainability of the Dutch system based on a comparison of the Dutch higher education system with leading tertiary education systems of other countries. To this end, it will examine the Dutch system, its flexibility and the differentiation in learning pathways it has achieved, in the light of relevant national and international developments, in particular the expected increase in the number of students and the growing diversity of the student population. The Committee will include the international recognisability of the system in its study. The Committee will assess the lessons the Netherlands can learn from countries abroad in terms of the further development of the Dutch higher education system. The recommendations of the Committee will be given priority on the agenda. They will constitute a major building block for further deliberations on a future higher education system suitable for the Netherlands.

I intend to establish the Committee in the very short term. I envisage a small-scale Committee, comprising an independent chair and a total of four to six national and international experts. I will inform you of the names of the members of the Committee once they have been appointed.

The Committee will be asked to present its report within six months, i.e., no later than March or April 2010.

I hope that in the next few months a broad social discussion will develop regarding the topic to be addressed by the Committee. The question of whether our current system is future-proof and what course it should take is one that merits our full attention.

The Minister of Education, Culture and Science,  
also on behalf of the Minister of Agriculture, Nature and Food Quality,

A handwritten signature in black ink, appearing to read 'R.H.A. Plasterk', with a long horizontal stroke extending to the right.

Ronald H.A. Plasterk

A copy of this letter will be forwarded to: VSNU, HBO-raad, PAEPON, ISO, LSVb,  
VNO-NCW and MKB-Nederland

# ANNEX VI

## Composition of the Committee

### Chair

**Prof. Dr C.P. Veerman** Professor, Tilburg University and Wageningen University

### Members

**Prof. Dr R.M. Berdahl** President/Executive Office of the Association of American Universities, Washington DC, United States

**M.J.G. Bormans** Chairman, Executive Board, HAN University of Applied Sciences

**K.M. Geven** Former Chair of the European Student Union, Eindhoven / Paris

**Prof. Dr E. Hazelkorn** Director of Research and Enterprise, Dean of the Graduate Research School  
Executive Director, Higher Education Policy Research Unit (HEPRU), Dublin Institute of Technology, Ireland

**Prof. Dr A.H.G. Rinnooy Kan** Chairman of the Social and Economic Council of the Netherlands (SER), The Hague

### Secretariat

**W.A. van Niekerk** Programme Manager Higher Education &  
**Secretary** Student Finance, Ministry of Education, Culture and Science, The Hague

**Prof. Dr J.J. Vossensteyn** Executive Director and Research Coordinator  
**Secretary / external expert** CHEPS (Center for Higher Education Policy Studies), Twente University, Enschede





## **Colophon**

### **Production**

Dennis Dekker

### **Traffic**

Else Bovenlander

### **Design + illustrations**

VormVijf

### **Printer**

Koninklijke Broese & Peereboom

### **Publication date**

April 2010

### **Orders**

Postbus 51-infolijn

Telephone 0800-8051 (free) or [www.postbus51.nl](http://www.postbus51.nl)

ISBN 978-90-5910-578-2

### **Price**

€ 17,00

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