



**A bridge to the future: European policy for
vocational education and training 2002-10**

National policy report – Denmark



This report is one of a set of European country reports on VET policy development prepared within Cedefop's ReferNet network. ReferNet is a European network of national networks providing information and analysis on national VET to Cedefop and disseminating information on European VET and Cedefop work to stakeholders in the EU member states, Norway and Iceland. The report has been produced by ReferNet Denmark as a contribution to Cedefop's fourth policy report which reviews progress in VET towards the policy goals of the Copenhagen process. The opinions expressed in this national report are not necessarily those of Cedefop.

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INTRODUCTION

The Kingdom of Denmark constitutes Denmark, the Faroe Islands and Greenland. Denmark consists of the peninsula of Jutland and 407 islands, of which approx. 78 are inhabited. Of these, the largest and most densely populated are Zealand on which the capital of Copenhagen is situated, the island of Funen, and the peninsula of Jutland. The North Sea defines Denmark to the west, while the islands divide the Baltic Sea from the Kattegat. Denmark is a constitutional monarchy with a single chamber parliamentary system. Denmark has been a single kingdom since the end of the 10th century.

The Parliament (*Folketinget*) has 179 members, including two representatives from the Faroe Islands and two from Greenland. Both Greenland and the Faroe Islands have home rule and are responsible for local matters such as the education and social systems, welfare, taxes, environmental policy and a number of commercial matters.

A major reform of the administrative structure was implemented in 2007 whereby 5 regions replaced 14 counties and the number of municipalities was reduced from 275 to 98. The aim of the reform was to increase the quality of public services and make them more cost effective. There has been no change to the electoral structure, i.e. universal adult suffrage by voluntary and secret ballot. National elections are open to all Danish citizens of 18 years or over, while all adult residents are eligible to vote in local and regional elections. All voters are eligible to run for office.

The state and municipalities are responsible for levying taxes and providing social services. The main responsibility of the regions is health care provision, and in terms of education, the regions compile detailed plans for their own geographical area, whereas the state has overall responsibility for the framework and provision of education. Besides the public authorities, the social partners have major influence on VET in Denmark and pay a share of the costs of both initial and continuing VET.

On average, there are 8-10 political parties in the Parliament and the government coalition sits for up to 4 years. The current right of centre coalition was first elected in November 2001 and most recently re-elected in November 2007. Lars Løkke Rasmussen of the Liberal Party of Denmark (Venstre) replaced Anders Fogh Rasmussen as Prime Minister in 2009. All political parties support free access to education and training, including continuing training.

Denmark, like most other countries, is, following a longer period of growth, now experiencing an economic slowdown and recession. Whilst unemployment remains at a relatively low level historically speaking, the figures are rising rapidly almost doubling between September 2008 and September 2009 to 6.4% (Eurostat). Young people have been particularly vulnerable with approximately one in ten under the age of 30 now unemployed. One explanation is that one in five has yet to embark on a course of education or training providing genuine job qualifications at a time when the demand for unskilled labour continues to fall with more and more jobs requiring qualifications and participation in courses of further education and training (Politiken 04.12.2009).

There are approximately 5.5 million inhabitants in Denmark, of which 4 million live in urban areas. Denmark has a total area of 43 000 square kilometres and a coastline of 7 300 kilometres. The overall population density is 128 people per square kilometre (Statistics Denmark 2009).

The Danish labour market is characterised by a high participation rate partly due to the high participation rate of women (76.3% and 81.8% for men). Of the total population of 5.5 million,

the labour force population constituted in 2008 approximately 2.9 million. 20.9% of those of working age (16 - 64 years) are outside the labour force: many are in early retirement or represent young people enrolled in education. The unemployment rate reached its lowest for 34 years during summer 2008 but has since risen sharply as a result of the global economic downturn with gloomy forecasts, particularly for youth unemployment levels.

With both men and women are active on the labour market or participating in educational and training activities, most children are therefore in day care centres. The average age for women to have their first child is 30.4 years (2008) – in 2005 it was 28.9. Denmark has one of the highest fertility rates in the EU with 1.89 children per woman in 2008 compared with an EU average of 1.43 (Statistics Denmark 2009). One explanation for the high fertility rate is the extensive system of reasonably affordable public day care centres and Danish laws regarding maternity and paternity leave.

Nonetheless, like the rest of Europe, the Danish population is getting older. According to Statistics Denmark, a fertility rate of 2.08 is needed for the population to reproduce itself. The average age of the population in Denmark is 40.1 years in 2009 (39 years for men and 41.1 years for women). The increase in the average age is due to an increase of nearly 60% in the number of people over the age of 80. The average life expectancy is 76.3 years for men and 80.7 for women.

The aging population means that the next two decades are expected to see a considerable increase in the number of citizens receiving public benefits and a decrease in the active workforce. The Government is therefore encouraging Danes to remain within the labour market beyond the minimum pensionable age and offering retraining initiatives to increase the attractiveness of older generations to employers.

The projected old age dependency ratio for Denmark in 2010 is 24.98%, close to the EU average of 25.9%. This figure is expected to rise sharply by 2015 to 29.09% as the large post-war cohorts reach pensionable age. The predictions for Denmark are expected to closely follow the EU average until 2035 after which the EU average is predicted to continue rising while the Danish ratio is expected to plateau at around 42%. A possible explanation for this levelling out is the relative success of governmental policy seeking to improve fertility rates through improved structures for financial support, childcare and labour market protection.

Immigration is higher than emigration (in 2008 immigration: 72,749 and emigration: 43,490), but considerably lower than neighbouring countries such as Germany and Sweden. It is, however, worth noting that almost one in three immigrants is a Danish citizen returning home after a period abroad. Similarly, Danes comprise half the total annual emigration figures. Nevertheless an increasing proportion of the population is made up of foreign immigrants and their descendants. In January 2009, this group comprised 9.5% of the Danish population. Of these, 54% originate from a European country. Turkey, Iraq and Germany are the three most common countries of origin.

The Danish economy is small and open, dependent on trade with other countries and without any possibility of significantly influencing international trading conditions or central economic factors, e.g. interest rates. GDP for 2008 was almost DKK 1 750 billion (approx. EUR 235 billion). However, despite a slight increase from the 2007 figures, in real terms, this represented a negative growth of 1.1%. This reflects the start of an economic downturn following a period of high growth. The value of both exports and imports constitutes roughly 1/3 of GDP, each with a value of approximately DKK 585 billion (approx. EUR 80 billion). Since 1987, there has, however, been a surplus on the annual balance of trade, currently equal to approx 1% of GDP. About 3/4 of foreign trade is with other EU countries and Norway. Germany

is the most important bilateral trading partner, but Sweden, Great Britain, Netherlands and Norway are also of significance. Outside Europe, the US and China are the most important trade partners.

Sources: Statistics Denmark: Statistical Yearbook 2009 and Eurostat.

THEME 1: SOCIOECONOMIC CHALLENGES FOR FUTURE VET POLICY DEVELOPMENT

1.1 Impact of globalisation on VET

One of the results of globalisation has been a dramatic reduction in the availability of non-skilled work. With the high wage levels found in Denmark, a focus on knowledge-intensive high-skilled sectors is regarded as the best strategy in ensuring economic growth and global competitiveness. This means that some form of qualification is increasingly becoming a necessity in order to find work within *all* areas of the labour market. Not only are education and training an entry requirement to the labour market, skills and knowledge need to be constantly renewed and upgraded during the course of a working life in order to adjust to and keep pace with the rapid rate of technological change. As such, education and training are seen as the key growth and welfare for the individual, enterprises and society as a whole and national policy within this area is increasingly situated firmly at the centre of broader political strategies.

This also applies to the vocational education and training sector. In Denmark, VET policy is created, adjusted and decided within the broader context of the Government's globalisation strategy as presented in the report "Progress, Innovation and Cohesion – Strategy for Denmark in the Global Economy" (Danish Government 2006a; 2006b) and the "Agreement on the Implementation of the Globalisation Funds" ("*Aftale om Udmøntning af Globaliseringspuljen*", Danish Ministry of Finance 2006a) which form the basis for the overriding educational strategy until 2012, including Denmark's strategy for lifelong learning.

Within this context, VET is afforded a significant role. IVET is seen as crucial in fulfilling the stated objective that 95 percent of a youth cohort should complete a youth education programme by 2015 which provides direct access to either higher education (general upper-secondary education) or a particular vocation (IVET)¹. The ambitiousness of this goal becomes clear when viewed in relation to the most recent prognoses for 2007 predicting an 80 percent completion rate, a figure which has not risen, in fact falling slightly in recent years, despite numerous political efforts and initiatives (Danish Government 2009). IVET is at the same time seen as key to ensuring flexibility and a skilled workforce able to adapt to changes within the labour market.

Ensuring a flexible and skilled workforce is also the primary policy objective in terms of CVET. CVET is seen as crucial in providing education and training for all groups in the labour market, reflecting the growing focus on lifelong learning. CVET is to provide both individuals and enterprises with training opportunities adapted to the needs of the labour market. Denmark has a well developed further education and training sector with high participation levels among the workforce: in 2007, 29.2% of adults aged 25-64 participated in adult and further education activities (Danish Government 2009). However, as mentioned, the market for

¹ Most recently reiterated in the governmental 'Agreement on the Implementation of the Globalisation Pool' (*Aftale om udmøntning af globaliseringspuljen*, Danish Ministry of Finance 2006a) and at the centre of national education policy as one of the Ministry of Education's transversal themes. See for example:

<http://www.eng.uvm.dk/Uddannelse/Themes/Lifelong%20Learning/Goals%20for%20a%20worldclass.aspx>

unskilled labour has almost disappeared in recent years and there is therefore an emphasis in terms of CVET on strengthening provision for disadvantaged groups, i.e. low-skilled, bilinguals, and marginalised groups, as, at present, these groups generally have low participation rates in vocational education and training.

1.1.1 The Council for Internationalisation (2007)

The Council for Internationalisation of Danish Education was established at the beginning of 2007 and consists of a chair and eight members. It can be regarded as a tool in implementing the recommendations presented in the national globalisation strategy relating to internationalisation of all areas of the education sector. It performs an advisory role to the Ministers of Culture, Education, and Science and Technology, and to the Danish Agency for International Education. The overall objective is to contribute to the incorporation of international development trends within education policy. The broader aim is to contribute to increasing Danish competitiveness and growth as well as international understanding.

In terms of VET, the Council's work has resulted in the publication of a report "VET with an International Perspective" (*"Erhvervsuddannelser med Internationalt Perspektiv"*, CIRIUS 2009). Here, the Council presents a number of challenges facing VET in terms of internationalisation and suggests a series of initiatives. The background for this report is the new legislation regarding VET introduced in 2008 which stipulates that students should gain the competencies necessary to act in a globalised world.

Among the most common activities within VET which can be considered part of internationalisation processes are:

- Student exchanges/posting abroad
- Teacher exchanges
- International co-operation projects
- Training placements abroad
- Multicultural classes
- Guest teachers from abroad
- Special courses
- Language teaching
- International exercises
- International courses or programmes
- Export of systems (CIRIUS 2009, p. 9).

The report suggests that the order of these activities likely represents their respective prevalence at the institutional level, but underlines that there is no statistical data able to fully account for the spread of internationalisation activities. However, the figures for the number of students taking advantage of the Training Placement Abroad scheme [*Praktik i Udlandet*] indicates that there is a considerable way to go before practice lives up to the goals laid out in strategies and policy documents – in 2008, of 70.000 VET students with a training agreement, only 234 completed a training placement within an enterprise abroad (CIRIUS 2009, p. 10).

The initiatives suggested by the Council cover every aspect of VET with a series of suggestions made in terms of schools, teachers, students, enterprises, trade committees, and knowledge and information. Their implementation and the degree of success in terms of increasing the

international profile and orientation of VET in Denmark will have to be monitored over the course of the next few years.

1.2 Impact of technological progress on VET

The rapid rate of technological change poses serious challenges to the vocational education and training sector. The extent of these challenges varies considerably within the different areas of VET with those directly involving technology such as electrician naturally being more affected than, for example, social and healthcare work, where use of new technologies is more peripheral. Nevertheless, all VET graduates are expected to possess at least basic computer literacy skills and ICT has for a while been an intrinsic part of all VET programmes.

In some of the more technology heavy areas of VET, the challenges are greater. In some cases, this has led to a need for the introduction of new subjects within the curriculum, in others to entirely new areas of specialisation and even new programmes. The involvement of the social partners and trade committees in determining curricular content and identifying labour market needs for new skills and competences goes some way towards ensuring VET's responsiveness to technological progress. Nevertheless, there is likely to be a certain amount of lag in terms of curricular integration. The speed of the changes taking place and their impact on some professions makes it difficult for colleges to keep up. Financially speaking, it can be difficult to provide all the latest technology as costs can sometimes be prohibitive, and it is likewise difficult to ensure that teachers have themselves received the necessary training in order to be able to provide instruction to their students. In such cases, there are clear benefits to an alternating dual system of training such as that found in Denmark. This ensures that students have the opportunity to encounter practice within the workplace and can offer an insight into the latest technological developments, how they are implemented in practice, and their impact on the profession. It can however serve to further accentuate the already existing schism between the workplace-based and the college-based elements of VET. Many students already experience classroom teaching as less important and less relevant than the practical training which takes place within an enterprise and a clear gap between the theory presented at college and the reality the student meets in the workplace can confirm and strengthen this opinion. A major challenge in this regard is therefore the ongoing further training of VET teachers to ensure they remain in touch with the latest technological developments within their field and encouraging a close collaborative relationship between VET colleges and enterprises, for example by providing the opportunity and actively encouraging VET teachers to spend a few days each year within an enterprise and by inviting guest teachers from enterprises.

New technologies also create a considerable need for CVET in order to ensure a workforce with an up-to-date set of skills, able to meet the labour market's demands in implementing new technologies. This area of CVET can be roughly divided into two types: Firstly, upgrading of skills, for example in conjunction with the introduction within the workplace of a particular new piece of technology, computer programme etc. This is often likely to take the form of relatively short courses with a very specific content and privately funded, either by the place of employment or by the company providing the new technology. Secondly, one finds broader re-skilling programmes. These may be offered, for example, to long-term unemployed who have been away from education and the labour market for some time, and thereby need to acquire a new set of skills. While often publicly funded, it may also occur e.g. when an enterprise chooses to redeploy employees whose positions have become obsolete within a new position.

1.2.1 Eudtube.dk (2009)

The Danish Ministry of Education has launched a new project aimed at improving knowledge sharing between VET teachers regarding the use of ICT in their lessons. The target group is all VET teachers, as well as organisations interested in contributing electronic teaching materials. Increasing the use of ICT in the classroom has been identified by the Ministry as a focus area which can support teachers in providing differentiated teaching, and thereby helping to reduce student drop-out. Currently, the project is in a start-up phase this should be completed in September 2010.

The project will be reviewed along the way by representatives from VET colleges, the social partners, and teacher organisations and both the Danish Technological Institute (*Teknologisk Institut*) and the Danish IT Centre for Education and Research (*UNI-C*) are actively involved in the project's ongoing development.

The project is centred on a national web portal covering all areas of VET – <http://eudtube.dk>. At present, there is a provisional or trial version available, but a more extensive site will be launched after the completion of the initial start-up phase. As the site content is intended to be largely user-created, with teachers uploading examples of successful teaching they have employed in the classroom, its success or failure will be largely dependent on VET teachers' willingness to participate and contribute. However, in order to ensure a good start, the start-up phase during the first half of 2010 will involve a number of designated 'ambassadors' visiting and contacting VET colleges, actively seeking to compile suitable material and publicising the portal.

Source: <http://eudtube.dk>

1.3 Impact of demographic change and international migration on VET

As mentioned in the introduction to this report, Denmark has a relatively high fertility rate in comparison to many other EU nations. Nevertheless, the population is aging, particularly due to a sharp increase in life expectancy. As such, whilst the number of young people is not expected to fall dramatically over the coming years, the size of the oldest segment of society is expected to explode.

Population projections (2009)			
AGE GROUP			
	0-24	25-64	65+
2008	1,647,977	2,974,773	853,041
2020	1,637,464	2,860,093	1,157,931
2030	1,630,863	2,792,770	1,365,841

Source: Statistics Denmark: Statistical Yearbook 2009.

This represents a clear challenge to the current Danish welfare model which the figures would suggest is unsustainable. It also means that certain areas of the labour market, such as social- and healthcare are already experiencing shortages.

In order to combat the problems of a decreasing labour force and growing dependency group, the Danish government is seeking to ensure that as many young people as possible complete some form of competence-giving education or training as quickly as possible. Currently Danish students commence an education at a later point than many of their European contemporaries. They are also more likely to drop out or change course, and consequently take longer to complete their studies/training and enter the labour force. IVET is here afforded a key role as drop-out levels are particularly high. A VET route is also considered better suited than a pathway through general upper-secondary education and higher education for those young people who do not currently complete some form of competence-giving education or training programme. The government has therefore introduced a number of initiatives for example aimed at making IVET more attractive to practically-oriented but academically weak young people.

At the other end of the scale, efforts are being made to encourage citizens to remain part of the labour force for longer. So far, despite a considerable amount of public debate on the matter, politicians have largely rejected the idea of raising the pensionable age or abolishing the early retirement scheme, instead preferring incentive schemes. CVET plays a considerable part here with offers of retraining schemes to increase the attractiveness of elderly employees. Early indications are, however, that more drastic measures will be required.

In terms of immigration, levels are considerably lower than in neighbouring countries such as Sweden and Germany. Nevertheless an increasing proportion of the population is made up of foreign immigrants and their descendants. In January 2009, this group comprised 9.5% of the Danish population with Turkey, Iraq and Germany the three most common countries of origin (Statistics Denmark 2009). Adjusting to a more multicultural society poses a number of challenges in relation to VET. Immigrants and students with an ethnic minority background comprise a growing proportion of the IVET student population. However, drop-out rates among these students are even higher than among their ethnically Danish contemporaries. Measures specifically targeting these students have therefore been launched in order to combat these problems. There are also challenges in relation to CVET: whilst steps are being taken towards implementing the European Qualifications Framework in Denmark, no such framework exists for officially recognising the qualifications of immigrants from outside Europe. Although there is some scope for applying measures introduced in conjunction with recognition of prior learning initiatives to help identify competencies possessed by immigrants with vocational qualifications and/or experience from their country of origin, the process of evaluating qualification equivalencies between often highly different contexts is complicated. In most cases, there will be a requirement for some form of supplementary training to help translate foreign competencies to the Danish labour market. In order to aid this process, CVET courses are being introduced in other languages than Danish, as language difficulties often comprise an additional barrier to the successful integration of immigrants within the workforce.

1.3.1 New apprenticeship (2006)

New apprenticeship (*ny mesterlære*) has been introduced as an alternative pathway into IVET and is part of the Government's strategy for increasing enrolment and reducing dropout within

IVET and fulfilling the 95 percent objective. Pupils undertaking an IVET programme via the new apprenticeship pathway will typically spend the first year of their education receiving practical training within an enterprise. The initiative is aimed in particular at more practically-oriented pupils who may struggle or lack the motivation to complete the more theoretical school-based education without first gaining a practical insight into the field. However, pupils will still have to follow some school-based teaching as agreed in their personal education plans.

New apprenticeship has been introduced within all areas of IVET, although a few trade committees have chosen to opt out (e.g. electricians and plumbers). The school and the enterprise, along with the pupil, are responsible for planning and organising the form and content of the practical training and developing the pupil's personal education plan based on a description of the competences to be gained from the VET programme in question and an assessment of the pupil's actual competence. As such, the flexibility of the various pathways within IVET can be regarded as reflective of an overall policy trend throughout the educational sector toward more differentiated and individualised teaching methods and of the greater attention paid to actual competence and non-formal and informal learning.

Whilst there has yet to be conducted an actual evaluation of new apprenticeship able to document the effects on VET drop-out, in 2007, approximately one year after its introduction, the Ministry of Education published a handbook collecting some of the initial experiences and providing practitioners with some guidelines and ideas as to how new apprenticeship can be implemented in practice and the respective roles of pupil, school and enterprise (Jacobsen 2007). Furthermore, the most recent evaluations point to the fact that, with the requirement that students have entered a training agreement with an enterprise already prior to beginning a VET programme, new apprenticeship attracts the “stronger” students who are perceived as attractive manpower by the enterprises and who may have the general knowledge otherwise required in the basic course. In this sense, the new apprenticeship scheme may not achieve its objective of providing especially weaker students with an alternative pathway into the VET system; however it does increase the flexibility of the Danish IVET system.

1.3.2 Adult apprenticeship (2009)

The adult apprenticeship scheme (*Voksenlærlingeordning*) was initially introduced on a trial basis in 1997 and made permanent in 1999. The original objective with the scheme was to improve adults' possibilities of participating in vocational education and training, but also to provide manpower within areas with a labour shortage and expected to offer good employment opportunities in coming years.

Since its introduction, the scheme has undergone a number of revisions and enhancements, but previously with only a limited amount of resources made available each year. In practice, this meant it was opened at the beginning of each year and closed again when the money ran out. Therefore, in December 2008, a political agreement was reached to revise the adult apprenticeship scheme. This meant that, from 2009, access to a subsidy for enterprises offering a training agreement to adult apprentices within a sector with a labour shortage and/or good employment prospects without qualifications became a right. At the same time, with the new agreement the scheme was now more precisely targeted adults without vocational competences or with outdated qualifications. This was the result of an evaluation of the previous scheme suggesting that it was widely used by individuals who already had jobs and/or qualifications, thereby reducing the opportunities for those who would most benefit from participation in reskilling programmes, i.e. unskilled workers and the long-term unemployed. This evaluation showed that 43 % of adult apprentices already had already

completed some form of education or training. In fact, 7 % had completed some form of higher education. Another figure implying that the scheme had not fully been fulfilling the aim of offering an opportunity of education and training to adults who would otherwise this chance is that almost half the adult apprentices are between the minimum age of 25 and 30. As such, they are not much older than 'normal' apprentices. However, the results also clearly indicated that, in terms of overall participation levels, the scheme was a clear success. In 2007, there were 10,000 adult apprentices, an increase of 65 % on the figure in 2003 (Danish Ministry of Employment 2008).

All in all, the results of this assessment made it clear that the adult apprenticeship scheme was a qualified success, but one in need of adjustments in order to ensure that the available resources were put to the best possible use. The terms of the new agreement stipulate that only those over 25 without qualifications at a VET or higher level are eligible for the subsidy. This restriction does not apply to individuals with an obsolete qualification or the long-term unemployed.

The revised adult apprenticeship scheme will be evaluated in 2011. On the basis of this evaluation, the parties to the agreement will consider whether additional adjustments are required in order to ensure the intended target group is being reached (Danish Ministry of Employment 2009).

1.3.3 Integration and Mentoring Scheme (2006)

In August 2006 Copenhagen Technical College introduced a mentoring scheme. The aim of the scheme was to halve the drop-out rate from the basic course during the period from August 2006 to June 2008. The background was primarily the high drop-out rate among ethnic minorities (60 percent).

The mentor scheme was aimed at all bilingual students and students considered vulnerable or disadvantaged. These students were offered the opportunity to participate in the mentoring scheme. Via this scheme, the students were ensured help to find an apprenticeship and were linked to a mentor within an enterprise. Participation in the mentoring scheme was voluntary; however were a number of requirements to the students:

- they must undergo two weeks of work placement during the basic course;
- they must attend a course in writing job applications, attending job interviews and the "tacit" rules of working within a Danish enterprise;
- they must meet with their mentor regularly.

The mentors were recruited among the staff at the college on a voluntary basis. It was compulsory for potential mentors to undertake a one-day training course. The role of the mentor involved creating a network around the individual student and helping to make possibilities visible to the student. The mentor participates in meetings between the student, the mentor from the enterprise and the educational consultant when the student enters an apprenticeship contract.

The scheme was implemented at Copenhagen Technical College, which has more than 4,000 students (full-time equivalent) per year in their programmes. The scheme was co-funded by the Ministry of Education and should be seen within the context of the overall objective for the Danish education system of a 95 percent completion rate at upper secondary level.

Since its implementation in 2006, 300 students have agreed to have a mentor. During the period from August 2006 to June 2007, the drop-out rate among students with a mentor was

28 percent. In autumn 2007, the drop-out rate among students with a mentor was 16.6 percent. The result has been a fall in the college's overall drop-out rate from 40 % to 23%.

The challenges have been:

- To find mentors;
- To stay focused and maintain the enthusiasm;
- To find apprenticeships and mentors within the enterprises.

The mentoring scheme at Copenhagen Technical College is just one of many mentoring schemes at colleges in Denmark. The exact nature of these schemes differs from college to college, but they have invariably proved successful in reducing drop-out. At Århus Technical College, a drop-out rate of 50 % was reduced to zero among students with a mentor after the college trained 50 mentors. Such was the success of these initial pilot schemes that, since August 2007, all vocational colleges in Denmark are required to offer a mentor to students needing special support (Danish Ministry of Education press release 2007).

1.4 Impact of greening of economy on VET

There is little information available regarding the effects of greening of economy on the VET system in Denmark. In 2009, the Danish Government adopted a national strategy for education for sustainable development, in line with the UN Decade of Education for Sustainable Development (Danish Ministry of Education 2009a). This is a strategy for all areas of education, formal, non-formal and informal, with the overall goals:

- “To ensure that knowledge for education for sustainable development is disseminated and utilized in practice at all educational levels in the formal education system, and also to engage in special efforts vis à vis the non-formal learning environments and also – where possible – the informal learning environments.
- To strengthen the population's understanding, engagement and knowledge regarding the concept of sustainable development that simultaneously incorporates the interrelationship between economic, social, political and cultural elements, thereby ensuring qualified general debate on the subject.
- To coordinate a series of Danish educational initiatives that ensures cohesion and synergy in relation to both time and content” (Danish Ministry of Education 2009a, p. 11).

It goes on to state that:

“Since 2005, sustainable development has been incorporated in connection with the revision of goal descriptions, curricula and guidelines for primary and secondary education programmes, including also vocational education and training programmes” (Danish Ministry of Education 2009a, p. 14).

However, the more concrete initiatives listed do not directly relate to VET, primarily concerning primary and lower-secondary education.

The effects of the greening of the economy on the VET sector are considered in some of the reports compiled as part of the Ministry of Education's analysis and prognosis activities for 2009. These reports examine the competency profiles and skills needs likely to be in demand within specific sectors in the future and how VET can contribute to fulfilling this demand. The three areas examined are the windmill industry (Industrien Uddannelser 2009), the energy sector (Oxford Research 2009), and cleantech (Brøndum & Fliess 2009). In each case, the

growing focus on sustainability and environmental issues is found to result in a demand for new skills and competencies among workers. It is important that VET is able to integrate these new demands within their curricula if Denmark is to establish a position at the forefront of green industry. Of equal importance is ensuring a CVET system capable of providing further training to skilled workers within these fields to ensure that changing skills and competency requirements are met.

1.5 Other challenges for VET

As mentioned previously, the main policy challenge in relation to VET in Denmark is considered to be reducing drop-out rates in order to achieve the objective that 95% of a year group complete an upper-secondary education programme (either vocational or general) by 2015. This requires IVET to accommodate an increasingly broad and heterogeneous group including young people who, in the past, most likely would have entered unskilled labour upon completing compulsory schooling. At the same time, however, many areas of VET are becoming more and more demanding in terms of the academic requirements for students, for example in terms of language skills for an increasingly globalised labour market and IT skills to cope with the latest technological developments. These seemingly contrary demands for inclusiveness and excellence need addressing.

Another related challenge is to ensure that IVET is seen as a relevant and valid pathway among 'stronger' students. Currently, IVET would seem to be widely regarded as an option for those who struggle in school and are not considered suitable for general upper-secondary education. While steps have been taken to provide more opportunities for those with a VET background to enter higher education, there is a long way to go before IVET achieves parity of esteem.

Another problem intrinsic to the Danish dual VET system is ensuring the availability of a sufficient number of suitable workplaces for students to receive their workplace training and complete their apprenticeships. This is an ongoing struggle and particularly at times of recession or economic stagnation such as at present, these problems are accentuated. An increasing number of young people seek the relative security a vocational qualification can offer, while enterprises are less likely to feel they have the resources to offer a training placement.

In terms of CVET, Denmark is placed among the leading countries in terms of participation levels. However, ensuring lifelong learning *for all* remains a challenge if a residual group, left behind in terms of qualifications and skills suited to the modern labour market, is to be avoided. Another issue is ensuring that especially small and medium-sized enterprises invest in the education and training of their employees.

THEME 2: ECONOMIC CRISIS – VET POLICIES AS RECOVERY MEASURES

2.1 Initiatives for recovery

A combination of the government's existing policy priority that 95 % of a cohort complete some form of post-compulsory education and the sharp rise in youth unemployment levels brought about by the economic crisis is the primary driving force behind the launch so-called Youth Package and Youth Package 2 in autumn 2009 (*Ungepakke & Ungepakke 2*). These packages, which are part of the implementation of the globalisation funds (see 1.1) collect a series of policy initiatives with the aim of ensuring young people either participate in some form of education or training, or gain employment. The concrete initiatives are wide-ranging, for example including DKK 2 million (EUR 270,000) to help newly-qualified academics and DKK 20 million (EUR 2.7 million) to help young people into work after release from prison². Among the initiatives directly involving the IVET sector is a strengthening of existing mentor schemes (for further information on such schemes, see 1.3.3), increasing the flexibility of IVET, and an evaluation of IVET curricula to assess whether unnecessarily stringent demands are made on students in terms of theoretical knowledge³.

As mentioned (see 1.5), the economic crisis has resulted in a decrease in the number of training placements within enterprises at the same time as an increasing number of young people choose a VET pathway. The creation of more training placements has therefore been a focus area in responding to the effects of the economic crisis. In November 2009, an agreement was reached to allocate a pool of DKK 1.35 billion (EUR 180 million) especially to create 5,000 new workplace training placements in 2010. This will be achieved via the introduction of several measures. The measures aimed at increasing the number of training placements within enterprises are detailed below (see 2.1.1). In addition, the number of training placements within VET colleges was increased in 2009 by up to 1,500 within subjects where there is a particular shortage of placements available within enterprises. This number of additional places will be maintained for 2010, although the distribution is different, with the places spread across a wider range of VET subjects. In addition, the agreement gives municipalities and regions an obligation to create at least 1,650 new public-sector training placements in 2010 and urges central government to create 200 new placements. A direct consequence of the current economic crisis is that a greater number of apprentices lose their training placement through no fault of their own, for example if the enterprise goes bankrupt. The agreement therefore introduces initiatives aimed at helping students affected in this way to continue their training with as little disruption as possible (Danish Ministry of Finance 2009, p. 131ff).

While these initiatives focus on young people and the IVET sector, there is also considerable focus on CVET and its role in recovering from the current economic crisis. CVET is seen as playing a vital role in ensuring that both enterprises and individuals are well-equipped to adjust to changes in labour market conditions, thereby in line with the renowned Danish flexicurity model.

²http://www.bm.dk/Beskaeftigelsesomraadet/Flere%20i%20arbejde/Ungeindsats/Ungepakke%201.aspx?sc_lang=da-DK

³<http://www.uvm.dk/Uddannelse/Vejledning/Vejledningsordninger/Fra%20grundskole%20til%20videregaende%20uddannelser/Ungdommens%20uddannelsesvejledning/Regeringens%20ungepakke.aspx>

With rising unemployment throughout the labour force and not only among young people, there is some concern that certain vulnerable groups risk long-term estrangement from the labour market. Offering targeted adult education and training programmes focusing on fields expected to offer good employment opportunities in coming years and the most vulnerable groups within the labour market is seen as a key part of the national strategy for economic recovery (see 1.3.2) and simultaneously harmonious with the government's longer term globalisation strategy with its focus on lifelong learning and a knowledge-based economy (see 1.1).

All in all, the most recent agreement on adult and further education and training from November 2009 allocates DKK 46 million (EUR 6.2 million) per year for the period 2010-2012 to be used on special measures to strengthen this area. Initiatives include substantial improvements to adult guidance and counselling and the establishment of a diploma programme for CVET teachers (Danish Ministry of Finance 2009, p. 172ff).

2.1.1 Creation of additional workplace training placements within enterprises (2010)

In May 2009, an agreement was reached regarding a Training Placement Package (*Praktikpladspakke 1*) and the award of funds from the Employers' Reimbursement System (AER) to enterprises establishing new apprenticeship contracts with VET students. As described above, in November 2009 a further agreement was reached resulting in a package of measures aimed at alleviating the shortage of training placements and responding to the adverse effects of the economic crisis on the training placement situation.

One of these measures focuses on the creation of additional workplace training placements within enterprises. The restructuring in May had not shown any signs of resulting in an increase in the number of apprenticeship agreements entered into by students and enterprises, whilst AER's accounts showed an accumulated surplus of funds. The decision was therefore made to triple the amount awarded to enterprises for entering an apprenticeship contract with a VET student to DKK 50,000 per student (EUR 6,700). This higher amount is to apply for all apprenticeship contracts begun during 2010 and it is estimated it can result in an additional 1,650 training placements being created within enterprises than otherwise expected.

The entire training placement area is due to be evaluated during spring 2010. This evaluation will measure the effects of the initiatives introduced in the Youth Packages and Training Placement Package 1, as well as considering the latest trends, and form the foundation for an assessment of the need for further adjustments in policy in relation to training placements (Danish Ministry of Finance 2009, p. 131ff).

THEME 3: IMPACT AND IMPLICATIONS OF THE JOINT WORK ON EUROPEAN PRINCIPLES AND TOOLS

3.1 Impact of joint work on European principles and tools on national LLL policies and practices and VET developments

There can be no doubt that the European policy processes initiated with the adoption of the Lisbon Declaration in 2000, and further accentuated with the Copenhagen Declaration in 2002 have had an impact on the Danish VET policy. Although many of the initiatives adopted with the Copenhagen Declaration and the Education and Training 2010 Work Programme were in line with prior Danish policy initiatives, e.g. the target for completion rates at upper secondary and tertiary level, the European strategy has contributed to or rather accelerated the implementation of a national qualifications framework (NQF), learning outcomes approaches in the VET programmes and the introduction of “steps” in VET programmes corresponding with the different levels in the NQF. The European tools have gone through a transformation process at national level in which the various stakeholders have been involved and in which the tools are adapted to the Danish VET context.

The National Qualifications Framework

Since 2002, the development of a NQF has been ongoing. In tertiary education (the Bologna Process), the NQF has been fully implemented under the Law on Accreditation, whereas the NQF and the alignment with the EQF is still an on-going process when it concerns the VET programmes (which is the focal point of this report). In the first phase, the stakeholders were involved in defining the possibilities in the development of a national qualifications framework. An inter-ministerial group was set up in 2007 and during this period a number of trade committees and vocational colleges took part in pilot projects testing a NQF.

The introduction of the NQF has implied an orientation towards an output oriented system in which the learning outcomes become the pivotal point for laying down curricula (see example below). In the new regulations which became effective in 2008, the concepts of skills, knowledge and competences were introduced, so although the NQF has not been integrated into the national Law on VET yet, it is already paving its way from VET policy to VET practice.

Since 2008, the trade committees responsible for the various VET programmes have worked on placing the various programmes within the national qualification framework and drawing up learning outcomes (*kompencemål*), which should form the basis on which the vocational colleges base their teaching objectives. This work has then been approved by the Ministry of Education. The NQF has to some extent paved the way for the introduction of steps in the Danish VET system, although the social partners have emphasised that steps in a VET programme should always correspond to an existing demand in the labour market. This is an ongoing discussion in the Danish VET system where the Ministry of Education and the social partners have different interests which draw in different directions.

ECVET

ECVET is gaining ground at the vocational colleges, which are involved in international activities. Furthermore, ECVET is being introduced in a number of sectors which have initiated development projects on ECVET with the aim of improving mobility and transparency. In 2008, a number of LLP projects about the use of ECVET in mobility were initiated involving either trade committees or vocational colleges:

- The Trade Committee on Graphical Programmes, the Technical College in Copenhagen and Roskilde Technical College were involved in a partnership project aimed at developing a model for accreditation within this sector;
- The Trade Committee for Painters has been involved in a LLP project on ECVET which aimed at drawing up a proposal on how ECVET could be implemented within this sector across Europe (<http://www.uniep.org/leonardo.shtml>);
- Skive Technical College is involved in a transfer of innovation project aimed at “strengthening the integrated system between education and training in the field of adult education, with a view to getting the systems ready for innovative future changes which will be necessary to respond to ECVET” (http://www.adam-europe.eu/prj/4271/project_4271_fr.pdf).

The implementation of the ECVET is sector and school driven which offers the advantage of a bottom-up approach i.e. the tool becomes gradually relevant to the sectors and the schools, but may end up in the development of quite different practices and approaches. Although ECVET may provide transparency within the individual sector and within a Memorandum of Mutual Trust among a number of schools, it may end up becoming a complex system of different methods, concepts and approaches for the accreditation of VET programmes.

Europass

Europass is introduced and promoted in Denmark via the Danish Agency for International Education. The Europass documents are available through the Agency’s website (<http://www.iu.dk>) and it has since 2002 been promoted at seminars and meetings carried out by the agency. In 2007, the Agency drew up a report which evaluated the activities related to the introduction and promotion of Europass, and it showed that the main interest was oriented towards the Certificate Supplements whereas the interest in the other documents was modest (Cort & Rolls 2008, p. 37).

3.1.1 Example of local project implementing learning outcomes

The learning outcomes approach is at the basis of the European tools and this implies a shift in curriculum thinking from input to output. For the colleges, this also implies a change in drawing up teaching and transforming the learning outcomes as defined by the trade committees into practice. This is by no means an easy task as it requires that the teachers are able to lay down the contents, decide the methods, organise the activities, reflect on teacher and learner roles: in short that the teachers have a high level of proficiency in didactics. This shift from content to learning outcome is fundamental.

At a number of technical colleges in Jutland, teachers and school leaders have initiated a project aimed at developing the competences of the teachers to turn learning outcomes into teaching at the foundational and main course for hotel and catering. The project work implied that the learning outcomes defined by the Trade Committee were discussed and subsequently transformed into actual teaching. This process was described by the teachers as “rewarding” but also difficult as the learning outcomes were described at an abstract level and at times were confusing in use of concepts and their relation to a taxonomy level. The teachers experienced that they developed a common understanding of the trade which went beyond their own subject focus. However, they also experienced that not all learning can be described, and consequently, a risk is that teaching becomes more instrumental – teachers will teach to the objectives as these are measurable (Sørensen & Størner 2009).

In a leaflet from the National Centre for Vocational Education and Training, the shift from input to learning outcome is described as a “quiet revolution” (Sørensen & Størner 2009) through which the teachers and schools have become responsible for laying down the contents of the teaching. Although the aim is to increase transparency, the process adds to the complexity as the learning outcomes are not easily transformed into contents. They provide examples of learning outcomes and point to their abstract character:

In the regulation for the commercial foundational course [it says]:

“[...] solve commercial work tasks by drawing on knowledge about the organisation, the labour market and environmental and societal issues” (Sørensen & Størner 2009, p. 3).

Turning to the experiences from the UK, the shift from content to learning outcome is not unproblematic and Wolf has in her evaluation of the NVQs pointed to the fact that:

“[...] the short history of NVQs has also been one in which the quest for clarity has produced an ever more complex and complicated ‘methodology’” (Wolf 1995, p. 24).

The logic behind an outcome based approach is that it is possible to acquire knowledge in many different sites and, if qualifications can be described in a transparent manner, then the individual learner will be able to acquire a qualification without necessarily having to go through the formal pathway. However, evidence points to the fact that the outcome based approach may just make qualifications even more complex (Cort 2010).

3.2 Promoting geographical mobility of learners/apprentices and teachers/trainers in VET

Internationalisation is an important theme in the Danish VET policy, and since 1992, the internationalisation of VET programmes and the promotion of mobility have been on the political agenda. The Ministry of Education has initiated development projects and analyses about how to increase the international scope of the Danish VET programmes.

In 2009, the Danish Agency for International Education set up a working group to analyse how the international dimension of the VET programmes could be strengthened (Erhvervsuddannelser med internationalt perspektiv 2009). The background for setting up the working group was the new Law on VET in which it is stated that the programmes should provide students with “knowledge about international issues and knowledge as a basis for working and learning abroad”. The programmes are thus to “further the students’ international competencies in regard to employment and further education”. Internationalisation has thus become part of the legal framework for VET and the trade committees and the vocational colleges are required to set up targets for the students’ international competences. Despite the fact that internationalisation has been integrated within the Law on VET, the degree of internationalisation varies from vocational college to vocational college. At some colleges, the level of international activity is high, whereas at other colleges, it is virtually non-existent. It is thus a political priority to increase not only mobility among students and teachers in VET, but also to strengthen language teaching, the colleges’ international strategies and participation in international partnerships and networks, and not least include international perspectives in teaching (Erhvervsuddannelser med internationalt perspektiv 2009, p. 11).

3.2.1 Mobility schemes

The Danish scheme “Work Placement Abroad” (*Praktik I Udlandet – PiU*) was introduced in 1992 with the aim of offering students at vocational colleges the opportunity to take part of

their training programme abroad and have it recognised as part of a vocational qualification. In 2008, the scheme was expanded and it was made possible for vocational students to study outside of the EU and EEA countries. The PiU scheme and the EU mobility schemes constitute the main programmes for mobility; however students also have the possibility to apply for funding from the DK-USA programme and the Nordic Nordplus programme under the Nordic Council.

The number of work placements abroad is still fairly low, although the number of students who go abroad has increased from 2003 to 2007, from 1,220 to 1,851 students. On average approx. 1.5 per cent of all VET students go abroad and in this figure, some sectors are overrepresented: more students from commerce, hotel and catering, services and social and health care go abroad. Most of the students choose to study in Norway, the UK, Germany and Sweden (unpublished statistics from the Ministry of Education, Tal der taler 2009).

Figure 3.2.1.a Number of students in work placements abroad in initial VET

	2003	2004	2005	2006	2007
Number of students in work placements abroad	1,220	1,585	1,884	1,695	1,851
Percentage of students in initial VET	1.0	1.1	1.4	1.3	1.5

Compared to tertiary education, where the percentage of students going abroad is 8 per cent, the figure for VET is low and reflects partly the national character of VET qualifications and partly the student group in VET (see example below).

The number of teachers from the VET sector who go abroad has also been on a minor increase from 2003 to 2007. In 2003, 112 vocational teachers went abroad (1.5 % of all teachers). In 2007, this figure had increased to 166 (2.1 %) (Statistics from the Ministry of Education).

Figure 3.2.1.b Number of vocational teachers in work placements abroad

	2003	2004	2005	2006	2007
Number of teachers in work placements abroad	112	139	169	197	166
Percentage of teachers in initial VET	1.5	1.7	2.1	2.5	2.1

3.2.2 Example of local initiative aimed at promoting mobility

At national level, internationalisation is a political priority; however it is at local level that internationalisation and the promotion of mobility is to take place. Many vocational colleges take internationalisation seriously and work to promote student mobility in order to attain the overall political objectives. In the following, such an initiative will be outlined. The innovative aspect of this initiative is to combine guidance counselling and internationalisation with the aim of informing students who may be interested but relatively undecided in regard to going abroad about the possibilities.

At SDE College (*Syddansk Erhvervsskole*), it is possible for the VET students in the foundational course to follow an international module which aims at preparing them for a work placement

abroad (<http://sdeweb.ots.dk/SDE/site.aspx?p=1488>). The module includes help to write an application and a CV in English and to prepare the student for living and working abroad. In connection with the module which attracts 10 students among 130, the vocational college has developed a model for guidance and counselling of students who are interested, but who do not have the necessary confidence to take part in a mobility scheme. The aim is to support this group of students through targeted counselling and hereby increase the number of students in work placements abroad. In a pilot analysis of the group of “doubting” students, it turned out that among this group many of the students have never been abroad and are closely attached to their home environment. In order for this group of students to become more mobile (even nationally), it is important to offer support and knowledge about the implications of a work placement. The main aim of the guidance strategy is to expand the students’ life space (Peavy, 1998).

THEME 4: STRENGTHENING THE LINKS BETWEEN VET AND THE LABOUR MARKET

4.1 Identifying and anticipating skill needs

See 4.2

4.2 Integrating skill needs of the labour market into VET provision

The Danish VET system has a longstanding tradition for strong links to and cooperation with the social partners and the labour market. In IVET, the dual training principle means that strong links are established between enterprises and VET providers, encouraging the integration of learning with working. A dynamic and close cooperation between the various stakeholders is considered a vital prerequisite if the dual system of training is to function effectively and to continue to develop in accordance with changes in labour market needs. Similarly, cooperation is necessary to ensure the availability of the required number of enterprise-based apprenticeship contracts, an area which continues to be problematic. Within CVET, the flexible provision of short competence-based courses adaptable to the specific needs of the enterprises indicates a demand-led system. The social partners have a considerable influence in the running of VET institutions, both through locally anchored training committees involved in developing local education plans, through trade committees which set the objectives and framework for VET within their particular sector, and through national councils which act in an advisory role to the Danish Ministry of Education in matters pertaining to VET. As such, there is a continuous ongoing dialogue between the various stakeholders with regard to ensuring VET responsiveness to labour market needs and attempting to anticipate skill needs and integrate them within VET provision. The decentralised nature of the Danish VET system allows providers a relatively high degree of autonomy enabling a rapid response to labour market changes and changes in skill needs.

Trade committees and the national Advisory Councils for Initial Vocational Education and Training (Rådet for Erhvervsfaglige Uddannelser – REU) and for Adult Vocational Education and Training (Rådet for Erhvervsfaglige Voksen og Efteruddannelse - REVE) are responsible for updating VET programmes and ensuring that they integrate the skill and competence needs of the labour market at the national level. At the regional/local level, vocational colleges, social partners and local business and industry are able to influence VET programmes so that they are adapted to the specific skills needs of local business, industry and regional development plans through the local training committees. Their main function is to provide assistance to the colleges regarding the planning of VET programme content, as well as strengthening contacts between colleges and the local labour market. Each college is attached to at least one local training committee to assist with its VET provision.

The Danish system is geared to continuously updating VET programmes so that they are in line with the skill needs of the labour market. However, it should be emphasised that the actual functioning of the system varies from trade committee to trade committee and from one region to another. There is a risk of a certain degree of inertia where the committees only legitimise VET programmes rather than contributing to skills innovation and renewal.

Returning to the national level, a new VET programme is set up after a need has been identified by one of the trade committees. They draw up a proposal containing a number of recommendations and information regarding projected job and apprenticeship opportunities, estimated intake, and analyses and forecasts regarding the skill and competence needs within

the field. This proposal is sent to the Ministry of Education which, based on the advice of REU, has the final decision as to whether or not to establish the suggested VET programme. Should the Ministry of Education decide to approve the proposal, the trade committee is responsible for outlining the objectives and scope of the programme after which the Ministry determines the financial aspects and other details before issuing a regulation describing the aim of the programme, its content, assessment, examinations, etc.

Due to the traditional ties between the various stakeholders, policy progress since 2002 in identifying, anticipating and integrating skill needs of the labour market into VET provision has largely been a case of tweaking and fine-tuning the existing structures and mechanisms as opposed to introducing extensive reforms. Much of this fine-tuning has been conducted on the basis of the conclusions presented in a report compiled by The Committee for Future-Proofing VET [*Udvalget om fremtidssikring af erhvervsuddannelserne*] and commissioned by the Danish Ministry of Education on future-proofing VET (Danish Ministry of Education 2006). The following new initiatives can be mentioned:

- The possibility of appointing special development committees [*Særlige udviklingsudvalg*] when necessary able to perform some of the tasks normally carried out by the trade committees. This can ensure necessary reforms are carried out and counter the aforementioned risk of inertia within existing VET programmes. Likewise, it can help in cases where a need has been identified for a new VET programme outside the jurisdiction of the trade committees.
- Stronger ties between the trade committees' identification and anticipation of skill needs and central analysis and prognosis activities. Grounding skill needs identification and anticipation within the results of relevant research can qualify the foundation for developing the structure and content of VET and thereby supplement the work carried out in the trade committees and national councils. In 2008, a Central Analysis and Prognosis Unit was established by the Ministry of Education, coordinating efforts within this area (see 4.2.1).
- Within CVET, the 13 newly established Adult and Continuing Education and Training Centres [*Voksen- og Efteruddannelses Centre* or 'VEU centres'] have the identification and integration of skill needs as one of their five primary functions (See 4.2.2).

4.2.1 Central Analysis and Prognosis Unit (2007)

The objective with establishing the unit was a systematic identification of the need for new VET programmes as a response to new areas of employment and an ongoing responsiveness to skill needs in the form of adjustments to VET. A total of DKK 15 million (EUR 2 million) was made available for the period 2007-2009 in the form of a pool. Legislation was at the same time implemented requiring the trade committees to submit an annual development report to the Ministry of Education detailing labour market developments within their trade and adjoining fields, and the consequences for VET provision. As a quality assurance mechanism, 18 analysis and prognosis projects were launched and funded in 2008. These projects resulted in 18 reports published in April 2009 containing a wide array of recommendations. The Ministry of Education has given the trade committees the task of considering and, when relevant, implementing these changes. Their deliberations in this regard were included in the annual development reports for 2009 and implementation is expected to occur from 2011.

The trade committees' own skill needs identification and anticipation work as presented in their development reports has likewise resulted in a series of suggestions – 48 in all –

concerning changes to the VET system. These range from minor adjustments to recommendations that new programmes are created and existing programmes abolished.

Overall, the Ministry of Education's internal evaluation of the effectiveness of the initiative finds that it has resulted in an increase in the trade committees' focus on dynamic development of the VET sector, while the long-term effectiveness in terms of skill needs identification and anticipation can not yet be assessed.

Source: Danish Ministry of Education 2009b, section 4.4.3

4.2.2 VEU Centres (2010)

On the 1st of January 2010, a comprehensive reform of the adult education system resulted in the establishment of a national network of 13 VEU centres for adult and continuing education and training. This involves existing institutions within both general and vocational adult and continuing education and training in a particular part of the country cooperating with each other. The objective is to improve the flexibility and effectiveness of adult education. Guidance efforts - targeted both individuals and enterprises - will likewise be concentrated within the VEU centres.

On the basis of the legislative changes introduced, the following five main fundamental tasks have been identified for the VEU centres:

- Improving transparency for users about adult education options;
- Assisting in coordinating the work of CVET providers in marketing programmes to enterprises and provide coordinated guidance and consultancy to local enterprises and workers covering all relevant institutions within the region;
- Managing other relevant tasks for the institutions within the centre, public authorities, and social partners which can assist in coordinating and improving the institutions' provision;
- Managing administrative functions related to the institutional cooperation;
- To identify skill needs and coordinate and initiate analysis in order to fulfil the demand for education and training from both individuals and enterprises.

In relation to the last of these tasks, which is the most relevant in terms of identifying, anticipating and integrating skill needs, the role of the VEU centres is elaborated:

- Providing an overview of existing knowledge about labour market requirements for adult and continuing education and training;
- Identify areas where there is a need for analyses of skill needs and coordinate this work;
- Develop methods and tools for identifying skill needs and ensure knowledge and experiences are shared between institutions;
- Collaborate with local and regional stakeholders in identifying and anticipating needs for adult and continuing education and training.

At present, it is far too early to assess or even predict the success or otherwise of the new VEU centres in achieving the goals set out.

Source: Danish Ministry of Education 2009c

4.3 Involving labour market actors in VET

The involvement of labour market actors is intrinsic to the very concept of VET in Denmark (see 4.2). Employers and employee organisations are equally represented within the national trade committees, playing an advisory role regarding the structure and content of VET. The social partners are also represented on the Advisory Councils for IVET and CVET and on the local training committees and are as such represented in the decision-making processes at different levels, from national education policy to course content and structure at the institutional level. Enterprises are, of course, directly involved in the provision of workplace training to apprentices.

As such, the involvement of labour market actors in VET system development, governance and management long predates the Copenhagen process and this has therefore not been a policy priority during the period covered by this report.

4.4 Promoting workplace learning

Workplace learning/apprenticeship is an integral part of the Danish VET system. The dual system means that students spend 2/3 of their time in an enterprise where they receive practical training and experience within their chosen profession. Within the CVET sector, learning is also an integral part of many individuals' working lives – in 2006, 26 % of the Danish labour force in the 25-64 age group had participated in some form of adult and continuing education and training during the four week period prior to being surveyed. This can be compared with an equivalent study conducted in 2003, where the figure was only 14 percent (Danish Ministry of Education 2008a, p.115).

There have been extensive reforms to the apprenticeship area within both IVET (new apprenticeship, see 1.3.1) and CVET (adult apprenticeship, see 1.3.2). These reforms further improve the opportunities for workplace learning within VET.

In addition, initiatives have been taken to further improve the co-operation between IVET providers and enterprises, largely on the basis of the conclusions presented in the report *Future-Proofing VET* (2006). Partnerships between colleges and local enterprises are encouraged as a way of promoting mutual understanding and ensuring coherence in the dual training programmes offered to pupils. Such partnerships can be more tangible than the existing local networks, setting concrete objectives in terms of the structure and content of education and training periods within the college and the enterprise.

Partnership initiatives between VET colleges and enterprises are an attempt to tackle one of the central problems within the Danish dual VET system; i.e. a disjuncture between students' learning in the classroom and in the workplace. Ensuring the cohesiveness within VET programmes is essential and an area of further efforts.

Another key issue with the Danish system is ensuring the supply of a sufficient number of suitable training placements within enterprises. As outlined previously, the current economic crisis has heightened this issue, and the creation of training placements has moved to the top of the policy agenda (see 2.1).

4.4.1 Validation of knowledge, skills and competences acquired through learning at the workplace

A legal framework has been implemented for the assessment and recognition of skills and competences acquired through non-formal or informal learning. It is the stated goal of the Danish Government that: "All forms of education and learning should be based on and build on

the knowledge, skills and competences of individuals. In adult education and continuing training, new and improved opportunities shall be created promoting visibility and recognition of an individual's prior learning" ("Danish Ministry of Education 2007a, p. 9).

Assessment of prior learning now constitutes a compulsory element of student intake within VET and is taken into consideration in the compiling of personal educational plans. The VET colleges are responsible for the assessment of the prior learning of applicants.

A legal framework for recognition of prior learning within the CVET sector was introduced in August 2007 (The Act on Recognition of Informal and Non-Formal Learning). The programme IKV (individual competence assessment) in AMU (labour market training programmes) hereby replaced the previous programme IKA (clarification of individual competences) in AMU with the goal of improving adult participation rates in adult and in-service training and responding to labour market demands. In conjunction with the introduction of this new framework, a report was produced mapping the previous activities of institutions in assessing students' prior learning. The report found that only a few institutions offered satisfactory levels of individual competence assessment, something which they would have to improve as IKV in AMU guarantees citizens the right to an assessment of prior learning. Whilst this assessment was previously only used in compiling a personal educational plan, it can now also result in documentation, in the form of a certificate, that the individual has actual competence equivalent to an entire or part of a labour market training programme (Carøe & Bottrup 2007). These changes make new demands on the institutions which are to carry out the validation in terms of stringency, quality and reliability in their assessments.

The reforms have been accompanied by a national campaign, including television programmes, informing of the new opportunities for validation of prior learning. As detailed below, it is central to the Government's policy that the process of documenting prior learning is made easily accessible (See 4.4.2).

As part of these reforms, quality assurance mechanisms are being introduced and a system is being established securing the individual's right of appeal in relation to their personal assessment of prior learning. Whilst non-formal or informal learning can provide access to education or replace more formal learning, thereby reducing study time, it is considered essential that this does not result in a weakening of the standards of quality. Steps are being taken to develop validation methods and provide practitioners with guidelines and best practice examples, resulting in 2008 in a handbook on individual competence assessment (Danish Ministry of Education 2007b). The recognition of prior learning within other areas of the education system has been identified as a field in need of further development.

4.4.2 My Competence Portfolio (2007)

My Competence Portfolio is a tool developed by the Danish Ministry of Education as a simple and accessible method for the individual to document skills and competences acquired through non-formal or informal learning. The aim is to provide an overview of the individual's skills and competences, regardless of whether they were acquired through formal education, workplace experience or leisure time activities. This portfolio can then be used in conjunction with validation of prior learning when embarking upon a CVET programme; when compiling a personal educational plan for participation in continuing training; or when looking for a new job. The tool is freely available online and in paper form.

My Competence Portfolio is part of the Government's strategy to improve processes of recognising and validating skills and competences, and, alongside the introduction of standardised complaint procedures, it can help make these processes more transparent and accessible to users.

There has not yet been conducted an assessment of the impact of My Competence Portfolio and there are no available figures on the number of users. For the tool to be successful, it is important that it is successfully integrated into the validation process conducted at the institutions. One potential obstacle is that, without proper guidance, certain groups may understate or struggle to fully document their actual skills and competence. Although usage of the tool is entirely voluntary, when a competence portfolio is available, it is likely to play a significant role as institutions struggle to get to grips with the new requirements concerning individual competence assessments. At the same time, these same groups are likely to be the least well-equipped to take advantage of the new complaint procedures. As new guidelines are produced regarding IKV in AMU, however, it will be possible to implement safeguards ensuring that the tool remains a resource and does not negatively affect the opportunities of any users. For further information, please check the following website: <http://www.minkompetencemappe.dk/Default.aspx>

THEME 5: ADDRESSING EQUITY, SOCIAL INCLUSION AND ACTIVE CITIZENSHIP

5.1 Addressing equity in VET

In Denmark, all young people with 9 years of compulsory schooling have access to the basic courses within the VET system, although a few programmes for which the job prospects are bleak have admission requirements. However, access to the main course requires that the students enter an apprenticeship contract with an enterprise. This contractual relationship is regulated by the market, i.e., the enterprises employ people on the basis of their qualifications, but also on often tacit assumptions about gender, ethnicity, age, etc. Studies show, for example, that enterprises often choose *not* to employ people from ethnic minorities, assuming that it will be difficult to integrate them into the workplace, that they will provoke conflicts or that there will be other problems with regard to these groups. The general economic upturn for much of the last decade was favourable in terms of increasing the number of apprenticeships available. In many areas supply outweighed demand which went some way towards concealing these issues. However, as detailed elsewhere (see 2.1), the economic crisis has led to a sharp decrease in the number of available training placements within enterprises as well as an explosion in unemployment levels among young people in particular. As a result, measures to ensure equity in VET, and that a large group with a disproportionate representation from certain vulnerable groups within society do not become increasingly estranged from the labour market, have once again become a focus within Danish VET policy.

Ethnic minorities in particular have been the subject of a considerable number of initiatives, such as the introduction and spread of mentoring schemes (see 1.3.3). The majority of these initiatives have been concerned with reducing drop-out levels among ethnic minority IVET students as part of the government's overall 95 % objective with drop-out levels among ethnic minorities are considerably higher than among ethnic Danes⁴. As such, improving equity and social inclusion may be considered potential positive side-effects more than primary policy objectives.

Another policy objective related to equity and social inclusion is improving the parity of esteem between VET and general education. Approximately 35 percent of a youth cohort currently chooses to enter a VET programme, and this figure has actually remained fairly stable during the last decades (Danish Ministry of Education 2008a). However, the trend is towards stronger students choosing general education over vocational education and training with IVET regarded by many young people as a second-rate pathway intended for those unable to cope with the demands of general education, and this is a trend which the government would like to see reversed.

In order to understand policy progress since 2002 in achieving this goal, it is necessary to mention a wide-ranging reform of the IVET programmes which took place in 2000. This reform led to increased individualisation, flexibility, and modularisation of the basic courses within the programmes. One of the objectives was to make it possible for strong students to fast-track basic course and improve access from VET to higher education. For weaker students, the idea was that they could spend more time within the basic course to acquire the necessary competences to continue within the main course.

⁴ Approximately 60 % of all young people with an ethnic minority background enrolling in VET drop out (Cort 2008a, p. 36).

Subsequent analyses have shown that the reform did not achieve its objectives, especially in regard to the weaker students within the system. The reform took individualisation and modularisation too far, dissolving the highly important student communities and the sense of belonging to a community. In a sense, the reform increased the inequality of the system by focusing too much on students' responsibility for their own learning, the ability to choose among different modules and to build their own VET programme. Instead of reducing dropout, the reform led to an increase in the overall drop-out rate, with weaker students struggling with the greater responsibilities resulting from individualisation and modularisation and subsequent reforms have tried to remedy this situation by introducing alternative routes through a VET programme aimed especially at "practically oriented" students such as partial or step by step qualifications and a practical one-year introduction course, as well as *new apprenticeship* (see 1.3.1).

The twin objectives of raising VET's overall parity of esteem in order to attract students who would otherwise choose general upper secondary education, and at the same time making VET one of the main mechanisms for including the weakest 10 per cent of a youth cohort within the education system and the labour market poses the question: Is it possible to improve parity of esteem and at the same time make the system "all-inclusive"? The inclusion of weak students may lead to a lower proficiency level, lower quality, and hereby lower status of VET in the overall education system. The central dilemma is how to meet both objectives and position VET as a more attractive pathway into both the higher education system and working life. This is an issue which needs to be addressed.

In the following, the amendments to the Act on Vocational Education and Training are briefly outlined in order to provide an overview of the changes which relate to equity and social inclusion within IVET:

Act no. 448 2003

In August 2003, the IVET programmes were adjusted with regard to vocational proficiency and flexibility. The act emphasised the issue of creating a more inclusive system. The programmes were to be flexible enough to be able to include both the trainees who want additional qualifications, by ensuring access to further and higher education, and the trainees who want a partial vocational qualification. The amendment therefore specified that personal education plans should be based on an assessment of prior learning (both formal and informal). This had previously been available to adults in CVET via the individual competence assessment (Grunduddannelse for voksne – GVU), but in principle, all participants in VET should now be assessed individually upon entering the system, and have their formal, non-formal and informal qualifications recognised and taken into consideration when drawing up their personal education plan, which stipulates their pathway to a VET qualification.

Act no. 1228 2003

In December 2003, another amendment to the Act on Vocational Education and Training was adopted. The aim was to renew the dual training principle, and offer especially weak learners the possibility of shorter, more practically-oriented training programmes by establishing partial qualifications in existing VET programmes. Act no. 1228 also focused on increasing the number of training places available and limiting access to the compensatory practical training scheme at the vocational colleges.

Act no. 561 2007

In June 2007, a more comprehensive amendment to the Act on Vocational Education and Training was adopted. One of the major changes was the inclusion of the agricultural and

social and health care programmes under the same act as the commercial and technical programmes. The objective was to make the IVET system simpler and more coherent.

The driving force behind this act was the overall political goal that, by 2015, 95 % of a youth cohort should complete a youth education programme. This goal has led to a number of adjustments to the last major reform implemented in 2000. The changes encompassed both structural and pedagogical changes. In regard to improved access and equity, the following changes are relevant:

- The colleges were obliged to develop “basic course tracks”, i.e. specially designed courses aimed at less qualified trainees who may have additional needs such as improving language skills and knowledge of Danish culture. The colleges may develop the basic course tracks together with other institutions in their geographical area, e.g. production schools or language schools. Based on the APL assessment taking place during the first couple of weeks at the college, the basic course should be adjusted to the individual trainee’s needs;
- To ensure that the system is inclusive enough to attract both highly qualified and less qualified trainees, streaming was introduced. All basic subjects are provided at different levels (F to A) and streaming offers the opportunity for the individual trainee to choose a suitable level. For the proficient trainees, streaming provides the possibility of choosing higher levels than those which are compulsory and thus qualifying themselves for further or higher education;
- It is underlined that a major challenge is creating a better match between trainees’ wishes and companies’ need for labour in order to provide a sufficient number of suitable training placements. In particular, it is necessary to provide more apprenticeships for students from ethnic minorities as this group still constitutes the majority of the applicants who do not obtain an apprenticeship (Cort, 2008a).

In terms of CVET, equity and social inclusion are elements in the Danish Globalisation Strategy which provides the framework for CVET policy (Danish Government 2006a; 2006b). Here, it is underlined that:

Denmark is one of the countries where the percentage of people participating in adult education and continuing training is highest. And Denmark is the best country at getting persons with little formal education and people with literacy problems involved in such education and training. However, the low-skilled and those with literacy problems participate less in adult education and continuing training than other groups. They are also the ones least motivated to participate. And they are prioritised less by companies. Nor are the courses available sufficiently tailored and attractive to this group (Danish Government 2006a, p. 34).

The objective of improving the CVET opportunities for vulnerable groups such as the low-skilled and those with literacy problems forms part of the backdrop for the new reforms of the CVET sector; restructuring labour market training and adult education within a national network of 13 VEU-centres (see 4.2.2). It is likewise a motive for the introduction of a legal framework that has been implemented for the assessment and recognition of skills and competences acquired through non-formal or informal learning (see 4.4.1), reforms of the guidance system (see 5.2) and the improvements to the adult apprenticeship initiative (see 1.3.2). Migrants are offered a course in labour market Danish (*arbejdsmarkedsdansk*) to aid their integration within the Danish labour force and improve their opportunities of finding work or participating in further CVET.

5.1.1 More 15-17 year-olds under education or in work (2010)

The most recent national Budget (Danish Ministry of Finance 2009) sets aside resources specifically aimed at improving participation in education or the labour market among early school-leavers. This is part of the overall 95 % policy objective. It is pointed out that young people who fail to get started immediately after completing compulsory education are more likely to become estranged from the education system and labour market in the long-term. These problems are magnified by the economic crisis and growing youth unemployment.

There is talk of a series of initiatives, predominantly implemented at the municipal level. Among these concrete initiatives, the following relate particularly to VET:

- All 15-17 year-olds are under an obligation to follow an 'individual education plan' (*uddannelsesplan*). The local authorities are to monitor the fulfilment of individual education plans and are obliged to offer the young person relevant educational and training options.
- Augmentation of guidance efforts assessing young people's readiness for education and training: this is to address the problem, particularly prevalent within IVET, that young people drop-out prior to or during the first two months of a programme. Students wishing to enter general upper-secondary education have previously been assessed in terms of their 'suitability'; such an assessment is to be broadened to other areas of youth education. It is underlined that the principle that all young people are entitled to IVET is not broken. Instead, there is a possibility of delaying the intake of young people deemed 'not ready' until they have fulfilled certain criteria⁵.
- A review of the competency objectives (*kompetencemål*) within IVET programmes to ensure they are not unnecessarily overly academic, including whether some of the currently obligatory subjects should be made optional. The results of this review will be discussed with the trade committees in order to ensure that any changes properly reflect the skill needs of the labour market. VET colleges are also to improve and extend streaming.
- The creation of flexible IVET programmes for stronger students wishing to combine VET with a qualification providing access to long-cycle higher education. A considerable group of young people currently complete two different youth education programmes. New pathways are to be established in order to ensure students can receive qualifications which can give them a broad array of options in order to avoid wastage.

All in all, DKK 510 million (EUR 68 million) has been set aside for the initiatives in this area between 2010 and 2012. These initiatives form part of the broader policy for young people, including initiatives to increase the number of available workplace training placements within enterprises (see 2.1.1). There will be performed an evaluation of the effectiveness of the combined package of initiatives targeting 15-17 year-olds at the end of 2012.

Source: Danish Ministry of Finance 2009, pp. 103-118.

5.1.2 Special introductory courses within IVET and a more practice-based introductory course (2007)

The initiative was introduced in order to provide specially structured introductory courses to IVET for selected target groups. It involves VET colleges assessing the individual student's competences prior to enrolment in a programme and the introduction of the practical elements of the programme at an early stage in the introductory course. The primary

⁵ This does not apply to young people who have already entered into an apprenticeship contract with an enterprise.

objectives were the construction of a vocational identity among students and a reduction in drop-out rates.

The initiative was part of the broad agreement on the implementation of the globalisation funds and a total of DKK 126 million (EUR 17 million) was allocated for the period 2007-2009. It has resulted in the establishment of introductory course packages reflecting the diverse requirements of the student population, whether they already have an apprenticeship contract, want to gain access to higher education, or need stability and a supportive social framework.

Colleges are required to offer and publicise a range of special introductory course packages. An evaluation conducted by the Danish Evaluation Institute (EVA) found that the implementation is underway at the institutional level and that there is considerable variation between colleges and subject areas. The main findings were that:

- 72 % of basic courses have established course packages for students in need of academic support, e.g. more practice-based courses;
- Roughly half the basic courses have established course packages for students needing to develop their personal competences, e.g. their readiness to study;
- 25 % of basic courses have established course packages for students wishing to go on to higher education, and 20 % for students with work experience;
- 9 % of basic courses have established course packages for bilingual students.

The variation in the spread of introductory course packages is considerable with less than one in four students following a course package at 27 % of basic courses, while more than three in four students are following a course package at 31 % of basic courses.

Another result of the initiative has been that colleges are now required to perform an assessment of the student's competencies within two weeks of entering the basic course. It is on the basis of these assessments that students are offered a suitable course package.

While it is too early to assess the long-term effects in terms of reduced drop-out, preliminary surveys of VET college teachers and heads show that the initiative is widely considered a success.

Source: Danish Ministry of Education 2009b, section 4.2.1

5.2 Support services for groups at risk

The Danish guidance system was the subject of a major reform in 2004, including the establishment of new guidance centres. The Government has described the goals with this reform as follows: "It is the government's objective that guidance at all levels of the education system should provide the young person with a qualified basis for choosing an education that is in agreement with his/her own wishes and abilities and with society's need for a qualified workforce. The guidance is to contribute to strengthening bridge-building between the educational levels" (European Commission 2007, p. 9ff). In addition, a new guidance framework for adults and enterprises was implemented in 2007-2008 with the stated objective of helping to strengthen and qualify demand for further education and training amongst both employees and enterprises. In order to achieve these goals, the reforms have been developed and implemented whilst maintaining a close dialogue with the various stakeholders.

The guidance system in Denmark, following these reforms, consists of 45 municipal youth guidance centres focused on the transition from compulsory schooling to youth education or the labour market; seven regional guidance centres responsible for the provision of guidance

concerning the transition from youth education programmes to higher education; and the concentration of adult vocational/career guidance services within 91 job centres. In addition, 22 local adult guidance networks have been established as part of the Government's strategy for creating a coherent crosscutting guidance system able to respond to the needs of society and the labour market. The 13 new VEU centres (see 4.2.2) will also offer guidance to adults regarding the options available for adult education and CVET within their area.

A focus area for the Danish guidance strategy is the concentration of guidance efforts on those with special educational needs in order to prevent dropout and ensure as many as possible complete some form of higher secondary education. Guidance is provided at an earlier stage of compulsory schooling than previously so as to be able to offer counselling and advice to young people struggling with school. Likewise, 40 million DKK/year (EUR 5.4 million) has been allocated to establishing a permanent corps of Preparatory Adult Education (*Forberedende VoksenUddannelse* - FVU) outreach consultants and to improving guidance and counselling for those groups with the greatest obstacles to participation in adult and in service training. These consultants are to actively approach enterprises and inform about the opportunities for literacy and numeracy training for employees making it possible to reach a greater proportion of small and medium-sized enterprises. The consultants work in cooperation with the outreach efforts of institutions offering VET.

Improvements have also been made regarding the qualifications of practitioners and the methods implemented for evaluation and quality assurance of practice with the objective of improving the professionalism of guidance services. Guidance practitioners are now required to complete a diploma programme in educational and vocational guidance or document equivalent competences through prior learning. A professional bachelor degree in education and vocational guidance has also been established. A system for quality assessment within the guidance system has been developed and in May 2008, a national centre for competence development was established, whose role, among other things, is to collect knowledge and produce new knowledge regarding adult guidance, including an evaluation of the adult guidance networks.

Other than guidance and counselling, the strengthening of the mentoring scheme (see 1.3.3) constitutes an important element of Danish efforts to improve support for groups at risk.

5.2.1 Amendment of the Act on Guidance in Relation to Choice of Education, Training and Career (2007)

The amendment is the result of an assessment carried out by the Danish Evaluation Institute (EVA) of the 2003 guidance act. This act concerns the provision of youth guidance focusing on the transition from compulsory schooling to youth education in support of the Government's goal that at least 95 percent of young people should complete a youth education programme by 2015. The amendments stem from the recommendations found in EVA's report. They include targeting guidance efforts towards young people considered unlikely to commence or complete a youth education programme; provision of educational and vocational guidance at an earlier stage of compulsory schooling; the introduction of bridge-building schemes; new requirements regarding the qualifications of guidance practitioners; and an obligation for municipalities to extend their outreach services to all young people under 25 not currently enrolled in or yet to complete a youth education programme.

The amendments make new requirements to youth education institutions, guidance practitioners, and municipal youth guidance centres. As well as being a central element of the Government's strategy to increase participation in youth education programmes, the

amendments must also be viewed as part of the ongoing reforms to the guidance system as a whole, which view guidance as a continuous lifelong process key to Denmark's strategy for lifelong learning.

It is as yet not possible to assess the impact of the reforms, with the key indicator of success being the achievement of the 95 percent objective. As stated, however, the reforms are a direct result of an evaluation of the existing system of youth guidance.

One problem identified in EVA's assessment is the difficulty of defining the group of young people with a particular need for guidance. Such a definition is necessary in order to develop practice suitable to reach the target group and ensure consistency and effectiveness in guidance provision. Another obstacle is that the ongoing development of guidance initiatives and new legislation concerning the various educational sectors can result in instability and uncertainty among guidance practitioners.

5.3 Active citizenship

The idea of active citizenship is intrinsic to the Danish concept of education. This is especially true within compulsory schooling and the Danish *Folkeskole*, which can be literally translated as 'people's school'. It is also stated as one of the six overall objectives for the VET system that the system should: "contribute to the development of young people's interest in and ability to actively participate in a democratic society and contribute to their personal development" (LBK no. 1244: Act on VET 2007). This has however been part of the Danish Act on VET for many years and there have been no significant changes in this area in recent years.

THEME 6: QUALITY, EXCELLENCE AND ATTRACTIVENESS OF VET

6.1 Improving the quality of VET

Quality assurance policies within Danish VET deal with the college-based element of the dual training system – the quality of apprenticeship training within enterprises remains the responsibility of the trade committees.

Quality assurance and development have been on the Danish VET policy agenda since the 1990s. The area has undergone substantial changes in recent years where issues of national follow-up on self-evaluation systems at the vocational colleges, quality benchmarking and networking among the colleges, and indicator-based inspection have been added to the quality assurance policy within VET. The overall trend has been from a strategy focusing on local, internal self-evaluation towards a complementary strategy of national external output-monitoring. Hereby, the Danish policy follows the general trend of decentralisation-recentralisation seen within many other European Member States.

Since 2000, output monitoring has gained importance in the Danish quality approach. Whereas the period from 1990 to 2000 was marked by a bottom-up approach in which the vocational colleges were given the funds and possibilities of establishing internal self-evaluation, the period since 2000 has been marked by increased national inspection and external monitoring.

Since 2004, the role of indicators and indicator-based monitoring has increased. Six quality indicators have been drawn up by the Ministry of Education focusing on:

- test and examination results;
- completion rates;
- completion times;
- drop-out rates and times;
- transition rates to other education programmes;
- transition rates to the labour market.

Quality assurance and development are important issues in all Member States and at the European level via the development of the EQARF. However, it is necessary to evaluate the impact of quality systems in order to assess whether increased quality measures such as indicators, “value-for-money”, output orientation, etc. actually lead to better quality of the core product of VET: the learning of a vocation. It may prove to be counterproductive to quality, as too much time is consumed filling in evaluation tables, questionnaires and annual reports. A key question is, “how to achieve a balance between trust and control”? Today, quality assurance and development are to an increasing degree used as regulative mechanisms whereby the performance of vocational colleges is either rewarded or not depending on whether it meets centrally determined objectives and definitions of quality. It might be suggested that the strategies seem to have tilted too much towards control mechanisms and accountability strategies and there is a risk of losing sight of what actually constitutes quality vocational education and training in the ongoing quest to quantify quality.

6.1.1 Resource reports (2007)

The six quality indicators mentioned above were further refined in 2007 with the introduction of an annual resource report (*Ressourceregenskab*) throughout the educational system in Denmark (and therefore including all public IVET and CVET institutions) in parallel with the

annual financial report. In the resource report, college performance is documented in terms of indicators set up by the Ministry of Education. These indicators revolve around the following overall policy objectives for the education system:

Objective: High vocational quality:

Indicators:

- test and examination results;
- user satisfaction;
- student/teacher ratio and student/employee ratio;
- distribution of teacher working hours;
- teacher competences.

Objective: Education for more people:

Indicators:

- admission rates;
- drop-out and completion rates;
- practical training places;
- company outreach;
- resources used to prevent dropout;
- student participation rates.

Objective: Strong, development-oriented educational institutions

Indicators:

- competence development;
- exchange visits;
- development projects and external networking and cooperation.

Objective: Efficient management

Indicators:

- productivity;
- key figures;
- distribution of costs;
- management evaluation and employee satisfaction;
- staff turnover;
- absence rates.

The aim of the annual resource report is to provide a documentary basis for managing the quality of the VET system and to simplify the present documentation requirements for the vocational colleges. The annual resource report also facilitates a systematic benchmarking of the colleges and documents the relationships between input, process, output and outcome. Whilst the main focus of the annual resource report is on output, the report also includes more descriptive elements so that colleges can describe the relationship between their quality strategy, activities, context and output.

The annual resource report facilitates the ability of the Ministry to monitor education and training. It makes it possible to focus on specific priority areas such as completion and dropout, and the efforts of the colleges to tackle these issues. The annual resource report has to be seen as the next step in the Danish quality strategy within VET and a method to meet the demands of collecting and systematising data which are of relevance to the continuous development of the Danish VET system (Cort, 2008b).

As such, it is obvious that quality assurance and development to an increasing degree are used as regulative mechanisms whereby the performance of vocational colleges is either rewarded or not depending on whether it meets centrally determined objectives and definitions of quality.

6.2 Promoting excellence in VET

Whilst the Danish Globalisation Strategy (Danish Government 2006a) includes among its objectives establishing world leading primary and lower secondary education, short- and medium-cycle higher education programmes and universities, no such target is set in relation to VET. Here the focus instead is on inclusion and completion rates.

Nevertheless, the focus on inclusiveness means that IVET should be able to accommodate not only weaker students, but also strong students. As such, the various initiatives to increase flexibility within the VET system also give stronger students the chance to exceed the mandatory levels within courses and, for example, combine elements of general upper secondary education programmes (see 5.1.1).

Similarly, initiatives to improve the possibilities of gaining access to higher education with a VET qualification (see 6.3) can help attract stronger students to IVET. In the long term, such initiatives may go some way towards improving the parity of esteem with general upper secondary education programmes by challenging the notion that IVET represents something of a dead-end. This can attract able, highly motivated and ambitious students, but as discussed elsewhere (see 5.1), would seem extremely difficult to achieve.

6.2.1 Stepped and streamed IVET (2008)

With the goal of creating an IVET system able to accommodate both strong and weak students, as well as establishing clear pathways from VET to higher education, stepping and streaming have been introduced.

This initiative has been introduced and financed as part of the national agreement on the implementation of globalisation funds.

It involves the division of VET programmes into a series of levels or 'steps', where the completion of a step grants access to the next step. Each step corresponds with a job profile found within the labour market. This enables weaker students to leave the programme at an earlier stage than was previously possible with qualifications providing access to an equivalent job, while still maintaining the possibility of returning at a later date to complete the next step. However, it also provides access to higher education, as tertiary programmes are established which form the next step upon completion of IVET.

At the same time, the subjects which comprise the programme are streamed, so stronger students can choose to take certain subjects at a higher than mandatory level, hereby improving their opportunities in terms of access to higher education.

The initiative has so far resulted in the establishment of a total of 101 steps within 69 IVET programmes, of which 23 did not previously exist. There remain 41 VET programmes not split into steps, either due to a short duration, a very small number of students, or the lack of a suitable job profile.

An evaluation has investigated the number of apprenticeship contracts at a 'step'. In 2008, the figure for programmes which have introduced a step was 10 %. It has also shown that these contracts were concentrated within a relatively small number of programmes.

The number of grades awarded within subjects either above or below the mandatory level was small and primarily found within the commercial VET programmes. However, it is noted that the results may be due to students not yet having entered the main course, with their choices thereby not yet registered.

It is therefore too early to assess the success of the initiative in fostering excellence whether in terms of attracting stronger students to IVET, allowing students to study at higher levels than mandatory, or increasing the number of IVET students who gain access to higher education.

Source: Danish Ministry of Education 2009b, section 4.4.2

6.3 Higher level qualifications in VET

Danish policy within higher education has involved amalgamation and concentration resulting in a small number of large institutions. This has applied to universities, but also in the establishment in 2008 of eight university colleges offering professional bachelor qualifications aimed directly at a specific job, for example teaching, nursing or engineering (see 6.3.1), and most recently of ten Academies of Professional Higher Education (*erhvervsakademi*). These new institutions took over the responsibility for short-cycle vocational higher education in 2009. The programmes can either be offered directly by the ten academies or by suitable vocational colleges within the area. They are also expected to form a seeding ground for professional bachelor and diploma programmes within the technical and commercial fields. They are intended to form a bridge between vocational colleges and university colleges, thereby further contributing to a cohesive education sector and to the opportunities for individuals with a VET background to gain higher qualifications. The Academies will be the subject of a major evaluation in 2013.

The objective with reducing the number and increasing the size of higher education institutions is, as well as improving administrative efficiency and exploiting economies of scale, to create strong professional environments able to make a mark on the international stage. Another objective is to help achieve the government's goal that half a youth cohort completes a programme of higher education by 2015. As such, this strategy is in keeping with the Danish Globalisation Strategy.

6.3.1 University colleges (2008)

As per 1 January 2008, all professional bachelor programmes are gathered within eight large university colleges (from 2012, this number will be reduced to seven). These university colleges have been created by merging the 17 previous Centres for Higher Education (CVU) as well as a large number of single-faculty institutions providing medium-cycle programmes (e.g. teacher training colleges).

The goal is that a lot more practically-oriented professional bachelor programmes will be provided throughout the country in ten years time than is presently the case, not least within the technical and commercial areas. In *Denmark's Contribution to the 2008 Joint*

Council/Commission Report on the Implementation of the Work Programme “Education and Training 2010” (European Commission 2007), the aims are outlined as “... to strengthen the professional standards of the education programmes and to create attractive study environments that draw and retain even more students in a challenging, stimulating environment and thus contribute to the overall goal of ensuring that at least 50 percent of all young people complete a higher education programme” (European Commission 2007). The goal is likewise to increase transparency and coherence within the sector.

The policy is implemented at the national level and forms a part of the Danish reform of the higher education sector and of the Government's strategy for Denmark in the global economy. The reform affects all institutions involved in the provision of medium-cycle higher education and offering professional bachelor programmes, with the engineering schools given a special dispensation meaning they are not obliged to become part of a university college until 2015.

6.4 Improving horizontal and vertical permeability of education and training systems

In recent years, a main objective for VET has been to turn it into an inclusive, cohesive and transparent system which should provide all kinds of learners with the possibilities of “lifelong learning”: taking partial qualifications, taking additional qualifications, returning to the system, having non-formal qualifications recognised. Key initiatives have included the establishment of a national qualification network (see 3.1.1), introducing different steps within IVET (see 6.2.1), implementing a system for the recognition of prior learning (see 4.4.1), launching a network of comprehensive adult education and training centres (see 4.2.2), streamlining guidance services for both young people and adults (see 5.2), and establishing higher education programmes providing VET students with clear opportunities for higher qualifications (see 6.3). All of these initiatives are intended to improve the horizontal and vertical permeability of the Danish system.

IVET consists of a broad introductory basic programme which gives access to one of the more specialised main programmes. Since 2008, the basic programmes have been gathered in twelve vocational clusters, each leading to several different vocational qualifications:

1. Motor vehicle, aircraft and other means of transportation	6 programmes
2. Building and construction	15 programmes
3. Construction and user service	3 programmes
4. Animals, plants and nature	9 programmes
5. Body and style	3 programmes
6. Human food	11 programmes
7. Media production	7 programmes
8. Business	8 programmes
9. Production and development	30 programmes
10. Electricity, management and IT	7 programmes
11. Health, care and pedagogy	4 programmes
12. Transport and logistics	7 programmes

Source:

<http://www.eng.uvm.dk/Uddannelse/Upper%20Secondary%20Education/Vocational%20Education%20and%20Training.aspx>

This eases the process of switching between programmes for students, as well as allowing them some time to gain an overview of the options within a particular field before deciding upon a specialisation. There can in some cases be particular requirements regarding grades, but otherwise, the 'only' limitation upon the student when selecting a specialisation is that he or she has a suitable apprenticeship contract (of course, this limitation can be considerable bearing in mind the shortage of training placements).

6.5 Teachers and trainers

The education and training of VET teachers is currently in the process of reform. From August 2010, the current professional teacher training programme will be replaced by a diploma degree programme in vocational pedagogy. This raises the qualification level of VET teachers with all newly-employed IVET and CVET teachers now required to complete the new teacher training programme. The programme will consist of six modules and a total of 60 ECTS points. The first two focus on the planning and teaching of lessons. There is a module on the theory of science, two elective modules and a final project. It will be offered as a part-time course and must be completed within a period of six years. The course will be offered by the National Centre for Vocational Pedagogy (NCE), which is part of the Metropolitan University College, and by VIA University College.

Perhaps the biggest difference between the new training programme and the existing one is that it is not a sandwich course. Practical training will no longer be an integral part of the training: the diploma programme is an exclusively theory-based education. Workplace training is no longer compulsory; instead, it is left up to the VET colleges to provide practical training and guidance for their employees. This change is considerable as competence development of teachers in VET has previously to a high degree focused on on-the-job learning and tailor-made training provision.⁶

While this initiative can help professionalise the teaching abilities of VET teachers, there is a risk that the diploma programme will form a barrier for the more practically-minded. This can represent a problem as the majority of potential VET teachers, particularly in the traditional craft subjects, have a primarily practical background and the increased amount of theory may deter them from entering teaching.

At the same time, there are no requirements made of VET trainers within the workplace. In other words, VET students spend a considerable proportion of their time learning within an environment where their trainers may not have any pedagogical qualifications or teaching whatsoever. There would seem to be a certain amount of dissonance between the growing demands made of teachers within VET colleges in terms of pedagogical qualifications and the lack of such requirements within enterprises which can contribute to increasing the gulf between VET students' experiences in college and at their training placement, theory and practice.

6.5.1 Continuing training of VET teachers (2008)

Policy regarding the professional development of VET teachers forms part of the Danish globalisation strategy. The goal of improving the quality of VET and an increasingly heterogeneous student population result in increasing demands on the abilities of VET teachers. For the period 2008-2009, DKK 165 million (EUR 22 million) was set aside for the further training of VET teachers as part of the implementation of the globalisation funds.

⁶ See <http://delud.dk/>

Documentation provided by VET colleges indicates a significant increase in professional development activities among VET teachers in 2008 compared to the figures for 2007 - in fact, the figure for 2008 was double that for 2007.

An evaluation has shown a roughly equal spread between activities regarding the vocational subject itself and activities regarding teaching. Teachers from technical colleges were found to prioritise continuing training activities involving vocation-specific knowledge and skills, while there was a greater balance among teachers from business colleges, agricultural colleges, and social- and healthcare colleges.

Teachers at social- and healthcare colleges were the most likely to participate in diploma programmes, while teachers from the other three college types were more likely to participate in activities arranged by their colleges. Training within an enterprise was found to be rare among all four groups.

In terms of effect, a survey of teachers showed that 75 % that they had benefitted from their participation in continuing professional training activities and two thirds that their participation has directly influenced their teaching practice.

It is suggested that further efforts are required to improve follow-up initiatives helping teachers to relate what they have learnt to their everyday teaching practice.

Source: Danish Ministry of Education 2009b, section 4.1.1

6.5.2 Training of mentors

Mentoring within the VET programmes has the overall objective to support the students and to avoid dropout. During the last couple of years, the vocational colleges have experimented and developed different kinds of mentoring schemes (see 1.3.3 for an example of a mentoring scheme). The Danish Institute for Educational Training of Vocational Teachers (now the National Centre for Vocational Pedagogy (NCE)) offered a number of courses aimed at supporting the ongoing work at the colleges.

The courses were provided by the Institute at its 3 regional offices. Three courses or seminars were provided:

- A basic course for new mentors;
- Five thematic seminars for experienced mentors who want to develop their competences;
- A seminar aimed at mentors who are to supervise colleagues and train new mentors.

Mentoring is an important element in the achievement of the overall objective of a 95 percent completion rate, and is a compulsory element for vocational colleges to introduce. Assessments of local initiatives show good results, however mentoring has not been evaluated at a national level.

The teacher role is proliferating and many new roles and functions are being added. Mentoring is a new function which some of the teachers are to perform. A central question which could be relevant to address is: how many functions is it possible to add before the “core” professional identity of the teachers starts to be diluted? Maybe there is a need to re-think the vocational college as an organisation, existing positions within this organisation and professional demarcations.

THEME 7: ENHANCING CREATIVITY AND INNOVATION

7.1 Creativity, innovation and entrepreneurship in VET

Innovation and entrepreneurship are expected to be key competence needs within the labour market and must therefore be integrated throughout the educational sector, including VET. As part of the most recent reform of the Act on VET, (Amendment no. 561), passed in 2007, innovation and entrepreneurship were introduced to the VET legislation in a new and central role (LBK no. 1244: Act on VET 2007). The six primary objectives for VET now include the following additions:

“...offer young people an education which provides a foundation for their future working life, including the establishment of independent enterprises”

And **“...meet the labour market’s demand for vocational and general qualifications as assessed with consideration for the professional and societal development, including the development in terms of vocational structures, labour market conditions, workplace organisation, and technology, as well as for an innovative and creative workforce”**.

These objectives are elaborated in the description of the content of college-based teaching:

“... providing students with competencies aimed at innovation and independent enterprise [...] Colleges must offer students lessons in innovation and starting independent enterprises...”

These changes reflect the central role afforded innovation and entrepreneurship within the Danish Globalisation Strategy. Innovation is regarded as central to Denmark’s ability to compete in the global market and entrepreneurship is considered vital for ensuring the development of innovative products, services and practices; a dynamic market; and economic growth. Whilst Denmark has a high rate of new company start-ups, few of these achieve a high growth rate during their first years of existence. It is the government’s goal that Denmark should be among the leading countries in this respect by 2015. One of the tools for achieving this goal is to offer courses in entrepreneurship to all VET students (Danish Government 2006a).

To this end, a series of publications have been produced by the Danish Ministry of Education offering inspiration, guidelines and examples of best practice to VET providers on how to incorporate innovation and entrepreneurship into their programmes. Approximately half the IVET programmes now include *Innovation and Entrepreneurship* as a basic subject. VET colleges are also obliged to offer teaching in starting a company, including innovation, as an optional subject. In 2008, 30 % of VET students participated in courses or other educational activities focusing on innovation and entrepreneurship.

A potential obstacle to Denmark succeeding in the overall goal of achieving a world-leading position with regard to innovation and entrepreneurship is that other countries are likely to have similar ambitions as they also adjust to an increasingly global economy and a more knowledge-based society.

7.1.1 Innovation and entrepreneurship within IVET (2007)

As part of the government’s efforts to strengthen the focus on innovation and entrepreneurship within education, a project was established with the goal of collecting experiences within a number of areas which, combined, form a foundation for innovation and entrepreneurship within VET. These areas are:

- Skilled workers should be capable of acquiring information and new knowledge and translating it to their everyday work. As such, they are expected to keep track of developments within their field and neighbouring fields throughout their working lives;
- Skilled workers should be able to understand the role of the tasks they perform within the context of the enterprise's combined activities – holistic understanding;
- Skilled workers should possess a good understanding of business, e.g. an awareness of costs and resources, and of the value of good customer service;
- Skilled workers should be flexible and willing to adapt as the rate of change and development is expected to become even faster in the future;
- Skilled workers are expected to be solution-oriented, able to think in terms of solutions and new ideas;
- Skilled workers need good communication skills, able to share knowledge with others, teach others, possess foreign language skills etc.;
- Skilled workers should be independent and enterprising, able to cope with deviations from the routine, discover problems and identify solutions.

The project resulted in a series of six publications which can be found here: <http://eud-innovation.dk/publikationer>. The project is no longer active, but the results are still available as a source of inspiration for those wishing to work with innovation and entrepreneurship within VET.

Source: <http://eud-innovation.dk>

7.2 Improving quality of teaching

Today, there is a proliferation of functions that teachers are to carry out. In a publication produced as part of the project *Innovation and Entrepreneurship within IVET* (see 7.1.1), the necessary new teacher competencies are outlined (Sørensen et al. 2008a). A vast array of competencies are listed, from creating networks and managing innovation processes from start to finish, to creating an innovative learning environment within the classroom and translating the latest developments within the professional field to relevant learning activities for students.

At the same time as the seemingly overwhelming number of roles teachers are expected to fill, there is a cry for a higher proficiency level and the development of vocational “professionalism” among VET students/participants. The question is whether the teachers are able to act as mentors, coaches, contact teachers, guidance counsellors, and consultants and at the same time ensure a high proficiency level. There may be a need for scrutinising the roles and functions of teachers in order to increase specialisation and professionalisation of the many new functions. Instead of having a “jack-of-all-trades” teacher whose professional identity may be lost in too many functions, it might be more valuable to have an organisation geared towards promoting cooperation among different groups of professionals (teachers, social workers, guidance counsellors, consultants, etc.) responsible for different functions within the VET system.

7.3 Innovation-friendly institutions

The close relationship between Danish VET colleges and the social partners (see 4.2), the decentralised nature of VET curricula with the involvement of local training committees in determining the content of VET programmes, and the partnerships between VET colleges and

local enterprises in the actual provision of VET should ensure that VET institutions are relatively innovation-friendly. However, this is more in terms of reacting to and integrating innovative practices within VET programmes. Innovation within the colleges themselves, i.e. creating innovative institutions and innovative learning environments utilising new and experimental teaching methods, is another matter, and one which is largely unexplored. The expansion of continuing professional development initiatives (see 6.5.1) could be one way of introducing new teaching methods and approaches into VET. Meanwhile, the funding of a series of experimental and development projects (*FoU projekter*) by the Ministry of Education has stopped, seemingly replaced by the analysis and prognosis activities (see 4.2.1) which are oriented towards the fulfilment of labour market skill needs, i.e. reaction and anticipation rather than experimentation and development and are as such far less likely to encourage innovative practice. While pedagogical innovation undoubtedly takes place at a local and institutional level, there is no systematic mechanism for collecting and passing on experiences.

7.4 Encouraging partnership

The Danish dual system means that it is vital to consider the role of the enterprise as well as the cooperation between enterprise and college if innovation and entrepreneurship are to be integrated within IVET as prescribed in the legislation from 2007 (see 7.1). As such, improving partnerships between VET colleges and enterprises is in focus and one of the six publications produced as part of the project *Innovation and Entrepreneurship within IVET* (see 7.1.1) deals specifically with the role of enterprises (Sørensen et al. 2008b). The publication explores a wide array of different ways in which enterprises can contribute to developing VET students innovative and entrepreneurial competencies. Among the conclusions, the following examples are given of how a partnership agreement between enterprise and VET College can focus on promoting cooperation which, both directly and indirectly, encourages the students' development of entrepreneurial skills:

- The apprentice is allowed to peer over the master's shoulder, gaining insight into the enterprise's operation;
- The enterprise creates opportunities for teacher visits, so that college teachers gain inspiration from developments in practice;
- A representative from the enterprise has a permanent role as a guest teacher at the college – perhaps even being part of a teaching team;
- Enterprises provide real-life problems which the students can work with in their projects and assignments at college;
- The enterprise makes sure that the apprentice obtains a broad knowledge of the trade by, for example, arranging visits at other enterprises, attendance at trade fairs etc. (Sørensen et al. 2008b, p. 13).

However, there is no policy directly promoting partnerships between VET providers, cultural organisations, networks, creative industries and research.

THEME 8: FINANCING VET

8.1 Improving efficiency, equity, levels of VET funding

The major characteristics of the present funding system for IVET were established in a reform introduced as far back as 1991. The 1991 reform introduced the taximeter principle whereby the VET providers are funded in accordance with their overall activity level and performance rates (number of students entering and completing a VET programme). Besides the taximeter rate, the VET providers also receive an annual block grant for the maintenance of buildings, salaries, etc. The 1991 reform, which was primarily organisational, introduced management-by-objectives as a means to improve the overall provision of VET. The funding system was introduced as part of a New Public Management strategy to decentralise and make institutions compete on “quasi markets”. For example, in the publication "Better institutions for Better Education" describing the Government's policy for all educational institutions (see 8.1.1), it is stated that "the healthy competition between educational institutions should be encouraged" (Danish Ministry of Education 2003a, p. 22).

Over the years, however, despite the rhetoric of marketisation, the budgetary room to manoeuvre of the vocational colleges has been restrained and, in fact, the trend seems to be towards greater centralisation as the Ministry of Education sets up more specific objectives, quality indicators and targets for the colleges. Funding is hereby linked to quality benchmarking (see 6.1) and institutions' annual resource reports (6.1.1).

From 2003, the concept of “value for money” was introduced. In order to obtain earmarked funding, the institutions were to show their “willingness to adapt within specific politically prioritised areas” (Danish Ministry of Education 2003a, p. 9). An example of this change in the allocation of funds can be found within the *Experiment and Development Funds* (FoU), which in the 1990s provided a valuable means for the colleges to try out new, local approaches and methods in VET. By 2003, the funds became more targeted and more regulated through narrow objectives, and today, the funding of locally initiated projects has been more or less discontinued as a source of local development initiatives (see 7.3).

To sum up, since the 1980s, a shift has taken place from detailed regulation of input to framework regulation of output. The aim of output regulation is to:

- increase focus on results and quality so that the practices of the institutions meet the political objectives;
- ensure that the needs of the regional and local business sectors are met for education and skills (Danish Ministry of Education 2003a, p. 10).

It should be noted that the basic principle of VET funding is that the state funds the vocational college budgets, while enterprises fund apprenticeships⁷ and CVET. In terms of apprenticeships, all enterprises, private as well as public, with or without apprentices, pay a monthly sum to the Employers' Reimbursement Scheme (AER). AER then provides monetary compensation to enterprises offering training placements. This scheme has existed since 1977. More recently, incentive schemes have been introduced providing public funding to partially reimburse enterprises offering apprenticeships (see 2.1.1).

Within CVET, the Government entered an agreement with the social partners in 2006 as part of the allocation of the globalisation funds stipulating that, in the period 2008 to 2011, funding

⁷ The college-based training placements introduced to combat the current shortage are government funded (see 2.1).

would be increased by one billion DKK (approx 134 million EUR) conditional on the social partners entering agreements on collective saving schemes for adult vocational and continuous education and training. In the collective agreements completed in 2007, the social partners agreed to fund the training of employees and to establish collective funds for competence development, including the funding of participation in publicly provided training.

8.1.1 Better Institutions for Better Education (2003)

The strategy for Better Institutions targeted the entire Danish education system. The overall vision was to strengthen educational institutions so they were better equipped for “reacting quickly and flexibly to the changeability which characterises today’s society” (Danish Ministry of Education 2003b, p. 7). The overall objectives were to create:

- Strong institutions which are professionally and economically self-sustaining;
- A more demand-led system in which the preferences of the end-users impact on the institutions in regard to both strategies and provisions;
- A more coherent and development-oriented regulation system in which all the stakeholders enter into a dialogue on provision in correspondence with the overall principles of the regulative framework.

In respect to VET institutions, the aim was to strengthen local and regional provision through voluntary mergers (funding incentives) and strengthen the adaptation of provision to local and regional demands.

The “Better Institutions” strategy was part of the overall policy strategy for the entire Danish education system, “Better Education”. The aim of the strategy was to streamline the educational institutions and extend the overall principles of “taximeter regulation” and “institutional quasi-autonomy” with increased user regulation (through the creation of transparency in the educational sector, e.g. by publishing results of evaluations on the Ministerial website or the website of the individual institution and through increased “free choice”), increased output management and strengthened quality assurance measures.

The “Better Institutions” policy initiative has led to the mergers of institutions. The process has been a top-down, bottom-up process: the institutions were to merge, but could choose with whom to merge. The outcome of the mergers has not been assessed. Undoubtedly, the mergers have required many resources on part of the merging institutions: merging different organisations, work cultures and educational areas provokes resistance. However, as already mentioned, no research or systematic evaluation has yet been completed out within the area.

8.2 Use of Lifelong Learning Programme funds

The Leonardo da Vinci programme has supported the development of the European dimension within VET. There has been a small but steady growth in the number of students travelling abroad as part of their apprenticeship training. There remains, however, a long way to go in terms of the internationalisation of VET. The available EU funds in this regard comprise only a fraction in comparison to the funds made available as part of the Danish Globalisation strategy. Figures detailing funding levels and distribution are not publicly available.

8.3 Use of other EU funds

The European Social Fund (ESF) provides backing for Denmark's operational programme *More and better jobs* under the Regional Competitiveness and Employment Objective. The aim is to develop more and better qualified workers to help Danish enterprises (particularly SMEs) meet the challenges of globalisation and ageing. This is to be achieved through improving the qualifications of the Danish workforce and increasing the number of people in work by building basic skills in the population and improving opportunities for older workers, immigrants, the disabled etc. As such, this programme will heavily involve CVET initiatives.

More and better jobs forms an element in the overall Danish strategy for EU Structural Funds during the period 2007-2013, a strategy: "shaped by the broader national growth strategy and vision, which aims to make Denmark a country of world-class education, a leading knowledge society, and an innovative and entrepreneurial society by 2015".⁸

Danish ESF funding levels are very low, with funding for the 2007-2013 period totalling EUR 255 million and only ahead of Cyprus, Malta and Luxembourg on an overall funding level and the lowest of all the EU-27 countries when tallied on a per capita basis. This also represents a significant drop compared to funding levels for the previous funding period (2000-2006) where a total of EUR 470 million was provided by the European Social Fund.

As to priority areas, as suggested in the outline of the *More and better jobs* programme above, funding is primarily concentrated on the area 'more adaptable workers and firms'. This area receives 58% of total Danish ESF funding, compared to an 18% EU average. This also means that all other priority areas receive proportional funding below the EU average and three priorities receive no ESF funding whatsoever: Combating social exclusion and discrimination in the labour market; supporting reforms for more and better jobs; better public administrations and public services. During the previous period, there were three Danish ESF programmes representing a wider range of priority areas: Equal opportunities across borders; regional development and adjustment; human resources – development competences and more people in work.

The European Regional Development Funds (ERDF) will likewise contribute EUR 255 million during the period 2007-2013 to the Regional Competitiveness and Employment Objective. Here, the operational programme is titled *Innovation and knowledge*. Again, CVET has a key role, along with ICT, entrepreneurship and interaction between academia and industry. As such, the two operational programmes are highly integrated and together comprise a cohesive strategy.

This cohesiveness is a direct result of changes introduced with the new programming period. In Denmark, a joint administration of the two funds was established, giving a number of strategic and administrative benefits, but also requiring a lot of work and development. In addition, the extensive Danish Regional and Municipal reform in 2007 meant considerable challenges for the regional administrative units.

Sources: Danish Enterprise and Construction Authority 2009

European Social Fund:

http://ec.europa.eu/employment_social/esf/members/dk_en.htm

8.3.1 Network for flexible teaching and courses (2002)

As part of the ESF funding for the Danish operational programme *Human resources – development competences and more people in work*, a network of organisations offered

⁸ http://ec.europa.eu/employment_social/esf/members/dk_en.htm

training opportunities to the unemployed in the area around Nexø on the Danish island of Bornholm. The island of Bornholm is located in the Baltic Sea, separate from the rest of the country and with a population of approximately 43,000. Nexø, the island's second largest town, is located on the east coast, 35 km away from the island's administrative centre, Rønne where Adult education and CVET opportunities are concentrated. This distance had proved a major barrier to enrolment in training for Nexø's inhabitants, despite unemployment levels at the time almost double the national average. The project was therefore launched in 2002, running for a little over two years and receiving around EUR 650,000 in ESF funding alongside an additional EUR 1 million. The municipality joined forces with the adult education centre in Rønne and a number of trade unions to provide local training opportunities to the unemployed. The most popular courses proved to be training within IT.

At the end of the project period, 380 people had registered for a training course, with around 35% going on to find employment.

Source: ESF 2004

8.4 Improving VET governance

The Danish VET system has been characterised by many different providers regulated under different laws. The trend since 1999 has been towards mergers among VET institutions and a simplification of national legislation through which institutions are to be regulated under the same acts. In 2003, providers of VET (vocational colleges, labour market training centres, agricultural colleges, and social and health care colleges) were included in the same act, the Act on VET institutions. As part of this act and an overall strategy of making the Danish education system one of the best in the world (see Danish Government 2002), vocational colleges and labour market training centres were encouraged to merge as part of an overall institutional reform (Danish Ministry of Education 2003b - see 8.1.1). The aim of the mergers was to improve interaction with the local and regional business sector and strengthen the dialogue among training providers and end users, including both the students/participants in the VET programmes/courses and the businesses. Furthermore, the aim of the institutional mergers was to create better coherence in the training provision and to improve the possibilities for credit transfer and crossover (Danish Government 2002). In 2007, this overall streamlining of the VET system was taken one step further as the agricultural and social and health care programmes were included in the Act on Vocational Education and Training, creating coherence in programmes as well as institutional regulation.

The policy of fewer, larger institutions has been applied to much of the educational sector, including merging long-cycle higher education institutions within a handful of universities, and the creation of University Colleges and Academies of Professional Higher Education collecting non-university higher education programmes (see 6.3). Most recently, it has been the turn of adult education with the formation in 2010 of a network of Adult and Continuing Education and Training Centres (VEU Centres – see 4.2.2). Youth guidance and counselling services have likewise been consolidated within a number of local centres.

Parallel to this reduction in the number of institutions, governance has increasingly been characterised by output management, quality assurance mechanisms and financial accountability (see 6.1 and 8.1). Institutions are increasingly expected to compete within a quasi-market for the same resources with factors such as completion rates determining the distribution of funding. This means that decision-making power is largely decentralised with VET institutions as 'independent' institutions with their own board and own responsibility for budgeting, strategies and local adaptation of national objectives (local education plans and

VET content adapted to the needs of the local/regional community in cooperation with the social partners). However, this decentralisation is accompanied by an array of new (financial) governance mechanisms ensuring that institutions prioritise national policy objectives.

8.4.1 Reducing bureaucracy within VET (2008)

In terms of the overall administration of VET, the policy objective has been to reduce bureaucracy. This objective was mentioned in the plan for Better Institutions (Danish Ministry of Education 2003b), and in 2007 a committee for “de-bureaucratisation” was set up with the aim of simplifying rules and procedures. The assignment was firstly to identify and analyse the requirements to VET colleges in terms of documentation, and secondly to make recommendations to simplify these requirements. The committee forwarded its 23 recommendations in 2008 placed under the following five headings (Danish Ministry of Education 2008b):

- Organisation of VET programmes and teaching (seven recommendations);
- Quality assurance and evaluation (two recommendations);
- Economy, governance and administration (twelve recommendations);
- Ad hoc reporting and analyses (one recommendation);
- Ongoing work and dialogue between the committee’s members (one recommendation).

The background for initiating the work on de-bureaucratisation is the overall objective of a 95 percent completion rate. The work is furthermore part of the introduction of an annual resource report to supplement budgetary reporting (see 6.1.1). One of the conclusions drawn by the committee was that evaluations are not always meaningful and very often the evaluations are not used constructively to improve practice.

The status for implementing the 23 recommendations varies considerably.

THEME 9: PROGRESS IN MODERNISING EUROPEAN VET SYSTEMS IN THE COPENHAGEN PROCESS AND PRIORITIES FOR FUTURE COOPERATION

9.1 Impact of European cooperation in VET on development of national VET policies

See 3.1

9.2 Governance, cooperation and ownership of the different actors in the Copenhagen process at European level

Denmark has participated in peer learning activities (PLA) on the following topics⁹:

- Professionalization of teachers and trainers in VET (Bonn 2009);
- Validation of non-formal and informal learning (Prague 2009);
- One step-up (London 2009);
- Costs and benefits of validation of non-formal and informal learning (Reykjavik 2009);
- Added value of NQFs as tools to support lifelong learning (London 2008);
- Quality assurance procedures in the recognition of non-formal and informal learning (Brussels 2007).

In general it can be said that Denmark has recently become more involved in peer learning activities during the last year, for example taking on the role as coordinator of the cluster on the modernisation of higher education.

9.3 External dimension of European cooperation in VET

Denmark has entered bilateral agreements regarding cooperation within VET with a number of countries outside the EU such as USA, Singapore, Korea and Vietnam.

9.3.1 Denmark-USA cooperative programme (2010)

The programme has been in operation since 2000, most recently being granted an extension to 2012 and a funding renewal which came into effect in 2010. Previously the programme had applied to both IVET and short-cycle higher education, but the latest renewal of the agreement focuses the programme exclusively on IVET.

The overall goal is to support transatlantic collaboration and cooperation within IVET, strengthening internationalisation and exchanging good practice. The programme stimulates and supports partnerships between Danish VET colleges and American community colleges and promotes partnerships with American enterprises.

In Denmark, the programme is coordinated by the Danish Agency for International Education (previously known as CIRIUS). The programme is aimed at VET colleges and other VET stakeholders including enterprises and trade committees. Since its launch in 2000, the programme has provided financial support to more than 800 students, teachers and administrators from VET colleges for a study visit in USA.

⁹ <http://www.kslll.net/PeerLearningActivities/Default.cfm>

Parallel to the most recent renewal, a new agreement was reached between Denmark, USA and Canada supporting cooperation between the countries within the University College and Academy of Professional Higher Education sector, hereby compensating the previous inclusion of short-cycle higher education within the Denmark-USA programme.

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