



2nd edition

The Danish Approach to Quality

**– in Vocational Education
and Training**



National Educational Authority
Danish Ministry of Education

The Danish Approach to Quality in Vocational Education and Training

2nd edition

The Danish Ministry of Education, 2008

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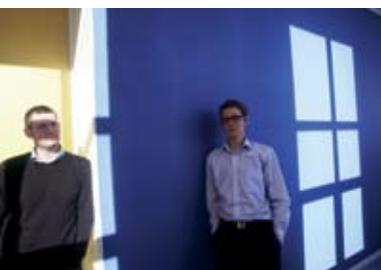


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Preface



Since the adoption of the Copenhagen Declaration in 2002, the Copenhagen process has progressed and contributed to the development of common tools and the sharing of good practices within vocational education and training (VET) across Europe. Within the field of quality, the process has enhanced cooperation through networks, projects and study visits, and in this way increased transparency and the understanding of quality approaches in other European countries.

The focus on quality in VET has proved to be common across Europe, as framework governance and decentralisation of the VET systems have become mainstream policies. Granting providers greater autonomy in adapting the VET they provide to local needs and demands (and thereby ensuring greater flexibility for VET) accentuates the need to implement national quality strategies which find a balance between control and mutual trust among VET stakeholders. Denmark has experienced this situation over the past fifteen years, where the majority of efforts have been focussed on promoting a more systematic approach to quality assurance at provider and system level.

One of the tools that has been developed at a European level with the aim of promoting transparency and a common basis for quality assurance and development, is the Common Quality Assurance Framework (CQAF). The CQAF was developed by the European Forum on Quality, in cooperation with the Technical Working Group (TWG). Its aim is to inspire stakeholders in VET at national, regional, and local levels in their work with quality. The CQAF describes the various elements in a quality model, and raises a number of key questions to be considered by the major stakeholders when assuring and developing quality in VET.

In this publication, focus is on the Danish approach to quality assurance and development. The publication deals with quality assurance in both initial vocational education and training (IVET) and continuing vocational education and training (CVET). The CQAF has been chosen as a framework for the description of the Danish approach to quality, and to describe the state of affairs in regard to the overall policy priorities: employability, matching and access.

One of the characteristics of the Danish approach to quality in VET is that quality is not only a policy issue per se, i.e. policy measures dedicated specifically to quality. Quality is built into the very fabric of the Danish VET system by involving all the major stakeholders, and entrusting them with the power to continuously adapt and renew the system in light of social, technological and economic changes.

It is our hope that this publication can contribute to the European knowledge sharing within the field of quality, and that it will become part of the overall process of promoting transparency and cooperation within VET.

Søren Hansen
Head of Department of Vocational Education
January 2008

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The Danish approach to quality in VET



The Danish perception of quality

The focus of this publication is on quality, and on quality approaches in the Danish vocational education and training (VET¹) system. Systematic quality assurance with focus on objectives such as completion rates, employability, satisfaction among stakeholders, and societal value, etc., is a relatively new issue in education, and did not appear on the political agenda until the late 1980s. Quality is not an absolute concept, however; it is rather a complex concept, which depends on the stakeholders' values, objectives, resources, policies and context. As such, quality in education and teaching is continuously defined through political debate and by the democratic process².

As to a national definition of quality, the Danish Ministry of Education has formulated it as follows in its description of the quality strategy for the VET sector:

*"[...] it is not possible to say anything definitive and universal about quality in an education system. It is neither possible nor desirable to authorise one specific concept – be it in regard to methods or objectives and values. This is a basic democratic principle, which takes into consideration the fact that it is possible to achieve the same goals by different routes and with different means and methods"*³.

In the ministerial quality project initiated at the beginning of

1) In this publication, VET encompasses both the initial VET programmes called EUD (Erhvervsuddannelserne), and the continuing VET programmes (CVET) targeted primarily at unskilled and skilled workers (Arbejdsmarkedsuddannelserne = AMU).

2) *Focus on Quality*, p. 3.

3) *Quality strategy for the vocational college sector, 2nd edition*, the Department for Vocational Colleges, Theme booklet 6-96, p. 7.

the 1990s, the basic idea behind the introduction of quality approaches at vocational colleges was formulated as follows:

“Quality concerns the processes and the results achieved by an educational institution. In order to establish the basis for “good quality”, it is necessary to define what is valuable to attain, i.e., what does the institution strive for. Only in this way is it possible to decide whether the institution is close to what has been formulated as “good quality” within an area. From such a point of departure, the crucial issue is to formulate objectives and consider methods to attain these objectives. That is why quality is all about deliberate change and development.”⁴

In Denmark, quality in VET is perceived primarily in regard to providers and learners, with the aims of ensuring correspondence between the national VET objectives and the local VET programmes, and of securing the quality of the individual providers⁵.

For the Danish VET programmes, the objectives are that all young people should

- acquire a high professional level of competence;
- be able to continue in further or higher education after completion of a VET programme;
- develop their citizen skills in order to become active citizens in a democratic society.

Measuring the quality of VET programmes on these parameters is important, and the main indicators are employment, completion and further education/career pathways.

Main characteristics of the Danish VET system

The perception of quality and the approaches to quality in the Danish VET system reflect the values upon which it has been

4) *Q 90-projektet*, the Danish Ministry of Education, 1999.

5) Be they vocational colleges, adult vocational training centres or enterprises.

built, its structure, the role of the stakeholders, the prevailing governance principles, and of course, the overall historical and cultural context. When describing the Danish approach to quality in VET, it is important to emphasise three main characteristics of the VET system:

1. It is a decentralised system in which the VET providers have a great deal of autonomy in terms of adapting the VET they provide to local needs and demands. Quality assurance and development have been on the political agenda in Denmark since the beginning of the 1990s, when the Danish Ministry of Education changed course from central governance to targeting framework governance based on taximeter grants per student. The aim of the new guiding principles was to improve the overall responsiveness and effectiveness of the VET system. The VET providers should be relatively autonomous, enabling them to respond more rapidly to changes in the labour market stemming from technological, organisational and societal changes.
2. It is a system in which the social partners play an institutionalised role at all levels, from the national councils⁶ that advise the Danish Minister and the Danish Ministry of Education about VET, to the local training committees which advise the VET providers about the local education plans. This applies to both IVET and CVET⁷. This tripartite structure plays a significant role in all the quality aspects of VET:

“The end users of the skills and competences produced by VET

6) The Advisory Council for Initial Vocational Education and Training (Rådet for de grundlæggende erhvervsrettede uddannelser – REU) and The Council for Vocational Adult Education and Training (Rådet for Erhvervsrettet Voksen- og Efteruddannelse – REVE).

7) IVET here encompasses the EUD programmes which are provided by technical, commercial and combined colleges. CVET encompasses the adult vocational training programmes which are provided by technical, commercial and combined colleges, and by adult vocational training centres. So the same providers may provide many different VET programmes.

are centrally integrated in the formulation of standards, the running of production and the testing of performance⁸⁾.

This means that procedures for quality assurance and development are integrated into the VET system.

3. It is a rather tight-knit system, due to the continuous dialogue between all the stakeholders at all different levels of the system, and to the short distance between those in positions of power, both culturally and geographically. Denmark is a small country, the stakeholders know each other and work together across the system, and there is widespread confidence and mutual trust among the various stakeholders. The stakeholders share the common overall objective, which is to ensure good VET programmes, for the benefit of the individual learners, the enterprises, the labour market and society as a whole. So despite a relatively vague definition of quality, a common quality criterion is, so to speak, also knit into the very fabric of the Danish VET system.

The VET context

This publication does not include a description of the Danish VET system, or the structure of IVET and CVET⁹⁾. However, in regard to IVET and CVET, it is important to mention that:

- IVET programmes are based on the dual training principle, whereby the trainee enters into a contract with a company after the basic programme and alternates between school-based education/training and work-based training. The programmes are continuously renewed and developed, and since 1991, the system has undergone major reform.

Today, the system is flexible and individualised. There are different entrances to the system, both through

8) Nielsen, Søren P.: *Quality in Vocational Training in Denmark*, SEL, 1995, p. 4.

9) For a description of the Danish VET system, please see: <http://eng.uvm.dk/publications/engonline.htm>

school and work, and the duration of a VET programme can be adapted according to individual needs and proficiency levels. Furthermore, the system offers both the opportunity of taking a partial qualification and for qualifying for further studies through a system of additional qualifications. The overall political aim is to make it an inclusive system. IVET plays an important role in the Danish education policies, as it is perceived as one of the main inclusion mechanisms for achieving the policy objective of making 95 per cent of a youth cohort complete a youth education programme.

- CVET is also offered through a public system which is highly flexible and modularised. In recent years, the focus has been on the development of skills closely related to the workplace and the job functions of the CVET participants. An extensive collaboration has been initiated between CVET providers and enterprises, and CVET courses are often provided as on-the-job training. CVET is primarily targeted at unskilled and skilled workers.
- There is currently political focus on increasing the interaction and coherence between IVET and CVET. The VET system as a whole is to become more transparent and more homogeneous in terms of regulations, providers and provision. One of the ways of making the system more coherent is to lay down objectives for the programmes in terms of competences to be acquired, in order to make the system more transparent, and to facilitate the transfer of credit between programmes. In 2007, all initial vocational training programmes came under the same national legislation as part of this policy objective.

Quality policy measures



Nine quality measures

In Denmark, there is no single, nation-wide, quality approach, but common principles and measures at system level, and different approaches at both system and provider level. The Danish Ministry of Education has defined nine common principles/measures concerning the policy on quality issues:

- The involvement of stakeholders;
- Common national guidelines;
- Output monitoring using indicators;
- Quality rules;
- Ministerial approval, monitoring and inspection;
- Testing and examination;
- Transparency and openness;
- Evaluations by the Danish Evaluation Institute;
- International cooperation and surveys. (Please see figure 1, p. 13.)

These measures apply to the entire Danish education system, but are given different weight, and take different forms, within the education system.

CQAF

The Common Quality Assurance Framework

In the following, these nine measures will be described within the framework of the CQAF model¹⁰, which is based on the quality circle. The model consists of four elements:

- planning (purpose and plan);
- implementation;
- evaluation and assessment;
- review (feedback and procedures for change).

¹⁰For a description of the CQAF, please see *Fundamentals of a "Common Quality Assurance Framework" (CQAF) for VET in Europe*, by the European Commission, Directorate-General for Education and Culture, 2004.

Core quality criteria have been identified for each of the elements. The criteria are presented as possible answers to specific questions, which are universal when reviewing existing policies in any VET system¹¹. A number of questions have to be answered for each stage.

DK: Approaches to Quality Assurance

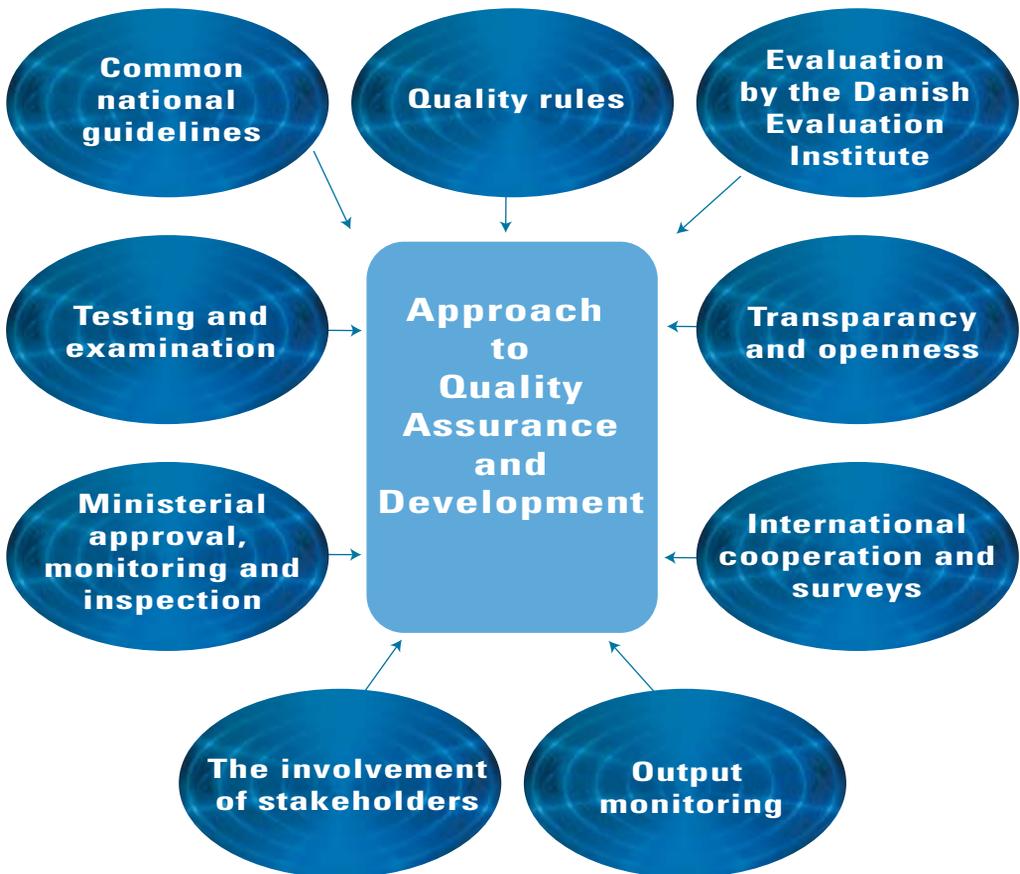


Figure 1.

¹¹Ibid.

These questions, and the overall model, have formed the basis for a classification of the nine Danish quality principles; e.g. in the implementation stage, one of the key questions is “How do you implement a planned action on increasing the completion rate?” In the Danish VET system, one answer is “by initiating projects at the colleges aimed at supporting the individual learner and hereby increasing the overall completion rate”. In the review stage, another key question is “How do you organise feedback and procedures for change?” The answer in a Danish context could be: “by reviewing the results of projects aimed at increasing the completion rate at the college”. Figure 2 shows the classification of the Danish quality principles within the CQAF.

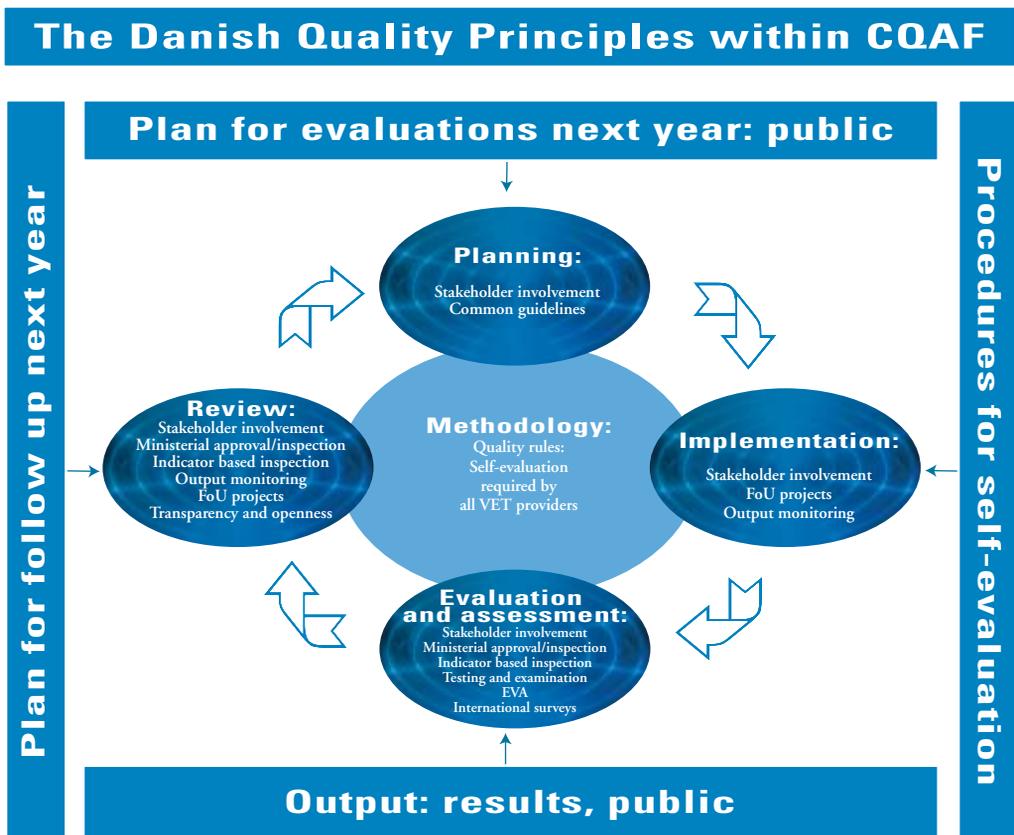


Figure 2.

The various stages can only be separated analytically. In reality, the stages overlap, and the quality principles and measures described in this publication may cover several stages of the model. However, the figure gives an overview of how quality assurance and development are dealt with in the Danish VET system.

Involvement in all stages of the CQAF

Involvement of stakeholders

As already mentioned, the involvement of stakeholders is a very important feature of the Danish VET system. The three main stakeholders are the learners, the enterprises and the social partners. The system is based on continuous dialogue, and on the idea that all the stakeholders in the system are able to contribute to the continuous innovation and development of VET in Denmark. In this way, the stakeholders contribute to all stages of quality assurance and development.

Social partners

The social partners play a particularly major and significant role (please see figure 3, p. 17). A network of councils, committees and advisory bodies, with an equal representation of parties, works closely together with the Danish Ministry of Education on almost all aspects of VET, and at all levels of the VET system. In regard to quality, the social partners are involved in all phases of quality assurance and development, from laying down objectives for the VET programmes, cooperating with VET providers, examinations and certifications, and continuous monitoring of labour market development, to adapting the programmes to new conditions and requirements.

One of the main objectives of involving the social partners is to ensure the relevance and quality of VET programmes in relation to the labour market. The trade committees are responsible for the continuous adaptation and development of the VET programmes. The committees monitor the skills development in the labour market, and recommend changes to existing programmes on the basis thereof. They may also

recommend the establishment of new VET programmes, or the discontinuation of out-dated VET programmes. The role of the social partners is to ensure that VET matches the needs and demands of the enterprises and the labour market at both national and local levels.

Another important aspect of the trade committees' quality assurance is the approval of training places in IVET. The trade committees are responsible for approving and inspecting enterprises that want to take in trainees, on the basis of defined criteria. To be approved, an enterprise must have a certain level of technology, and a variety of tasks to be performed that will ensure the trainee a full range of activities and tasks corresponding to the qualification requirements of a skilled worker.

Learners

The learners also play an institutionalised role in the Danish VET system. According to the Danish Act on Vocational Education and Training¹², the trainees should be able to influence both their own training and the overall school environment. This is done, partly by involving the trainees in the planning and evaluation of the teaching and training, and partly via student councils. In the day-to-day training activities, the teachers must involve trainees in laying down overall themes for a specific subject, or letting them choose between different assignments (this is also part of the overall differentiation of teaching). The student council is another means of influence, where a trainee representative is, for example, represented in the board of directors, whereby the trainees have the possibility of voicing their opinion.

Furthermore, the Danish Ministry of Education initiates surveys among the trainees, e.g. in connection with major reforms, whereby the trainees are able to provide feedback to national VET policies.

12) Consolidation Act no. 1244 of 23/10/2007, § 28 and § 40, section 4.

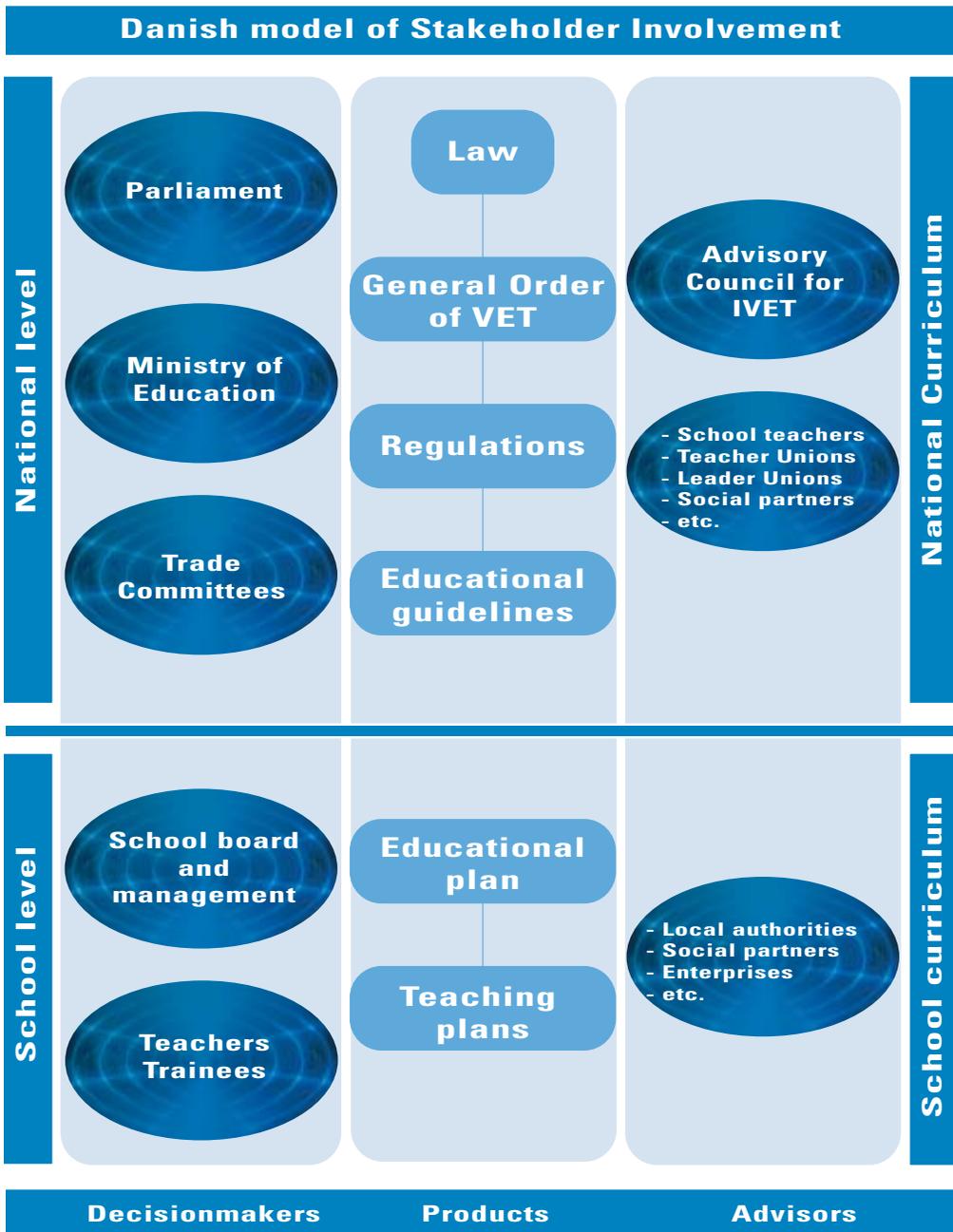


Figure 3.

Enterprises

The enterprises are the third major stakeholder in the Danish VET system. They are represented at national level, via their employers' organisations, and at local level in the local training councils and in the board of directors of the local VET colleges. In both IVET and CVET, the enterprises are able to "colour" the local education plans/CVET courses so that they meet the specific needs and demands of the local or regional labour market.

According to some observers of the Danish VET system, the overall need for independent external quality control is considerably reduced, thanks to the involvement of the stakeholders at all levels of influence¹³.

Planning, process, evaluation

Common national guidelines

The overall objectives for VET are planned and laid down in legislation. A number of laws, regulations and guidelines lay down the aims, structure, content, competence levels, examination requirements, rules for complaint, teacher competences, etc., as common national standards.

In IVET, these regulations and guidelines provide an overall framework for the programmes. Since 1991, the requirements relating to content have become less detailed, in order to make the provision of IVET more flexible and more adaptable to local needs and demands. For the last 10 years, there have been various initiatives aimed at making the IVET programmes competence-based. In 2007, a new reform was introduced, of which the objective was to change the orientation of all IVET programmes, focusing much more on competence and learning outcome, and all national regulations were revised accordingly. The trade committees were responsible for the revisions. The introduction of competence-based programmes should be seen in the light of the transition

13) Nielsen, Søren P. & Visser, Karel: *School-based quality measures at intermediate level: a Danish-Dutch comparison*, Cedefop, 1997.

towards a lifelong learning system, in which formal, non-formal and informal competences are to be recognised.

The transition towards competence-based programmes has taken place in CVET where approximately 140 joint competence descriptions have been drawn up by the social partners, in cooperation with the Danish Ministry of Education (2003). These are divided into approximately 2,800 different CVET modules of typically one week's duration (from 1 day up to some weeks depending on the competences of the learner).

The competence descriptions also provide a framework, within which the CVET providers are obliged to adapt their courses to the needs of local commerce and industry in order to meet the needs of the enterprises. Thus, legislation, regulations and guidelines provide framework standards for all VET programmes in Denmark, ensuring nation-wide homogeneity for the provision of VET as well as minimum standards and quality.

Process, evaluation,
review

The funding of innovation and development projects

In the past decade, the funding of innovation and development projects (FoU) has been an important tool when considering quality assurance and development from the process side. Each year, the Danish Ministry of Education stipulates a number of political priority areas, which are described in two programmes. It is then up to the VET providers to formulate local or regional projects within these priority areas, and to apply for funding from the Ministry.

Today, FoU projects play a minor role. However, FoU has been an important mechanism for the development of the Danish quality approach. In the early 1990s, pilot projects on quality assurance and development were initiated at a number of colleges. Afterwards, the results from these colleges were integrated in an overall quality strategy. The overall aim of

the strategy was to improve and develop the VET that was provided, and to make the VET programmes more attractive. This was to be achieved by motivating the VET providers to integrate the principle of “self-evaluation” into their overall management philosophy, so that this would comprise an on-going, internal quality assurance and development, and a continuous evaluation of activities and results. So in order to promote the quality strategy at the colleges, quality became one of the FoU priority areas by the mid-1990s, and all colleges were able to apply for funding for quality assurance activities.

Implementation,
evaluation, review

Output monitoring

One element in the Danish quality strategy that has become increasingly important over the years is “output monitoring”. Whereas the focus in the 1990s was primarily on the process, and motivating the VET providers to set up quality assurance and development systems, the trend is now to promote quality by providing incentives. The VET providers have to fulfil specific policy goals in order to receive earmarked financial grants.

In IVET, this new principle is called “value for money”. The Danish Ministry of Education specifies the priority areas, and offers the providers additional funding if they attain a number of goals within fields such as quality. The providers are encouraged to initiate activities within these fields. In 2003, the Ministry defined four priority areas concerning quality:

1. *learners’* systematic quality development at the colleges, specifically focussing on proficiency and flexibility;
2. *teachers’* strategic skills development, specifically aimed at motivating them to update and renew their professional skills, and to use new forms of teaching and working, e.g. pedagogical IT skills;
3. the professionalisation of *school management*;
4. strengthening the *colleges’* contact with enterprises and the local community.

At the end of the year, the colleges have to document the local quality activities that have been initiated, and their results, in order to release the quality grants. The documentation has to be published on the institution's website, and a report (questionnaire) must be sent to the Ministry.

In CVET, a "supply policy" has been introduced vis-à-vis the CVET providers approved to offer joint competence descriptions. As of January 2004, the providers are obliged to draw up a policy stating how the institution will ensure that the region's labour market needs will be fulfilled, within its budget target. This "Supply Policy" will be a precondition for the providers' receipt of financial grants¹⁴.

Internal evaluation

The "backbone" of the Danish quality strategy is self-evaluation by the VET institutions. All providers are required to evaluate their own performance and the courses they provide on a regular basis.

Legal requirement for self-evaluation methodology

Quality rules

The regulation stipulates that all VET providers must document that they have and use a system of quality assurance and development. They must meet the requirements laid down in the quality rules (see annex 2), whereby they will also meet the requirements of the CQAF.

All providers must document that they have a quality system matching the four phases of the CQAF model (please see figure 2, p. 14):

Planning: the providers must draw up an annual plan

¹⁴The 12 continuing training committees have developed about 140 competence descriptions aimed at easily recognisable job areas in the Danish labour market. The descriptions will provide the enterprises and the employees with a basis for entering into a dialogue about the need for specific competence development in the short and longer terms. *New adult vocational training concept – Placing the user in the centre*, the Danish Ministry of Education, 2004, p. 11.

for improvement, including how to increase the overall completion rate.

Implementation: the providers must draw up procedures for methods of evaluation at specific levels and within specific VET programmes. These procedures must specify how users/trainees/enterprises will be involved in the evaluations.

Evaluation: the providers must report on the evaluation results within the priority areas stipulated by the Danish Ministry of Education and publish them on their website.

Review: the providers must assess the results and draw up a follow-up plan, taking into consideration available resources and time. This follow-up plan should form part of the action plan for the following year.

The results of these self-evaluations, including follow-up plans and strategies, must be publicised on providers' websites.

In IVET, providers are required to have¹⁵

- A. a quality management system;
- B. procedures for information collection and self-evaluation within politically defined priority areas;
- C. a follow-up plan and a plan for the public dissemination of results.

Quality rules in VET

A. The VET college must have a quality system

B. The VET college must have a procedure for self-evaluation and quality development on specific priority areas

C. The VET college must have a follow up plan based on the self-evaluation, and publish it

Figure 4.

¹⁵Please see annex 2: Quality rules.

However, the colleges are free to choose their own quality concept, and there is no national model or system which the individual provider is obliged to use. One of the reasons for this is that VET providers vary considerably in terms of size, organisational culture and the VET they provide, so they must have the possibility/freedom to adapt a quality strategy to the local needs and the local culture. In order to observe the quality rules, most colleges have set up a new function of “Quality Coordinator”, with particular responsibility for quality management.

The quality rules for IVET also apply to the in-company training, whereby the trade committees are responsible for the ongoing quality assurance and development of the in-company

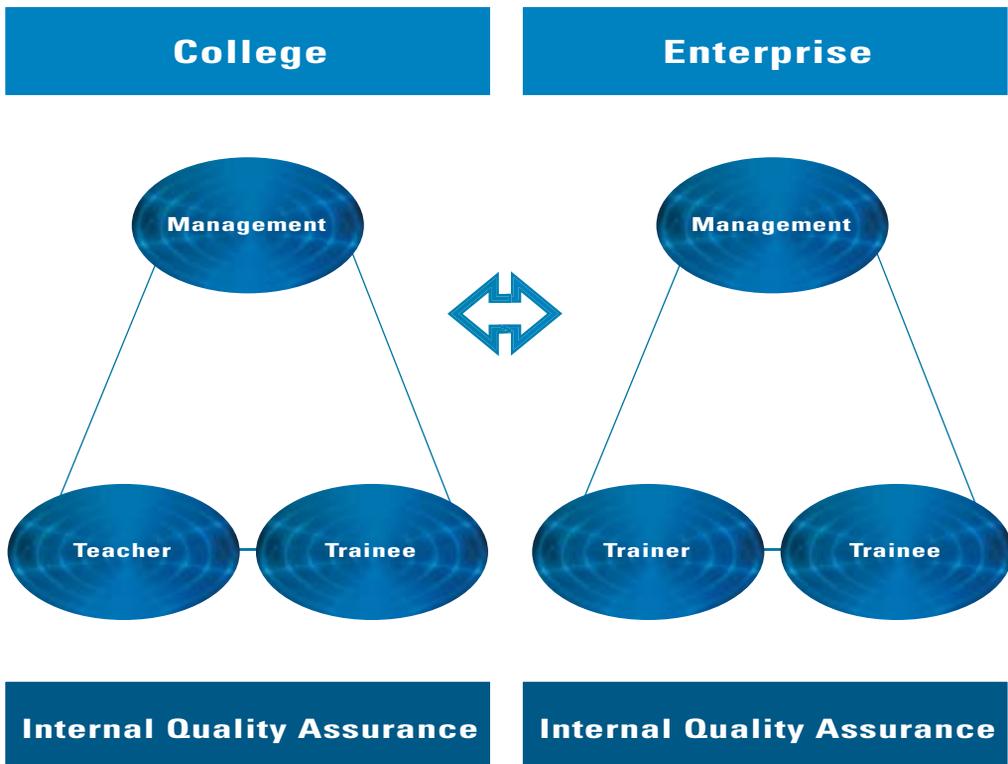


Figure 5.

training, in cooperation with the local education committees. However, the ministerial focus has been on the school-based part of the IVET programmes, as the in-company training is under the jurisdiction of the social partners. As a standard procedure, the Danish Ministry of Education monitors the completion and the employment rate for each VET programme and makes this the basis for a discussion with the responsible trade committee.

CVET providers are also obliged to set up a quality management system, formulate a follow-up plan and a plan for dissemination, and self-evaluate on a regular basis. However, since 2000, CVET providers have been required to carry out comparable evaluations of all the CVET programmes that they provide. For this purpose, a national self-evaluation tool¹⁶ has been developed, and now constitutes a compulsory element of the providers' quality strategies. The aim is to measure both the participants' satisfaction and learning outcomes, and the satisfaction of the enterprises whose employees have participated in CVET modules. It is a flexible tool that offers the possibility of inserting optional questions at regional and local level, so as to include other aspects of interest to parties such as the providers and the regional councils. The advantage of this system is that it is possible to establish quantitative aggregated data on quality in CVET at a national level.

External evaluation

Although internal self-evaluation constitutes the “backbone” of the Danish quality strategy, external evaluation is also essential, and is gaining importance. The focus is on how to improve the external, national evaluation of VET, based on the information given by the providers (please see “Next steps in the Danish approach to quality”).

Ministerial
evaluation and
review

Ministerial approval, monitoring and inspection of VET providers

The Danish Ministry of Education is the main authority

¹⁶) Please see <http://www.viskvalitet.dk>.

on education and training in Denmark, and has overall responsibility for the way the system functions. In regard to VET, the Ministry plays an important role in both the approval and inspection of the VET that is provided: The Ministry confers upon institutions the right to provide specific VET programmes. The providers must fulfil a number of conditions, and if these are not fulfilled the approval may be revoked.

Secondly, the Ministry continuously monitors VET providers/provision, by systematically collecting data on educational results (intake, trainee flows, completion rates, marks, employment, etc.) and finance.

Thirdly, the Danish Ministry of Education undertakes a legal, financial and pedagogical inspection of VET. The process of inspection takes various forms, and is based on several inputs. These include desk research and analysis on the basis of selected data, and meetings and/or visits to selected institutions with specific colleges and trade committees. The following information is included in the Ministry's inspection of quality at the vocational colleges: annual reports, websites, and data on completion rates, drop-out rates, grades, and transition rates to employment and further education. The inspection is not conducted by a specific national body.

**Indicator based
inspection**

However, the Ministry is in the process of tightening up on monitoring, by introducing a new form of monitoring based on six quality indicators concerning output and outcomes. These indicators are:

1. Test and examination results;
2. Completion rates¹⁷;
3. Completion times;
4. Drop-out rates and times;

¹⁷The overall objectives for the Danish education system are for 95 % (by 2015) of a youth cohort to complete a youth education programme at upper secondary level, and for 50 % to complete an education programme at tertiary level.

- 5. Transition rates to other education programmes;
- 6. Transition rates to the labour market. (Please see figure 6.)

The aim of the new system is to make the overall monitoring of quality in the Danish education system more systematic, and to provide a better foundation for the external evaluation of quality. The new system makes it possible to screen all educational institutions on an annual basis, and hereby identify institutions showing dissatisfactory results or quality in the training they provide.



Figure 6.

This indicator based monitoring system will encompass the entire education system. Within the scope of VET, the indicators have been adapted to IVET and CVET. In IVET, all

six indicators are considered relevant, whereas in CVET, only completion rates are relevant for the short CVET modules. So here, other indicators will be developed, most likely on the basis of the current national self-evaluation tool, with greater focus on the effect of the training.

General external quality measures

A number of more general quality measures, i.e. those not only related to the VET sector, can be identified in addition to those mentioned above.

Testing and examination

Firstly, a well-established quality measure in the Danish VET system – as in most education systems - is testing and examination. In general, the Danish system is based on a principle of “objective” testing and examination, where an external examiner is appointed. The external examiner is a way of preventing bias. In IVET, for example, the trainees have to take a final vocational test (in many programmes a specific journeyman’s test) where the professional skills of the trainee are tested. For these examinations, representatives from the local trade/industry act as external examiners. This ensures that the knowledge, the skills and the academic standards attained by the trainees are relevant, and live up to the demands of the IVET programmes, and to the requirements of the labour market. In CVET, the examination results form the basis of the certification. An individual examination takes place before the issuing of certificates.

Evaluation, review

Act on Transparency and Openness

One of the general elements in the Danish quality strategy is the Act on Transparency and Openness¹⁸ in the education system adopted in 2002. This aims at providing access to comparable information on education and educational institutions for the stakeholders and the public, in such a way as to qualify the dialogue. All institutions are obliged

18) “Lov om gennemsigtighed og åbenhed i uddannelserne m.v.” Act no. 332 of 18/05/2005.

to publish information about the courses they provide on their website. This includes their pedagogical values and practice, strategy plans, quantitative data on grade averages for individual subjects and levels, and the other indicators mentioned in figure 6. Although grade averages may be an indicator of quality, they cannot stand alone. Therefore, the institutions must publish overall¹⁹ evaluations of their teaching, etc. The legislation also stipulates that the institutions must publish all information relevant for an assessment of the quality of the instruction provided²⁰. This initiative should be seen in connection with the quality element concerning output monitoring, because it can supply further information about an institution.

External evaluation
and review

Evaluations by the Danish Evaluation Institute

The Danish Evaluation Institute (*Danmarks Evalueringsinstitut – EVA*) was established in 1999 as an external, independent body for quality assurance and the development of Danish education and teaching. The Institute is responsible for evaluating all fields of education in Denmark, from basic schooling to higher education. As such, the EVA has a very broad field of education and training to cover.

Each year, the EVA submits a plan of action outlining evaluations and other activities to be undertaken in the year to come. The Ministry ensures that the plan is in line with the objectives set out for the EVA. The EVA's job is to evaluate education and teaching, whereas evaluations of educational institutions' overall activities only can take place on prior approval from the Danish Ministry of Education. It should be mentioned that all evaluations comprise a self-evaluation performed by the 10-15 colleges normally participating in one of the approximately 12 evaluations carried out by the EVA every year.

The EVA is also a knowledge centre on evaluation in

19) I.e. aggregated data on teaching, not evaluations of single teachers or courses.

20) *The Danish Approach to Quality Assurance*, 2002, p. 6.

Denmark. The EVA conducts research and surveys, develops methods of evaluation, and disseminates its knowledge among all stakeholders in the Danish education system. The EVA also cooperates and exchanges knowledge with evaluation institutes all over the world.

Since 1999, the EVA has conducted a number of evaluations within the field of VET, most recently on quality assurance and development in IVET. These evaluations have led to specific actions in regard to the colleges involved in the evaluation, and to the Danish Ministry of Education. In their evaluations, the EVA forwards a number of recommendations targeted at the stakeholders in question, who are obliged to follow up on the recommendations.

International cooperation and surveys

In Denmark, participation in international surveys, such as



the OECD surveys, is also perceived as an important element of the national quality strategy. International surveys offer a valuable contribution to the evaluation of the quality of the Danish education system, insofar as they shed light on important indicators such as participation rates, proficiency levels, returns on investments, etc. Denmark is to participate in the OECD study on systemic innovation in VET from 2007-09.

The Copenhagen process and the cooperation on the CQAF have had an impact on the Danish quality policies in VET. They have increased focus on the use of indicators in IVET, and on the issue of a monitoring of providers and the quality of the education and training they provide.

The Danish approach to quality within the CQAF

The Danish principles concerning quality cover different stages of the CQAF, and provide answers to different questions raised during the course of the various stages. In this way, the model helps to highlight the strengths and weaknesses of the national quality strategy.

In the case of Denmark, the strengths are the involvement of stakeholders at all levels of the system, the quality rules which apply to all VET providers, and the external evaluations carried out by the EVA. The weaknesses have been the lack of documentation showing that VET providers have actually implemented a systematic quality assurance system, and especially the lack of clear national quality indicators, thus resulting in a lack of basis for external evaluation (and inspection) in a highly decentralised system. However, the Danish Ministry of Education took the next step, by introducing six quality indicators for the entire education system in 2006. So when analysing the Danish *approach* to the quality of VET within the framework of the CQAF, the following overall status can be ascertained:

First wave from 1990 to 2000

During the 1990s, systematic quality assurance and development was introduced as a compulsory element for all VET providers, and the Danish Ministry of Education initiated numerous activities aimed at promoting quality “thinking” in the VET system. Systematic quality assurance and development was implemented by means of a bottom-up process, which became the national strategy in 1995. Today, all VET providers are required to self-evaluate the VET they provide; and they should all have implemented quality systems, and use models/frameworks very similar to the CQAF.

The overall policy aim of the “first wave” was to establish a quality system for systematic self-evaluation and follow-up within framework governance – at provider level. This process was supported by continuous local and regional quality development, where the task of the Ministry was primarily to offer support and inspiration to local initiatives. The role of inspection and external evaluation was toned down until the late 1990s. The first sign of a change of policy was the establishment of the Danish Evaluation Institute (*Danmarks Evalueringsinstitut – EVA*) in 1999, as an external, independent body responsible for quality assurance and the development of Danish education and training.

Second wave from 2000 to ?

In the second wave, output monitoring has gained greater importance in the Danish approach to quality. Thus, it became important to set up clearly defined *national* indicators for quality. For this reason, the Danish Ministry of Education laid down six quality indicators formulated for the entire education system (please see page 26). These indicators have subsequently been adapted to match the specificities of the different fields of education. With the introduction of quality indicators and indicator based inspection, the Ministry has strengthened the overall external monitoring of the system.

This enables the Ministry to more actively identify quality problems at specific educational institutions and branches of the system. The annual resource report is the latest innovation within the Danish approach to quality in VET (see page 37).

CQAF indicators in a Danish perspective

However, quality approaches alone are insufficient. They are tools or measures for attaining the overall objectives for a VET system. So when focusing on quality in the Danish VET system, it is important to analyse how the system meets overall policy priorities, such as those defined in the CQAF. Besides the model, the CQAF also comprises a measurement tool, i.e. a set of reference indicators aiming at facilitating the Member States to monitor and evaluate their own quality systems. These indicators include the following three areas: employability, access, and matching. The following sections provide a qualitative description of how the Danish VET system matches these indicators, and the problems it is facing:



Employability

An intrinsic quality of the Danish IVET system is the fact that it is built on the dual training principle. Trainees have to enter a contract with a company in order to complete their training programme. The dual training principle ensures that the trainees acquire both theoretical and practical competences within a profession, so that their skills are immediately useful when they enter the labour market. The result is that the employment rate in Denmark for trainees who have completed an IVET programme is very high; approximately 80% of all trainees are employed one year after completing an IVET programme²¹.

The disadvantage of this system is the lack of training places. Too few enterprises employ apprentices, especially because of changes in the business structure and work organisation. Today, many production processes are highly specialised, and furthermore, too expensive to slow down or leave to apprentices. Consequently, many enterprises do not employ apprentices, or cannot be approved as a training centre, because they provide an inadequate learning context. However, progress has been made remedying this situation. The Ministry of Education and the Ministry of Integration have launched a number of campaigns and initiatives addressing the issue of training places. For example, the Ministry of Integration launched a campaign “100 training places within 100 days” especially aimed at second generation immigrants and employers, and there have also been campaigns within specific sectors aimed at increasing the number of employers taking in apprentices. Some progress has been made in general and in respect of these groups during the last few years.

Matching

Involving all the stakeholders in a continuous dialogue on VET and its development ensures that the Danish VET

21) For available figures on the employment rate of graduates from vocational colleges, see <http://us.uvm.dk/erhverv/generelt/beskaeftigelsesfrekvenser.htm?menuid=200504>.

system matches the demands of the learners, the enterprises and the labour market. The social partners are responsible for monitoring the development within the various sectors, and contribute to the continuous updating of VET programmes. For example: each year, the continuing training committees in CVET develop or change approximately 500 CVET programmes, in order to ensure that the programmes meet the demands of the labour market. The VET providers also play an important role in ensuring the flexibility and adaptability of the Danish system. They lay down the local educational plans in cooperation with the local representatives of the social partners, hereby ensuring that local needs and demands are taken into consideration at the VET institutions. Furthermore, the learners are also involved in the dialogue about VET, via student councils and via on-going evaluations of programmes (e.g. in CVET), and evaluations conducted by the EVA.

One of the main problems within the field of matching is how to make the VET programmes more attractive to young people. Denmark shares this problem with most European countries. Many young people opt for the general upper secondary education programmes, and do not find VET to be an attractive option. One of the Danish Ministry of Education's main priorities is to find new tools dealing with young people's values and priorities, and how to "shift" them in the direction of VET.

Access

The VET system is organised as a flexible and stepwise system, which ensures that it is accessible to trainees with different levels of proficiency and capability. In the technical training programmes, the trainees can build their own training programme, so-to-speak, to match their capabilities and their needs. Recently, new programmes have been set up to meet the needs and skills of young people with a low level of academic proficiency. These programmes are more practical in their scope, and ought to be able to match the needs of this group of learners. Furthermore, the guidance system and the



individual support for trainees have been strengthened in order to provide more holistic and coherent guidance and support to young people in IVET.

However, the IVET system is still facing problems with the residual groups, and with trainees who drop out of an IVET programme. Immigrants find it particularly difficult to complete an IVET programme, and secure themselves an active status in the Danish labour market. As a consequence, a number of campaigns and initiatives have been launched focusing on retaining immigrants within the IVET system (see also page 33 on Employability).

The CVET system is also highly flexible and modularised, and the increased integration with the IVET system will improve the possibilities of unskilled workers achieving the competency level of a skilled worker. In many ways, the system offers the opportunity for life-long learning. CVET focuses specifically

on providing training for adults with a low level of educational attainment, and marginalised groups. Another main priority is to motivate and inspire adults to enter a Life Long Learning pathway. LLL is easier in theory than in practice.

Thus, when it comes to achieving the Lisbon goals, and introducing quality measures as described in the Copenhagen Declaration, the Danish VET system offers a number of examples of good practice, despite the challenges it is facing. Moreover, the Danish approach to quality offers the awareness that quality assurance and development can be fully integrated in a VET system at both system and provider level.

The next steps in the Danish approach to quality



The Danish approach will be developed in a number of areas in the years to come. The Danish Ministry of Education has defined three main priorities in the fields of quality assurance and development:

Introduction of an annual resource report

Introducing and anchoring a systematic approach to quality in an organisation takes time. It is quite clear that VET providers in Denmark are at different stages in this process. In order to bring forward this process, the quality rules were changed in 2007 introducing new measures for documentation of quality approaches (see Internal Evaluation, p. 21) and setting up new objectives for monitoring completion and drop-out rates, especially to support trainees of another ethnic origin than Danish or socially disadvantaged young people.

The next step in the internal evaluation is the introduction of an annual resource report for the educational system in Denmark – also including VET. This is to be a parallel to the annual financial report. In the resource report, college performance will be calculated in terms of indicators set up by the Danish Ministry of Education. These indicators evolve around the 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 spent on minimising drop-out rate;
- 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 documentation basis for managing the quality of the IVET system and to simplify the present documentation requirements for vocational colleges. The annual resource report will also facilitate systematic bench-marking of the colleges and document the relations between input, process, output and outcome. The main focus of the annual resource report will be on output, however, the report will also include more descriptive elements to give the colleges the opportunity to describe the interrelationship between their quality strategy, activities, context and output.

The annual resource report facilitates the efforts of the Ministry to monitor education and training. It makes it possible to focus on specific priority areas, such as completion and drop-out rates as well as the efforts of the colleges to tackle these issues. The annual resource report should be seen as the next step in the Danish quality strategy within VET and a method of meeting the demands of collecting and systematising data, which are of relevance to the continuing development of the Danish VET system.

Danish experiences relating to the introduction of the annual resource report may contribute to the continuous discussion and study of indicators, which have been laid down on a European level.

One of the issues which the work on indicators has brought to the fore is how to ensure the quality of the training in the companies. The social partners are responsible for the in-company training and for ensuring the quality of this training. However, it is a rather unclear issue, as quality measures and procedures vary from sector to sector. Whereas vocational colleges are required to document their quality approach, there is no such obligation placed upon trade committees or companies.

Voluntary benchmarking among VET providers

In a decentralised education system like the Danish system, responsibilities have been distributed between the state and the local VET providers. The Ministry lays down objectives and frameworks, and the providers are very autonomous in their efforts to comply with the national framework. At the colleges, the management is responsible for the day-to-day running and development of the VET provided. The colleges have a double responsibility concerning quality assurance and development: on the one hand, they must document their procedures and results to the Ministry, and on the other hand, they must ensure that quality is systematically anchored

within the organisation, and that a culture of evaluation is developed. School leaders and teachers are responsible for the planning, organisation and execution of teaching. The Danish Ministry of Education is not to be involved at school level. Development is a question of commitment, and the desire to do better. In this respect, experience from existing networks shows that cooperation among providers on benchmarking, i.e. comparing and discussing data, is a suitable method for furthering local quality assurance and development.

In order to take the benchmarking forward and contribute to the establishing of networks, a number of network projects have been initiated to test new approaches to benchmarking. An example of such a project is “From Benchmarking to Benchlearning” initiated by the ES Benchmarking network, which includes 35 member colleges. The project is financed by the Danish Ministry of Education, the SCKK (Statens Center for Kompetence- og Kvalitetsudvikling – The Centre for Development of Human Resources and Quality Management) and the colleges. 12 of the network colleges participate in the project, which aims at identifying the prerequisites necessary for ensuring that documented evaluation results lead to changes in practice, a step which has proven hard to take in many cases. The aim is to find out which structures, functions and processes have to be established in order to make evaluations and benchmarking result in organisational learning, not just empty bureaucratic rites²².

Another example of a benchmarking network is the UddannelsesBenchmark consisting of 28 commercial colleges. The aim of this network is to make quality assurance at the colleges concrete, transparent and development-oriented. An important element in the network is the concept of coaching whereby three consultants from the network visit a college and enter into a dialogue with management, teachers and students on specific priority areas. The aim is to promote critical

22) For further information, see <http://www.es-benchmarking.dk/>.



reflection on own practices and provide examples of “good practices” from which other colleges might learn²³.

The ambition is for ALL providers to be included in such networks to ensure mutual and continuous inter-organisational competence development.

Active participation in the European cooperation on quality

In the same way that local and national networks are excellent methods for assuring and developing quality, European cooperation is a precondition for knowledge sharing and dissemination of “good practices”. As a consequence, the Danish Ministry of Education aims to motivate Danish VET providers to get involved in European initiatives. This will be done by informing providers about the possibilities of European cooperation, and encouraging them to participate

²³) For further information, see <http://www.uddannelsesbenchmark.dk>.

in projects under, for instance, the auspices of the Leonardo programme.

The Ministry will also continue to participate actively in the work that lies ahead in ENQA-VET, thus continuing the ambition of the Copenhagen process to ensure up-to-date, relevant and high-quality VET programmes, allowing a comparison of qualifications across Member States. The aim of the network is to develop, disseminate and promote best European practice and governance in the field of quality assurance at both system and provider level. The Danish Ministry of Education continues its commitment to this work.

In the Copenhagen Declaration, quality was identified as an important area of cooperation. Denmark has played an active part in the work to complete the agenda. The CQAF is considered to constitute a fruitful basis for this work, both on a European level, and in Denmark.

Annex 1:

CQAF policy priorities and the case of Denmark

Policy priorities	Objectives	The case of Denmark
1. Employability	<p>Competences & attitudes</p> <p>Completion/drop-out</p> <p>Transition to employment</p> <p>Quality of employment</p>	<p>Dual training principle: trainees spend 2/3 of their training in a company.</p> <p>Flexible and modularised system with possibilities for partial qualifications and credit transfer across IVET programmes.</p> <p>Objectives for VET programmes laid down by the Ministry, in cooperation with social partners (thereby reflecting labour market demands).</p>
2. Matching	<p>Information/knowledge</p> <p>Responsiveness</p> <p>Adaptation/flexibility</p> <p>Innovation</p>	<p>Stakeholder involvement at all levels of the system.</p> <p>Social partners responsible for monitoring skills and labour market development, and continuously adapting VET programmes.</p> <p>Innovation and development projects stipulated centrally and initiated locally.</p>
3. Access	<p>Basic competences for everyone</p> <p>Targeted provision of VET</p> <p>Participation rates for certain groups</p> <p>Permeability/transparency</p>	<p>Modularised and flexible IVET.</p> <p>Short IVET programmes targeted at trainees with a lack of academic proficiency.</p> <p>Broad entry routes into IVET, allowing the trainees the possibility of trying out various VET programmes before making their final decision.</p> <p>Public CVET courses with a specific focus on adults with a low level of educational attainment.</p> <p>CVET courses targeted at refugees and immigrants, and young people with particular difficulties.</p> <p>Modularised and flexible CVET.</p> <p>IVET and CVET are in the process of merging, in order to increase transparency, and the possibility of transferring credits between the two systems.</p>

Annex 2: Quality rules

Regulation on IVET - Order no 1518 of 13/12/2007 Chapter 2 Quality Assurance in IVET

§ 5 The trade committee responsible for an IVET programme shall follow up on training, and ascertain whether it meets the quality requirements for the programme.

Subsection 2. The trade committee shall continuously assure and develop the quality of the practical training in IVET, including monitoring of the development in the completion rate of specific groups of trainees. This is to take place in cooperation with the local training committees and the enterprises.

Subsection 3. The trade committee shall be responsible for monitoring the development in employment, and shall, on the basis thereof, submit a recommendation concerning new needs or changes to the training.

Subsection 4. The trade committee shall monitor the work of the local training committees on local education plans at the colleges approved to offer IVET.

§ 6 The vocational college shall have a quality system for the use of internal continuous quality development and assessment of results in the school-based part of IVET. The quality system is to include procedures for self-evaluation and procedures for the continuous collection and management of information.

§ 7 The vocational college's procedures for self-evaluation shall ensure that defined areas are subjected to systematic and critical discussions regarding the college's planning and implementation of IVET in order to facilitate an evaluation

of its results compared to its objectives and action plans for increased completion rates.

Subsection 2. An annual self-evaluation shall be carried out, which includes at least one area regarding the planning and execution of IVET programmes and teaching.

Subsection 3. On the basis of the self-evaluation, the vocational college shall develop a follow-up plan, laying down the needs for changes, an operationalisation of objectives, strategies and a time schedule for the follow-up. The follow-up plan shall be made available on the website of the vocational college.

Subsection 4. The college follow-up plan shall include an action plan for increased completion rates among IVET students. In the action plan, the college shall prioritise its chosen methods for increasing the completion rate in relation to the student composition, provision of IVET programmes and other challenges specific to the college. The action plan shall include the objectives for an increased completion rate and the objectives for the effect of the chosen methods. Finally, the action plan is to include a report on the results of the previous year. The action plan shall be approved by the board and submitted to the Danish Ministry of Education in a form drawn up by the Ministry.

Subsection 5. The vocational college's procedure, cf. § 6, shall ensure that college employees and learners and the local training committee are involved in the self-evaluation and in drawing up the follow-up plans to a necessary and adequate degree.

§ 8 The vocational college's procedures for the collection of information are to ensure that the vocational college is able to document its results on a continuous basis, including documenting its efforts for increasing the overall completion rate. Moreover, the documentation is to form part of the

college's self-evaluation. The continuous collection of information shall

- 1) document how the chosen teaching and teaching methods support the objectives of the IVET programmes and the objectives of the teaching;
- 2) include a report and evaluation of completion and drop-out rates.

Subsection 2. The results of the continuous collection of information shall be published on the college website for each year by March the following year, at the latest.

§ 9 The vocational college's description of the principles for and the planning of the systematic quality assurance shall be available in a brief and clear format on the college website.

Subsection 2. The description shall support the participation of the college employees, the trainees and the local training committees in the systematic quality approach and their evaluation of this approach.

Annex 3: Acronyms

CQAF	Common Quality Assurance Framework
CVET	Continuing Vocational Education and Training
ENQA-NET	European Network on Quality Assurance
EVA	The Danish Evaluation Institute (<i>Danmarks Evalueringsinstitut</i>)
FoU	Innovation and development projects (<i>Forsøgs- og udviklingsprojekter</i>)
IVET	Initial Vocational Education and Training
REU	Advisory Council for Initial Vocational Education and Training (<i>Rådet for de grundlæggende erhvervsrettede uddannelser</i>)
REVE	Council for Adult Education and Training (<i>Rådet for erhvervsrettet voksen- og efteruddannelse</i>)
SCKK	The Centre for Development of Human Resources and Quality Management (<i>Statens Center for Kompetence- og Kvalitetsudvikling</i>)
TWG	Technical Working Group
VET	Vocational Education and Training

Annex 4:

Relevant institutions and organisations

Government Agencies

Undervisningsministeriet
The Danish Ministry of Education
Frederiksholms Kanal 21
DK-1220 Copenhagen K
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Danish Confederation of Trade Unions
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One of the areas given high priority in the Copenhagen process is the promotion of European cooperation in quality assurance and development in order to enhance mutual trust among the Member States. The focus of this publication is on the Danish approach to quality in vocational education and training (VET).

The Danish quality measures at policy level are described and assessed within the framework of the Common Quality Assurance Framework. Nine common measures for quality assurance and development are described from the perspective of VET: the involvement of stakeholders; common national guidelines; output monitoring, ministerial approval, monitoring and inspection; testing and examination; transparency and openness; evaluations by the Danish Evaluation Institute; and international cooperation and surveys.

The overall aim of the publication is to contribute to the Copenhagen process, and to European knowledge sharing in the field of quality assurance and development. The hope is that this publication will become part of the overall process of promoting transparency and cooperation within VET in Europe.