

Quality policy 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.

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).

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.

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.

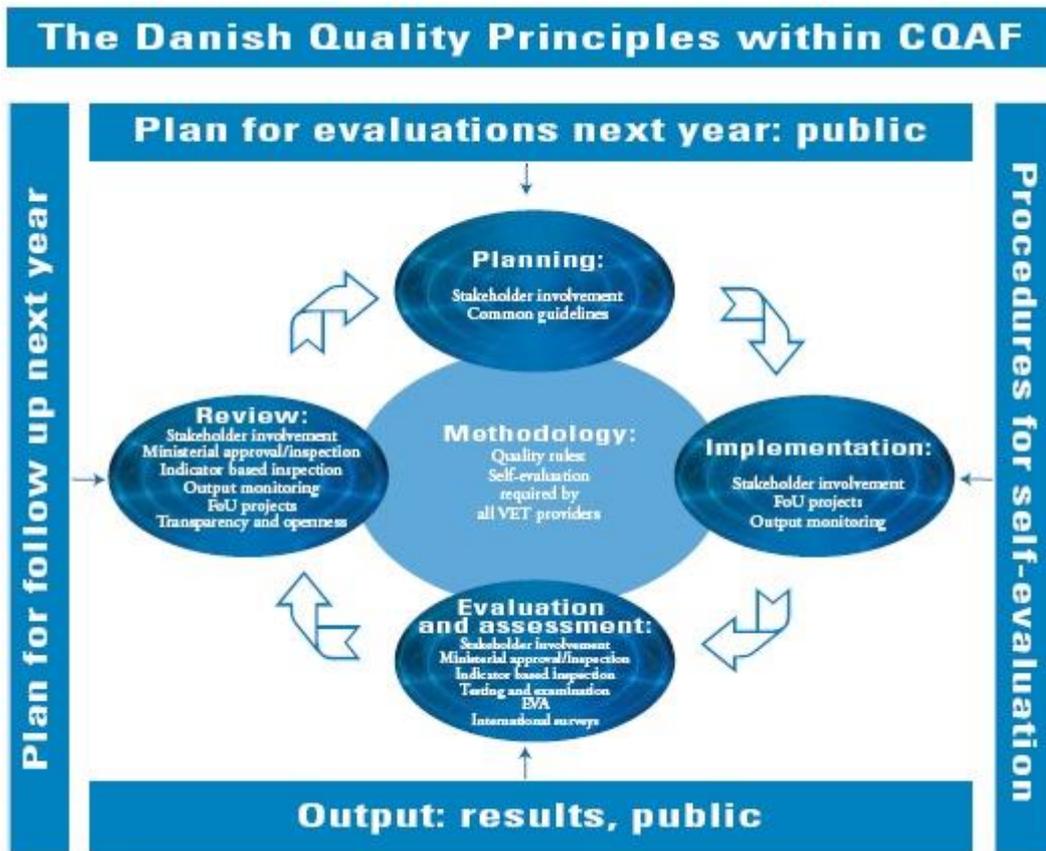


Figure 2.

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 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.

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 competencebased programmes should be seen in the light of the transition towards a lifelong learning system, in which formal, nonformal 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.

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.

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:

- *learners'* systematic quality development at the colleges, specifically focussing on proficiency and flexibility;
- *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;
- the professionalisation of *school management*;
- 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 selfevaluation by the VET institutions. All providers are required to evaluate their own performance and the courses they provide on a regular basis.

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

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 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.

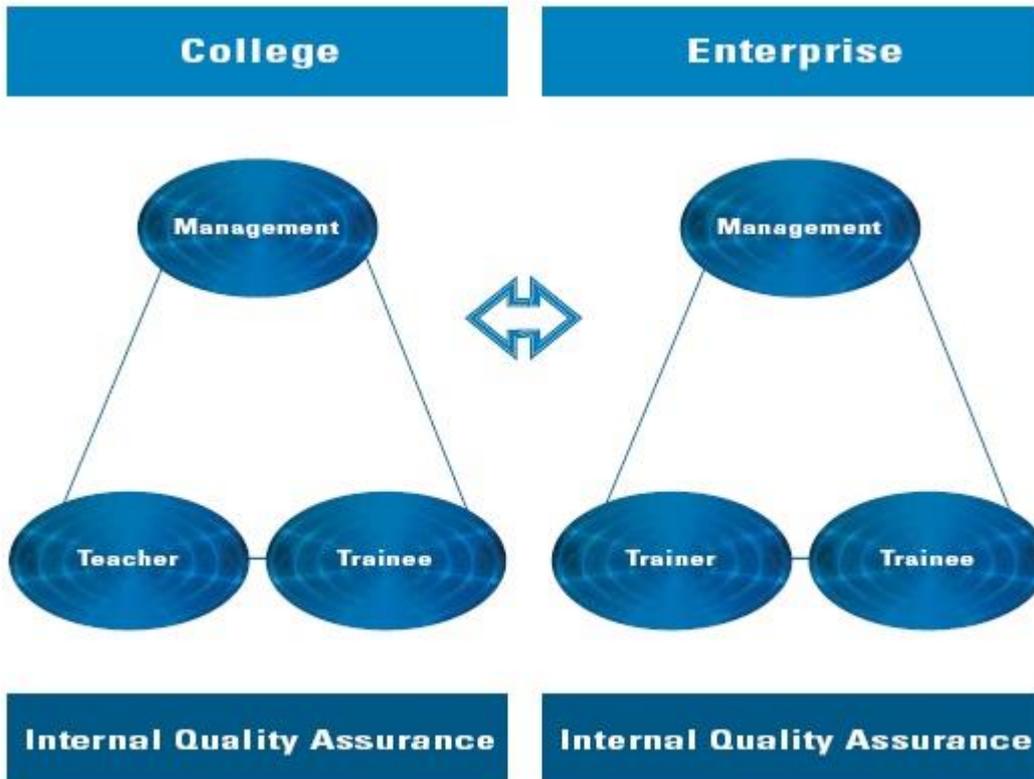


Figure 5.

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 approval, monitoring and inspection of VET providers

The Danish Ministry of Education is the main authority 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.

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;
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.

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 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.

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 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 bottomup 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 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.

Footnote

10) For 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.

11) Ibid.

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

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

14) The 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.

15) Please see annex 2: Quality rules.

- 16) Please see <http://www.viskvalitet.dk>.
- 17) The 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.
- 18) "Lov om gennemsigtighed og åbenhed i uddannelserne m.v." Act no. 332 of 18/05/2005.
- 19) I.e. aggregated data on teaching, not evaluations of single teachers or courses.
- 20) The Danish Approach to Quality Assurance, 2002, p. 6.
- 21) For available figures on the employment rate of graduates from vocational colleges, see <http://us.uvm.dk/erhverv/generelt>