

## **Leonardo da Vinci project QUALIVET**



# **Quality assurance in secondary vocational education in the Netherlands in 2006**

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## **1. Introduction**

Since the turn of the 20th to the 21st century many changes have been and still are taking place in secondary vocational education in the Netherlands. In order to be able to fully understand quality assurance and changes that are taking place in quality assurance in this era, the context of the overall changes in the Dutch vocational education system should in fact be understood as well.

Already for about ten years secondary vocational education in the Netherlands finds itself in a very dynamic and turbulent situation, caused by education internal and external factors. It would be far too ambitious, however, to try to describe and analyse the continuous developments during this last decade. We will restrict ourselves to indicating events which directly constitute important landmarks for the developments in regard to quality assurance in secondary vocational education.

The first part of this report is devoted to a description of the most important developments which during the last decade happened at national level in the Netherlands in regard to quality assurance in secondary vocational education. In order to get a better understanding what these developments mean in practice and how they influence quality assurance at school level, in the second part of the report an analysis has been made of the typical experiences a regional vocational education college (ROC A) has with the introduction of a quality management system.

The information that is presented in this report is based on documentary research (laws, policy notes, evaluation study reports, quality assurance reports, internet websites) and interviews.

## **2. Legal context: the WEB and the WOT**

A very crucial event in regard to quality assurance is that since 1 August 1997 the Law on Adult and Professional Education (WEB) is governing secondary vocational education in the Netherlands. This law is meant to bring vocational education and industry closer together, to enhance the responsiveness of the education system, to optimize flexibility in education and in the system of occupations and to provide every student with a so called start qualification.

In regard to quality the Law (art. 1.3.6) expresses that the entitled authority of an education institution has to set up a system of quality care and to provide for a regular assessment of the education quality, thereby involving independent experts. Every two year the entitled authority has to make public a report about its quality care which has to be send to the Education Inspection. In this report an explanation must be given of the methods applied in quality assessment, the organisation of quality assessment involving independent experts, the results of the regular assessment, the policy intentions of the institution in view of those results and its intentions in regard to quality assessment.

Hów quality arrangements should be made, was not arranged by this law, neither were reference criteria for quality defined. Point of departure was that the education institutions are responsible for offering and performing education which meets the expectations and requirements of clients and customers, such as the students, further education, industry and the public authorities.

In practice as reference criteria were considered the objectives of vocational education as they were mentioned in the Law:

*Vocational education has to:*

- *provide for theoretical and practical preparation for the performance of occupations for which a qualifying education is required or useful.*

*Moreover it has to:*

- *enhance general training and the personal development of the participants*
- *and it contributes to their functioning in society.*

*Besides these the institutions also bear the responsibility for:*

- *the accessibility of education, specially for underprivileged groups,*
- *the offer of efficient learning paths,*
- *the offer of possibilities for study and career guidance and*
- *the adaptation to the developments in society at national and international level in general and especially in regard to the labour market.*

By the WEB the educational institutions were given a big autonomy in performing their tasks. The Education Inspection should control their task performance.

In 2001 the functioning of the WEB has been evaluated. In the frame of this evaluation process a series of research projects has been carried out, all focusing on a special subjects. One of these studies concentrated on the influence of the WEB on the quality of the education offer and the examinations. Secondary vocational education institutions are primarily responsible for the quality of learning processes, including testing and final examination. The study 'Quality assessed in the BVE' (Nieuwenhuis, a.o.) came to the conclusion that *'the WEB had a positive effect on quality consciousness in the vocational education sector, but that not in all fields, however, this had led to 'operational' policy. Accountability in arrear gets too little attention. The institutions have not succeeded yet to develop a vision on education which is shared by teachers and the regional industry. As a result external and internal consistency and attractiveness of education are not optimal. Stimulating supervision would be the most important instrument to attain quality advancement. External legitimization could be enclosed in a public system for quality supervision'*.

In 2001 also the Education Council gives a tentative evaluation of the WEB (WEB: Werk in Uitvoering, 2001). The Council agrees with the analysis of the Steering Committee Evaluation WEB about the internal supervision in education institutions:

*'There are big differences in the policymaking capacities of the various education institutions. Quality care in these institutions is not up to level'.*

Here the Council cites the Education Inspection which concluded that the self-correcting capacity of the Regional Education Institutions (ROCs) still was insufficient. Initiatives at school governors level are required. The Council thinks that governors and managers of schools have to stimulate quality care. They should establish frameworks for quality care which have to be filled in by teachers and practice coaches in the first place. The Education Council emphasizes the responsibility of the government for education quality and in this framework the final examinations. Therefore the government should define minimum requirements for final examinations which are carried out by examination institutions, mostly being the education institutions themselves.

The Council is worried that the vagueness of the quality definition in the WEB leads the Education Inspection to act as writer as well as the surveillance of the norms. A single, unified Education Inspection model would leave insufficient space for diversity and for the various quality models that are applied by the autonomous education institutions.

The Socio-Economic Council also criticizes the quality of final examinations in secondary vocational education. The Council pleads for national examinations and standards. Independent control should be strengthened. In its reaction on the ministerial policy note 'Koers BVE, Perspectief voor het middelbaar beroepsonderwijs en de volwasseneneducatie' the Council argues for stimulants for quality improvement of Regional Education Institutions (ROCs) by initiating a process of communication and discussion about the quality and results of the ROCs with social partners, companies, participants, parents and other education institutions. This process of giving account would have to be compulsory and based on the education institution's quality care report.

Quality development should be related to the interaction of the institution with the main users: the students and industry.

The critical assessments of the situation of secondary vocational education at the turn of the century gave way to important new policy developments.

In 2002 the Law on Education Supervision (WOT) has been accepted in Parliament. The intention of this Law is to enhance the concern for quality in and of Dutch education. The responsibility of the Education Inspection in regard to education institutions and programmes is once again described and clarified.

In 2002 also, the three umbrella organisations of vocational education institutions: BVE-Raad (for school based education in ROCs), COLO (for dual education) and Paepon (for private, non

government funded education providers), established the Quality Center Examinations (KCE). This Center has the objective to guarantee and stimulate the quality of examinations in secondary vocational education and therewith contribute to the societal confidence in the secondary vocational education diplomas. In August 2004 in the renewed WEB, the KCE is assigned as the legal body to carry out the external guarantee of the quality of examinations in secondary vocational education. On the basis of national quality standards the KCE has to assess the quality of the exams of all vocational education programmes of government funded and non government funded vocational education institutions, which are licensed in the so called CREBO register.

As a result, in regard to quality assurance in secondary vocational education, since 2004 besides the education institutions themselves two inspection institutions are playing a major role: the Education Inspection and the Quality Center Examinations.

### **3. Formal structures in quality assurance**

In the beginning of the 21st century many changes were implemented in the quality assurance of education institutions in the Netherlands.

Traditionally, the Education Inspection was responsible for controlling the quality of education in the Netherlands, from the level of primary education up to higher education (the 'hogescholen' and the universities). In 2003 a new quality assurance system was established in higher education, which cut back the Inspection's role in that part of education considerably in favour of a new national accreditation organisation (NVAO).

According to the new Law on Education Supervision the Education Inspection has the task *to maintain and to improve* the quality of secondary vocational education institutions and their units, being mostly (clusters of) education programmes. The new Law has two intentions: making transparent for society what is the state of education in the country and stimulating the education institutions to keep improving the quality of education.

The Law on Education Supervision of 2002 regards all school types and levels of education in the Netherlands. Every level of education is subjected to a specific supervision framework. Also secondary vocational education has a specific framework.

In the law it is emphasized that every school or other education institution is itself responsible for its education quality, including how quality is measured and evaluated. As much as possible the Education Inspection links up with this in its supervision activities and it stimulates schools to improve education quality themselves. The Inspection has to respect the own responsibility of the schools for their education and it should not burden the education institutions any more than is necessary for a careful supervision (this is called proportional supervision).

The Inspection has the following tasks:

- to assess the quality of education provision on the basis of the legal regulations
- to stimulate education quality and the own responsibility of education institutions
- to report about the developments in education, especially in regard to its quality at the level of the institutions and of the system as a whole.

According to the Law quality promotion follows naturally from quality assessment

The Inspection has the task to assess the education institutions for their quality periodically, to talk to them seriously if there are any deficiencies and to stimulate them to develop their self-regulatory capability. Central question which the Inspection has to answer in every Inspection visit is: how is the quality of the education at a school? This central question can be subdivided in three other questions:

- how is education quality care arranged?
- what is the quality of education and learning?
- what is the quality of the education results?

#### *The WEB*

A school itself is responsible for the quality of its education programmes. Quality implies: describing the quality which is aimed at through specific target objectives, the attaining of these objectives, the surveillance of the quality and public accountability. The school itself defines its quality objectives and standards, just as it does with the way in which quality is being measured and evaluated. The education laws give way for making own choices on the basis of own identity and professionalism. The Law on Education Supervision (WOT) takes this point of view also as a point of departure by instructing the Education Inspection to link up its quality assessment with the self-evaluation of the school.

If a school assesses its quality regularly, then, where ever possible, the Inspection is evaluating quality on the basis of this self-evaluation. Before carrying out an investigation itself, the Inspection will hold the self-evaluation against the light in regard to some aspects:

- a. the Inspection controls if all relevant aspects of the functioning and performance of the school have been considered in the self-evaluation. In any case the evaluation has to assess the quality aspects mentioned in the supervision framework of the Inspection for the vocational education sector (see further).
- b. on the basis of documents delivered by the school, the Inspection checks if the self-evaluation is well-founded and reliable. The Inspection looks into the methods being used to assess quality and into the degree to which stakeholders and external experts have been involved. At random inspections may also take place at location in the schools.

- c. the Inspection checks if the school has chosen target quality objectives at the right level. The Inspection looks at the standards of the school in the light of school specific circumstances (e.g. the composition of the student population), the norms and standards of comparable schools, the arguments the school gives for its choices and the ideas about the level of quality in society.

Quality in the WOT refers to two categories of aspects: legal regulations and other aspects of quality. Legal regulations for secondary vocational education have been formulated in the WEB. It concerns, among others, requirements for teachers, for school organisation and for school hours and periods and education targets. If a school complies with these legal regulations, this indicates that it has a certain basic quality, which, however, is no guarantee that a school delivers the quality that might be expected compared to other schools. According to the WOT, the Inspection also has to assess a number of other aspects of quality which are related to the functioning and performance of the specific school. The Inspection has to work out these aspects in consultation with the education field, resulting in the frame of supervision for a sector of education.

The Inspection gives an overall assessment of the total quality of a school. The assessment deals with every quality aspect separately but also links them together. Quality aspects are all identifiable in Inspection reports, which are public.

If a school seriously or protractedly lacks quality, the minister of Education can take administrative measures. Often these measures consist of stimulating efforts, such as extra money for more teachers, better education equipment or additional management capacity. If the worst comes to the worst school funding can be blocked or suspended. This, however, hardly ever happens. This, very recently, has caused the Education Council to advise the minister to add more negative sanctions to the Inspection's set of instruments, such as financial fines.

In consultation with the representatives from education field and other stakeholders the Inspection has to develop a frame of supervision for each education sector. The intention is to reach a consensus about the mode of operation of the Inspection and the content of the supervision. In regard to the mode of operation the frame of supervision informs about the kind and frequency of the investigations the Inspection carries out, about the Inspection reports and about the relationship between these reports and the electronic school dossiers and quality maps. In regard to content the supervision frame contains an evaluation framework which is an elaboration of quality aspects in the form of indicators and norms. This evaluation framework explains what may be expected of school quality in three clusters of indicators: quality assurance and - improvement, teaching and learning, and results. The frame of supervision of an education sector has to be approved by the minister of Education.

Currently in practice this frame of supervision is very important because it serves as a guiding beacon for the way in which vocational education colleges (ROCs) operate in regard to quality assurance. Many of them have experimented and struggled with quality models such as ISO and INK. Now the inspection criteria are often the guiding lines to which criteria of other quality models are being weight against.

#### **4. The frame of supervision for secondary vocational education**

According to the WEB vocational education institutions have a number of legal assignments, combined with a great degree of autonomy. Consequently the investigations of the Education Inspection will focus on the way in which these institutions compel with the legal assignments, on which quality objectives they have formulated for themselves and on the question if these objectives have been realised to an acceptable level. The intensity of the Inspection's supervision depends on the degree to which the institution makes its quality care visible and on the quality of its education. In a self-evaluation report the institution must make clear which objectives it has aimed at in regard to quality aspects, what has actually been realised and what is to be improved in the forthcoming period. Where these data provide sufficient and sufficiently reliable information, the Inspection will adopt the judgments of the self-evaluation and these elements most probably will not be part of the investigation of the Inspection. In cases where there is insufficient information in the self-evaluation report, where the Inspection thinks that the targeted objectives are not ambitious enough, where the self-evaluation indicates lacking quality or where there are relevant aspects that the self-evaluation does not pay attention to, the Inspection may start an investigation itself.

In its investigation and its report the Inspection makes a distinction between the organic parts of the institution. It assesses the institution as a whole as well as the organic parts, which normally are clusters of education programmes. On the basis of self-evaluation data and former data of supervision, among others, the Inspection selects some education programmes in every organic part which can offer a representative picture of that part. Thus, education programmes function as a source of information. Only in case of serious or long-lasting shortcomings in specific programmes statements will be made explicitly about education programmes.

The Education Inspection has of five different instruments at its disposal:

- a. the periodic quality investigation (PKO)
- b. the further investigation (NO)
- c. the investigation of quality improvement (OKV)
- d. the yearly investigation (JO)
- e. the incidental investigation (IO)

a. the periodic quality investigation (PKO)

The PKO is the most extended supervision investigation the education institution is confronted with, every three years. On the basis of this investigation the Inspection is able to assess in full the quality of education in the institution. Basic element in this investigation is the quality of the self-evaluation which determines the degree, form and content of the PKO.

b. the further investigation (NO)

A NO can be carried out in case that, during the preparation or carrying out of a PKO, the Inspection gets a reasonable notion that education quality is deficient in regard to important aspects. In that case the investigation can be extended or deepened in regard to these aspects and some extra indicators in the supervision framework can be used, especially related to financial, personnel and material policy. A NO must be finished within six months after the PKO. The report of a NO is always included in the PKO report.

c. the investigation of quality improvement (OKV)

In case of serious deficiencies in an organic unit (one or more education programmes) during the PKO, the Inspection carries out an investigation into quality improvement. The nature of the shortcomings (insufficient quality, non compliance with legal requirements) determines the time limit for the OKV. The OKV has to be carried out within two years after the PKO in which the shortcomings were observed.

In the OKV report the education programmes at stake will be explicitly mentioned.

d. the yearly investigation (JO)

According to the WOT the Education Inspection investigates the education quality of the institution on a yearly basis in the JO. The JO has a limited size and takes no longer than one day.

The JO has four objectives, which determine the agenda:

- investigation of the results of the institution
- updating of data for the overview of information about the institution
- consultation about the development of quality assurance and about the development of the institution in general
- analysis of the risks in the further development of the institution.

Other issues can be added by the education institution as well as the Inspection.

The JO only takes place in those years in which no PKO or OKV is carried out in the institution. However, in case of a PKO or OKV year, also subjects of the JO can be investigated. The JO is completed with a report for the institution, which is publicly available.

d. the incidental investigation (IO)

In case of serious complaints, news in the media, questions in parliament or a request of the minister, the Inspection can carry out an IO.

The quality aspects that are investigated by the Inspection are dependent on the nature of the inspection (PKO, NO, OKV) and the nature of the education institution which may have specific points of attention. The PKO is the most important investigation in which all important inspection areas are covered.

## **5. The evaluation framework for secondary vocational education**

The Inspection's evaluation framework is subdivided in three domains:

- quality assurance and quality improvement,
- teaching and learning, and
- results

Each domain encloses a number of quality aspects which are considered to be crucially important.

Each quality aspect is build up on indicators which are in fact the specific measuring rods.

In this section the quality aspects and indicators will be described in detail because these may be a source of inspiration in the Qualivet project.

### **Domain A. Quality assurance and quality improvement**

The question to be answered is how quality assurance and quality improvement of the education are arranged.

The vocational education institution has to develop a quality care system which provides for the assessment of its own quality, the development of improvement activities if necessary, the assessment of the results of these activities and the quality assurance. The quality care process has to be carried out with the involvement of stakeholders, other institutions and external experts. The results must be published in a three yearly report.

Quality assurance is assessed at the level of the education institution as well as the level of the education programmes. At the institutional level an assessment is made whether there is a clear quality care policy and whether this policy is sufficiently steered and provided with amenities towards the education programmes. For the education programmes is assessed whether quality assurance and quality improvement has actually been achieved.

### ***Quality aspects***

- A1. Quality assurance and quality improvement at institution level
- A2. Quality assurance and quality improvement at educational programme (cluster) level
- A3. Legal protection of the participant
- A4. Examinations

### ***Quality decision rules***

For the institution: quality assurance and quality improvement are satisfactory if A1 is passed sufficiently and if also the majority of the education programmes pass sufficiently in regard to quality assurance and quality improvement.

For the education programme: quality assurance and quality improvement are satisfactory if quality aspects A2 and A4 are passed sufficiently.

### ***Quality indicators***

*Quality aspect A1: quality assurance and quality improvement at institution level.*

The education institution assures and improves education quality and accounts for that.

A1.1 The institution has identified relevant stakeholders for its (education) activities and includes their wishes in defining the quality requirements

A1.2 The institution has defined its strategy, verifiable targets and priorities and translated these into policy and quality objectives for, at least, the relevant areas of the WEB

A1.3 Quality care of the institution is sufficiently systematic and an integrated part of the policy cycle and the organisation of the institution

A1.4 The institution directs towards achieving its policy and quality objectives

A1.5 The institution involves relevant stakeholders in education quality assessment

A1.6 The institution involves independent experts in education quality assessment

A1.7 The institution adequately accounts for the achieved education quality towards the stakeholders.

Decision rule: The institution passes sufficiently if indicators A1.2, A1.3, A1.5 and A1.6 are assessed satisfactory. The institution passes good if all indicators pass satisfactory.

Additional indicators which could be assessed in a NO:

A1.8 The institution has a financial policy which leads to improvement of education quality and continuity of the institution

A1.9 The institution has a policy in regard to teaching and service personnel which leads to improvement of education quality

A1.10 The institution has a policy in regard to teaching facilities (rooms and materials) which leads to improvement of education quality

*Quality aspect A2: quality assurance and quality improvement at education programme (cluster) level*

The education programme cluster evaluates and improves education quality in a systematic manner

A2.1 The education programme cluster has worked out the quality objectives of the institution for its own situation

A2.2 The education programme cluster systematically works at achieving and keeping achieving the quality objectives

A2.3 The education programme cluster involves relevant stakeholders in the assessment of education quality, among which in any case the participants

A2.4 The education programme cluster involves independent experts in the assessment of education quality

A2.5 The education programme cluster adequately and regularly reports to relevant parties about the achievement of education quality.

Decision rule: The education programme cluster passes sufficiently if indicators A2.1, A2.2, A2.3 and A2.4 are assessed satisfactory. The institution passes good if all indicators pass satisfactory.

*Quality aspect A3: legal protection of the participant*

The rights of the participant are protected.

A3.1 The content and functioning of the education agreement meets the requirements

A3.2 The content and functioning of the education- and examination regulation meets the requirements

A3.3 The content and functioning of the practice agreement meets the requirements

A3.4 The content and functioning of the complaints regulation meets the requirements

A3.5 The content and functioning of the treatment of complaints in regard to matters of confidence meets the requirements

A3.6 A formal complaints procedure for the participants does exist

Decision rule: Because A3.1 to A3.5 are legal requirements, they all have to be fulfilled for the status of 'meets the legal requirements'. If an official procedure for complaints (indicator A.3.6) does not exist, the institution does not pass.

#### *Quality aspect A4: examinations*

The education programme takes care for examinations with good quality

A4.1 The education programme has an approval statement of KCE if it examines itself and/or it has a valid agreement for examining with a licensed institution

A4.2 The education programme acts according to the requirements of the approval statement

Decision rule: if indicators A4.1 and A4.2 are met, this quality aspect passes assessment.

### **Domain B. Teaching and Learning**

In article 1.3.5 of the WEB the tasks of the vocation education institutions are defined (see chapter 2). In the domain Teaching and Learning these tasks are elaborated further. They relate to all aspects of education, from the enrolment of students and the attuning to pre-vocational education up to the final examinations. Among others, quality aspects such as study feasibility of the education programme, the education learning processes, occupational practice teaching, contact with the participant and education process coaching are of great importance in this domain. An important input in regard to these quality aspects has to be delivered by the participants themselves. The Inspection is investigating whether the choices that have been made by the education institutions sufficiently and meticulously contribute to the tasks that are described in article 1.3.1 WEB.

### ***Quality aspects***

B5 Accessibility

B6 Study feasibility

B7 Education learning processes

B8 Occupational practice learning

B9 Contact with participants

B10 Education process coaching

### ***Quality decision rules***

For the institution: Teaching and Learning have sufficient quality if the majority of the education programmes qualify satisfactorily for the domain Teaching and Learning.

For the education programme: Teaching and Learning have sufficient quality if both the aspects B7 and B8 and at least 1 of the aspects B6, B9 and B10 qualify satisfactorily for the domain Teaching and Learning. B5 is assessed at the level of the institution.

### ***Quality indicators***

#### ***Quality aspect B5: accessibility***

The institution carries out an active policy to increase accessibility, especially for underprivileged groups such as disabled people.

This quality aspect has six indicators. If four indicators are passed, the assessment is sufficient. If all indicators are passed, the assessment is 'good'.

#### ***Quality aspect B6: study feasibility***

The education programme is feasible for participants

B6.1 The programme meets the content requirements that have been laid down in the education examination regulation (OER), shows a transparent structure and connection with related programmes

B6.2 The content of the programme attunes to pre-vocational education and successive education (mainly higher professional education)

B6.3 The organisation and the performance of the programme accounts for differences in education needs and possibilities of the participants (tailor-made pathways)

B6.4 The programme is offered to the participants within the programme- and study time that is required and manageable

B6.5 The institution strives for a maximum realisation of the programme time and gives account for that

Decision rule: The education programme cluster passes sufficiently if indicators B6.2, B6.3 and B6.4 are assessed satisfactory. The education programme cluster passes 'good' if all indicators pass satisfactory.

*Quality aspect B7: education learning processes*

The education learning process and the use of learning rooms and learning materials are efficient for the participants

B7.1 The education learning time of the participants is being used efficiently

B7.2 The content of education learning situations and the learning materials used attune to the final terms/partial qualifications, to characteristics of the participants and the characteristics of occupational practice

B7.3 The quality of the learning rooms and the inventory is sufficient for achieving the final terms/partial qualifications

B7.4 The whole of (didactical) arts of working is efficient and coherent, fits with the points of departure selected and offers room for self-reliance of the participants

B7.5 The needs for instruction, support and coaching of the participants in the education learning process are acknowledged and fulfilled in a stimulating manner

Decision rule: The education programme cluster passes sufficiently if indicators B7.1, B7.2, B7.4 and B7.5 are assessed satisfactory. The education programme cluster passes 'good' if all indicators pass satisfactory.

*Quality aspect B8: occupational practice learning*

The occupational practice learning is organised and carried out sufficiently efficient for the participants

B8.1 The education programme has laid down which part of the final terms has to be learnt in occupational practice learning and implements in a coherent way learning in school and in occupational practice learning

B8.2 The education programme prepares the participants as well as the occupational practice learning companies for the occupational practice learning

B8.3 During occupational practice learning the participants are coached by the school

B8.4 The education programme sees to it that the coaching of the participants by the company is satisfactory

B8.5 The education programme sees to it that the content of the occupational practice learning matches the requirements of the programme

B8.6 The learning results of the occupational practice learning are assessed according to the specified requirements

Decision rule: The education programme cluster passes sufficiently if indicators B8.3, B8.4, B8.5 and B8.6 are assessed satisfactory. The education programme cluster passes 'good' if all indicators pass satisfactory.

*Quality aspect B9: contact with participants*

The participants stay in a respectful and secure environment

B9.1 The information preceding the education programme about its content and organisation and the examinations is precise, realistic and timely

B9.2 During the education programme the information provision about all relevant issues is precise and timely

B9.3 Questions and remarks of participants are treated carefully

B9.4 Within its territory the education programme takes care of social and physical security and respectful contact between and with participants

B9.5 The education programme sees to it that within the territory of occupational practice learning places social and physical security of the participants and respectful contacts are realised

Decision rule: The education programme cluster passes sufficiently if indicators B9.1, B9.2, B9.4 and B9.5 are assessed satisfactory. The education programme cluster passes 'good' if all indicators pass satisfactory.

*Quality aspect B10: education process learning*

The intake and coaching of participants are sufficiently careful and efficient

B10.1 The education programme applies a system of intake and assessment

B10.2 The education programme applies a system of individual coaching of participants in case of processes of choosing and of change of education programme

B10.3 The education programme applies a system of individual coaching of participants in case of serious problems in the progress of the learning process and during the education programme personal and social coaching of the participants is available

B10.4 The education programme systematically registers the learning results and coaching data of the individual participants

Decision rule: The education programme cluster passes sufficiently if indicators B10.1, B10.2 and B10.3 are assessed satisfactory. The education programme cluster passes 'good' if all indicators pass satisfactory.

**Domain C. Results**

Qualification results are the final objective of vocational education. Education programmes have to aim at taking as many participants as possible to the end of their learning pathway successfully. When, for whatever reason, this cannot be achieved, then the education institution is responsible to accommodate the participant in a suitable, other place in such a way that they use the maximum of their capacities.

*Quality aspects*

C11 Institution results

## C12 Education programme results

### *Quality decision rules*

For the institution: Results are assessed to have sufficient quality, if C11 is qualified satisfactorily and if the majority of the education programmes qualify satisfactorily for the domain Results

For the education programme: Results are assessed to have sufficient quality, if C12 is qualified satisfactorily

### *Quality indicators*

#### *Quality aspect C11: results of the institution*

The institution yields optimum achievements of the participants

C11.1 The institution succeeds in qualifying the participants at the level to be expected

C11.2 The institution shows a certified outflow which meets the expectations

C11.3 The institution supports participants who leave the education programmes, actively in finding an appropriate pathway

Decision rule: The institution passes sufficiently if indicators C11.1 and C11.2 are assessed satisfactory.

#### *Quality aspect C12: results of the education programme*

The education programme achieves a maximum qualification of the participants

C12.1 The education programme has actual data about success rates at its disposal, among which especially data of its target groups

C12.2 The education programme actively uses data about success rates in its policy to increase its performance

C12.3 The education programme achieves internal success rates that meet the expectations

C12.4 The education programme realises an average length of stay for certification which meets the expectations

Decision rule: The education programme passes sufficiently if indicators C12.3 and C12.4 are assessed satisfactory, or one of them in combination with C12.1 or C12.2. The education programme cluster passes 'good' if all indicators pass satisfactory.

## **6. The quality of examinations**

In chapter 2 is mentioned that in the beginning of the 21st century in the evaluation of the WEB 1997, a great concern was expressed about the quality of secondary vocational education in general and more specifically about the quality of the final exams. The examination structure at the time did not sufficiently guarantee the quality of the examinations, did not provide a transparent enough picture of that quality, was complicated and inefficient. A clear national standard for examination quality was lacking, the roles of the external examination institutions were not transparent and no possibilities for negative sanctions were possible.

In reaction the representative umbrella organisations of the various secondary vocational education institutions (see chapter 2) established the Quality Center Examinations (KCE) in vocational education. The objective of KCE is to assure and stimulate the quality of the examinations in secondary vocational education in order to contribute to the confidence in this type of education diploma.

Since August 2004 in the revised WEB, the KCE is appointed as the legal body with the task to carry out the external guarantee for the quality of the examinations of all secondary vocational education programmes on the basis of national quality standards, which are laid down by the minister of Education. These quality standards have been developed by the KCE in cooperation with stakeholders such as education institutions, the professional field and the Knowledge Centers Vocational Education and Industry (KBBs).

The functioning of the KCE itself is subjected to a yearly investigation by the Education Inspection. Central question in this Inspection control is: Does the work of the KCE every year result in a reliable and valid assessment of the quality of the examinations and the examining in all vocational education programmes?

The education institutions remain responsible for the examination of the vocational education programmes they have on offer. They can subcontract, however, the examination of a specific education programme and the responsibility for the quality of the exam, to an education or examination institution which is certified to carry out the exam. Quality standards lay down everything that is relevant in regard to the total exam of an education programme (all qualifications, all examination tasks and procedures, including all legal regulations). The standards refer to the exam within the education institution as well as within the learning company.

Product standards are related to the quality of the examination tests, in particular the answer to the question: is the content and level of the exam adequately attuned to the final terms and the level of the specific qualifications?

Process standards concern the quality of the examination process, the examination procedures, the conditions for taking exams and the decision on the results of the exam.

The education institution has to take care and guard that the exams of all its education programmes meet the standards. This internal quality control of exams is a part of the quality care system of the institution. Self-evaluation in this respect has to take place every year.

The KCE monitors the quality of the examinations by carrying out the external control and by providing an independent assessment to which degree the exams come up to the standards. In principle the KCE assesses the exams of every education programme that is delivered by an education institution. At the end of its investigation the KCE issues a declaration to the institution which underpins its findings. This may be a favourable declaration if the institution to a sufficient degree comes up to the standards. It may also be a conditional declaration meaning that the examination doesn't meet the standards sufficiently yet, meaning that shortcomings do exist but KCE expects the institution to be able to resolve these within one year. But it can also be a disapproving declaration when the institution doesn't meet the standards and the KCE expects it not to be able to comply with the standards sufficiently within a year. If the institution has been given a conditional declaration in the preceding year and insufficient improvement is visible, it will also be confronted with a disapproving declaration. In case of a disapproving declaration the minister of Education can deny the right to exam the education programme which is registered in the Central Register Vocational Education Programmes (CREBO).

In its annual report the education institution has to give public account of the results of the self-evaluation concerning quality of the examinations and of possible improvement actions, including the independent assessment of the KCE about the investigated exams.

### *Examination quality standards*

In the ministerial regulation of February 2005 examination standards are subdivided in five domains.

These domains are:

1. managing the exam (6 standards)
2. cooperation, purchasing and subcontracting (2 standards)
3. examination process (6 standards)
4. examination products (3 standards)
5. accountability (2 standards)

For every standard one or more indicators are defined which are used by the KCE for its assessment. In this section we describe all the standards and the indicators are presented as far as these could be relevant for the Qualivet project.

*Domain 1. managing the exam*

a. The organisation of the exam

The competent authorities assure that the organisation of the examination is arranged in such a way that the quality objectives of the institution concerning examinations can be achieved (4 indicators).

b. The professional field

The competent authorities assure that the professional field is involved in the content and the implementation of the examination

One indicator: same terms

c. The examination regulation

The competent authorities decide on an Education- and examination regulation (OER) which is congruent with art. 7.4.8 of the WEB as far as the examination regulation is concerned (2 indicators)

d. Examination information

The competent authorities assures that in time the participant can get a picture of the content and the organisation of the exam (2 indicators)

e. Committee of appeal

The competent authorities have set up a Committee of Appeal for the examinations, possibly together with the competent authorities of other institutions (3 indicators)

f. Sector specific standards and occupational standards

The institution meets sector specific KCE standards and occupational standards originating from other legislation

Indicators:

- the employees involved are aware of relevant sector specific standards and occupational standards and act accordingly
- the competent authorities regularly evaluate the application of the sector specific standards

- the competent authorities regularly evaluate the application of occupational standards originating from other legislation

## *Domain 2. cooperation, purchasing and subcontracting*

### 2.1 Expertise

The competent authorities assure that employees who are involved in the organisation of the exam, have enough expertise to carry out their tasks properly (1 indicator)

### 2.2 Contract

In the event of cooperation with or purchase or subcontracting of a third party, the competent authorities assure that the arrangements are part of a contractual agreement (4 indicators)

## *Domain 3. examination process*

### 3.1 Test construction

Instruments set up by or on behalf of the competent authorities, by which the relationship between the final terms and the examination products is traceable, are used in constructing the examination products (3 indicators)

### 3.2 Tests decrees

The competent authorities assure that the quality of the exam products is assessed and that these exam products are determined before being used (4 indicators)

### 3.3 Meticulousness in hearing the examination (2 indicators)

### 3.4 Meticulousness of the assessment (2 indicators)

### 3.5 Examination results

The competent authorities assure that determined modes of operation are being used in processing and publishing of the examination results (2 indicators)

### 3.6 Diplomas and certificates

The examination committee assures that the granting and registration of certificates and diplomas goes meticulously and properly (4 indicators)

## *Domain 4. examination products*

### 4.1 Degree of cover

The competent authorities assure that every part of the exam is representative for the content of the final terms that belong to the sub-qualification concerned

Indicators:

- 100 percent of the final terms of the sub-qualification has been described in an overview
- at least 75 percent of the final terms has been elaborated in examination tests
- the content of the exam test(s) matches the subdivision in the overview
- the relation that is indicated between questions/assignments of the examination tests and the final term(s), is correct.

### 4.2 Degree of difficulty

The competent authorities assure that the level of the exam matches the level of control that is required in the final terms

Indicator:

- the form of testing fits with the level of control which is described in the final terms and the level of the sub-qualification

### 4.3 Technical quality of testing

The competent authorities assure that the parts of the exam meet the defined requirements concerning technical test qualities and completeness

Indicators:

- the parts of the exam meet the technical test qualities which guarantee an unambiguous and accurate hearing
- the parts of the exam meet the technical test qualities which guarantee an unambiguous and accurate assessment
- the parts of the exam contain information which guarantees an unambiguous, accurate hearing, related to the final terms
- the parts of the exam contain information which guarantees an unambiguous, accurate assessment, related to the final terms

## *Domain 5. accountability*

### 5.1 Satisfaction inquiry

The competent authorities assure that regularly the satisfaction about the exam is investigated among the participants and the professional field

Indicator:

- regularly satisfaction inquiries are carried out among the participants and the professional field by or on behalf of the competent authorities

## 5.2 Accountability

Every year in a public report the competent authorities disclose the results of the evaluation and the intended policy in regard to examination

Indicators:

- every year the competent authorities carry out a self-evaluation and publish the results
- the involvement of the professional field in the examination forms part of the self-evaluation

In practice an industrial sector or branch may have specific wishes concerning examinations. In regard to the sector-specific and occupational standards it has been agreed between KCE and representatives of the education institutions and industry that in fact for KCE the quality standard for the examination of an education programme has been established if education institutions and a branch of industry make written engagements about examinations.

Self-evidently the frames of references of the Education Inspection and recently the KCE strongly influence the quality assurance activities of the individual education institutions and programmes. Nevertheless it is also emphasized that every education institution is responsible and accountable for its own interpretation and design of a quality care system.

In the following case study will be shown how a regional vocational education college paves its own way in regard to quality assurance.

## 7. The ROC A

ROC A is a secondary vocational education institution in a city of about 150.000 inhabitants. It also provides for adult education. The institution offers hundreds of vocational education programmes clustered in four sectors: Health and care, Economy, Technics, and Reintegration and Education. The college has a regional function in an area of about 15 kilometres surrounding the city and includes also an auxiliary branch in a small town about 25 kilometres away, which is considered as a separate unit (sector). Within this 15 km area hardly competing influences of other regional vocational education colleges occur.

The vocational education programmes are provided in 12 premises. In 2005 the number of staff was 673 full time equivalents, of whom 418 belonged to the education staff.

The number of students has risen from about 8.500 in 2003 up to over 10.000 in 2005.

## 7.1 Quality assurance assessments and organisational restructuring

In 2002 a sample of 10 education programmes of the ROC A has been investigated as part of, what is called, an integral institution inspection (IIT). Such a sample of programmes, which is selected by the Education Inspection, possibly supported by the school's management, is considered to enable a full assessment of the quality of the education institution.

In 2002 the IIT came to the following main conclusions:

ROC A took care of the quality of its education to a sufficient degree. Nevertheless a great number of improvements were thought to be necessary. The quality of five of the ten programmes, among which constructional fitter, has been assessed as insufficient (compare the Inspection's criteria, chapter 5), in the other five programmes one or more quality aspects were evaluated as insufficient.

Accessibility of the education is insufficient because of an inadequate policy in regard to so called target groups.

The primary process of teaching and learning had sufficient quality but still critical remarks were made in regard to the aspects flexibility and tailor-made education, qualifications and the internal and external legitimacy of the examinations.

On top of that the Inspection passed judgement that the systematic quality care at the institution level was not recognisable at the level of the education sector and the education programmes.

The Inspection's judgements resulted in a renewed integral assessment of the five programmes which was carried out by the end of 2003. At the time the conclusions in regard to the programmes were different then because they passed judgement as having sufficient quality, although improvements still were necessary, especially in regard to insufficient study feasibility as consequence of lacking tailor made education and flexibility.

In 2003 quality assurance and quality improvement, however, still were not assessed as being good enough.

In 2004 in the yearly investigation (JO), the Inspection draw up the conclusion that the education programmes had started with improvement actions but that no results were to be seen yet. Another conclusion was that in 2004 audits of the KCE had shown which improvements were necessary in the examinations. For this also improvement actions have been planned. In the same JO conclusions were drawn in regard to the progress of the development of quality care:

*“The operation of the new quality management system and the appointment of a senior staff member Education and Auditor have to test and guarantee quality assurance and quality improvement of the primary process and the supporting process, and bring about the continuous process of quality*

*improvement. In order to realise this down to all levels of the organisation, an organisation restructuring process has been initiated into teams which are accountable for their results. Strategic goals have been formulated and critical success factors established. In the Balance Score Card these success factors are clustered in four policy areas: Clients and market, Innovation, Finances and Internal processes. In regard to three performance indicators teams formulate their goals and actions planned. Two of the three performance indicators are defined at institutional level: reduction of drop outs and increase of participants' satisfaction. The third indicator is chosen by the teams themselves from a set of thirteen prioritised indicators for the year 2005".*

The renewal of the quality management system did take place concurrently with the organisational development referred to afore. Since the midst of 2005 the vocational education college operates within the education sectors with teams of staff members which are accountable for their own results. The education supporting services which formerly were organised centrally, were decentralised towards these teams. Teams are managed by a team manager. For example this implicates that the structure of the sector Technics has been changed. Formerly there was one director and three heads of units, each unit employing about 30 to 35 full time and part time teachers. Now there is a director and a deputy director with 6 teams, each one consisting of about 15 teachers, which, consequently, implies that the span of control of the team managers is smaller compared to that of the former heads of units. The teams in the sector Technics are focussing on the following subjects:

- building, infrastructure and interior design and decoration
- electrotechnics and automation
- mechanical engineering
- mobility and logistics
- installation-, process- and operational technology
- commercial technics

In 2005, in mechanical engineering it was possible to study 25 education programmes, most of them at level 1 and 2 (respectively 5 and 13). Seven of these level 1 and 2 programmes were school based (BOL programmes) as well as alternance-based, dual education programmes. The other 11 are all dual education programmes (BBL programmes).

At level three, 6 programmes were available of which only one was given in a school based form as well as in an alternance-based, dual form. The other 5 are dual programmes. The only level 4 education programme (for mechanical specialist) is school based.

At the end of 2005 the Education Inspection has carried out a new PKO. Just very recently the report was agreed upon between the Inspection and the Board of the ROC A. For inspection, besides the general parts of the institution, again 10 education programmes were selected: two from each sector. For the sector Technics the programmes process- and installation technology and mobility have been

selected for assessment which means that this time no specific mechanical engineering programme has been assessed. Nevertheless, on the basis of the information collected about these two education programmes and of general information about the sector Technics, the Inspection has produced a sector assessment which in fact also refers to the mechanical engineering programmes. The sector Technics' management thinks that in order to give a valid assessment of the education in the sector, it would be better to investigate a greater selection from the 120 programmes the sector can deliver. Nevertheless, the management is positive about the feedback the Education Inspection has asked for in order to check if its findings were representative for the sector.

In the assessment of the Inspection, as always, the Inspection's Frame of reference with its evaluation criteria is the guiding thread. Evaluation criteria are gathered in three clusters: teaching and learning, results and quality assurance and – improvement. We here present some conclusions of the inspection in regard to the sector Technics.

### *Quality of the education in the sector Technics 2005*

#### *Teaching and learning*

The first and most important conclusion of the inspection is that the quality of teaching and learning in the sector Technics is sufficient. The programmes are directed at attaining the nationally defined final terms (learning objectives) of the programmes.

The teaching and learning process has been renewed fundamentally. The intention is to offer education starting from practice situations, a process which in fact is in an initial stage. In regard to the cluster teaching and learning all aspects (B7 Education learning processes; B8 Occupational practice learning; B9 Contact with participants; B10 Education process coaching) are assessed as sufficient except the study feasibility. Still most programmes pay too little attention to tailor-made education and they are not flexible enough, especially the school based education programmes. Most education programmes consist of fixed trajectories with few options for the participants to choose alternative subjects. Also the connection with pre-vocational education is considered to be insufficient. This is a central point of attention at institutional level but in the sector Technics this did not yet result in concrete agreements with pre-vocational education institutions about content and pedagogical-didactical approaches.

Already existing agreements with higher professional education institutions and programmes have been renewed in a number of cases, which may result in the possibility of reducing the study time needed in higher professional education programmes by qualified students of the secondary technical education programmes of the sector Technics.

The quality of the education learning processes is sufficient. In 2003 the sector has decided to change the education concept, especially of the school based education programmes, towards practice guided education with more variety in working forms in surroundings which offer a rich context. This

restructuring process is on its way but the turnaround from subject-oriented education to education in which practice situations and the learning process of the participant are focal points, still is in its infancy. Some programmes didn't even start yet. External support still is very much oriented on content of the subjects and not on the education process itself.

The quality of occupational practice learning is sufficient. The organisation and preparation of occupational practice learning are good. Generally this is also true for the coaching by the companies. To a sufficient degree occupational practice learning is directed to attaining the final terms. A consistent feedback of the findings during company visits of the teachers might even contribute more to this. The coaching by the school is varying and sometimes a little bit poor.

The whole sector is working on the preparation and integration of competence learning. Although good conditions seem to be available, knowledge and skills are not yet firmly-rooted in the projects of all education programmes.

Students experience the study load as moderate. In most education programmes, according to the Inspection, the work forms are sufficiently efficient but a variety in activating work forms is lacking. Because the programmes have noticed this themselves, to an increasing degree working in projects is relieved with class instruction and practice, however, without losing attention for teaching basic knowledge and skills. Subject matters guidelines sometimes support the planned approach. Materials for practicing skills generally are available but the capacity utilisation is so high that the progress of the learning processes is subjected to stagnation. For this an improved planning could bring about some relief.

Mostly available study time is used efficiently. Presence or absence of students is registered sufficiently and mentors act timely and adequately in case of unauthorised non-attendance. Dropping of classes is confined because of agreements on mutual replacement.

Generally information provided about the education programmes provides a fair picture. Trajectory coaching is sufficient but improvements are needed.

Education programmes try to maintain and further develop a strong relationship with occupational practice in order to provide an integral approach of theory and practice. Partnerships with technical companies and the so called 'associations of friends' contribute to this.

Questions of the participants are treated by the teachers in a positive and problem solving way.

Teachers are approachable for the students. In recent times the sector has invested in the coaching of participants. A changing role from teacher/instructor to coach of learning processes is difficult for a number of teachers. Therefore coaching not always goes smoothly. The support for participants who need extra care, gets off the ground and the cooperation with the teams is growing. The task description of the guidance counsellor is not always clear. The counseling about professional

opportunities is provided rather late. Registration of learning results and personal coaching can be attuned better.

### *Study results*

Study results are estimated as being sufficient. The number of students who leave school with a diploma, is somewhat higher than the national average. The drop out rate has decreased. These figures are not playing a big role in defining the teams' policies.

### *Quality assurance and -improvement*

In the next sections more in depth attention will be paid to the quality care in ROC A. In this section the opinion of the Inspection will be presented. According to the Inspection quality assurance and -improvement has received good impetus but is not yet of a sufficient level on the whole. The system of quality assurance and surveillance is introduced rather recently and the cycle has not yet been performed at team level. The relationship between documents at various levels, however, is clearly apparent now.

In the self-evaluation and in the team plans not all objectives yet are formulated concretely and measurable enough. An evaluation of improvement activities therefore is not possible yet. Data of the JOB-survey have not been worked out noticeably in the team plans and the first year's students survey has not been applied everywhere. An important initiative is the establishment of students' platforms in some teams. Occupational practice learning companies are not yet involved in quality assurance.

The progress of the activities is regularly discussed internally which is an indication of a systematic mode of operation. The restructuring of the school based education has been evaluated broadly. Data are available and the conclusions will be transferred in improvement actions.

The legal protection of the participants is sufficient. Legal documents meet the requirements but do not fulfil an important role for the participants. Complaints are treated adequately. The sector offers a secure climate.

In 2005, in the education programmes of the sector Technics, KCE has carried out a process and a product audit. This has resulted in so called provisional statements. The sector and the teams are working on improving the shortcomings.

## **7.2 Quality assurance model in ROC A**

It has been emphasized in the WEB that every secondary vocational education institution itself has the responsibility to develop or choose a quality management system. The ROC A started with developing

a quality management system in 2004. It has been inspired by the model of the Balanced Score Card (BSC). This model has been transformed into the *Performance Card* of the ROC A. The four performances areas of the BSC have been maintained: clients and markets, innovations, financial affairs and internal processes. In a conversion matrix the ROC A has related every performance indicator of every performance area to an indicator of the Education Inspection's evaluation framework:

*'Our performance indicators and those of the Inspection overlap almost 100 %. Indicators are only clustered differently, sometimes at a somewhat different level. Nearly everything we measure is related to an Inspection indicator but also vice versa. Some Inspection indicators are more thoroughly transferred into our document than others. We do not measure these before an Inspection visit but in such a case we can refer to another document. This is also the point of departure for the self-evaluation. We showed this to the Inspection and they now are also able to do this translation.'*

This system with four performance areas, critical success factors (KSF) and performance indicators (PI) is still developing. It is becoming more detailed with an increase of the number of KSF and PI, but nevertheless it still is less detailed than that of the Inspection.

The most recent version of the Performance Card (2006) is presented here:

*Box 1 Performance Card ROC A 2006*

Performance area '**Clients and markets**':

<b>Critical success factors (KSF)</b>	<b>Performance indicators (PI)</b>
To increase satisfaction participants	- % satisfied participants
To increase satisfaction companies and other organisations	- % satisfied companies and other organisations
To increase satisfaction of pre-vocational education and higher professional education	- % student counsellors satisfied about information service - number of consecutive learning programmes - % satisfied higher professional education programmes
To build up relevant networks	- number of contracts - % growth of occupational practice learning companies
To increase number of participants	- number of participants per education programme - % growth of participants

Performance area '**Innovation**':

<b>Critical success factors (KSF)</b>	<b>Performance indicators (PI)</b>
To improve attuning of education and practice	- % real and simulated context-bound training hours against total of SBU - number of contacts of staff with companies and other organisations - % teachers who are working in professional practice

To increase entrepreneurship of teams (+)	<ul style="list-style-type: none"> <li>- number of project plans of teams which are directed to cooperation with companies and other organisations</li> <li>- number of new education programmes</li> <li>- number of finished education programmes</li> </ul>
To improve tailor-made education	<ul style="list-style-type: none"> <li>- number of participants accepted between Oct 1st and June 1st</li> <li>- % students moving up to higher professional education</li> <li>- % drop outs</li> <li>- number of participants attaining diploma within regular study period</li> </ul>

Performance area **‘Financial affairs’**:

<b>Critical success factors (KSF)</b>	<b>Performance indicators (PI)</b>
To stay financially healthy	<ul style="list-style-type: none"> <li>- number of diploma’s</li> <li>- % difference between real and forecasted number of participants</li> </ul>
To carry out activities within budget (+)	<ul style="list-style-type: none"> <li>- difference between budget and real costs per period</li> <li>- difference between budget and forecast at yearly basis</li> </ul>
To increase turnover contract activities	<ul style="list-style-type: none"> <li>- turnover per contract</li> <li>- turnover in subsidised projects</li> <li>- contractual turnover related to sales costs</li> </ul>

Performance area **‘Internal processes’**:

<b>Critical success factors (KSF)</b>	<b>Performance indicators (PI)</b>
To decrease absenteeism (+)	<ul style="list-style-type: none"> <li>- % absenteeism</li> </ul>
To increase satisfaction of staff	<ul style="list-style-type: none"> <li>- % mobility</li> <li>- % employees feeling secure</li> <li>- % satisfied employees</li> </ul>
To improve professional culture (+)	<ul style="list-style-type: none"> <li>- % employees scoring sufficiently on core competences</li> <li>- % employees proud on ROC A</li> <li>- amount of training budget in relation to personnel costs</li> <li>- number of performance talks</li> </ul>
To attain an optimal use of staff (+)	<ul style="list-style-type: none"> <li>- proportion direct and indirect staff</li> <li>- flexible staff component</li> </ul>
To improve quality of examination processes	<ul style="list-style-type: none"> <li>- % education programmes with approving statement of KCE</li> </ul>

Compared to the first version of the Performance Card five KSF have been added (marked with + in the boxes) and the PI have been worked out more in detail.

As said, this system of indicators still is less detailed than that of the Inspection. E.g. the Inspection requires the contact and interaction with the participants to be guaranteed by a complaints regulation. The ROC A fills this in another way, by adding instructions in the self-evaluation format which elaborate at a more concrete level what the teams have to or may pay attention to in this respect. In

regard to the example of the complaints regulation, in a survey among participants the question is enclosed: can you turn to somebody if you have complaints? In such a way the indicator of the Inspection is linked to a more concrete item. Another example is the KSF 'improving tailor-made education'. An indicator of the Inspection for this was: the availability of a system of intake and assessment. The teams then are provided with a document with the instruction: 'review how are our own intake functions or look into questions with numbers so and so in the survey among participants'. Currently the self-evaluation format is also adapted and filled with more of this kind of instructions.

Clearly it is not the ROC's objective to copy the complete Inspection framework. Point of departure is the ROC's own framework. A check on overlaps with the Inspection framework has been done, however, because in the end the ROC has to meet the Inspection criteria. If some overlap exists, this is taken into account; if not, then in the year the inspection visits the institution the lacking information is provided otherwise.

The quality manager of the ROC A thinks that the added value of the BSC model compared with the Inspection framework is that the BSC model reviews the complete operation of the ROC while the inspection framework focuses especially on the education aspects.

During the Inspection's yearly investigation of 2004 the ROC A only had a virtual quality care model. It presented a quality assurance model on paper but in fact they didn't had anything. By presenting the quality assurance model the institution did get a hold on questions such as: What is really important for us? Which priorities do we have each year? What are we aiming at? To what do we spend innovation budget?

The assessment of the Inspection in the JO 2004 has been described afore. It stimulated the management of the ROC A to put more emphasis on the development of an own quality assurance model.

Since 2005 the ROC has established a structure with a cycle of annual plans at several levels in the institution. In a yearly framework letter the Board of the institution defines a number of strategic objectives at institution level. These are related to some of the KSF and PI of the Performance Card. E.g. for the study year 2004-2005 two objectives were defined at central level: reduce the number of drop outs and increase the satisfaction of the participants. The ROC has about 20 PI and the Board of the ROC has decided that each team really has to make a plan for action on at least these indicators: decrease of the number of drop outs and satisfaction of participants. Some of these actions may have a short time horizon, other may take more time to bring about results. The teams can use the findings of the surveys among participants as a source of information to base their plan upon.

In 2005-2006 the strategic goals were: attain a greater quality of education, reduce the number of drop outs and increase (education) output efficiency, and to these three were added: strengthen the relationship between education, the world of work and society and improve operational business. Education sectors and education teams have to elaborate these objectives and indicators in their own annual plans. Education sectors have to make annual sector plans, all teams have to make an annual team plan. Besides the objectives defined at institution level, education sectors and teams are requested to add their own objectives, accompanied by KSF and PI. Institutional, sector and team objectives and their indicators must have a central place in the annual self-evaluations which are preceding the making of the next annual plan.

In 2005 in some teams the team manager has written the annual plan and discussed this afterwards with his team, in other teams the plan was the result of real teamwork. In all sectors, however, teams still have difficulties in defining their objectives SMART (specific, measurable, acceptable, realistic, time plan related). In the sector Technics, team managers and teachers have a practical orientation and they keep it brief and to the point in the annual plans.

Self-evaluation and formulating annual plans are expected to become more easy now that a new management information system (MIS) has been introduced in 2005, which now is increasingly filled with relevant data. This MIS up till now is accessible at the team managers level and up only.

Performance Card areas, KSF and PI have not been worked out sector-specifically for each sector. And it is also not the intention to do so. Every sector or team of course acts towards these criteria from their own perspective. E.g. the sector Technics is going to cooperate with companies in a completely new manner by housing vocational education at secondary level, higher professional education and companies together for triangular cooperation in a new building, the Technovium concept. If the sector wants to express what is happening there, it has to catch this in a new indicator.

The self-evaluation in the summer of 2005 took place with the perspective of the PKO of the Education Inspection in November that year. The Inspection returns in about three years (2008 or 2009). The ROC now, however, is carrying out already the self-evaluation of 2006:

*'It fits in our conception of quality that every year we complete the PDCA cycle (Plan, Do, Check and Act). The system now is complete and transparent and driven automatically by a number of sources'.*

The system also includes audits which are carried out by the quality manager of the institution. In these audits a check is carried out on the results of the improvement plans of sectors and teams.

The quality manager thinks that it will take the ROC another year before quality assurance has really descended to team level to the teachers. They are not yet familiar with all indicators. They are just mainly fulfilling their daily teaching task and must get more involved in the quality process.

Students are not directly involved in quality care and they are not aware of the Performance Card. In an indirect way, however, they do participate in quality improving activities, e.g. when teachers report the result of the study into student satisfaction (see section 7.4.1). Students at the ROC A participate in these surveys.

The quality management system is based on the Balance Score Card model. According to the quality manager of the ROC, the quality improvement processes resemble more an INK-like model. Behind the indicators there is a kind of assessment list which shows if people are operating quite 'ad hoc' (phase 1) or really system-oriented. That is the intention: turn ad hoc policy into system policy.

### **7.3 The context of quality assurance in the sector Technics, especially the Mechanical engineering programmes**

Managers and teachers in the sector Technics, particularly in the Mechanical engineering programmes, believe that quality assurance should be a means to develop and build up and not to control. Although they think that quality assurance is necessary, they experience the Balance Score Card model and the KCE inspection as being oriented rather to control than to development. Teachers do not have the idea yet that this kind of quality assurance brings them profit. They do want to teach and do not like to fill in all kinds of formularies and they are not awaiting outside interference.

From their point of view especially the KCE criteria have too much of a controlling perspective. On top of this, these criteria are focusing on traditional education forms and traditional testing and they do not account for innovative developments in education. E.g. schools have the right to determine the content of the examinations. The move to competence based education brings about a very different way of testing which still is a discovery process for every teacher, all the more for the specific category of teachers who didn't make examinations for the last 20 years. Examinations that are crossing qualifications, as part of problem based education, now prove very difficult to assess for the KCE. The same applies for proficiency tests (see further) at the end of a company practice based project. The Mechanical engineering staff has to explain to KCE how they are doing this. Therefore, the current KCE-criteria rather are an impediment. School has the freedom to develop and experiment but in practice the controlling organisations are quite near by and dominating the scenery.

The sector management concludes that it is necessary that in the quality assurance process teams will be provided with room for development by giving them responsibility for results, budgets and expenditures.

The perspective from the teaching staff in the Mechanical engineering programmes can be explained by the profound changes the education programmes went through in recent years and the changes that are still going on.

The ROC A has two education streams, the school based BOL and the alternance based BBL. The alternance based stream is practice oriented. Students have to work in a company for three or four days per week and take lessons in school for the rest of the time. The BOL was rather theoretically oriented, providing only for a number of lessons in practical instruction rooms inside school.

Some six years ago the ROC A started a project 'From teaching to learning', the aim of which was to create more space for modern education. The idea was to modernize the traditional way of teaching in which the teacher is just transmitting subject-matters, to an education form in which the teacher is not only a traditional lecturer. Education sectors have the freedom to shape this modernisation process themselves.

In this framework the sector Technics started with a broad sector-oriented plan 'Redesign Technics'. By carrying out this plan the form of education has been altered from a traditional and theoretical one with lectures in classrooms to more practically oriented education: problem based or project based education. Basically this change has been initiated by the wish to attune vocational education better to the learning capabilities of the pupils coming from the supplying pre-vocational schools and to respond to questions from companies which expressed a need for graduates with initiating, problem solving and learning capacities. It clearly has not been motivated by an assessment of the programme by students and/or graduates.

In the same period at national level the quality assurance activities from the Education inspection became more tightly, the KCE was raised as an institution and also a national process has been initiated to obligatory change vocational education at secondary level from being guided by qualifications, sub-qualifications and final terms (learning objectives) to competence based education. Moreover, an organisational restructuring has taken place in the ROC A, by the creation of teams of about 15 teachers with a team manager in stead of big units of about 35 teachers or more with a head of unit.

All these developments put heavy stress on the adaptation capacity of teachers throughout vocational education, not only in the sector Technics or in the Mechanical engineering programmes.

Currently the Redesign Technics plan has resulted in Mechanical engineering programmes which provide students with practice experiences from the start. Year one starts with a general part, getting students to know about technics. Students then are confronted with problems which have been defined by the teachers; the students' task is to solve these problems, being coached by the teacher. Year one and year two are filled with such problem based and project based education. The first half of the third year consists of a practice period in a company. Besides his regular practice activities the student has to come up with, describe and present a problem which exists in that company. In the second half of the third year projects are being defined to solve these problems. Because two students have to work together on such a project a, student-dominated, selection procedure is carried out for the problems

that were brought along by the students. Students decide which projects will be carried out (after a suitability test by the teachers) and students, teachers and companies together decide on the content of the projects. Projects are carried out in school, with coaching by the teachers and with the possibility of getting support from the company. Project results are presented before school representatives and representatives of two companies: the company for which the project is carried out and a second company which is invited in order to get a more independent assessment of the results, this also with the intention to account for the KCE criterion that companies should be involved in examinations of students. The fourth year programme is now being carried out as a pilot project in the BOL stream. It consists of a practice period of a student in one company, working independently for in the beginning three and later four days per week, coached by a teacher and a practice coach in the company. A presentation of the results again serves as the proficiency test, before a panel of coaching and non-coaching teachers.

The mechanical engineering programmes characterise the activities in the first three years as 'vocational task based learning'. The tasks established in the metal sector up to now seem somewhat artificial and the sector now has contact with the metal sector in another ROC in order to learn from their experiences.

The introduction of problem - and project based education has been a big turn around for the teaching staff in the sector Technics. So far the change from the teaching role into the coaching role has not been taking up equally by each teacher. Everybody is still doing everything, and the quality of all these activities is not always sufficient. Some teams still do lectures in classrooms and are oriented to qualifications and final terms, with nothing such as competence based or independent learning. Another team which had to develop a new programme has done this completely competence based. The learning process towards new roles has been supported by a tutor training and intervision activities. Now, some 6 to 7 teachers have got really acquainted with the tutor role.

Nevertheless the changes have not come to an end yet. The process towards competence based education continues until 2008, national requirements influence the school policy, e.g. the wish to better attune pre-vocational education, secondary vocational education and (tertiary) higher professional education (in the so-called professional column), and the sector Technics will move to a new building in the near future.

Altogether the discussion about these developments has resulted in a future-oriented plan to build a new school where secondary vocational education, sector Technics, higher professional education, sector Technics and local and regional companies in this sector cooperate to provide students with the best possible practice-related modern forms of education.

Now, besides the general ROC goals mentioned afore, the sector Technics has a very specific goal to realise: to change the way of teaching in the new Technovium building, starting at the end of 2008,

breaking down the barriers between secondary VET, higher VET, pre-vocational preparatory education and companies. Less drop outs, more participants and satisfied participants become deducted objectives. The sector works from a development perspective, with the central question how to fit the education and the organisation into competence based education. The criterion to assess their operations, according to a member of the management, should be that the education programme together with companies provides for good people.

Sector goals for 2008 are focused towards company project based learning as a concrete realization of competence based learning. At the basis of the programmes are real time projects which are carried out by students in the Technovium or within companies, according to a set of requirements which have been defined by the schools and the companies together. The programmes must be future-oriented, companies have to tell what kind of employees they will need in 3 to 4 years.

In the first part of the study programme stage most projects will take place in the Technovium because otherwise it would cost the companies too much time. Projects will be influenced by processes which are happening in these companies, e.g. the design methods are delivered by the participating company, which is only possible if such a company is really connected to the education programme. The companies have to take care that real practice simulations are offered in the Technovium and that the machinery is up to date. The ROC takes care of the education component inside the school, among others by designing multidisciplinary projects and multilevel projects, showing what mechanical engineering means at BOL level 3 or 4 or at higher professional level 5. In the second part of the programme the schools collect projects from the market which will be organised in the same way as it is now, by students in their third year practice period. A new idea is to have this also done by so-called project co-innovators who go to companies to look for projects in order to match offer and demand. This would be one of the new teacher roles<sup>1</sup>.

The intention of the ROC's cooperation with professional higher education and pre-vocational education schools is to develop education programmes and an education organisation which fit the needs of students in secondary technical vocational education but also of potential students still residing in pre-vocational education (VMBO) and students who aim to continue their education career in higher professional education. Pupils in VMBO should be enabled to carry out practical components of their favourite programme in the Technovium. Students who start their study at the

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<sup>1</sup> Co-innovators is a project in which several ROCs are participating. The intention of the project is to develop the concept of company project based learning (BPGL). The more general idea is to analyse the innovative developments in the region and how education is able to link up with these. A project group has formulated a programme of 7 requirements for BPGL and has also described new roles for teachers who go into the business field and who are able to match the offer of and demand for projects.

ROC should be enabled to choose at which level they want to graduate, level 3 or 4 but also at higher professional education level 5. For level 5, projects then will be made more complex than level 4 projects, for level 3 more simple.

Quality assurance systems, however, until now hinder this process, e.g. the KCE requirements. To go to level 5, students first need a level 4 diploma. It also is a problem that quality assurance systems in VMBO and in higher professional education differ from those in secondary VET.

In the restructuring process that started in 2002, this very new idea of the Technovium certainly has not yet descended in the minds of the teachers. Teachers, classes and time tables are concepts that will not fit anymore. A communication plan to involve everybody will be put into operation soon. In order to prepare for all the changes described afore, in the very near future the Mechanical engineering team of 20 people will define some 5 to 6 new teacher roles more clearly. Then these roles will have to be staffed proportionally, which in the end is the responsibility of the team manager. In the team teachers may express their preferences and needs for training and the best possible division of tasks will hopefully result from the discussion.

### **7.3.1 Relationships with the world of work**

The sector Technics has had a long tradition of good connections with the world of business but the other sectors are catching up now; ministerial notes, regional ambitions, policy notes of the umbrella organisation for secondary vocational education schools, all urge for this closer connection.

The communication with the business community in the sector Technics is organised by the 'Friends of technics associations' (Friends of electrotechnics with about 20 member companies, Friends of mechanics with about 12 relatively big companies, and recently, the 'Friends of general operational technology'). These associations which are in different stages of development, discuss with the education programme about the content of the programme, about the learning processes, practice periods for teachers, availability of places for practical learning within companies, guest lessons, education in the Technovium, and also more strategic questions. They also provide for questions from practice which can be solved by students at school or within the company.

The school is also supported by the Technocentrum of the regional Chamber of Commerce which takes all kinds of initiatives in regard to the relationship between education programmes and companies, especially in bringing the companies together. It remains, however, a difficult process, especially in times of slowing economy, and always dependent on some companies which really want to go forward.

In the metal sector, companies have established the 'Foundation professional metal education' which serves as an intermediary for organising practice periods in companies for students following a BBL-trajectory in the ROC A.

Furthermore since two years every sector has a working field committee or an Advisory Council. Mostly, however, they are not a platform for cooperation at operational level. They discuss issues more at policy level.

The Inspection but also the KCE ask questions about the involvement of companies in the education process, e.g. questions such as how is the involvement of companies in the development, assessment and carrying out of examinations. During inspections both institutions talk with a (small) sample of companies about their involvement.

#### **7.4 Quality assurance in the Mechanical engineering programmes**

Since 2005 the Balance Score Card or Performance Card quality management model has been introduced for the Mechanical engineering programmes and the sector Technics. Starting point is the Performance Card which is used as a tool for self-evaluation and for the annual plan that sector and teacher teams have to make. At the end of the study year 2004-2005 a first self-evaluation report has been produced, the second report was going to be discussed at the end of the study year 2005-2006. The Performance Card that was prepared for the second self-evaluation differs from that for the first one (see section 7.2).

In 2005, the way in which the teams coped with the BSC format for self-evaluation was quite different. Some teams were very conscientiously giving additional remarks and comments, other teams restricted themselves to mainly yes and no answers. According to the team manager Mechanical engineering the last way of coping is not enough. Such yes and no answers have to be explained.

The self-evaluation in the sector Technics in 2005, which has been using the KSF and indicators of the 2005 Performance Card, shows that KSF and PI have been worked out in different detail for every performance area. It also shows that some specific indicators have been used as indicator for more than just one performance area or KSF. In the self-evaluation report it further appears that some performance areas, KSF and PI are much more accompanied by improvement points than others. The self-evaluation report uses the performance areas in combination with KSF as points of departure for an analysis of the current situation. To start with, every KSF is related to one or more quality criteria of the Education Inspection's framework (see chapter 5) and points out in regard to every Inspection criterion which education teams have mentioned problems. E.g. for the performance area

Innovation, KSF Improving tailor-made education, the self-evaluation report refers to no less than 10 Inspection criteria. Subsequently the report describes the problems identified in the self-evaluation in regard to every criterion, the efforts which in the past year have been made in regard to these problems by the sector and its management, and an assessment of the role of the sector management. The last step of the evaluation is that for every criterion points of improvement are formulated, some of which are very concrete and specific and some others are rather global and need to be worked out further.

A second part of the self-evaluation consists of an evaluation of the results that have been achieved with the sector plan for the reference year. For every KSF for which an action had been planned in the sector plan 2005, an assessment is made of the action that was taken and of its results. Where this is thought to be necessary, e.g. when some improvement points have not been realised, possible further improvement points in regard to the action are being distinguished.

Countless improvement points are mentioned in the self-evaluation report. This is difficult to handle in an action plan. The team manager Mechanical engineering solves this problem by focusing the team plan on a restricted number of subjects of which at least one will be related to the further introduction of company process based learning, because this is the most important subject for the Mechanical engineering teams.

On the basis of the self-evaluations only subjects are taken into the annual plan and the improvement actions which according to the team manager and the teachers can be influenced. E.g. for the organisation of practice periods for teachers, in the team budget and planning 40 hours were reserved for teachers who would like to go for a practice period. The forthcoming study year this budget will be extended. Within the teams some teachers think that is superfluous to go on practice period, others are very enthusiastic. The process is started with the last category and they communicate their enthusiasm by presenting their experiences which they kept in a logbook. In the end every teacher has to undergo this experience.

In the BS Card, by the way, practice periods for teachers are not mentioned, neither in the KSF nor in the PI. It will be put under the heading 'satisfaction of employees'.

An important point is that ROC objectives are being worked out in measurable, quantifiable (SMART) indicators, such as the % of drop outs, % of satisfied participants, % increase in participants. It is rather difficult to exert a perfect control on the influence of these kind of factors:

*'It should also be taken into account if the criterion is related to the assessment of a student, the assessment of a group of people about the group and individuals in the group, the definition of what is involved, the demarcation line between high and low scores, etc'.*

The solution of the manager is to take a number of subjects into the team plan which seems to be feasible for the team:

*'If you put many improvement points in an annual plan, this will freight a number of people. If the plan is less detailed, some of the things that are not enclosed in the plan will, nevertheless, be realised'.*

The team manager thinks that the extension of the number of PIs is not a good idea, because:

*'You have to do lots of things simultaneously which you are only able to if you have gone through a planning cycle already. If you are introducing an innovation you have no idea, which influence factor has which consequences where, how and why. It is very difficult to measure things and indicate causes. If the number of participants grows, is that a consequence of the way we are working? And what if the following year, with the same way of working the number decreases again? The question is: how do you steer and can you show that this steering has the result you aimed at, especially in case the surroundings have changed, e.g. when a traditional form of education has changed into a competence based one?'*

And talking about the team's and management's action possibilities, he continues:

*'responsibility for results asks for steering possibilities as well as team and individual competences which do not yet have been realised. You start from scratch and not somewhere halfway. This is a different perspective than defining some criterion, moreover in measurable dimensions, e.g. the percentage of satisfied participants. We would like to know on which points we could work to get a satisfied participant. Good education, I think is an important issue for students, and not being able to get home in time or to receive only few homework. We have to provide a clear, transparent structure for students: what do we expect from you, what can you expect from us. This contributes to a satisfied client but also to a satisfied employee'.*

#### **7.4.1 Information sources for quality assurance**

Very recently since 2005, the ROC A has introduced a management information system, which can be used, among others, to deduct figures for evaluation and quality reports.

Another means to collect information in order to be able to make statements about quality is the participation in a number of surveys. Connected to the BSC is a ROC-broad measuring plan which includes surveys that have to be carried out by each sector, with even additional surveys at the initiative of the sector Technics. This measuring plan is meant to collect data for the performance indicators. According to the management of the sector Technics it is difficult to translate the data of these surveys into PI.:

*'Sometimes it appears that we have collected survey data and that we look for an accompanying performance indicator'.*

Another objection is that the time in between two surveys is too short to enable improvements to be carried out. Before an improvement plan is turned into action, the next survey already takes place.

A working group with representatives of the sectors now is discussing a better description of performance indicators in order to bring them closer to practice and the sectors, and subsequently to decide which measuring instruments go with them. They want to stop the abundance of surveys and questionnaires.

The sector Technics and/or the Mechanical engineering programmes are participating in the following survey researches:

- since four years, a yearly questionnaire for first year students, which is only organised in and by the sector Technics (n = 159 in the 2003-2004 survey), in order to get a picture of how, after a few months, students appreciate school and the education programmes. Questions, which are formulated by the teachers assisted by the sector quality manager, refer to facts, opinions about facts and preferences. Answers can be analysed down to education programme level and results are being compared at programme level. Results are discussed with students in the class rooms, resulting in the selection of three improvement subjects that will be worked on.
- since 2001 biannually, the national ODIN-survey of the Youth Organisation Vocational education (JOB) takes place, in 2005 among 135.000 students in VET. Results are analysed down to ROC and education sector level. In the questionnaire 86 questions (with answers on a scale ranging from 1 - very bad, to 5 - very good) are enclosed, which are clustered in 12 thematic areas: information services, organisation, *learning at school*, *coaching*, issues outside the lessons, order and security, building and the environment, *practice periods BOL*, *workplace BBL*, *competences*, participation and general satisfaction. The thematic areas in italics contain many questions about the primary process of teaching and learning. The report with the figures of the sector Technics can be downloaded free of cost from the job-odin website. The average scores of the sector are benchmarked with the average scores for the whole sample.
- since 2001, a yearly survey among graduates (the MBO Card), about one year after graduation, is carried out in about 15 ROCs all over the Netherlands, including ROC A (sample of about 18000 graduates, response about 60 %). Questions refer to what graduates are doing after graduation (having found a job, going to further studies, combining work and learning, being unemployed, or other), in which sector is the job, in which region, which employer, in which sector is the further study, which education programme, which school, opinion about education institution and programme (content of the programme, personal coaching at school, preparation for searching work or for further study, guidance for work or further study, coaching for practice education by the school, the usefulness of the education programme). Results are analysed down to education sector level and are partly benchmarked with national figures from the total sample.
- since 2003 every two year, the content monitor which is a ROC-broad survey with a questionnaire in which teachers respond to 32 questions which cluster in 7 domains: school organisation, the colleagues in the team, the organisation of the team, the management of the team, work

satisfaction, personal development and working conditions. Scores can vary from 1 to 8 and results are analysed at team level. In the 2006 survey work satisfaction scores by far the highest average value in the Mechanical engineering team's assessment. School organisation, organisation of the team and management are the dimensions with on average the lowest scores (5,7; 5,8 and 5,7 respectively). The team scores on every question are also benchmarked with the total scores of the sector Technics and with the evolution of the scores since the last survey.

- Another survey which recently has been initiated, is a survey among companies. Companies which offer vocational practice work places, are asked how students function during their practice period or as a young employee. These survey results are not yet available but can also be used as a source of information for quality assurance.

The sector Technics also would like to introduce evaluation reports from companies about the practice periods and projects, but the capacity to analyse reports of 1000 students and more is lacking.

Surveys are supported by another information tool in the form of student platforms. Formerly each sector manager periodically talked with students about their experiences and opinions, which often resulted in defining action points. Now, periodically every quarter, team managers have a conversation with student representatives (two per class, totally 4 to 10 people), in which students can ask questions and discuss problems. Team managers have to draw conclusions and translate these into teacher activities. Small problems can be tackled in this way but it is more difficult to provoke structural effects. For some team managers it is no problem to involve students in thinking about how the education programme can be improved, for others this seems to be more difficult. Nevertheless, they all think that these talks with students are very important.

Management and teachers in the sector Technics think that the self-evaluation which has been introduced for the first time in 2005, is the most important instrument to prepare a new annual plan. It is a brand new process but teams are already positive about the profit it brings to them.

## **8. Conclusions**

In the Netherlands in the last decade secondary vocational education has been subjected to very dynamic developments in a rather turbulent environment. Part of these developments has been that dissatisfaction has arisen about the services which secondary vocational education institutions and programmes were rendering to society. Government policy had given schools rather much autonomy but as a consequence of signals of dissatisfaction, since 2000 much more attention has been paid to setting up a rather strict national system of quality assurance in this sector of the education system. The Education Inspection and later the KCE play an important role in this quality assurance system,

among others by inspection activities and by stipulating a broad and detailed set of quality indicators. Quality assurance by the Education Inspection and the KCE mainly have as focal point the primary process of teaching and learning.

Another important quality requirement is that an education institution should build up a quality assurance system itself.

Since a couple of years vocational education institutions, confronted with this quality requirement, are introducing quality assurance systems in their organisations. Although history is short and a general picture of this introduction process is not available, there are sufficient indications that schools still are experiencing many problems in setting up quality assurance or quality management systems in their organisation. One of these problems is the different scope of the quality requirements of the Education inspection and KCE and many quality management systems having an ISO-like perspective. Now, there seems to be a trend that education institutions and education programmes determine quality indicators, which in any case account as much as possible for the framework of the Education Inspection.

A good example of an institution which in spite of many efforts still has difficulties in introducing quality assurance is ROC A. The case ROC A not only shows that teachers still have to get used to a formal quality assurance instrument, especially when this instrument uses indicators which have no direct relationship with their daily practice, but also when the actual developments in a sector or an educational programme are beyond the scope of the indicators defined in the instrument. Quality objectives at sector level do not necessarily correspond (fully) with overall objectives of the education institution. Moreover, developments in quality assurance at school level cannot be viewed isolated from the context of national developments and policy decisions.

A real gap may exist between on the one side what people (teachers, stakeholders such as students, parents, employers) think what is important for the primary process at school, and the outcomes of a quality assurance or management instrument on the other side which uses indicators which define quality indicators in SMART quantifiable output terms, such as the number of drop outs of the number of graduates in a specific year. The SMART principle may reduce reality and perspectives to a number of figures, which have limited validity in regard to the universe they claim to indicate. The way in which management, teachers, students and employers cope with quality assurance in ROC A, is a clear indication that the way in which quality assurance processes influence relevant dynamics of the institution, most probably depends more on the organisational embedding of the quality assurance processes than on more or less detailed quality indicators. In other words, the future orientation and dynamics of quality assurance are not so much dependent on the subjects that are enclosed in the quality indicators, but more on the procedures which are used to embed quality assurance processes in the internal organisation of the education institution.

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