## **Foreword**

This publication, the first that the European Centre for the Development of Vocational Training (Cedefop) addresses to providers of vocational education and training (VET) rather than to policy-makers, aims to help VET institutions initiate or improve their quality approach. This will enable them continually to improve the education they offer, for their own benefit as well as students and society at large.

The handbook is meant to guide VET providers through a 'quality journey' based on the PDCA (plan-do-check-act/review) or quality cycle, the underlying approach to any quality management system (QMS). The handbook's guidelines, advice and practical examples are taken from 20 VET providers in initial, continuing or sector vocational training, all of whom have successful and mature quality management in place. The annex features 41 tools Cedefop selected among those offered by these VET providers, covering all phases of the quality cycle (planning, implementation, assessment/evaluation and feedback/procedures for change).

Cedefop, EU reference centre on VET, has found that while quality assurance is important for accreditation and certification of studies and diplomas, it is not enough to ensure that institutions continually strive to improve quality, unless accompanied by effective internal quality management. For this reason, this publication focuses on internal quality management and its importance for VET institutions.

Commitment of both teaching staff and management and their interaction, are crucial for any successful quality approach. Effective internal quality management is time- and energy-consuming and this must be taken into account from the start to secure whatever is necessary for a quality culture to flourish.

Striving for quality is a dynamic process, with tensions between efforts and results, and between leadership and participation. Such tensions can be partially overcome through lean quality management that privileges qualitative over quantitative methods and improvement over sanctions, involves staff closely, and, above all, is appropriate for the goals and scale of the institution. Overambitious systems risk leading to too much effort for too little benefit.

If the PDCA cycle is common to all quality management approaches, self-assessment is their second shared component. As the 20 case studies have demonstrated, self-assessment forms an integral part of internal quality culture, with results leading to specific improvements. Empirical data on the financial effect of quality management are lacking. In Cedefop's analysis, costs relate mostly to personnel, while positive effects are measured in relation to student satisfaction with teaching/learning and services/facilities. Though tangible, the latter cannot be compared directly against cost. Despite this, interviewed VET providers said the return on investment could be surmised from higher visibility and attractiveness for prospective students. Other positive effects include increased internal transparency, further education of staff and better adapted training programmes to students' and other stakeholders' needs. In addition, VET providers with solid internal quality management are more open to external cooperation, networking and participation in European cooperation.

Most VET institutions analysed are supported by public structures that are part of national quality frameworks. This support comprises guides to self-assessment, sets of indicators, data collection and processing tools and training opportunities for teachers and trainers.

Cedefop's analysis revealed that the vision of quality and the concept of internal QMSs differ considerably among the VET providers investigated. Each institution aims to define its own approach based on its local/regional environment and internal organisational structure. But they all respond to common challenges, such as increasingly heterogeneous groups of learners, developing into lifelong learning institutions, redefining curricula based on learning outcomes, strengthening methods for competence-based assessment, promoting self-learning and adopting new forms of teaching.

Teacher and student mobility is increasing and VET provision is becoming more international and subject to national and foreign competition. The present handbook is meant to help VET providers successfully meet these challenges.

Joachim James Calleja Director

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Erwin Seyfried drafted this report, assisted by Maria Gutknecht-Gmeiner, who provided input for Chapter 5 and by Katalin Molnar-Stadler who contributed to Chapters 4 and 7. In addition, Elena Eybe provided technical support by drafting most of the diagrams while Agnès Ammeux took care of the administrative aspects all along the work process.

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# **Executive summary**

This Cedefop handbook is meant for organisations providing VET that wish to develop and improve the quality of their services by establishing an internal QMS and creating a quality culture to face continuously current and future challenges.

## Quality, quality management and quality culture in VET

There are countless definitions of quality. For this handbook Cedefop selected one based on J.M. Juran's approach which defines quality as fit for purpose achieved with optimum resources. While purpose is manifold and depends on differing social contexts, ethical values, interests and stakeholders' views, several methods, instruments and a 'toolbox' are available to support optimal use of resources.

Although there are different approaches to quality management, their common core refers to systematic application of the above-mentioned 'toolbox', to coordinate activities, control and improve a VET institution on its journey towards what is agreed as fit for purpose.

The definition of a quality culture within a VET institution builds on the previous statements by adding the human factor. The term embodies the professional capacities necessary to use the toolbox, which are shared by individuals committed to pursuing the specific value system that defines what is fit for purpose for a particular organisation.

## Objectives and structure of this handbook

The primary objective of this handbook is to present to VET providers interested in quality issues a range of instruments, methods and tools they can work with to develop by themselves a quality culture within their organisations. The instruments, tools and methods proposed derive from detailed analysis of the praxis of VET providers active in initial vocational education and training (IVET) and/or continuous vocational education and training (CVET) who have successfully implemented over the years their own quality approach or have adapted existing quality (standardised) systems to their needs. Given this practical objective, the handbook avoids reference to quality theories, makes use of the minimum necessary technical terms and adopts a simple user-friendly structure based on the quality cycle. The handbook covers quality management at the whole organisation, teaching and learning and quality department levels. It is articulated in nine chapters each opening with a short introduction to its objective, evolving by steps, containing pieces of advice and questions for reflection and further action. An annex with selected tools used by the VET institutions visited and who generously accepted to provide them for this handbook, complete this publication.

## **Empirical sources**

As already mentioned, the handbook draws on a range of empirical sources, encompassing 16 case studies of VET institutions operating with national quality frameworks in 13 European Member States: Belgium, Germany (two), Estonia, France (two cases), Italy (two), Hungary, the Netherlands, Austria, Portugal, Romania, Slovenia, Finland, and UK/Scotland, supplemented by four case studies of VET organisations applying sectoral quality frameworks in the automotive

industry (Czech Republic), design and industry-related services (Italy), the social sector (Germany) and maritime management, navigation and engineering (Lithuania).

In addition to intensive desk research into the relevant national and sectoral quality frameworks, the case studies were conducted using site visits and comprehensive interviews with managers, quality officers, teachers and trainers, students and representatives of external stakeholders such as ministries, businesses and chambers.

# Chapter 1 – European context for quality in VET

By reading this chapter you will become familiar with the efforts and activities undertaken at European Union (EU) level, including cooperation between Member States and social partners, to improve quality of European VET systems and develop a common European reference framework for quality assurance in VET.

## 1.1 Growing demand for well-qualified workforces

In all European countries, fast-changing technical developments and global competition are leading to growing demand for well-qualified workforces; investments in education are an important means for the EU to keep pace internationally, as well as contributing to increased social cohesion. Financial investments alone are not sufficient to make VET attractive, socially inclusive and competitive – the quality of VET must be considered too.

Since 2002, the 'Copenhagen process for enhanced European cooperation in VET' has fostered common learning by involving all relevant stakeholders to improve performance, quality and attractiveness of VET in Europe. In its political dimension, the process aimed to establish common European objectives and support reforms in national VET systems.

A major development was definition of a common European framework to improve quality assurance in VET. Continuous cooperation between Member States and social partners at European level, supported by the EU Commission, resulted in adoption of the 'recommendation of the European Parliament and of the Council on the establishment of a European quality assurance reference framework for VET (EQAVET)' in June 2009 (European Parliament and Council of the EU, 2009a).

The EQAVET framework comprises an action pattern for quality assurance and quality improvement, based on the PDCA cycle of planning, implementation, evaluation and review, supported by common quality criteria and indicative descriptors (Annex I of the recommendation) and a coherent set of quality indicators (Annex II of the recommendation), which can be used both at VET provider and VET system levels.

Following the PDCA cycle, the EQAVET framework suggests application of a circular quality assurance framework that comprises:

- a. goal-setting and strategic planning;
- b. rules and regulations for implementation, continuous monitoring and measurement of results according to predefined goals;
- c. analysis of factors contributing to quality and management of change in view of the achieved results;
- d. new strategic planning and goal-setting adapted to new developments, thus starting a new cycle for continuous improvement.

The principle of the quality cycle is easy to understand, because it applies instinctively in everyday life. However, it is the systematic, continuous and regular use of the cycle that makes the difference when establishing a quality framework.

Figure 1. The Deming (PDCA) cycle



Source: CEDEFOP.

By following the same structure and the same steps as the PDCA cycle<sup>2</sup> – the foundation and common basis of all models and systems of quality assurance, either implicitly or explicitly – the EQAVET framework aims to develop a systematic approach to quality assurance and continuous improvement in VET systems and VET provision. Applying the PDCA cycle to a specific context constitutes the basic element of any effective internal quality management and quality culture within VET institutions – focus of this Cedefop handbook.

The EQAVET recommendation also promoted establishment of the EQAVET network<sup>3</sup>, a platform for deepening cooperation in quality in VET by bringing together the EU, European Economic Area (EEA), European Free Trade Association (EFTA) and candidate countries, social partners and European Commission. Cedefop plays an active role as scientific advisor to the network and participates in its steering committee and working groups. Within its strategic objective of fostering excellence, quality and relevance of VET, the Bruges communiqué of December 2010 invites countries to establish at national level and by the end of 2015, a common quality assurance framework for VET providers, compatible with the EQAVET framework (Council of the EU and European Commission, 2010).

To promote the EQAVET framework at national level, countries are recommended to establish quality assurance national reference points (NRPs). By 2013, 28 countries reported having put in place a NRP<sup>4</sup>. They form a network and support countries to develop and implement their national approaches to quality assurance, disseminate information on EU VET quality-related developments and raise national awareness of quality assurance in VET<sup>5</sup>.

The EQAVET recommendation invites Member States to review the EQAVET implementation process every four years and report the results to the European Commission. The first report of

<sup>&</sup>lt;sup>2</sup> Also called the Deming cycle, after Williams Edwards Deming, considered the inventor of the cycle.

<sup>&</sup>lt;sup>3</sup> More information about the EQAVET network is available from <a href="www.eqavet.eu">www.eqavet.eu</a> [accessed 26. 5. 2014].

<sup>&</sup>lt;sup>4</sup> EQAVET secretariat survey 2013 and EQAVET network website <u>www.eqavet.eu</u> [accessed 26. 5. 2014].

<sup>&</sup>lt;sup>5</sup> Updated list of NRPs at the above-mentioned EQAVET website.

the EU Commission to the European Parliament and the Council on the experience gained and implications for the future was submitted end of 2013.

### Box 1. Components of the EQAVET recommendation for VET

A pattern for action comprising:

- a. the EQAVET quality cycle for quality assurance and improvement in VET;
- b. quality criteria and indicative descriptors;
- c. a set of coherent quality indicators.

A European network (EU, EEA, EFTA and candidate countries and social partners).

The NRPs in EU Member States.

The EQAVET framework forms part of a series of European tools and principles to make qualifications more transparent and ease mobility of learners and workers. They include the European qualifications framework (EQF) for lifelong learning (European Parliament and Council of the EU, 2008), the European credit system for VET (ECVET) (European Parliament and Council of the EU, 2009a), the common European principles for identification and validation of non-formal and informal learning as expressed in the Council recommendation on validation (Council of the EU, 2012) and Europass (European Parliament and Council of the EU, 2004).

Among the various Cedefop publications related to quality assurance, the following three are of particular interest to VET providers looking for international cooperation:

- a. Cedefop, 2008;
- b. Cedefop, 2011a;
- c. Cedefop, 2011b.

### Box 2. Quality assurance tools provided by the EQAVET network (\*)

### **Building block**

... a series of themes and activities which NRPs can use to support VET providers in developing their internal quality assurance systems in line with the EQAVET recommendation.

### **Contrasting statements**

... helping VET providers to reflect on their quality assurance approaches in comparison to the EQAVET indicative descriptors, and to find out strengths and areas for further development.

## Indicators toolkit – Catalogue of indicators

... support implementation of the set of 10 EQAVET indicators by answering possible questions and addressing difficulties that may be encountered when using the indicators.

Guide for national quality reference points to support VET providers' self-monitoring by using the EQAVET indicators

... practical guidance on how to plan, organise and conduct the self-monitoring process at VET-provider level – focusing on results (output and outcomes) as measured by indicators.

### Glossary

- ... to clarify the key concepts and terms used in the EQAVET recommendation.
- (\*) http://www.eqavet.eu/index2.html [accessed 26. 5. 2014].

## Box 3. Questions for reflection and options for further action

- a. Have you ever been in contact with your NRP?
- b. Have you ever tried the EQAVET website?
- c. Are you informed about European VET measures?

# **Chapter 2 – Quality management and quality culture**

In this chapter you will learn more about the concepts on which this handbook is based – quality management and quality culture. You will see the differences as well as the relationships between these terms and you will get a first idea of what it means to set up a QMS and a quality culture in your organisation.

While in Chapter 1 you learned that a common EQAVET framework for VET was adopted, it is also a fact that most European countries have established quality frameworks that give their VET providers the freedom to decide by themselves which internal approaches, instruments and tools to apply (see annex, Section 1.39). Although this flexibility is fully in line with the EQAVET framework, there are some basic requirements and tasks for operation of any internal QMS that must be followed and which are explained in Section 2.1.

## 2.1 Dimensions of internal quality management

Even small VET institutions have a complex organisational structure and quality is generally produced in all parts of the institution, although some parts are more important for producing quality than others. Therefore, the first task is to distinguish between the less important and more important quality issues and focus on the particularly relevant areas for action. A typical list of quality areas including quality objectives and core tasks for quality management of a VET institution is in Box 4.

## Box 4. Typical quality issues in a VET institution

(see annex, Sections 1.1, 1.2, 1.30, 1.40 and 1.41)

- a. Manage the institution:
  - i. involve all relevant stakeholders;
  - ii. improve quality of teaching and learning;
  - iii. adjust processes for prime service delivery.
- b. Develop the institution:
  - i. agree on a vision and a mission statement;
  - ii. agree on quality objectives and targets.
- c. Lead the personnel of the institution:
  - i. develop capacities of teachers, trainers and other staff.
- d. Aim for optimal management of resources.
- e. Develop cooperation and networking with external stakeholders.
- f. Create and develop facilities for educational supply.
- g. Observe, assess and analyse processes, results, outcomes and impacts.
- h. Strive for continuous improvement of quality.

Box 4 provides a first overview of the quality tasks to be fulfilled by VET institutions.

As teaching and learning are at the heart of quality, internal quality management of any VET institution has to focus its activities primarily on them. Figure 2 highlights the quality issues important for quality in teaching and learning.

Monitoring – assessment – evaluation – proposals for change Quality management Documentation Development and delivery of VET Recruitment Curriculum: Placement **Teaching** and professional content, methods and and orientation of learners and examinations follow-up learning Accompanied counselling Management Leadership Staff **Facilities** Financial of the and development and resources institution management equipment

Figure 2. Main areas for quality within a VET institution

Source: CEDEFOP.

Figure 2 refers first and foremost to delivery and continuous development of VET programmes and their main components: content of the curriculum, pedagogical methods applied and procedures to assess student performance.

The main part of the teaching and learning process is preceded by recruitment processes and professional orientation of interested students/ learners; downstream activities are conceived to support placement of students in employment or their transfer to further and higher education institutions, and to services for follow-up. In parallel to the teaching and learning process, many VET institutions offer counselling to provide additional support, in particular to migrants and socially-disadvantaged students/learners.

Management processes within the organisation aim to ensure an appropriate environment and optimal preconditions for teaching and learning. Among different management tasks, the most important for quality are promotion and further training of teachers and trainers, adequate facilities and equipment for smooth provision of teaching and training, and last but not least, efficient management of financial resources.

Quality management embraces both the teaching and learning process and organisational management of the VET institution, and a specific function or even a department is responsible

for implementation and promotion of all quality-improving activities in these areas. In addition, quality management includes monitoring these activities, in other words assessment and evaluation of quality achievements, on which proposals for further improving quality of the VET institution are based.

A fully operational internal QMS covers several basic tasks or activities, applies a range of tools to assess and analyse, to illustrate and communicate plans and results achieved, and will use certain instruments to promote a quality culture within the VET institution and work in partnership with external stakeholders.

## 2.2 Basic activities of a QMS within a VET institution

Tasks of an internal quality assurance system can be described as follows:

- a. description of processes: this is one of the most prominent requirements for all kinds of external recognition of quality in a VET organisation. The internal quality assurance system sets up and describes the operational processes and their quality objectives together with the individual responsibilities for the management and control of each operation, giving a whole picture of the organisation;
- b. (self-)assessment: the internal quality assurance system develops and/or provides the necessary instruments and tools for collecting information and assessing results from staff, students and external stakeholders. As a horizontal task the quality assurance system is based on consistent principles for collection and evaluation of information in different units and departments of the VET organisation and for different operations;
- monitoring and change management: the quality assurance system puts into effect the institutionally-agreed quality assurance processes through continuous monitoring, regular assessment, evaluation and proposals for adaptation, improvement and change;
- d. documentation: this is another basic requirement for any type of external recognition of the institution. The internal quality assurance system has to ensure the documentation and storage of all documents guiding operations of the VET institution both internal and those addressed to its external stakeholders;

A fully-fledged documentation system in a VET institution should store under safe conditions at least the following records:

- i. mission statement and quality policy of the VET institution;
- ii. descriptions of the main processes and definitions of related (personal) responsibilities;
- iii. tools and instruments used for assessment and evaluation;
- iv. records of assessments and evaluations undertaken;
- v. records of all suggestions, complaints and subsequent investigations made;
- vi. minutes and results of discussions to improve quality of organisational processes and programme and service delivery;
- e. communication: as a cross-cutting function, a quality assurance system within a VET institution should ensure internal communication with staff, teachers/trainers and students as well as communication with relevant stakeholders from outside, such as general schools, employers and employment agencies.

Description of assessment and change management

Communication

Internal quality assurance system

Monitoring and change management

Documentation

Figure 3. Basic tasks of an internal quality assurance system

Source: CEDEFOP.

## 2.3 Quality culture

This handbook for VET providers focuses on developing quality management and a quality culture. They represent two different concepts and approaches to quality, which in practice should complement each other.

Quality management aims to introduce and provide a continuous review of planned quality objectives and coordinated activities to direct and control the VET organisation with regard to quality. Using reliable and valid instruments for data collection, quality management monitors, assesses and evaluates input, output and outcomes of its impact on quality of services within the organisation. Thus, quality management is a 'hard' concept based on facts, figures and measurement within the organisation.

Quality culture is a 'soft' concept, depending on prevailing attitudes and behaviour of individuals in the VET organisation. Quality culture builds on quality management and is understood as the interaction between a well-functioning, professional QMS and committed staff members who, guided by professionalism, demonstrate quality-oriented behaviour. Thus, the main factors of a quality culture are individuals' roles and commitment in producing quality in VET.

- Which of the above-mentioned tasks of internal quality management are sufficiently accomplished in your organisation?
  Where is there room for further action?
- Which benefits from internal quality management can be seen in your organisation? c.
- How are quality management and quality culture interlinked in your organisation?

# Chapter 3 – Heading towards quality: applying the quality cycle

In Chapter 1 you got a first idea about the PDCA cycle. In this chapter you can learn – step by step – how to apply the quality cycle in your organisation: how to plan your activities, how to monitor what you are doing and how to assess your achievements. Further, you will learn to analyse different factors affecting quality in VET and how to organise change to improve things.

## 3.1 Planning your activities for better quality

One can hardly imagine building a house without prior planning and the same applies to quality in VET. People make plans before they act and in VET institutions planning is an everyday process. One has to plan distribution of subjects, deployment of teachers and use of teaching materials, as well as assessments of students and graduation ceremonies.

But planning quality means strategic planning, which is more than finding short-term solutions or correcting errors that have occurred. Strategic planning is about improving the whole organisation and in particular its core process of teaching and learning. Last but not least, planning quality means developing a strategy for quality management.

A strategy must provide answers to the following questions:

- a. what should be achieved;
- b. how can it be achieved, by whom, by when;
- c. what resources are needed

Therefore, a VET institution has to define its strategic objectives, activities and resources. Consequently, strategic planning can be understood as development of a coherent plan to achieve the institution's self-defined objectives with appropriately defined resources and by systematic alignment of activities towards these objectives.

## Box 6. Proposals of the EQAVET recommendation

According to the quality criteria in Annex I of the EQAVET recommendation, planning should reflect a 'strategic vision' and 'includes explicit goals/objectives, actions and indicators'. The descriptors suggest:

- a. explicit goals/objectives and targets are established and monitored;
- b. responsibilities in quality management and development are allocated;
- c. VET providers have an explicit and transparent quality assurance system in place.

Since VET institutions are complex organisations, they will rarely have just one objective. This is why in strategic planning a hierarchy of objectives is established (see annex, Sections 1.1, 1.2, 1.29). At the top there is a general and commonly-shared principle, a vision of the future role of the organisation, which is mostly kept deliberately vague, and in Chapter 6 you will learn

more about the vision's importance and how to build and shape it. At the current stage, dealing with strategic planning, it is more important to look more closely at operational issues, because there are several additional steps to be planned to ensure achievement of the strategic objectives.

Strategic planning in teaching and learning could look like the following example (see Figure 4): the overall objective is to modernise the learning process and sub-objectives are to strengthen self-learning and use of eLearning/open-educational resources. Teachers and trainers must develop and provide tasks and instructions for self-learning and suitable material for eLearning through corresponding activities.

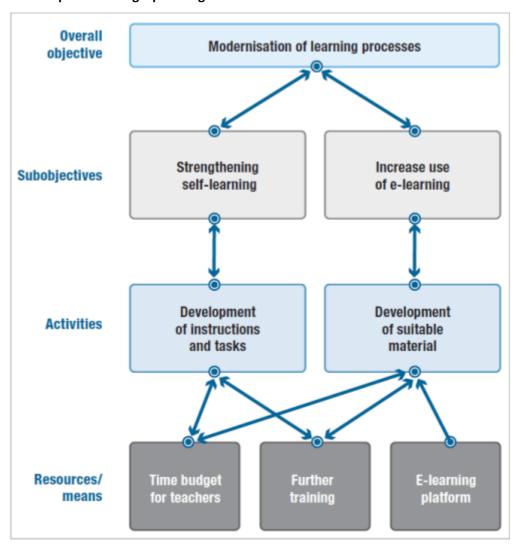


Figure 4. An example of strategic planning

Source: CEDEFOP.

Concerning eLearning/open-educational resources, a learning platform and additional equipment are the resources needed. In addition, teachers and trainers must be entitled to allocate a certain percentage of their working time for preparing themselves and further

training might be offered to them so they are able to perform their new tasks professionally. Necessary time for this could be made available by giving up other tasks they perform, such as providing cover for other teachers or carrying out clerical and administrative activities.

To determine at a later stage whether the strategic objectives have been achieved, they must be realistic and sufficiently specific. Setting targets helps to stay realistic. For example, setting targets would mean defining a realistic number of VET courses per department and determining for each course a realistic percentage of self-learning and, where appropriate, of using eLearning/open-educational resources.

In subsequent stages of strategic planning, departments should designate individual teachers to take on the tasks, thus defining clear personal responsibilities. Further, milestones and deadlines have to be fixed: what progress should be achieved after a month, three months, or half a school year? But it is important to differentiate, as mile stones and deadlines might be different for different departments or VET programmes.

The quality management department should be responsible for the following steps in strategic planning. First, it must define appropriate indicators for monitoring the process and the results. In the example above the number of teachers who have completed further training can be monitored as a process indicator and the number of tasks for self-learning developed could be used as a result indicator. In addition, the quality department must determine how monitoring processes and assessment of results is organised and what measurement tools could be used, to evaluate whether the tasks and instructions for self-learning developed are suitable and appreciated by students/learners.

## Box 7. Indicators

Indicators are to provide information on whether and to what degree agreed quality objectives have been achieved. Indicators should be tangible and measurable and accompanied by concrete targets, reflecting the envisaged level of attainment.

Involving stakeholders in planning and developing quality in your institution is of vital importance, although intensity of their participation should be different in various areas with respect to their individual concerns and responsibilities (see Table 3.1 and annex, Section 1.37). It is obvious that teachers and trainers are the most important actors for quality in teaching and learning, but senior management and students/learners should also have a voice and a significant role since they are directly affected by the planned objectives. External stakeholders should contribute to planning teaching and learning with their experience in an advisory role, while quality management should have a supporting function by defining appropriate indicators and tools for monitoring and assessing the envisaged quality objectives. Quality management's role is a supportive one also in the developing quality of organisational processes phase, while it is decisive in constructing an effective QMS within the institution. The senior management team should contribute through its proactive attitude to all areas, but is responsible for quality in overall management of the organisation.

Table 1. Intensity of involvement of stakeholders in different areas of quality development

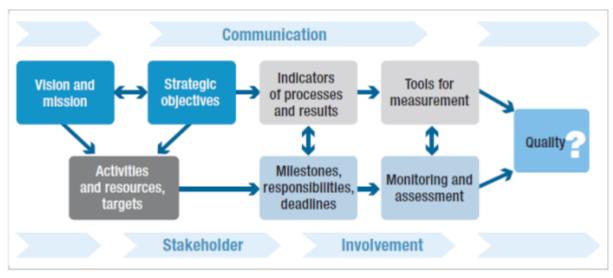
Stakeholders	Management of the institution	Teaching and learning	Quality management		
Senior management	•	•	•		
External stakeholders	<b>*</b>	<b>*</b>	•		
Teachers and trainers	•		•		
Students	<b>*</b>	•	•		
Quality manager	+	<b>*</b>			

NB: ■ most important actor; ● principal actor; ◆ supportive and/or advisory role.

Source: CEDEFOP.

An overview of the different steps in the strategic planning process and how these steps subsequently build on one another is given in Figure 5. It must be underlined that the whole planning stage needs to be accompanied by continuous communication and coordination between the various stakeholders, which should be organised by the quality department under responsibility of senior management. In later chapters you will learn more about how to organise stakeholders' involvement in operational terms.

Figure 5. Main steps in the strategic planning process



Source: CEDEFOP.

Strategic quality planning is usually undertaken in a long-term, multi-annual perspective, but is reviewed and adapted once a year in light of progress made, mostly in combination with preparation of the annual course programme. Achievement of quality milestones, however, can be monitored more frequently, quite often in parallel with implementation of activities leading to it. In Section 3.2 you will learn more about real-time monitoring of your activities.

## Box 8. Questions for reflection and options for further action

- a. What would you consider the main strategic quality objectives in your institution, in:
  - i. organisational development;
  - ii. teaching and learning;
  - iii. quality management.
- b. Are your main objectives broken down into a hierarchy of appropriate subobjectives?
- c. What steps do you take to put your objectives into practice?
- d. How do you try to stay realistic when setting your quality objectives?
- e. Have you allocated adequate resources to achievement of your quality objectives?
- f. Do you involve your stakeholders appropriately?
- g. Is your quality management department aware of its tasks in the strategic planning process?

## 3.2 Do and monitor what you are doing

In this section you can learn what you should consider when implementing your quality objectives. You will become acquainted with some instruments for monitoring quality of teaching and learning in VET institutions and learn how to use the results to achieve immediate improvement.

## 3.2.1 Governance and administration of quality within a VET institution

An effective internal relationship between senior management, heads of departments, the quality manager and other members of staff is crucial to ensure purposeful and timely implementation of the planned activities for achieving the quality objectives.

On the one hand, there must be a certain degree of freedom and flexibility in implementing quality activities in different departments and in particular at the lower end of the organisational hierarchy. Quality objectives will be achieved all the more readily when staff members at all hierarchical levels take ownership of the process, create their own targets and act on their own initiative to achieve them (see annex, Sections 1.31, 1.32). On the other hand, it is up to senior management to ensure coherent development of quality within the organisation and therefore to establish clear rules and transparency in decision-making, in case of deviation from the adopted quality objectives and the related activities. In Chapter 4 of this handbook you can learn more about keeping a balance between leadership and active staff participation and how to establish an effective flow of information and a communication system within a VET organisation.

Motivation and capabilities of staff, in particular teachers and trainers, is the decisive factor for success of quality improvement activities. Therefore VET organisations need a strategy for professional development of their staff in line with the institution's quality objectives.

Appropriate criteria for recruitment of new teachers and trainers should be introduced and a plan for further staff training should be defined which reflects development needs of the institution and also takes interests and potential of individuals into account. To develop capabilities of its staff, a VET institution should put in place appropriate programmes for further training and adopt measures acknowledging staff efforts.

### Box 9. Proposals of the EQAVET recommendation

The quality criteria in Annex I of the EQAVET recommendation propose that in the 'do' stage of the PDCA cycle 'implementation plans are devised in consultation with stakeholders' and the quality descriptors suggest:

- a. resources are appropriately assigned to achieve the targets set in implementation plans;
- b. for staff competence development, teachers' and trainers' needs are specified and staff undertake regular training, in cooperation with external stakeholders.

Staff appraisals are an essential tool to align development needs of the organisation and individuals. Many quality-oriented VET institutions use this tool continuously and systematically to allow mutual feedback between staff and senior management. Conducted annually, staff appraisals may proceed along the following lines:

- a. feedback from staff members interviewed to their managers;
- feedback from managers to staff members;
- c. discussion of ideas to improve quality within the institution;
- d. discussion of needs and demands for further training of staff members;
- e. recording mutually agreed objectives, activities and deadlines.

### Box 10. Tool: staff appraisal

A form with hints on undertaking and recording staff appraisals can be found in the annex, Section 1.6.

### 3.2.2 Monitoring quality of teaching and learning

It is appropriate to monitor all activities you undertake to achieve better quality, improve organisational processes, teaching and learning and quality management. However, this section focuses solely on teaching and learning to illustrate the importance of their monitoring.

Unlike assessment and evaluation, focus of the third step of the PDCA cycle, monitoring is part of the second step and is understood as direct and systematic observation of a process with designated instruments, to draw conclusions for immediate improvement. Thus, the main function of monitoring is to provide evidence of the course of a process for immediate intervention if the process deviates from the original intention.

Reducing numbers of dropouts and raising graduation rates in VET are Europe-wide agreed policy objectives, and monitoring can help achieve them through real-time collection of relevant information. Unexcused absence of students from classes can be considered an early-warning sign of impending drop-out, and it should therefore be monitored closely in every department. Where numbers of absences exceed a certain level, an institution might adopt a counselling strategy for these particular students or learners.

Another example is the number of cancelled lessons: additional resources might be provided for these classes and courses to serve students' and learners' needs better.

Quality of classroom lessons and workshop training lies primarily in teachers' and trainers' hands. If they have appropriate monitoring tools at their disposal, they can monitor quality of their lessons themselves and improve them accordingly.

In fact, quality-oriented VET providers have developed tools to help teachers to reflect systematically on quality of their classes, including on their students' different learning styles, their favourite methodologies, promotion of self-learning or quality of the learning material used.

This self-directed monitoring can be complemented by including students' perspectives collected through questionnaires, to obtain immediate student feedback on classes. This feedback is addressed directly and confidentially to the teacher and is intended for individual use only. The students' questionnaire addresses similar issues to those in the self-reflection form for the teacher, thus allowing the teacher to draw conclusions from comparing their own perception with students' assessments.

Additionally, some VET providers distribute questionnaires to students for self-assessment and self-reflection on their learning behaviour, which constitutes another monitoring tool for teaching and learning, although here the students themselves must draw the appropriate conclusions to enable change.

Another approach to monitoring teaching and learning in classes is to build tandems of teachers who attend one another's classes to collectively monitor teaching and learning processes and provide professional feedback to one another (see annex, Section 1.27). Experience has shown that teachers initially hesitate to engage in these activities, but agreement on quality criteria and assessment items helps develop common trust and prepares the ground for cooperation.

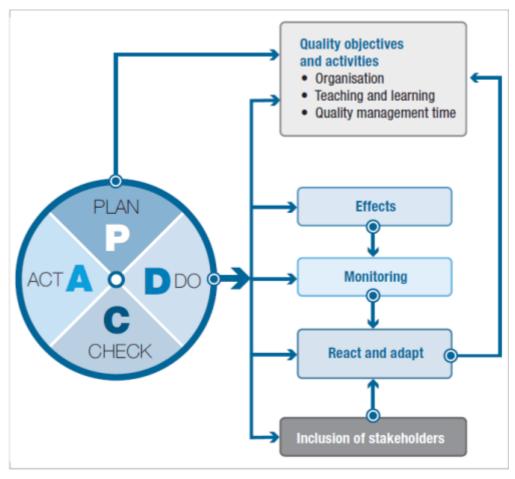
Monitoring can also take the form of voluntary learner engagement meetings between students and teachers, which discuss and reflect on quality of teaching and learning. Although the main intention of meetings is to listen to learners, it is important to make targeted use of this tool by structuring discussions around certain themes and by orienting the groups towards results and conclusions which will improve quality.

Box 11. Tools: monitoring quality of teaching and learning

a.	Self-reflection (see annex, Secti	an ons 1.3. 1.8.		self-assessn	nent	by		teachers		
b.	Questionnaire	for co	nfidential	feedback	from	students	to	teachers		
c.	(see annex, Section 1.22). Students' self-reflection (see annex, Section 1.7).									
d.	Students'	feedback	on 1 1 16 1 17	school	and	acac	demic	year		
e.	(see annex, Sections 1.10, 1.14, 1.16, 1.17, 1.18, 1.19). List of themes for learner engagement meetings (see annex, Section 1.5).									

The examples given above demonstrate clearly the value of real-time monitoring. Collection of monitoring data offers a chance for immediate response whenever results of activities crucial for achieving quality are recorded as poor or below expectations. Sometimes actions to correct or improve activities may result directly from monitoring data. Where this is not the case, searching for an appropriate solution must become a common concern. Necessary actions must be discussed by including relevant stakeholders, before senior management takes a final decision on the most suitable option for change.

Figure 6. Quality management in the implementation stage



Source: CEDEFOP.

### Box 12. Questions for reflection and options for further action

- a. What is your approach to further developing skills of teachers, trainers and other staff?
- b. What is your strategy for further training of staff?
- c. How do you define development needs? Do you use staff appraisals?
- d. Which activities aiming at better quality are monitored in real-time in your organisation?
- e. Which tools does your organisation use to monitor quality of teaching and learning?

## 3.3 Assess your quality results and your progress towards better quality

In this section you will learn how to assess and evaluate your quality achievements, how to collect feedback from internal and external stakeholders, how to implement self-assessment and in-depth evaluation of your results within your institution, and finally, how to communicate the available information.

### 3.3.1 Targeted data collection

Quality management means that developing quality is pursued systematically and is based on facts and figures. Thus, collection of data for assessing achievement of quality objectives is an inevitable practice in all VET institutions that have adopted an internal QMS.

Experience shows, however, that quality-oriented VET institutions often collect too many data and these data are neither analysed nor used, simply because it is impossible to cope with the magnitude of the task. But uncontrolled data collection not only creates unnecessary work; in the long run, it also discourages respondents from giving feedback. Stakeholders flooded with feedback questionnaires, possibly with incoherent questions, will not provide valid answers.

Hence the importance to strictly concentrate data collection on predefined quality objectives of your own VET institution and its core process of teaching and learning, and from the outset to keep collection of feedback from stakeholders within tolerable bounds.

### Box 13. A piece of advice

Scope of data to be collected should be strictly limited and clearly focused to assess achievement of your quality objectives as defined in the planning stage.

Further, the quality manager should ensure that a suitable system for data collection and processing is available and that it requires minimal effort. Nowadays, many inquiries can be performed online and by linking them with an appropriate data processing programme it should be possible to process and analyse the information automatically. It is highly recommended therefore, not to use homemade tools for data collection and data processing,

but to take advantage of professional support from outside the VET institution, and in fact in several Member States such systems are provided by relevant public authorities.

In some countries, data processing and analysis of results are undertaken externally by the education authorities, which provide VET institutions with their individual results, together with reference data, by placing their results in a context of average ratio of all institutions, thus allowing for benchmarking and common learning among VET providers.

### Box 14. Proposals of the EQAVET recommendation

The quality criteria in Annex I of the EQAVET recommendation stipulate that 'evaluation of outcomes and processes is regularly carried out and supported by measurement'. The descriptors suggest that:

- a. self-assessment/self-evaluation is periodically carried out;
- b. evaluation and review cover processes and results/outcomes of education, including assessment of learner satisfaction as well as staff performance and satisfaction;
- c. evaluation and review include adequate and effective mechanisms to involve internal and external stakeholders.

Some basic data, especially for running VET programmes, should be extracted immediately from the organisation's business management system without involving stakeholders. This includes information on participation rates in individual VET programmes as well as students' graduation rates. The business management system should allow capture of these data broken down by individual characteristics of students such as gender and age, or according to affinities to vulnerable groups.

With these data, generated from your business management system, you may already evaluate some of the indicators included in the EQAVET framework, presented in Box 15.

#### **Box 15. EQAVET indicators**

Annex II of the EQAVET recommendation proposes a comprehensive set of quality indicators, which can be used to support evaluation and quality improvement of VET providers.

#### European quality indicators propose:

- a. application of an internal QMS;
- b. investment in further training of teachers and trainers;
- c. establishment of participation rates in VET programmes, according to type of programme and individual/social characteristics (gender, age, vulnerable groups);
- d. establishment of completion rates in VET programmes, according to type of programme and individual/social characteristics;
- e. establishment of placement rates after graduation from VET programmes, according to type of programme and individual/social characteristics:
  - i. destination of graduates after completion of VET programmes;
  - ii. share of employed graduates;
- f. use of acquired skills at the workplace:
  - i. occupation obtained by graduates according to type of training and individual/social characteristics;
  - ii. satisfaction rate of graduates and employers with acquired skills/competences;
- g. use of unemployment rate according to individual/social characteristics (context indicator);
- h. prevalence of vulnerable groups (context indicator);
- i. mechanisms to identify (changing) training needs in the labour market;
- j. schemes used to promote better access to VET.

It is important to note that some European quality indicators are arranged in a chain of indicators, which are interrelated and build on one another and thus can provide information of additional value. For instance, having collected information on participation rates (indicator 5) and completion rates (indicator 6) it is possible to calculate drop-out rates by comparing the two. The more detailed and disaggregated the information gathered is (for example according to gender, age, ethnic background, educational background) the more reliable the evidence they provide. If information on participation, completion and destination is analysed by VET programme and individual/social characteristics of students, it will be possible to identify the effects on students with different social characteristics and thus to evaluate suitability and adequacy of the various VET programmes they have gone through.

However, information available from the business management system is insufficient to evaluate all these basic indicators, not to mention individual quality objectives of your own organisation. Additional methods for data collection must be used to get deeper insights into quality of a VET institution.

## 3.3.2 Collection of feedback from internal and external stakeholders

Usually, feedback is collected from students, but rarely from students' parents (see annex, Section 1.20), from teachers and trainers (but rarely from other staff of a VET institution), and from former graduates and their employers, companies cooperating in work-based training, business organisations (such as chambers of commerce and industry) and other stakeholders in the local community (see annex, Section 1.36). An overview of the internal and external

stakeholders that should be included in evaluation of processes and outcomes of a VET institution is given in Figure 7.

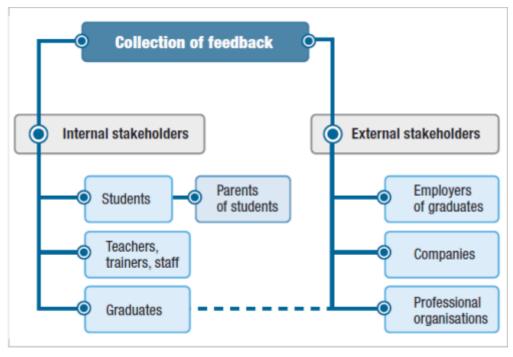


Figure 7. Overview of stakeholders involved in evaluation

Source: CEDEFOP.

Students and learners are the most important stakeholders for providing feedback; usually their feedback is generated annually and it should be possible to collect it online. Questionnaires might include items addressing personal data (respecting anonymity) and the institution and its various services (such as library and catering facilities), but focus should be on questions concerning the learning process. This section should contain questions on students' awareness of the learning outcomes to be achieved in classes, an appropriate combination of theory and practice, use of new media, opportunities for self-organised learning and clarity of assessment criteria.

### Box 16. Tool: campaign protocol

A guide on how to collect and record valid and reliable feedback from students can be found in the annex, Section 1.12.

A questionnaire for students' parents might address parents' views on whether classes attended led to increased knowledge and competence or whether their child made positive/negative comments about the school, its classes, teachers and trainers.

Questionnaires for collecting feedback from teachers, trainers and other staff members may address issues such as the institution's quality culture, performance of senior management, possibilities for participation, satisfaction with communication and information policy, the working climate and the way conflicts are dealt with.

Investigating former graduates' destinations to get information on their employment status is essential for every VET institution's quality. Issues to be addressed in such enquiries refer to occupations obtained as well as satisfaction with the completed education and use of acquired skills and competences at the workplace.

Mirroring these enquiries, employers of graduates might be interviewed about graduates' job performances and their career prospects considering their acquired skills and competences.

Feedback questionnaires addressed to companies offering work experience and work-based training may ask about satisfaction with exchange of information and cooperation between the VET institution and the company, quality of classes, lessons and learning material, a general assessment of the institution's image and incidents observed over the past 12 months.

Finally, other stakeholders, such as chambers of commerce and industry, business organisations, employee organisations or NGOs representing socially-disadvantaged groups, might be asked to give their feedback, in particular on their perception of quality and overall image of the VET institution.

### Box 17. Tools: questionnaires for collection of feedback

- a. Students' questionnaire (see annex, Section 1.26).
- b. Questionnaire for students' parents (see annex, Section 1.20).
- c. Questionnaire for teachers, trainers and other staff members (see annex, Section 1.34).
- d. Questionnaire for former graduates (see annex, Section 1.13).
- e. Questionnaire for employers of former graduates (see annex, Section 1.15).
- f. Questionnaire for business companies offering work-based training (see annex, Section 1.38).

### 3.3.3 Staff appraisals and staff performance measurement

In Section 3.3.2 on monitoring teaching and learning, you learned how important staff appraisals are as a tool for collecting common feedback between staff members and senior management and for recording ideas for improvement of quality.

Quality-oriented VET institutions may also regularly assess employees' performance against the tasks set out in their job descriptions. Assessment criteria include general professional attitudes (professionalism, methodological culture, assessment/evaluation, fostering talented students), specific educational activities (general tasks, extracurricular activities) and other quality-related aspects (commitment to the institution and its quality mission, cooperativeness, managing partnerships, communication, work discipline, administration). For specific positions additional criteria may be added to assess how employees perform

management tasks (management of a department and partner ships, leadership capabilities, managerial knowledge, creativity, communication).

Another tool for assessing staff performance is class visits by heads of department or head of the VET institution, aiming to assist teachers and trainers in their professional development by identifying strengths and areas for improvement of their individual capacities. To obtain the most objective and undistorted assessment, classroom observation is normally complemented with self-assessment by the teacher and assessment of the teacher's performance by the students. By no means should these assessments have a controlling function since they must be of a purely supportive nature. To create a quality culture within an institution, it is highly recommended to evaluate results and discuss activities for improvement in a confidential conversation between the teacher and supervisor involved.

### Box 18. Tool: teachers' performance measurement

A guide to assess teachers' performance by classroom observation can be found in the annex, Section 1.4.

### 3.3.4 Self-assessment and internal auditing

Self-assessment is a powerful tool for quality, if and when it is an inherent part of the quality approach within a VET institution and is carried out systematically and comprehensively. In most cases it is coordinated and implemented by the core quality team of a VET institution, assembling quality officers and experts under responsibility of a quality manager, but it goes without saying that other staff members – preferably teachers and trainers – are invited to participate in this process as well. Senior management should participate too and should motivate teachers, trainers and other stakeholders to engage in small teams for self-assessment of quality, where the organisation's strengths and weaknesses should be addressed in an open and honest debate.

The debate should of course consider the facts and feedback data collected from different sources, but it should also rely on 'intangible knowledge' of teachers, trainers and other staff. Ikujiro Nonaka and colleagues have demonstrated that new organisational knowledge is always generated from two sources: 'explicit knowledge' consisting of data, standards and indicators, and intangible 'implicit knowledge' based on experience, opinions and individual perceptions of reality (Nonaka et al., 1994). This kind of knowledge is difficult to detect using standardised feedback instruments and a big advantage of self-assessment is that complex, so far undetected problems, hidden conflicts and blockages can be tackled and solved in open debate. Both sources of knowledge should be combined and their cross-fertilisation will generate new knowledge and innovation in an organisation.

### Box 19. Preconditions for successful self-assessment

- a. Commitment, support and participation of the head of the institution.
- b. A core quality team to coordinate and integrate self-assessment activities.
- c. Involvement of staff in the self-assessment exercise.
- d. Openness towards data, facts and potential changes.
- e. Open and honest debate addressing 'intangible knowledge'.
- f. Immediate decisions on improvements based on self-assessment results.
- g. Agreement among staff on implementation of improvement actions.

Self-assessment has proven to be a useful and effective instrument for creating robust dynamics leading towards quality, but its full potential is only realised when it becomes an integral part of management standards and organisational structure of a VET institution. When they are widely agreed among staff members, its results can be transformed into immediate decisions to improve quality. This can result in consider able improvements, for example developing pedagogical culture, harmonising theory and practice, introducing new media in everyday teaching activities, or elaborating common criteria for assessing students' performances. Thus, when its results are used to define immediate solutions for improving quality, self-assessment can play an important role in establishing an internal quality culture in VET institutions.

Internal quality audits are another tool for self-assessment in VET institutions. These audits are undertaken by part-time quality officers recruited from the teaching and training staff, who can build on their own experience but should be trained continuously as well, to audit different departments of an organisation with a professional view. Being familiar with an institution and staff, quality officers can provide immediate feedback to staff members responsible in the audited areas, based on their audits. They can thus push for quality. Besides, they produce audit reports, which are considered in annual planning and updating quality objectives and in preparing for external accreditation. The reports are presented to the senior management team, where decisions on further change and improvements can be made, if necessary.

## 3.3.5 Participation of stakeholders in self-assessment

It is highly desirable that besides staff members of the VET institution itself other internal and external stakeholders are involved in self-assessment activities. However, in realistic terms, in most cases the scope to involve them actively is rather limited.

The easiest way to enlarge the stakeholders' circle is to involve the students. In addition to collection of feedback via questionnaires, teachers and trainers should be encouraged to collect qualitative feedback in a dialogue session with their students towards the end of the class. When students feel their opinions and ideas are welcomed, it can reasonably be expected that some at least will also participate in further activities to improve quality.

All these additional activities are designed to obtain qualitative feedback and statements from internal and external stakeholders on current status of the VET institution and on their expectations for its further development. Stakeholders might be invited to participate in selective meetings or thematic workshops to discuss current problems, or to elaborate on future trends and demands. Depending on the topic, this could be a one-off meeting or a series

of round tables, to which a wide range of external stakeholders can be invited. Whatever the format, it is important that the inviting VET institution has a clear idea of what the topic on the agenda is to give stakeholders a clear orientation and make them understand what is expected of them.

A tool that VET institutions are using increasingly – and successfully – to assess quality with stakeholders is focus groups. Originally rooted in social research, this tool has gained wide acceptance as a way to tackle in depth sensitive issues in training and education. A focus group is a tool through which a group of people is brought together and asked to express their opinions – on quality of a product or service, concepts or ideas, or new trends and developments. Focus groups are interactive settings where participants are free to talk and exchange views with other group members. They should be characterised by a thoughtful and permissive atmosphere. Excessive formality and rigidity should be avoided as this might stifle dynamics of interaction between participants, but too much informality and relaxation could also cause problems as the discussion might not be taken seriously.

In practice, focus groups not only deepen interpretation of data previously collected with quantitative tools such as feedback questionnaires, but they will also help to stimulate new ideas and creative concepts for developing quality in your VET institution.

### Box 20. Tool: organising a focus group

A guide on how to conduct a focus group to involve stakeholders actively in quality debates within a VET institution can be found in the annex, Section 1.23.

#### 3.3.6 Communication of assessment results

One should be aware that transparency of processes and results of quality assessments is not automatically ensured, neither for internal nor external stakeholders and customers. Therefore, all assessment activities need to be supplemented by an active publication and communication strategy.

This strategy must define who can access which information through which medium, since owing to their confidential nature not all assessment data can be given to all stakeholders or made available via the Internet to the general public. Generally a weighing of interests has to be made, between protection rights (of teachers and trainers in particular) and the requirement for the greatest possible transparency.

The following guidelines might help establish rules for communication of assessment results in your organisation:

- a. personal assessments of teachers are for their individual eyes only;
- b. results from classroom observation should be kept confidential and discussed only between the teacher and the responsible supervisor;

- assessment of classes and programmes might be circulated via the intranet of the VET institution, if anonymity of personal data is guaranteed and discussed widely in quality meetings with internal and external stakeholders;
- d. aggregated results from surveys should be made accessible via the public website, thus supporting positive marketing of the VET institution.

## Box 21. Questions for reflection and options for further action

- a. Check and adapt the amount of data collected in your organisation.
- b. Do you already consider the European set of quality indicators?
- c. Do you collect feedback from important stakeholders of your organisation?
- d. How do you define individual skills and capacity improvement needs of your staff members?
- e. Do you consider the self-assessment activities in your organisation as sufficiently successful?
- f. Have you ever tried a focus group for in-depth evaluation of your quality assessments?
- g. Have you established clear rules for communicating your assessment results?

## 3.4 Change and improve through analysis and strategy development

In this section you enter into the crucial phase of the PDCA cycle: you will learn how to transform your assessment and evaluation results into change and improvement activities for your organisation. You will become familiar with methods for professional analysis of factors contributing to quality and you will learn how to organise change and move towards improvement.

Several examples in Section 3.3 have demonstrated how close assessment and evaluation are to development of new ideas on change. When discussing assessment results the solution is quite frequently immediately at hand, particularly when it comes to correcting errors and overcoming poor quality.

Applying professional methods to analyse your assessment results should help you to go beyond ad hoc solutions and to design a coherent strategy for improving quality of the whole organisation and its core process — teaching and learning — and to set out a detailed improvement plan that corresponds to the criteria for planning as shown for this stage of the PDCA cycle in Section 3.1.

### Box 22. Proposals of the EQAVET recommendation

For the last stage of the PDCA cycle the indicative descriptors in Annex I of the EQAVET recommendation suggest that:

- a. learners' feedback with teachers' feedback is used to inform further actions;
- b. procedures on feedback and review are part of a strategic learning process in the organisation;
- c. appropriate action plans are put in place.

### 3.4.1 Learn by analysing factors that contribute to quality

Based on results of the monitoring and assessment carried out under responsibility of the quality department, an analysis of your performance (in relation to your quality objectives and previously set targets) has to be made. You will discover your positive results as well as your failures – and the organisation should learn from both to improve its quality.

Usually it is easier to look into achievements than to analyse failures, because failures must be admitted and accepted before they can be corrected. For analysis of both achievements and failures, it is extremely useful to be aware of the factors that could have caused the positive and the negative effects. To improve quality, one has to know and change the factors that caused these effects.

An initial overview of basic causal factors in VET is given in Figure 8, which is constructed according to the cause-and-effect model developed by and named after the Japanese quality theorist Kaouro Ishikawa. The diagram shows causes leading to or significantly affecting an intended result; it can be applied in many areas to analyse if and how certain factors have contributed to quality and is therefore widely used.

Management
Teachers and trainers

Equipment

Quality ?

Environment/ stakeholders

Curricular content

Pedagogical methods

Figure 8. Basic factors contributing to quality in VET

Source: CEDEFOP.

As shown in Figure 8, a certain quality effect might have been produced by management of the VET institution, teachers and trainers, or by available equipment, but external stakeholders, the curriculum content or the pedagogical methods used could have been crucial factors as well.

### Box 23. Ishikawa diagram

The Ishikawa diagram is a tool for analysis and generating ideas for problem-solving and improvement. It is an illustration of cause and effect, where the intended effect is placed at the right end of an arrow, while main causes are noted on either side of the effect 'bone' with subcauses linked to the main factors.

In practice, interplay of the responsible factors is particularly important, of course, but for analytical purposes, the causal contribution of each factor should be analysed separately as well. In Figure 9 the basic causal factors of quality in VET are further differentiated. The deeper the analysis of potential causal factors is, the clearer the emerging options for taking action towards improving quality are.

Figure 9 shows that, for example management could strengthen its leadership capacities, teachers and trainers could acquire more practical experience, and external VET authorities could be asked to replace obsolete technical equipment.

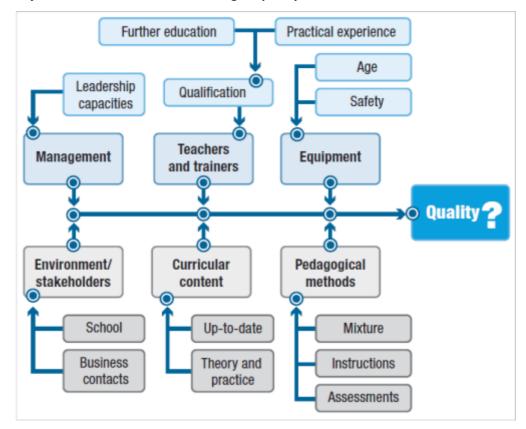


Figure 9. Major and minor factors contributing to quality in VET

Source: CEDEFOP.

## 3.4.2 Preparing for change

Once your causal analysis has progressed so far, the most important issues for change and improvement should be at hand. But since it is impossible to improve quality simultaneously all over your institution, you have to make choices, select and determine a focus for action. In this respect the Pareto analysis technique, explained in Box 24, may be a helpful tool.

#### Box 24. Pareto analysis

Pareto analysis, also known as the 80-20 rule, is a tool for prioritising improvement actions and finding solutions for problems. The rule states that 80% of problems originate from 20% of the causes. By identifying the crucial 20% you are able to improve your performance disproportionately.

As soon as preferred areas for change and improvement are identified, options must be discussed and agreed. As expectations and intentions of the VET organisation, teachers and trainers, other employees, students and other stakeholders do not necessarily coincide, compromises often have to be found. Available means for achieving the intended objectives should be checked: are they sufficient to accomplish the desired results? Which partners are available to help achieve the intended objectives? Which stakeholders can provide support?

Various tools are available to tackle such issues. To gather ideas for implementing change you could organise, for example, a mind-mapping session. A keyword or image is put in the centre of a chart, from where main branches and subbranches radiate in different directions, creating a map in which elements to be considered are clearly and hierarchically structured.

Another tool promoting innovative ideas is short brainstorming meetings, which should not exceed 10 to 30 minutes and should focus on topics communicated some time before the meeting.

### Box 25. Brainstorming

Brainstorming is a key tool to assure and develop quality in VET organisations. It is organised as a freeflowing process assembling experienced stakeholders to generate ideas for further development of the VET organisation and solutions to overcome failures.

### 3.4.3 Developing an improvement plan

An improvement plan builds on results of analysis of achievements and deficits and incorporates the challenges, opportunities and resources available for change (see annex, Sections 1.24, 1.25, 1.28). Once you have discussed the issues with the main stakeholders and agreed the most important areas for change, the improvement plan compiles all this information and elaborates two different proposals for change:

- a. corrective actions, to overcome detected failures and deficits, as an immediate response to major complaints of students and other stakeholders;
- b. adaptive actions to make structural improvements and adaptations of the VET institution and VET programmes, considering under performance or new demands.

After approval by senior management of the VET organisation, the improvement plan should be disseminated widely and communicated to the broadest possible range of stakeholders, to demonstrate the organisation's passion for quality.

An improvement plan should be reviewed twice a year and updated at least once a year as part of the annual quality cycle.

Internally, organisation of change needs an additional step: the improvement plan must be put into practice. Figure 10 gives an overview of how commonly identified and agreed needs for change are transformed into a detailed action plan.

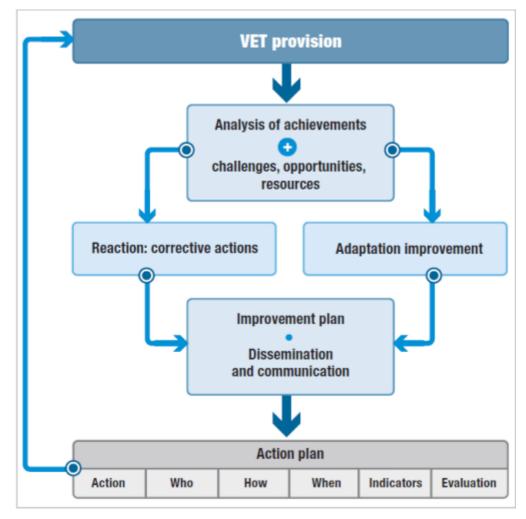


Figure 10. Transforming improvement needs into an action plan

Source: CEDEFOP.

An action plan is meant to ensure that change really happens and that the envisaged improvement process is monitored and evaluated to check if the intended effects have been achieved. In detail an action plan should record:

- a. kind of actions to be undertaken;
- b. individuals responsible for implementation;
- c. resources and tools needed to undertake the planned actions;
- d. deadline by which the actions are completed;
- e. indicators to measure if the intended effects are really achieved;

## f. assessment and evaluation of envisaged progress.

Monitoring activities to put the action plan into practice, as well as measuring its effects, is the responsibility of the quality manager.

To sum up, Figure 11 provides an overview of the different steps to be undertaken to establish an improvement plan. Based on a sound analysis of various factors contributing to quality in VET, followed by a thorough discussion of different options for change with internal and external stakeholders, the improvement plan is adopted by senior management of the institution. It sets out corrective actions and structural adaptations and defines activities, resources, responsibilities, indicators for measuring achievements and deadlines. The quality manager will monitor implementation of the improvement plan.

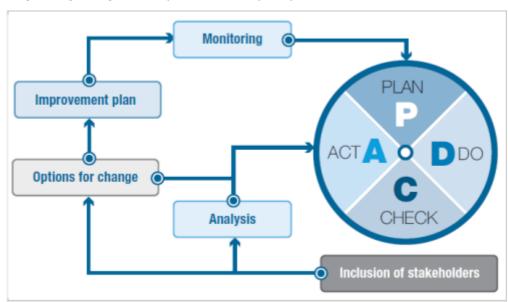


Figure 11. Organising change and improvement of quality

Source: CEDEFOP.

### 3.4.4 Ready for change?

Now that the preconditions for management and the technical tools for change and improvement are in place, one might assume that the envisaged change is implemented as planned. Far from it, it still remains to ask if the people in your organisation are ready for change and motivated enough to put the improvement and action plans into practice.

There are still some issues that must be considered to achieve the envisaged change. The challenges and obstacles that may occur in pursuit of different quality objectives are summarised in Table 2.

Table 2. Types of objective and improvement of quality

Quality objectives	Challenges	Obstacles
Permanent objectives	Creation of sustainable, durable development	Deadlocked routines leading to decline of attractiveness
New objectives	Promoting innovation against established procedures	Resistance to change and path dependencies

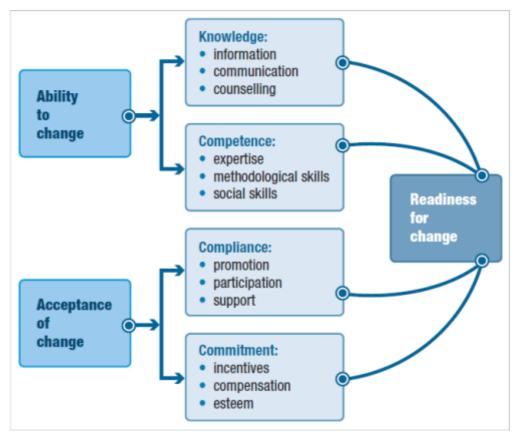
Source: CEDEFOP.

Permanent or long-lasting quality objectives become tiresome and lose attractiveness in people's minds. It is difficult to stay motivated over the years to achieve further improvements, which might themselves be blocked by deadlocked routines.

Implementing new innovative objectives is even harder: innovations go hand in hand with abolition of cherished traditions and ingrained customs. This frightens people and they will express their emotions in resistance to change and subtle conflicts. When implementing innovation, the organisation itself must adopt new patterns of action, departing from well-known roads and overcoming path dependencies.

What can be done to ensure readiness for change within your organisation? Two main approaches are at hand: one approach is to improve ability of people in your organisation and the second is to increase their acceptance of change. For an overview, see Figure 12.

Figure 12. Ensuring readiness for change within your institution



Source: CEDEFOP.

Communication with people, providing information on what is intended and what is expected, should help to increase their knowledge and ability to face new demands. Special attention should be paid to those who are acutely affected by the envisaged change and for some individual counselling might be appropriate.

Usually, change and improvement put new and different demands on people and therefore one should ensure that they have the necessary competences, skills and expertise at their command to cope with their new assignments and changing tasks.

Providing opportunities for participation in all stages of quality development is probably the best way to create acceptance of change and compliance towards upcoming new demands. It is a precondition for compliance with quality standards that people feel encouraged and supported not only in their extraordinary efforts for better quality but in their daily activities too.

Finally, encouraging people's self-esteem and valuing them is another important key to creating readiness for change, as well as promoting commitment and motivation through incentives and compensation for extraordinary efforts towards better quality. Readiness for change is a necessary precondition for any organisation to move towards a culture of quality.

#### Box 26. Questions for reflection and options for further action

- a. What are the three major or minor factors you consider to have the strongest impact on quality in your VET organisation?
- b. Which factor is the priority according to you? Is your rating shared within your organisation?
- c. Which tools do you apply within your organisation to get fresh ideas on improvements and find solutions to overcome failures?
- d. Does your improvement approach contain more corrective or more adaptive actions?
- e. Is your quality management ready to monitor implementation of your improvement plan?
- f. What is the main challenge in your organisation for creating readiness for change among people?

## 3.5 Planning version 2.0: establishing a coherent development strategy

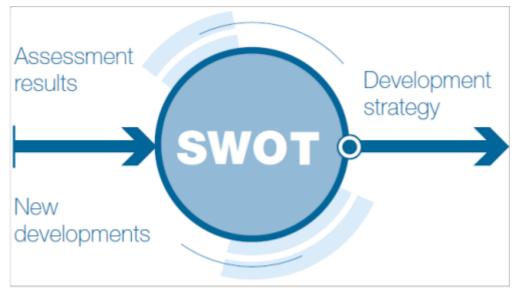
Having completed the whole PDCA cycle in the previous sections, you are now reentering the first stage of the cycle. While in the previous round planning was considered a detailed operational task, you will learn in Section 3.5.1 how to move to 'planning version 2.0', an advanced version of planning, and to establish a coherent development strategy for your VET institution encompassing continuous improvement of quality.

## 3.5.1 Detect your strengths and weaknesses – and your opportunities and threats

Strengths, weaknesses, opportunities and threats (SWOT) analysis provides an overall framework for identifying strengths and weaknesses of a VET institution and opportunities and threats for its strategic development. It is a methodological tool for developing a coherent strategy for the whole institution based on valid assessment and reliable evaluation of both internal and external factors influencing your organisation. The tool can provide a condensed overview of an organisation's situation based on the more detailed analyses undertaken in the previous stages of the PDCA cycle.

While your former analyses have focused on your internal achievements, a SWOT analysis aims at combining internal assessment findings with results of an investigation on the external preconditions for further development of your VET institution. Inward-looking analysis of strengths and weaknesses aims to illuminate where failures must be corrected and which strengths could be further developed.

Figure 13. Strategic significance of a SWOT analysis



Source: CEDEFOP.

Analysis of external factors should identify opportunities and threats the organisation might face in the future. Thus, a SWOT analysis is an appropriate tool to transform results of internal assessments and analysis of future trends into a coherent development strategy for your institution, including a strategy for continuous improvement of quality.

Table 3. Components of a SWOT analysis

	Strengths	Weaknesses	
Internal factors	Characteristics, capabilities and resources within your VET organisation which can be used to achieve your quality objectives	Internal shortcomings, limitations and disadvantages threatening achievement of your quality objectives	
Opportunities		Threats	
External factors	Opportunities arising in your institution that might support achievement of your quality objectives	Environmental factors that in future could have an adverse effect on your quality improvement strategy	

Source: CEDEFOP.

A SWOT analysis is a sober and open-ended investigation into the current and future situation of an institution, which includes analysis of empirical facts and data on persistent trends for VET in Europe and in your particular region. Relevant studies and research reports should be

evaluated, but contacts with experts, research institutions and development agencies should be favoured as well. Once the major opportunities and threats are identified, their potential impact on the institution has to be evaluated. The crucial step is to link internal and external factors: a SWOT analysis aims to identify which development strategy will best enable an institution to take full advantage of the opportunities – with regard to its particular strengths and weaknesses.

Unique strengths are particularly well-suited key factors for further development, so focus your strategy on the strengths that distinguish your institution from others (see also Section 3.5.2 on benchmarking).

Like other quality-oriented activities, SWOT analysis and subsequent strategy building should be carried out in partnership with internal and external stake holders. Applying this approach should allow you to integrate experiences from different economic and social segments of society in establishing your development strategy. Including a broad variety of experts and stakeholders from different backgrounds means organising this process as a multiphase circle, similar to the PDCA cycle, with individual stages considering tangible data as well as intangible knowledge of participants, shared analysis and reflection, drawing appropriate conclusions for further action and thus continuously shaping your development strategy (see Figure 14).

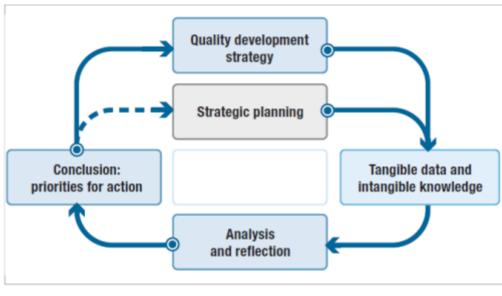


Figure 14. Shaping a development strategy

Source: CEDEFOP.

Ideally, each passage round the cycle should help to build a clearer picture of the empirical situation and future trends and thus optimise the development strategy. If planning is organised as a common learning process, it is not only quality of the strategy that will benefit. Through common exchange of experience and joint production of new insights cooperative relationships of the actors will also intensify and a climate of common trust will emerge.

Owing to growing requirements for innovation in VET, quality development is not making linear progress but is rather a multidimensional task. VET institutions have to adapt continuously to increasingly rapid changes in the business world and to constantly altering demand for new skills and competences in labour markets. Thus, strategic quality development means reiterating the cycle again and again, being ready to learn, adapt and innovate.

Identifying new external trends and demand in labour markets and ensuring appropriate response from your organisation is a continuous challenge. But not every new direction will suit your organisation and match your particular strengths. You should first thoroughly analyse external developments' significance for your organisation's strategy and then undertake a series of adaptation and change activities to bring your strategic insights down to earth – into your particular profile and into delivery of the VET programmes you offer (see Figure 15).

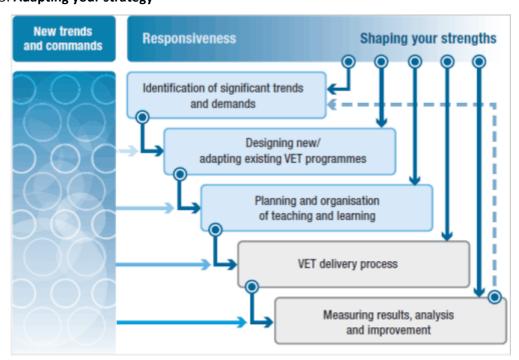


Figure 15. Adapting your strategy

Source: CEDEFOP.

- a. New VET programmes might need to be designed and existing ones might need to be adapted and changed as regards both content and methods of delivery.
- b. Planning teaching and learning processes will follow new staff, equipment and learning material might be needed.
- c. Delivery of adapted and new programmes must be organised.
- d. Monitoring and measuring results, analysis and further improvement must be ensured.

## 3.5.2 Benchmarking

In the business world, benchmarking has been used for quite some time and is taking on increasing importance. Benchmarking is a process in which products, services and practices are

measured and compared against the strongest competitor, considered to be the best-performing leading organisation in the relevant area. In business, continual search for strengths and weaknesses and exploitation of untapped potential are seen as key success factors for achieving quality and sustainable competitiveness.

Benchmarking helps to look consistently and purposefully for new ideas, effective methods, procedures and processes outside your own institution, to push for internal improvement and innovation. Thus, benchmarking focuses on development of your own organisation.

## Box 27. Questions for reflection and options for further action

- a. Has your institution established a long-term development strategy encompassing continuous improvement of quality?
- b. How would you analyse future trends and resulting opportunities for your organisation?
- c. What would you consider the unique strengths of your organisation?
- d. Do you know a suitable competitor against which you could benchmark your VET institution?

# Chapter 4 – Cross-cutting internal elements affecting quality in VET

In this chapter you will learn how cross-cutting elements originating from inside an organisation and the environment affect quality in provision of VET and you will learn how you can influence these factors to assure and improve quality in your organisation.

## 4.1 An organisational structure for quality management

The first and foremost challenge is to anchor quality management in the organisational structure of a VET institution. There is no 'one size fits all' solution, since organisation of quality management must match the size and overall structure of a VET provider. Traditions, personal qualifications and interests have also to be considered.

Therefore the overviews in Figure 16 and Figure 17 can only serve as examples describing some points of general importance.

Teaching and training affairs Administration

Quality manager

Teacher

Teacher

Teacher

Teacher

Teacher

Figure 16. Example of a structure for internal quality management in a small VET organisation

Source: CEDEFOP.

SENIOR MANAGEMENT TEAM OF THE VET ORGANISATIONS Head Head Head Head of quality of department of department of department management Quality advocate Quality advocate Quality advocate Formal/ Informal Quality Quality Quality Quality Quality expert expert expert expert expert

Figure 17. Example of a structure for internal quality management in a large VET organisation

Source: CEDEFOP.

For a small VET organisation it is advisable to attribute quality management tasks (as described in Chapter 2) to a teacher or trainer as a part-time activity carried out in combination with normal teaching or training activities. The person appointed should be responsible for operational implementation and monitoring of quality management activities and report directly to the senior management team.

In any case, a quality manager's formal position — or a quality department in large organisations — must be established under direct responsibility of senior management of the institution and must work in close cooperation with this level. In most VET institutions, heads of departments are part of the senior management team, at least regarding decision-making on quality issues, since they are responsible for putting most quality-related activities into daily practice. It is highly desirable for heads of department to be supported by official quality advocates; normally this is an additional task for a teacher, trainer or other employee in the department who has other major tasks.

Quality advocates are the most important partners for the quality manager, for implementation of quality activities at department level. Together they build the formal quality management team. Informally this team can be supplemented by quality enthusiasts personally engaged in quality issues and others who are experts in quality-related issues and are therefore entrusted with tasks closely linked to quality management such as internal data collection and data processing.

#### Box 28. Activities of a quality management team – an example from a large VET provider

In this example, the quality management team of the VET institution consists of seven people with special functions and expertise, the formal members being the quality manager and two quality advocates and the informal members being the administrator responsible for scheduling teaching hours, the union representative, an external educational counsellor, and the institution's information technology (IT) expert. The team is coordinated by the quality manager and meets at least twice a year – if needed up to four times – to discuss and operationalise the national, regional and school-specific quality goals and evaluate the latest achievements in quality. These evaluations are based on objective data collected, but for their analysis and interpretation the qualitative feedback the team members gain from their (informal) networks within the school is taken into consideration as well.

Building on work of the quality management team, the quality manager prepares decisions for senior management and drafts the official quality reports (for external accountability and accreditation).

The example also provides information on formal recognition of work of the quality management team. In total, the school has a 'time budget' of one teaching hour per pupil per year for tasks related to quality management. For the quality manager this leads to a corresponding reduction in his weekly teaching load; depending on distribution of tasks some of these hours can be given to other (formal) members of the quality team. Additionally, formal and informal quality management team members may become eligible for career development – including pay rises – in recognition of their engagement.

To conclude, internal quality management needs to be organised formally, but it can function with a limited number of formal positions and specific human resources, on condition that the experience and personal engagement of employees is used. An overall quality management function will be necessary, but many tasks connected with quality issues, such as administration, data collection and analysis, might be undertaken by teachers, trainers and other employees with intermediate management responsibilities.

## 4.2 Balancing leadership and participation

Distinct leadership is an indispensable precondition for successful operation of an internal QMS but, as already underlined, even the best system will not work without commitment of members of the organisation. The decisive point therefore is to find the right balance between leadership and participation. Successful quality management needs counter-flow processes – a combination of top-down and bottom-up initiatives.

The most appropriate and promising approach seems to be management by objectives (MBO) – setting strategic objectives by senior management after consultation with the main stakeholders, and joint agreement on concrete objectives in conformity with the overall strategy for each organisational unit and staff members. Daily activities are self-guided, but performance measurements will check whether staff members and units have achieved the agreed objectives. The MBO concept strengthens decentralised responsibilities, an important precondition for staff to be able to identify with the institution and commit themselves to quality.

Commitment of the senior management team (especially the chief executive or head teacher) to quality, and their active participation (as role models) in quality-related activities, is a key factor for balancing leadership and participation, as the following examples show:

- a. one member of the senior management team is put in charge of quality management and the quality manager reports directly to this person;
- b. senior management appoints the quality manager and quality officers and invites staff members to participate in the quality team;
- c. senior management provides both human and financial resources for quality management activities;
- d. the senior management team supports efforts to improve quality and acts as role models of effective agents of change.

Active involvement of employees, in addition to their leaders, ensures that quality management activities, changes – corrective and improvement actions – will be carried out at each level of the organisational hierarchy, boosting the staff's commitment to the institution and its continuous development towards better quality. It is senior management's task to create appropriate conditions for active participation of employees, which include:

- a. promoting shared values, defining clear responsibilities and raising awareness of quality objectives and targets;
- b. involving employees in setting objectives and targets for better quality;
- c. continuous and credible information and communication activities (see Section 4.3);
- d. creating an atmosphere of open and honest dialogue and trust (see Box 30).

Employees do not always automatically grant their active participation and may need motivation and stimulation. Empowerment is an effective tool, which means delegating certain responsibilities and authority to employees, enabling them to enjoy autonomy, determine themselves how to do their jobs, and make their own decisions in specific work-related situations. Empowerment counterbalances leadership and helps employees to take ownership of their tasks. The main operations for empowering employees may be the following:

- a. a decentralised governance structure;
- b. definition of clear process-related responsibilities (see Section 4.4);
- c. a clearly-defined voice for employees in decision-making processes;
- d. an internal reward and recognition system for deserving employees (see Box 29).

## Box 29. An internal reward and recognition system

An internal reward and recognition system to acknowledge achievement of quality objectives can motivate employees to strengthen their engagement in quality-oriented activities. Recognition comes best when it follows immediately after creditable action the employee has performed. Good performers should be recognised as such in person in front of staff and senior management. Information on recognition should be disseminated widely using different communication media.

## 4.3 Information and communication

Knowledge is considered the most valuable resource an organisation has, and one that can enable its further development and give it competitive advantage. To provide, share and produce knowledge effectively, it is vital for any VET provider organisation to arrange smooth

flow of information and provide ample opportunities for communication. However, information should be targeted at the right people and any information overflow avoided as counterproductive.

Good information and communication management is also crucial for operation of a QMS, as it helps to establish transparency of processes and responsibilities, spread information on occasions for active participation in quality and communicate results of quality assessments. Continuous communication with staff, teachers, trainers and students is an important precondition for creating commitment to quality. To give an example, feeding back results of quality measurements to those who participated in assessments and evaluations is an indispensable task of managing quality. Providing information on main results of a students' satisfaction survey – together with improvement actions launched in its wake – will improve perceived quality of a VET institution, and, as a by-product, increase motivation to participate in future surveys.

A VET organisation can use a broad range of media for meaningful management of information and communication, and it is an important task for quality management to choose the right medium depending on the case, purpose and confidentiality of communication:

- a. meetings are indispensable communication opportunities for discussing quality issues (activities, results, improvements) in an open atmosphere by actively including relevant stakeholders;
- an intranet is a perfect documentation system for rules, procedures, records and assessment data, where an individualised access system can allow flexible accessibility to confidential information;
- a website is the appropriate medium for positive marketing of a VET institution, communicating its quality objectives and achievements, and for rapidly disseminating all up-to-date information;
- d. newsletters might be used to inform people of latest developments and achievements introduce new personnel and promote new projects and plans;
- social media such as Facebook, LinkedIn and Xing are increasingly replacing (printed)
  newsletters as they fulfil the same role, but are more frequently updated and
  appreciated by VET students;
- f. notice boards are useful media through which to share core information with specific audiences (students, teachers);
- g. television screens, installed at central meeting points inside a VET institution, are helpful to communicate the latest news stories.

## Box 30. Meetings to address quality issues

Discussion of quality issues at meetings of staff, students and external stakeholders is extremely important, but meetings should be organised as efficiently as possible, with their duration reduced to a bare minimum and participation limited to those directly concerned in view of their interests and expertise.

To create a quality culture in a VET organisation, management's commitment to quality and its continuous improvement should be part of the basic message in each communication with internal and external stakeholders.

## 4.4 Process management

Smooth management of processes is crucial for quality-oriented VET institutions. Processes are defined as sets of interrelated or interacting activities repeated in time to deliver a service for students and other stakeholders of a VET provider by transforming input into output. Essentially, process management means that all activities performed regularly in an institution are implemented in a previously discussed, planned and controlled way, results are measured and evaluated and processes can be improved.

Design of a process management system starts with identification and definition of a VET provider's core processes, critical to attainment of the organisation's objectives and satisfaction of its customers (for example, see Figure 3 in Chapter 3). Next, interconnections and interactions between these processes should be mapped, to determine process boundaries and create a transparent and organised system of processes, resulting finally in elaboration of a process map for the whole VET institution (see annex, Section 1.33). The next step includes definition of individual process ownerships and determination of roles and responsibilities in maintaining and improving the relevant processes. Finally, establishment of a process management system includes designation of evaluation procedures for each process, comprising definition of performance criteria and indicators as well as appropriate instruments for measurement.

## Box 31. Typology of processes in VET institutions

Core processes comprise a VET provider organisation's main activities, from recruitment and enrolment of students to organisation of teaching and learning, and from assessment of performance and support for graduates to management of partnerships with external training sites.

Support processes are carried out to support the core processes and include, for example, recruitment of appropriate teachers and trainers, their further training, IT facilities and media support for teaching and learning.

Management processes are those that govern a VET provider organisation, and in relation to quality management they include strategic planning, resource allocation, setting objectives and targets, and distribution of roles and responsibilities.

It is important for quality of a VET organisation to review periodically its process map and introduce changes in both existing and new processes.

#### Box 32. Managing the core processes

Managing the core processes is crucial for creating a quality culture in VET providers. For this reason, institutions should focus on definition, management and improvement of their core processes – while support and management processes should play a role of strengthening the core processes.

Elaborated process descriptions ensure a standardised approach to activities performed in a VET institution as they allow control over who is doing what, why, when, where and how.

An elaborated process description should contain the following elements:

- a. name, purpose and objective of the process;
- b. name and position of the process owner;
- c. scope of the process: activities and operations covered;
- d. steps of the process: starting point, set of sequential steps, results;
- e. tasks to be performed at each step;
- f. persons responsible for execution of tasks in each step;
- g. indicators and instruments for measuring the process performance.

Far more than textual descriptions, graphical visualisations (such as flowcharts) help people to understand the processes, thus supporting operational performance of the organisation. Staff should be trained in how to define processes and write descriptions and understand and use existing process descriptions.

# 4.5 Managing documentation

Establishing internal quality management includes appropriate documentation, storage and protection of all documents that guide operations in a VET institution. In addition, an effective documentation system ensures that only authorised persons have access to valid documents and data sheets, and that only current versions are used. Obsolete documents must be removed to prevent incorrect usage, and therefore procedures for issuing, amending and withdrawing documents must be defined as part of the process management. Similarly, rules for data collection and data storage must be elaborated and observed. Previous data play an important role in evaluation of quality developments and for this reason it is essential to develop a sound data handling and storage system that is reliable, valid and eases data retrieval. All data and documents must be accessible to authorised persons, but protected from unauthorised access as well as damage, for example, fireproof storage should be considered.

In summary, the documentation system should ensure:

- a. all relevant documents on processes, procedures, rules and responsibilities are accessible in current versions by authorised persons only;
- b. valid and reliable data from previous quality assessments are retrievable to allow longitudinal comparisons of results;
- c. current tools and instruments for data collection (such as questionnaires) on quality issues are accessible.

VET institutions work with many personal data, protection of which is legally obligatory. Therefore internal rules for personal data protection must be established and access to these data must be clearly defined and strictly limited. In all cases, the data protection system must fully meet requirements of relevant national legislation.

## Box 33. Questions for reflection and options for further action

- a. What would an appropriate structure for quality management look like in your institution?
- b. Whom would you appoint as responsible quality manager, a supporting quality advocate and whom would you invite to become an informal member of the quality management team?
- c. Have you considered establishing an internal recognition and reward system?
- d. What are the most important media for communication in your organisation?
- e. Which media are neglected/overemphasised so far?
- f. Have you considered establishing a process management system?
- g. Does your internal documentation system meet the requirements set out above?

# Chapter 5 – External elements affecting quality

In this chapter you will learn how different external stakeholders can contribute to quality of your VET institution and how you can develop cooperation, networking and common evaluation to support your efforts for better quality.

## **5.1 Cooperation with external stakeholders**

For many VET providers, cooperation with external stakeholders and in particular the world of work is part of their daily activities, with varying benefits for quality stemming from different stakeholders:

- employers are partners in provision of practical training and an important source of information on workplace-related training needs and adequate responsiveness of training provision;
- b. social partners, chambers and sectoral or professional associations may provide information on the latest trends in the labour market, changing skills needs and concomitant needs for adaptation of curricula;
- c. employment services can support integration of graduates into the labour market and report on employability trends;
- d. cooperation with other providers of education and training opens pathways to further education for students and graduates of VET organisations and promotes in the long run permeability between educational subsystems;
- e. graduates may provide valuable feedback on usefulness of competences students acquire and help make contacts in the world of work and the local community. Durable contacts can be made through alumni associations or regular invitations to social events organised by VET institutions;
- f. contacts with local or regional decision-makers and civil society aim to anchor the institution in its environment, promote its visibility and reputation and improve attractiveness of VET;
- g. cooperation with accreditation bodies must be sought for external recognition of VET institutions.

## **Box 34. Proposals of the EQAVET recommendation**

The EQAVET recommendation emphasises involving external stakeholders and 'improving the interrelationship between education, training and employment':

- a. maintaining and increasing responsiveness of VET to labour market needs is the main purpose of fostering external cooperation;
- b. improving the transition from VET to continuing education and training, in particular to higher education;
- c. easing and improving access to VET.

## 5.2 Quality in cooperation with the world of work

While cooperation with employers is a valuable asset for quality of VET provision in general, it becomes a 'must' for institutions that include practical training in companies. As in several VET programmes at least some part of training is work-based, quality of this part becomes an inherent and decisive issue for internal quality management.

As the following step-by-step approach for establishing quality in work-based training will show, quality and quality improvement can be built in when cooperation between a VET institution and the world of work is developed.

Establishing quality in work-based learning<sup>6</sup>

**Step 1**, making contacts, aims to generate willingness to cooperate and recruit enterprises to provide appropriate work-based learning opportunities. This is usually a long-term endeavour that calls for continuity, networking and establishment of dependable partnerships. VET institutions' most important starting activities are:

- a. invitations to employers and company representatives to events, presentations of students' work to the public, visits to companies, joint projects with companies;
- b. engagement with chambers and employers' associations, preparing the ground for mutually-beneficial collaboration;
- c. invitations to external stakeholders to participate in feedback surveys and interviews.

**Step 2**, planning work-based learning activities, is mainly under responsibility of the VET institution and must consider legal requirements as well as pedagogical aims:

- a. contractual arrangements setting out rights and obligations of trainees and employers should be clear before the work-based training period starts;
- b. adequacy of training opportunities in enterprises must be ascertained: content of work-based training needs to fit in with the curriculum of the VET programme, and the work-based learning environment should allow acquisition of hard and soft skills;
- c. individual learning plans should be drawn up detailing the competences to be acquired by trainees during the work-based training period.

**Step 3** includes tutoring students and monitoring work-based learning through collaboration between the VET institution and in-company trainers, in:

- a. documenting the work-based training process by means of training protocols of incompany tutors and training diaries of trainees;
- self-evaluation by trainees and in-company tutors which helps to steer the learning process and detect areas for improvement;
- c. on-site visits of the VET institution's teachers and trainers to help with supervision of trainees' performance and provide opportunities for firsthand feedback;
- d. ongoing exchange between the VET institution's teachers and trainers and in-company tutors to ensure a favourable work-based learning process.

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<sup>&</sup>lt;sup>6</sup> See annex, Sections 1.21, 1.35, 1.36.

**Step 4**, encompassing review and evaluation of work-based learning activities, provides information for further improvement:

- a. feedback from trainees and in-company trainers on quality and results of the work-based training can be gathered through surveys and interviews;
- b. evaluation of the work-based learning period should include an objective assessment of the learning outcomes achieved;
- c. additionally, evaluation should build on observations and feedback collected during site visits of the VET institution's teachers and trainers.

**Step 5** refers to improvement and change of work-based learning activities and is based on evaluation results, agreement on a common quality approach and application of shared quality indicators:

- a. evaluation results should be discussed by responsible teachers and trainers in the VET institution; and also
- b. with in-company trainers to draw lessons for the future;
- organising reflective workshops or focus groups encompassing all stakeholders may entail improvements of quality, for example better preparation of students, reinforced coordination of work-based and school-based training, adaptation of curricula for VET programmes; leading to
- d. the final result of applying shared quality indicators and agreeing on a common quality approach.

Table 4, which presents a typology of stakeholder involvement, provides an overview of activities that can be undertaken to increase continuously involvement of external stakeholders. The rows at the top of the table apply to all stakeholders, employers, local authorities and graduates, while those at the bottom refer in particular to cooperation with employers for jointly providing work-based learning. Taking an example of implementing work-based learning, Table 4 contains not only the activities, but also the quality goals to guide cooperation activities, as well as several tools supporting attainment of these quality goals.

Table 4. Typology of stakeholder involvement

	Type of activities	Tools applied	Quality goals		
WEAK	Socialising with external stakeholders to increase participation in common activities	Public relations and information activities to stake- holders	Strategy to improve cooperation with stakeholders		
	Participation of stakeholders in feedback surveys or interviews	Questionnaires, interview guidelines	Response of stakeholders to quality issues		
Degree of involvement	Participation of stakeholders in workshops: (a) selective meetings; (b) thematic workshops; (c) continuous cooperation	Invitation, agenda setting, inputs from VET provider, collecting feed- back, focus groups	Contribution of stakeholders to quality improve- ment		
ree of	Cooperation in training provision				
Deg	Shared implementation of training in cooperation with external stakeholders	Formalised cooperation agreement	Strengthening work-based training		
	Shared monitoring and tutoring of work-based training	Training protocols and diaries, site visits, feedback	Assuring quality of work-based learning		
STRONG	Application of shared quality indicators in common provision of VET	Agreement on indicators, common quality approach	Improvement of common VET provision		

 ${\it Source: CEDEFOP.}$ 

# **5.3** Cooperation and networking with other educational institutions

Cooperation and networking with other education and training institutions has become a quality objective for many VET providers. The purpose is manifold – common information, making the institution and its vocational programmes known, exchange of experience,

networking and comparison with other institutions – all these activities with various effects on quality.

Most VET institutions pay special attention to cooperation with secondary/upper secondary schools whose graduates are considered potential students. Apart from traditional activities such as open days, some VET providers apply active recruitment strategies by organising information days at local secondary/upper secondary schools, where VET programmes on offer are presented to parents and prospective students. Institutional cooperation schemes with schools aim to prepare pupils for vocational programmes and support their smooth transition to VET.

Cooperation with other VET institutions can provide additional learning opportunities through participating in provider networks. Such networking with other VET providers may range from an informal exchange of experiences supporting common learning to cooperation in development and joint delivery of training programmes and targeted activities for benchmarking results.

Because of competition in the training market, exchange and cooperation between VET institutions will often be limited, despite the above-mentioned common activities. As interviewed VET providers have stressed, the harder VET institutions compete in the open market, the more limited their willingness is to exchange good practices in quality management. No institution wants to lose its competitive advantage.

Where cooperation takes place, the benefits for quality lie in identification and transfer of good practices to one's own institution and in receiving external feedback. Several VET providers cooperate with one another to pilot schemes, renovate and modernise training programmes or promote use of eLearning, thus gaining added value for their programmes and improving quality standards of their services. A few VET providers participate in innovation projects with research institutes to develop new quality marks and safety norms.

Some institutions, especially those with a lifelong learning approach, have a clear focus on cooperation with higher education establishments. Analysis of VET institutions, especially those related to specific sectors, revealed interesting examples of cooperation between them and universities to develop jointly new programmes closer to professional career needs of their VET graduates than traditional higher education programmes. This improves quality standards of their services and represents an important added value for them.

## Box 35. Results of cooperation with other educational institutions

- a. Ensuring a competitive edge, high visibility and improved attractiveness of a VET institution for prospective students, parents and companies.
- b. Development of new training programmes and modernisation of existing programmes through networking with other educational institutions.
- c. Acquiring new insights from joint delivery of training programmes and obtaining targeted benchmarking of results.
- d. Adding value to an institution's own programmes and improving its own quality standards.
- e. Opening up new professional career pathways for graduates.

## 5.4 Transnational cooperation and peer review

Transnational cooperation through participation in conferences, study visits, joint projects or mobility of teachers and students provides opportunities for learning and thus for improving quality. The activities conducted may reinforce one another and create synergy: a study visit might turn into sustained cooperation and joint projects, participation at a conference may lead to common visits and exchange of students, teachers and trainers. Transnational cooperation provides staff and students with additional opportunities to develop language skills and intercultural competences.

While transnational cooperation's impact on quality is rather diffuse and difficult to measure, peer reviews focus directly on quality. A peer review is a voluntary, improvement-oriented and external evaluation of a VET provider by its peers, colleagues from other VET providers on an equal standing with those whose performance is reviewed. Usually, peers work in teams of four that must comprise all competences and expertise necessary, namely experience in education and training (active teachers/trainers must be part of the team), expertise in the quality areas under scrutiny and some competences in quality management and evaluation. Peers are also called 'critical friends'. The peer review becomes 'transnational' if at least one member of the peer team comes from a foreign country.

Peer review does not propose a 'new' system, but builds on quality management already in place, by applying a step-by-step procedure: it starts with a self-evaluation by the VET provider, it includes a site visit by peers, and results of the review are laid down in an evaluation report.

In distinction to control-oriented external evaluation schemes, peer reviews are voluntary procedures with a purely formative function, building on professionalism of VET practitioners and supporting networking between VET institutions. Traditionally used for external quality assurance in higher education, peer review has been transferred to VET lately. Among various approaches, it is worth mentioning the Leonardo da Vinci projects carried out between 2004 and 2009 (ÖIBF, 2009a; 2009b; 2009c), to support VET providers in improving quality of their services with a clear reference to the EQAVET framework.

Peer reviews are targeted at institutions seeking alternative forms of external evaluation or wanting to complement traditional accreditation/ certification with a 'friendly, yet critical' approach tailored to their needs and paying special attention to teaching and learning. Both sides – the reviewed institution and the peers – will benefit from a peer review. If conducted in a quality-assured way, following the European peer review manual, peer review procedures gain added credibility and recognition from external stakeholders.

#### Box 36. Toolbox for implementing a peer review

The European peer review manual for IVET describes a standard European procedure for use of peer reviews in IVET and CVET. The manual offers directly implementable guidelines for VET providers who want to introduce peer review into their quality assessment and development procedures. It is currently available in 15 European languages.

The manual is complemented by a practical toolbox that includes a set of quality areas with quality criteria and indicators as well as various forms and checklists designed to guide and support peers and VET providers during the peer review.

A peer training programme helps to prepare peers for their task. It was developed based on a detailed competence profile for peers.

All tools are available from www.peer-review-education.net [accessed 26.5.2014].

# 5.5 Accreditation/external recognition

Most European countries have a system for external recognition of VET providers and/or VET programmes, which is carried out by ministries, semi-public agencies or recognised private organisations mandated to this effect<sup>7</sup>. In addition to these national accreditation schemes, most Member States recognise accreditations/certifications following the most common models such as the international organisation for standardisation (ISO) or the European Foundation for Quality Management (EFQM) as equivalent to their national ones (for an overview of the models see Box 37).

In many countries, accreditation is a requirement for VET institutions, especially those aiming at receiving public funding. Apart from this potential benefit, external accreditation improves institutions' reputations and contributes to increasing their attractiveness.

Accreditation can also serve as an external verification of internal quality efforts of a VET institution, since it always involves experts from outside. Ideally, both internal and external verification efforts should complement and cross-fertilise each other. To avoid duplication of efforts and squandering— usually— scarce resources, accreditation and internal quality management should be tightly linked and connected:

- ensuring compatibility of internal quality management with external requirements of national or sectoral accreditation systems should be a task from the start;
- b. resources and support provided by external agencies for implementing accreditation should be used strategically to improve internal QMS.

<sup>&</sup>lt;sup>7</sup> For a detailed overview see Cedefop, 2011a.

#### Box 37. Models for internal quality management and external recognition

While EN ISO 9000 explains the principles and definitions behind QMSs, EN ISO 9001 outlines the minimum requirements for a quality system within an organisation that wants to provide products and services meeting customer expectations and regulatory requirements. ISO 9000ff considers organisational processes and compares plans to actual achievements. In case of deviations, improvements and change will be implemented. According to the PDCA cycle, the organisation is subject to a continuous process of improvement.

The EFQM model is a quality assurance system providing guidance for establishment and development of an internal QMS. Self-assessments serve to determine strengths and areas for improvement within the organisation, thus supporting continuous development. To achieve sustainable results, all employees should be involved in the self-assessment and improvement process. In addition, permanent monitoring of all processes should help to identify an organisation's strengths, weaknesses and areas for improvement and to align its quality strategy.

The common assessment framework (CAF) is a result of cooperation among EU ministers responsible for public administration and aims to assist public-sector organisations to use quality management techniques to improve their performance. The CAF is inspired by the total quality model in general and by the excellence model of the EFQM in particular. The model is based on the premise that quality for citizens/customers and society is achieved through leadership, strategic planning, partnerships and process management.

Investors in people is an internal quality system and a model for external recognition of organisations. Similar to the EFQM model, it aims at continuous internal improvement, displayed externally by award of its eponymous quality label. In contrast to EFQM, staff management and development are at the centre of all quality-oriented activities and they are not just one factor among others. Focus on leadership and staff development will result in quality improvement.

The learner-oriented quality model, which originates in continuous training of adults, focuses on the learner. It is a model for internal quality management and external recognition, following which development of quality starts with definition of a vision and mission and identification of good practice. In its self-assessment report, which is the basis for its external recognition, a VET organisation has to outline how learning and the learning process are promoted.

Accreditation and external recognition serve mainly to ensure conformity of VET provision with minimum standards, and this limited understanding of quality should be taken into account when linking accreditation efforts to internal quality management. VET providers that have successfully renewed their accreditation over time or have been regularly 'inspected' by national/regional authorities will confirm that external requirements reflect the necessary preconditions for quality – but they are not sufficient to trigger and support continuous improvement. In most cases goals of quality-committed VET institutions go beyond external requirements of accreditation schemes. In this perspective, achieving external accreditation is a point of departure to keep track of an institution's own vision and goals for better quality.

# 5.6 Added value of sectoral quality frameworks

In addition to national accreditation schemes and widely-acknowledged models for external recognition, more sectoral approaches to internal quality management and external accreditation/recognition have been developed in recent years. Conducted by professional associations of providers, requirements and procedures imposed by these frameworks usually

address particular issues of quality and thus go beyond official systems, providing added value to VET organisations applying them.

It is necessary to distinguish between sectoral quality frameworks geared solely to internal quality and those accompanied by external recognition of the VET institution, in which case a positive result leads to a sectoral quality label.

The first group of sectoral quality frameworks includes quality standards applied by VET providers as a result of their close collaboration with businesses. For example, companies in the automotive and IT industries have to meet high-quality and/or safety standards.

VET organisations that voluntarily adopt these complementary quality standards always keep the technology, equipment and materials used in their training and education programmes up to date. Application of these quality standards is a constant source of innovation for training/education and corresponding job profiles. Students will often have an opportunity to acquire complementary certificates, while VET providers may improve their reputations.

To enjoy these benefits, VET organisations should make some additional efforts: compliance with high-quality standards should be continuously assessed by internal and external auditors and audits should be performed more frequently than national accreditation schemes, sometimes as much as twice a year.

Adoption of high-quality industrial standards has even more positive effects on quality of VET provision:

- companies involved participate more actively in development of future VET strategies, design of new training profiles and adaptation of training programmes to new technologies;
- VET teachers and trainers in companies usually maintain quite close relationships and companies are strongly interested in further training of VET teachers to adapt their knowledge to new technical developments;
- c. occasionally, companies send their staff as lecturers to VET institutions and often provide them with multimedia equipment and technology for modern laboratories;
- d. companies are eager to provide VET students with places for work-based learning, thus increasing their employability.

Introduction in VET institutions of high-quality industry standards impacts particularly on their core processes of teaching and learning and results in corresponding quality improvements. Introduction of sectoral frameworks associated with external recognition of a VET institution and a quality label have a greater impact on the entire organisation and affect both the quality concept and basic values of service provision, including in the teaching and learning process.

#### Box 38. Examples of sectoral quality frameworks

The European quality framework in social services (Equass) dates back to an initiative of the European platform for rehabilitation. Equass provides a range of services for approval and certification of quality of social service providers, in accordance with European requirements for quality in provision of social services. The Equass quality framework and corresponding certification of providers is complementary to national quality frameworks and is overseen by an independent international awarding committee that includes representatives from key European stakeholders in social service provision.

Eco-citizenship is a European quality award for educational institutions engaged in finding solutions for environmental and sustainable development resulting in tangible environmental benefits. Being an eco-citizen organisation means offering specific training programmes to support sustainable development, such as training in eco-construction, renewable energy or waste management and integrating eco-citizenship principles all over an organisation and its training programmes. Institutions meriting the award have to ensure that their students get a chance to participate in decision-making, and develop skills for, and a sense of value of, active citizenship. They build community links with local authorities, business organisations and students' families.

The total e-quality award is an annual award for organisations practising exemplary equal opportunities in their organisational policies. The award certifies sustainable commitment to equal opportunities in staff education and employment. Successful certification can be achieved by means of questionnaires on self-assessment, in which an institution has to demonstrate its continuous efforts and achievements in relation to equal opportunities in staff recruitment, development, career planning and provision of work-life balance measures for its employees, as well as in implementation of quality assurance instruments for organisational and quality culture development.

Sectoral quality frameworks, which promote fundamental values such as respect for dignity of the individual and consequent individualisation of services provided, testify to their importance and holistic approach. The Equass quality framework for social services serves as an eloquent example since it:

- a. promotes rights of customers/students, with reference to the United Nations Convention on Human Rights, and by providing guidelines to support autonomy and self-determination of students:
- b. refers to ethical values and behaviour by providing guidelines against sexual and financial abuse and guidelines for health and security of students;
- c. strongly supports partnerships with and participation of students by providing instruments for their empowerment.

These are important additional values and quality objectives that could be endorsed by any VET organisation, which is not the case in national or sectoral quality frameworks. However, it should be kept in mind that adoption of additional sectoral quality frameworks implies that the range of tasks related to internal quality management will inevitably be extended (see Figure 18).

Figure 18. Impacts on internal quality management



Source: CEDEFOP.

Under certain conditions, quality management established in a VET institution not only needs to correspond to requirements of national accreditation schemes, but also to take into account high-quality industrial standards and integrate over arching values and concepts of sectoral quality frameworks. This constitutes an important challenge all the easier to implement insofar as it is not seen as compulsory, but rather as a resource to improve continuously quality of the organisation and its quality culture.

## Box 39. Questions for reflection and options for further action

- a. Who are the most important external stakeholders of your VET institution?
- b. How are they involved in your activities to improve quality?
- c. How could you increase their involvement? Which activities could you perform and which tools could you apply to improve quality?
- d. What are your particular priorities for networking and cooperating with different external stakeholders of your institution?
- e. Which benefits would you expect to gain from participating in transnational cooperation and peer reviews?
- f. What should you consider when linking your internal quality management to requirements of external accreditation?
- g. What benefits would you gain from striving to adopt a sectoral quality frame work?

# **Chapter 6 – Towards creating a quality culture within VET institutions**

In this chapter you will learn how to create a quality culture within your VET institution, how to find a quality focus and how to define a vision and mission based on shared values.

# 6.1 Find your focus: different approaches of quality

The concept of quality and thus the quality management applied in VET institutions will always differ according to the type of education they offer, their organisational tradition and the regional or local environment. Next, three different approaches to quality and quality management in VET will be presented, although in reality VET providers apply a mixture of them (see Figure 19). Every VET institution has to find its own individual balance between these approaches, considering its environmental conditions as well as its internal organisational structure.

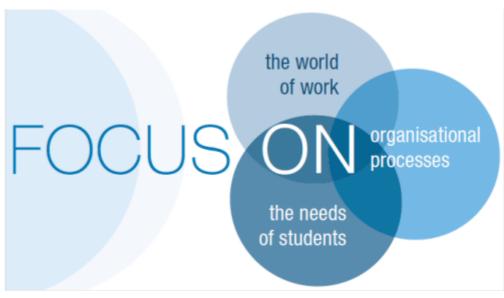


Figure 19. Different concepts of quality and their interaction

Source: CEDEFOP.

## **6.1.1 Focusing on the world of work**

For all education and VET providers, but especially for those principally engaged in CVET, quality is primarily geared to fulfilling requirements of businesses and secure employment prospects of their learners. Consequently, relationships with the business world come at the centre of their quality approach, and their good reputation among businesses and the local community are of central importance to them. For these VET institutions, quality means excellence of facilities, laboratories, workshops and equipment, inclusion of work experience in training programmes, and, as already mentioned, positive employment prospects for their learners.

Relationships with the world of work do not just mean responding mechanically to needs of companies, but also being able to anticipate new professional trends in the labour market, adapt content of training programmes and introduce innovation into curricula. Therefore, these VET institutions play an active role in the world of work by continuously updating technologies they use and by adapting professional profiles they deliver to the labour market's emerging needs.

The main activities related to quality should be to promote frequent and intense contacts with employers and representatives of business organisations, adapt training programmes offered to changing needs of the world of work, and demands of learners, who – it should be underlined – often pay on their own for their education, especially when retraining or acquiring new skills. There is a category of VET providers whose quality-related activities are driven by their ambition to design innovative and attractive training programmes and achieve satisfactory results for their students/learners and their employers.

For this group of VET institutions, adoption of a formalised internal QMS meets instrumental needs mainly with positive effects for the institution. A formalised system, preferably according to ISO standards, helps strengthen the quality image of an organisation among businesses and self-financed clients/learners. In addition, such an adopted system will ease monitoring all processes relevant to achievement of quality objectives.

## **6.1.2 Focusing on needs of students**

For another category of VET institutions, the central notion of quality lays in teaching and learning, in provision of individualised training including targeted support, in ability to meet individual needs of students, and in achieving educational success even under difficult sometimes personal conditions. Here, ensuring educational success includes supporting social integration, preparation for more active participation in society and access to the world of work.

Thus, for these VET institutions quality of teaching and learning, including relationships with the world of work to provide work-based learning, lay at the heart of their quality concept. Quality-related activities promote motivation and active participation of teachers and trainers and the tools and methods applied to manage quality that will strengthen their engagement.

These VET providers often view adoption of a formalised QMS very critically and consider it a demand coming from their external environment. They sometimes consider it a bureaucratic burden and even a waste of time. Quite frequently these VET institutions choose to shape their individual approaches to quality management to reflect their particular intentions and objectives. Accordingly, they build their own tailor-made quality systems, deviating from standard models and corresponding to their concept of quality. Further developments of their QMS result directly from continuous experimentation with new methodologies and tools to improve communication with students and external stakeholders.

## 6.1.3 Focusing on effectiveness and efficiency of organisational processes

For a third group of VET providers, effectiveness and efficiency of management processes in the organisation plays a central role in their concept of quality. This approach is particularly relevant to VET providers operating in the open market. They need to maintain an efficient organisation of all their services to compete in the market.

For these VET organisations it is mainly the senior management team that assesses implementation of the formalised QMS in place. Here, close coherence between the QMS and concept of quality can be observed: the QMS adopted allows monitoring and improvement of all processes and structural elements in the organisation considered essential for achieving quality. It is important to note that improving effectiveness and efficiency of institutional processes is quite often in full accordance with needs of teachers, trainers and students, as they usually benefit from transparent structures and processes that run smoothly. Teachers and trainers are particularly appreciative when quality management simplifies their daily work.

Reflections on further developments of the QMS are undertaken mainly by the senior management team, which increasingly results in introduction of new electronic information tools to improve effectiveness and efficiency of organisational processes.

# 6.2 Defining your vision and mission – based on shared values

A clearly identified focus for the quality concept may help to draft a vision and mission for a VET institution, promoting sustainable development and creation of a quality culture. Visions and missions provide an emotional and intellectual superstructure for quality culture: they sharpen the corporate identity of a VET institution and strengthen staff members' identification with and commitment to quality.

A vision is a positive expression of forward-looking expectations on what the institution should be in the future. Applying a long-term view, it describes a state for the institution, which does not yet exist, but which it should be feasible to reach in the future. To ensure its feasibility, your vision needs to be interlinked and cross-checked with the development strategy for your VET organisation (see Section 3.5).

**Example of a vision for a quality-committed VET institution** could read as follows: ... **to be the benchmark for VET in our region.** 

A mission is the means to achieve successfully your vision. In its mission a VET organisation states its self-image, its fundamental principles and its main objectives. The mission is to provide orientation for the organisation as a whole and to guide daily activities of individual staff members. The mission is part of normative management and provides a framework for strategies, quality objectives and operational actions.

To the public, a mission should make the organisation's fundamental purpose clear and help to communicate to stakeholders its strategic quality alignments.

#### Box 40. Example of a mission for a VET institution

To empower and educate our students through workplace-focused VET and provision of key competences, skills and knowledge for gainful employment and personal fulfilment.

There are many different perceptions of what culture means. As the term is broadly understood, every social phenomenon is characterised as 'cultural' and thus culture is used as a rhetorical term without a deeper significance. A more specific meaning of the term underlines that every culture is 'produced' by a certain group of people. Following this understanding, every culture has specific conceptions of practical organisation of its daily activities, which are based on common patterns of knowledge and belief, morals and law, customs, behaviour, and rules for making decisions. In these essential aspects, culture can be understood as an expression of specific values and ethics.

These basic values are the driving forces behind every quality culture within a VET institution, as they constitute the basis for understanding its vision, mission and quality objectives (see Figure 20).

## Box 41. A piece of advice

Active creation of a quality culture means reflecting on the ethical values that should guide your VET organisation when pursuing its vision, mission and quality objectives.

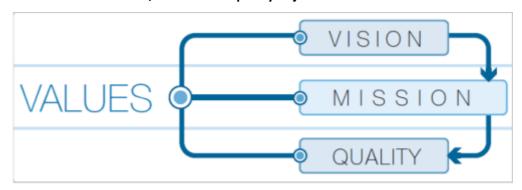


Figure 20. Values: basis of vision, mission and quality objectives

Source: CEDEFOP.

Values should be durable and therefore must be determined with particular care. The values you select should mirror your concept and focus of quality: they must refer to your tradition and environment, be appropriate for the organisation's future development and, last but not least, be suitable to be anchored in students' minds.

The more clearly you articulate the values guiding your organisation, the less time and resources you will spend on communicating strategic direction, generating staff commitment and terminating unwanted behaviour.

Figure 21 presents an example of values which might be typical for a quality-committed VET institution.

The ring of exemplary values is organised in three axes with correlating values at their ends, which means that the axes depict interrelated values which complement one another. The main axis is the vertical one, stressing at the top the overall quest for quality and excellence in the organisation, but outstanding professional performance is based on personal integrity and ethical standards. The common grounding of values is of particular importance, to avoid any one-sidedness that would result from moving forward with tunnel vision towards an overall dominating value which gains an independent existence.

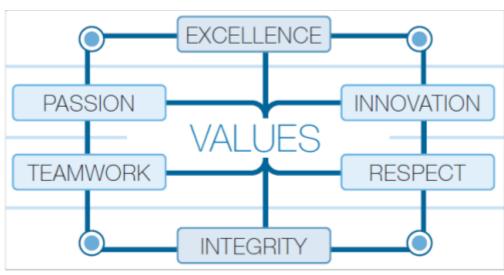


Figure 21. An example of values for a VET institution

Source: CEDEFOP.

Each value represents a condensed description of activities and in Table 5 exemplary values are described in conjunction with their associated activities.

Table 5. An example of values and associated activities

Values	Activities	
Excellence	Improving continuously to achieve excellence in all areas	
Integrity	Acting professionally, ethically, honestly and transparently	
Innovation	Taking on new challenges by creative and forward-looking thinking	
Teamwork	Acknowledging cooperation, mutual support and shared expertise	
Passion	Performing with positive emotions and devotion to quality	
Respect	Recognising dignity and diversity in all relationships	

Source: CEDEFOP.

Clearly articulated values and a complementary vision and mission will acquire particular significance when drawn up in partnership with relevant stakeholders of your organisation. But ideas on guiding values will never be uniform; individual people prefer different values and have different perceptions of the values important for their VET organisation. Individual stakeholders may even support contradictory values.

Developing a shared vision and mission is not an easy task and it should involve staff from an early stage. Careful balancing of leadership and involvement of stakeholders is required, as is clear decision-making in case of conflicts. But finally, the effort made to establish an internal quality culture should pay off, as shown in Box 42.

#### Box 42. Development of a shared vision and mission

Development of a shared vision and mission:

- a. requires leadership in decision-making;
- b. requires staff involvement at an early stage;
- c. creates legitimacy for action;
- d. enables coordination of activities towards achievement of quality objectives;
- e. enables subsequent assessment, evaluation and analysis of achievements;
- f. informs external and internal stakeholders on the organisation's ambition;
- g. motivates staff members;
- h. increases staff identification with the organisation and commitment to creating a quality culture.

## Box 43. Questions for reflection and options for further action

- a. What concept of quality does your VET institution focus on?
- b. What is your vision?
- c. What mission derives from your vision?
- d. What would you consider to be the basic values of your institution?

# Chapter 7 – Starting your activities to improve quality

In this chapter you will learn how to start activities for better quality within your VET organisation by introducing a self-assessment exercise broadly accepted by your staff.

# 7.1 The starting point: self-assessment

The following proposal to start activities for better quality within your VET organisation aims at reviewing and adapting the PDCA cycle to your own staff. While the PDCA cycle starts with planning activities, which logically is obvious, the proposal here is to start with an assessment phase, since tackling specific problems and finding solutions for them is more likely to attract people's attention and stimulate their engagement.

#### Box 44. Proposals of the EQAVET recommendation

The EQAVET recommendation suggests NRPs in Member States 'support self-evaluation as a complementary and effective means of quality assurance'.

Another equally important proposal is to promote communication and create awareness among teachers, trainers and other stakeholders of existence of critical aspects within the organisation, thus generating and stimulating the need for change and improvement.

#### Box 45. Self-assessment

Self-assessment is to ensure that your VET organisation identifies its strengths and areas for improvement, derives from this an improvement plan and develops and implements specific activities, thereby increasing its quality.

There is no single approach to self-assessment, which could be applied successfully to every institution. The most formal systems for external accreditation provide guidelines for self-assessment and in several European Member States not only is it a legal obligation for VET institutions to undertake self-assessment regularly, but national authorities also provide guidelines and criteria on how to do it.

The final aim of self-assessment is to develop a long-term QMS and a sustainable culture of quality in your VET institution. Repeating self-assessment again and again allows you to measure continuously progress you have made, compare current with previous performance and provide for consistent quality development.

## 7.2 Conducting self-assessment in your VET institution

Self-assessment allows you to pursue various objectives, but its effects should not be exaggerated. The two foremost objectives should be to promote awareness of problems, deficits, etc., and internal communication and views exchange on what should be done. Initiation of change and improvement can be expected only as a result of this process.

Before starting self-assessment three preconditions must be met, otherwise the process will not make any sense:

- a. the senior management team must support and direct the project with inner conviction and personal engagement;
- b. resources for carrying out the process must be justified and available;
- c. resources to implement improvements must be earmarked.

A four-phase process is recommended for implementation of a first self-assessment passage, which should later be repeated in appropriate cycles. The phases rely on the PDCA cycle and on what you learned in Chapter 3 of this handbook. The four-phase self-assessment process is implemented through the following series of steps<sup>8</sup>:

## Phase I: planning self-assessment

In the kick-off phase you will plan how to organise and communicate the envisaged self-assessment in your organisation.

Step 1: how to organise self-assessment

- a. Define the scope and the approach: it is important to decide whether the whole organisation or only some departments will be included. To start with, it is recommended that you focus on a few carefully selected areas where there is a good chance of seeing a rapid improvement.
- b. Appoint a process leader/quality manager.

The process leader is responsible for operation of self-assessment activities, communication about it, compliance with the schedule, and finally reporting and documenting results.

Appointing an appropriate person to lead the self-assessment process is one of the key decisions to be made by the senior management team. The person appointed should be familiar with the VET organisation and its ways of communication, must have a sound knowledge of quality management and be acknowledged as appropriate to carry out these tasks by staff and external stakeholders.

If the person appointed is not sufficiently experienced in quality management, they should either be trained or an external expert should be brought in to provide support and comoderate the self-assessment process.

<sup>&</sup>lt;sup>8</sup> The recommended steps for self-assessment are partly based on the guidelines for implementation of the CAF for public organisations. For further information see <a href="http://www.eipa.eu/en/pages/show/&tid=69#&title=topic">http://www.eipa.eu/en/pages/show/&tid=69#&title=topic</a> [accessed 26.5.2014].

Define a schedule for implementing the process: four to six months is likely to be an adequate timeframe for the first run of a self-assessment process; bigger organisations might need a longer period.

## Step 2: establish a communication strategy

- a. Implement a communication plan: continuous communication is a crucial factor for successful self-assessment: the communication plan should define the contents and channels for communication and consider needs of individual stakeholders.
- b. Motivate staff to engage in the self-assessment process: the means and style of communication should aim to create a positive environment, confidence and motivation for people to participate actively in the self-assessment process.
- c. Decide on inclusion of stakeholders: who should be included, how, at what stage of the process and in what role, who should be provided with information in what level of detail and at what stage.

#### Box 46. A piece of advice

Invite peers/representatives from other VET institutions experienced in self-assessment and quality management to a round table with the staff of your institution: motivate people to ask critical questions and learn from others' experience. Be aware of possible limits in exchanging experience with other VET institutions that might arise owing to a competitive situation.

## Phase II: implementing self-assessment

Step 3: compose a self-assessment team

- a. Representative composition: self-assessment should be carried out by a cross-hierarchical team representative of the organisation. Members should know the departments to be assessed and participate voluntarily in the team. Employees often feel appreciated when being specifically addressed.
- b. Size of the self-assessment team: to ensure an effective and relatively informal working style, teams of around eight to 10 participants are preferable. If the whole organisation is to be assessed, several teams should be formed addressing different topics.

#### Step 4: organise training

- a. Train the self-assessment team: in a one- or two-day meeting the self-assessment team should learn about fundamentals of quality management and operation of the PDCA cycle, understand and agree the self-assessment process. In any case the quality manager should provide a guide containing all relevant information to the selfassessment team, including the main criteria and indicators needed to assess the VET organisation.
- b. Develop competence in quality throughout the organisation: in addition to training the team, information sessions should be held for all employees to broadly anchor understanding of the self-assessment process and its importance for developing quality within the organisation.

### Box 47. Contents of training in self-assessment

- a. Basic knowledge of quality management and assessment procedures.
- b. Basic skills in quantitative and qualitative data collection and aggregation of data.
- c. Skills in giving and receiving feedback.
- d. Self-reflection techniques.

#### Step 5: undertake self-assessment

- a. Assessments should be made by applying reliable tools that reflect agreed criteria and indicators. Statements and conclusions should be based on empirical data and evidence; where appropriate, feedback from various stakeholders should be collected.
- b. The self-assessment team should achieve a certain consensus on strengths and the most crucial areas for improvement within the organisation.
- c. The self-assessment team is asked to suggest some first ideas for an action plan.

## Box 48. A piece of advice

It is important to develop a common perception of the organisation's situation: where are we, what do we want to change? There are no right or wrong views. Exchange and understanding of the different perceptions of quality are crucial for successful self-assessment.

#### Step 6: draw up a report with your results

- A self-assessment report should be clearly structured, address the strengths and areas
  for improvement supported by relevant evidence and provide ideas for improvement
  actions.
- b. It is crucial that senior management officially accepts the report and, ideally, approves it by reconfirming its commitment to implement improvement actions.

## Phase III: change and improve

Contributing to improvement of quality is one of the main objectives of self-assessment efforts and it is also the means to promote further strategic development of the VET institution

### Step 7: establish an improvement plan

- a. Supplement self-assessment by analysing major and minor factors contributing to quality.
- b. Distinguish between corrective actions, which can mostly be implemented immediately, and structural adaptations and innovations.
- c. Prioritise areas of improvement and allocate the necessary resources for implementation.

#### Box 49. A piece of advice

In the beginning, only those critical issues should be tackled which are under the control of the VET institution itself and which can be changed without relying on external interventions.

### Step 8: communicate the improvement plan

- a. To ensure the broadest possible acceptance it is advisable to inform all employees in a timely and open manner on the self-assessment process, the results that have emerged and subsequent improvement activities.
- b. The ways and means of communication can be based on the plan and principles elaborated in Step 2.

## Step 9: organise change and improvement

- a. Assign responsibilities, activities, deadlines and indicators for monitoring the process and results of improvement actions.
- b. Involve members of the self-assessment team in improvement activities this is a way to reward their efforts and will boost their further commitment.
- c. Ensure readiness for change by providing additional knowledge and competence, deal patiently with resistance, provide support and esteem.

## Box 50. A piece of advice

It is advisable to concentrate quality improvement on just a few critical issues, to avoid overloading the organisation and allow people to enjoy the merits of quality-related activities. Make sure that in some areas short-term success becomes visible.

### Step 10: establish a coherent development strategy

- a. Undertake a SWOT analysis of your organisation and combine your internal assessment results with results of an investigation into external preconditions for further development of your VET institution.
- b. Shape your development strategy by identifying your unique strengths and key factors for further development; benchmark your institution against its strongest competitor to exploit your untapped potential.
- c. Plan the next self-assessment: quality development needs continuity and sustainability

   self-assessment should be carried out repeatedly after one year at the earliest, but not later than three years.

## Phase IV: ensuring continuous quality development

The final phase builds on self-assessment but goes beyond it since its main objectives are to create informed professionalism for quality within your organisation and develop towards a quality culture.

- a. Anchor a quality department/quality manager within your organisation to professionalise your efforts further for quality and strengthen its significance.
- b. Prepare for external recognition/accreditation which serves as an external verification of your internal efforts for quality and will improve the reputation and attractiveness of your organisation.

## Step 12: create a quality culture within your VET institution

- a. Define your focus of quality by reflecting on different concepts and putting together your own approach.
- b. Reflect on your basic ethical values that should steer your VET organisation when pursuing its vision, mission and strategic quality objectives.
- c. Define a broadly accepted vision and mission for your institution to sharpen its corporate identity, strengthen your staff's identification with it and boost their commitment to quality.
- d. Apply continuously the soft skills articulated in the MERI cycle to ensure a quality culture within your organisation (see Figure 22).

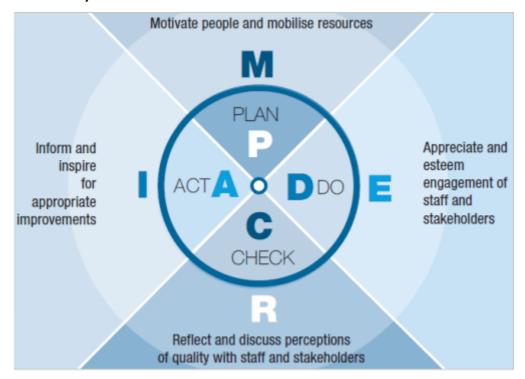
It is important to make sure that teachers, trainers and other staff of your institution know about and understand the logic of the PDCA cycle. This way of thinking and acting should be integrated into the everyday life of the VET institution and used systematically in all its areas of operation, thus paving the way for a quality culture.

Apart from embedding this attitude and behaviour in your institution, development of a quality culture is strongly influenced by human factors, which are supported and encouraged by making use of appropriate soft skills, as explained in the MERI cycle (see Figure 22). The soft skills inherent in the MERI cycle are the complement and counterpart to the hard skills addressed in the PDCA cycle. While technical activities of the PDCA cycle are a prerequisite for establishing an internal QMS, the MERI cycle articulates ingredients of creating an internal quality culture. A quality culture requires more than that foreseen by the PDCA cycle activities; it is mainly produced by human relationships characterised by common respect and encouragement.

In detail, the MERI cycle foresees the following activities for strengthening interpersonal relationships within the organisation:

- a. motivate people and mobilise resources for improvement;
- b. appreciate and esteem engagement of staff and stakeholders;
- c. reflect and discuss assessments, evaluations and opinions of staff and stakeholders;
- d. inform and inspire appropriate improvement.

Figure 22. The MERI cycle



Source: CEDEFOP.

## Box 51. Questions for reflection and options for further action

- a. Do you agree to start quality development in your organisation with a self-assessment process?
- b. Are the three preconditions fulfilled before starting self-assessment?
- c. Do you clearly focus self-assessment on certain areas within your organisation? If this is the case: which ones will you focus on?
- d. Do you need external support to conduct the self-assessment process or do you have all competences at hand?
- e. Will you establish one or several self-assessment teams?
- f. How will you transform your self-assessment results into an improvement plan?
- g. How can you build further on your self-assessment results to create a quality culture within your organisation?

# Chapter 8 – To do and not to do

In this final chapter you will learn about the 10 basic recommendations on what you should do and what you should avoid when establishing internal quality management and creating a quality culture within your VET institution.

Promotion of quality management and...

- a. The senior management team's commitment to quality is a make-or-break factor. If it is absent stop: there is no way to move forward.
- Identify expertise and stimulate motivation among staff, students and other stakeholders, build a self-assessment team and provide it with organisational resources.
- c. You can only do a few things well restrict self-assessment and improvements to one or two weak points which matter to students, staff and, if possible, also to external stakeholders.
- d. Make sure that assessment results and subsequent change and improvements are widely shared within the organisation and by external stakeholders.
- e. Ensure continuity and extended follow-up activities involving the whole organisation.
- f. Take advantage of your quality achievements for internal and external marketing build your VET institution's reputation.

## ... creation of a quality culture

- a. Professionalise your internal quality management and your staff in applying the PDCA cycle in everyday operations.
- b. Promote empowerment of staff and students, reward their commitment to quality and make use of their innovative potential.
- c. Apply the MERI cycle, keep people's enthusiasm high and support learning as a key factor of quality.
- d. Define your concept of quality, your development strategy, vision and mission of your VET organisation.

Good luck on your journey to quality!

## List of abbreviations

CAF common assessment framework Cedefop European Centre for the Development of Vocational Training cgo competence-based learning crebo central register of vocational courses CVET continuous vocational education and training DAFCO Délégation académique à la formation continue [academic delegation to continuing education) ECVET European credit system for VET EEA European Economic Area **EFQM** European Foundation for Quality Management EFTA European Free Trade Association EQAVET European quality assurance reference framework in VET EQF European qualifications framework Equass European quality framework in social services EU European Union GRETA groupements d'etablissements [national network of public and adult education centres INBAS Institute for Vocational Training, Labour Market and Social Policy ISO international organisation for standardisation IT information technology IVET initial vocational education and training LEAP local education action plan LMA Lithuanian Maritime Academy MBO management by objectives NCDVET Centrul Național de Dezvoltare a Învăță mântului Profesional și Tehnic [Centre for the Development of Vocational Education and Training] NRP national reference point ÖIBF Österreichisches Institut für Berufsbildungs forschung [Austrian Institute for Research on Vocational Training] PDCA plan-do-check-act REAP regional education action plan QMS quality management system SAP school action plan SWOT strengths, weaknesses, opportunities and threats TVET technical and vocational education and training VAE validation des acquis de l'expérience [validation of knowledge acquired through experience] VET vocational education and training WEB Wet Educatie en Beroepsonderwijs [Adult and Vocational Education Act]

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