

1. The concept of quality management in vocational training

Quality management has always been one of the main concerns of Vocational Training Institutions (VTIs). As national institutions, their interest in

offering an adequate answer to national needs implies good quality. The concept of management, as it will be explained later, is a step forward in the route towards quality.

CEDEFOP, 1998

Those interested in training, and even more, the customers of the institutions, expect that the provided training

is related to the abilities and competences required. The growing training demands and the rapid and changing conditions have imposed to the training offer the need to show that they do a good job. Also, the funds assigned to training have become so important that frequently an analysis of their correct application and specially of their impact is required. This transforms quality management in the training process into a relevant issue.

It is important to point out that the concept of Quality Management developed in this docu-

Key aspects of quality management in educational processes:

- Customer centred
- Quality policy
- Responsibility, authority and communication
- Resources provision and management
- Competent human resources
- Infrastructure and working environment
- Product planning and realisation
- Design and development
- Buying process
- Control of the follow up and measuring devices
- Customer’s satisfaction

ment refers to processes¹, in this case the processes of vocational training within Training Institutions. There is another conception of quality, which approaches the products of training. The first concept, quality management of the processes, is the one that the ISO² 9000:2000 refers to. This standard can be resumed in four big moments or phases: direction responsibility, resource management, product realisation and measurement, analysis and improvement.

Another concept of quality is centred on the characteristics of the products of the vocational training process. Therefore, it covers the performances in the labour market of the graduates. Different methodologies have been used to approach the measurement of the results. These methodologies have developed and evolved since the eighties with the so-called boom of quality. They include, for example, statistical analysis of indicators such as income evolution, labour mobility, etc. Recently,

these methodologies have been focusing on the entry into the labour market of graduates, their labour performance according to employers and the relevance of the provided training. The evaluation of training impact is a good example of the use of information to measure quality under the product approach.

In this document quality management regarding vocational training will be analysed from the stand point of the management of processes in the institution assuming that an organization which acts according to the implicit principles of the quality standard will ensure consistently the quality of its products and the satisfaction of its customers.

In the thirties, with the expansion of the series production, statistical techniques were used at the end of production lines; therefore, the necessity of inspecting all products was avoided. The costs associated to quality control were lower. Afterwards, intermediate control points along the process were created in order to anticipate the faults that were only registered in the analysis of the finished product.

The definition of key parameters on certain values of the characteristics of the product, which provide a range of acceptable statistical validity of the product, improved the statistical techniques. In this way, the statistical control of processes emerged, which was overcome by techniques developed in Japan which in time gave place to the concept of Quality Management and then to the concept of Total

¹ Process is understood as “an activity or group of activities that uses resources to transform inputs into products or services.”

² The acronym stands for International Organization for Standardization. It was founded in the United Kingdom after the II World War in order to promote international standards to facilitate the exchange of goods and services.

According to this perspective, many training institutions have defined a quality policy explicitly and as a consequence developed quality management strategy. This implies to have external and internal referents and to combine both in order to advance in the fulfilment of goals.

The implementation of a quality management system requires the application of various basic principles:

- A clear orientation towards the customer: to understand and satisfy the customers' needs
- Continual improvement of the institution activities: quality as a philosophy that never ends
- Defined and consistent processes: Processes are defined and its fulfilment is guaranteed
- Quality guarantee of the processes: The quality of a process comes from the preceding processes. In the same way, the quality of a training service reflects the control applied to its process.
- To prevent instead of to supervise and correct: The costs of preventive measures are lower than the costs of a close supervision and correction

The organizations, which have implemented the Quality Management, have adopted in general the following principles³:

- Commitment to the direction
- Team Work
- Quality is everybody's task
- Decisions are based in facts and knowledge of objective data
- Systematic solution of problems. Problems are understood as "everything that can be improved"

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The quality standards application has improved since the version of the ISO 9000:1994 standard, which privileged the orientation towards ensuring quality and the 2000 version of the same standard. This last version has included new features that favour quality by promoting the institution's commitment to a process of continual improvement.

³ ISO 9000 standards applications to teaching and training. European Training Foundation. 1998.

1.1 Standards and quality assurance

Quality assurance usually implies a comparison between a certain product or service and a standard, previously defined, which establishes the criteria to assess the quality of this good or service.

In this context, the ISO 9000:2000 standard is being increasingly used. This standard refers to the quality assurance from a general perspective, not specifically associated to a certain product or service. Users are the starting points. Currently, there is a high valuation of the ISO standards as “quality hallmarks”, among other reasons this valuation has extended their usage to the VTIs. The 2000 version of the standard advanced, from the concept of quality assurance of the 1994 version, to the design of a quality management philosophy, which incorporates an emphasis in continual improvement.

The VTI, which have incorporated the quality management philosophy, are acting on their processes through the development of systematic and consistent definition, documentation and verification. They are acting over the training inputs in order to achieve their goals. Usually, quality standards are applied according to a wide conception of quality management, which uses the mentioned basic principles.

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In fact, the ISO standards refer fundamentally to the consistency and systematization of de processes. They constitute a method to standardize the organization activities and to offer reliability to customers over the expected quality of products and services. The group of ISO 9000 standards is applied in quality management; in fact, the ISO standards are not related to the intrinsic features of a given good or service. In other words, even if a VTI is certified by ISO 9000⁴, competency certification related to the performance of its graduates is required.

The series of ISO 9000 standards was adopted in 1987 by the European Standardization Committee and then globally assumed by ISO in 1994. The last version of the standards is from 2000. The certification principle under the ISO standard is based in the review and an evaluation of the conformity to the standard, which provides a uniform method of quality inspection.

⁴Even if the generic reference is the ISO 9000 standard, it is the ISO 9001 standard the one used to certify quality.

1.2 Quality management, knowledge and institutional learning

Various analyses have shown that when an organization starts a process of quality assurance, there are not only procedure issues but there is also a key underlying feature. It has to do with the way in which the quality principles are adopted and with the journey through the certifying process because these two instances generate valuable results in terms of organizational learning. These results have been recently analysed in the literature on knowledge management.

Institutional learning

In many experiences of ISO standards application it has been documented the need of a training process for workers. This learning is linked to the structure arrangement, improvement and documentation of the processes. The persons involved in the processes should question themselves, explicit the procedures, document them and then apply them.

In this procedure, overlapping and voids are found in different activities and the search for solutions by the work in-group results in the application of new knowledge and of previous experiences. The analysis of the processes introduces new ways of learning⁵. Training institutions can, therefore, take advantage of the generated knowledge and reapply it in order to promote learning. In this sense, learning forms such as “learned lessons” or “good practices” shape what is known as “knowledge generated in the working processes”⁶. The documentation of processes, its analysis and continual improvement offers an extraordinary opportunity to learn to the VTI and to make explicit the knowledge that is usually applied.

The above is exemplified in the activities of development of processes of enrolment, registration, evaluation, didactic and material development. The analysis and improvement of these processes has allowed for the development of institutional capacities that today are reflected in the design of training workshops and centres, electronic training media, evaluation material, etc.

It is true that the standards are vulnerable to the permanent risk of over definition, and that these debate should not be avoided. To detail processes and to describe steps and procedures has a threshold of efficacy related to the

⁵ Mertens, Leonard: 1996.

⁶ Peluffo, Martha; Catalán, Edith:2002.

problem of over specification, which undermines and eventually nullifies the descriptive capacity of documentation. In terms of knowledge management, the process of documentation is a process of knowledge codification and in this activity “the abuse of codification can reduce the learning spaces and produce in the long term stagnation in the evolution of the organization”.⁷

Knowledge management

Today knowledge is valued as a resource, probably the most valued one in the context of VTIs. VTIs are organizations devoted to the generation of knowledge related to training. Their more valuable asset is to translate the work demands into training programmes: codified knowledge, which has the capacity to foster the development of labour competences.

After the eighties, when all kind of remarks were done to the training institutional model, the alternative models showed its deficiencies regarding their ability to generate knowledge related to training. The capacity to gather knowledge, educational capacities, design and training methodologies, qualified teachers and processes of teaching/learning is a product of the know-how of the institutional organization of training.

14 VTIs have shown, since the second part of the nineties, that they have that capacity and they have applied their knowledge to develop new ones, to innovate in the programmes and to apply new methods. Undoubtedly, the codification developed in the processes of quality management allows for this accumulation and for the usage of it in training. This is one of the potential advantages of the use of a quality certification system in the VTIs.

The capacity to innovate that the VTIs show reveals that partners can put into practice the accumulated knowledge and experiences and therefore generate new pedagogical products. The organizational context is fundamental and the specific intention of the VTIs to improve their capabilities facilitates the establishment of projects and working areas that promote knowledge generation. Tacit knowledge will be turned into explicit knowledge and then the certification process can be expanded and used in the whole process.

The VTIs oriented to knowledge “learn” through the storage, mobilisation and management of their experiences and information. The interaction with the entrepreneurial sector, the data on the economic sector evolution and the

⁷ Villavicencio, Daniel; Salinas, Mario: 2002.

occupational contents are all elements of knowledge accumulated and generated in the working process.

The documentation of the processes that support the accumulation and generation of knowledge has a strong relation to the codification done during the certification processes and to quality. That part of the knowledge is included and codified in the manuals and established procedures where besides defining a quality policy it is necessary to do a clear enunciation of the vocational training process, of the persons in charge of quality management and also of the responsibilities according to each process.

The global and regional recognition

The labour market is becoming more and more complex and less traditionally organized. The old traditional separation between time of work and time of study, work place and home, place of work and place of study is less defined nowadays.

Also, the number of training offers has increased. Now, not only traditional VTIs prevail. Sometimes the demand volume and sometimes the complementary existence of funds for the contracts of training have incremented the number of training institutions.

These offers are varied and widely different which brings forth a need for a service quality reference, from the standpoint of both customers and public sector. In this case the concern about quality comes from those who want to be trained, those entrepreneurs who want to invest in training of their workers and those who provide funds.

This is the reason why quality certification mechanisms are being increasingly applied in a highly competitive market. Many European countries where the funds for training are used through auditing processes between private and public specialised agencies seek to have a quality criterion, which allows for reliability when resource allocation has to be decided. In these cases the quality standard certification has

In the European Union within the continuing training mode (directed to involved workers) the use of quality standards is very extended. This type of training is usually developed with funds which can be used by different institutions.

Since 1989, the EN 45013 standard "General requirements for bodies operating certification of persons" is applied. This standard was the base of the ISO 17024 adopted by ISO for international application.

been positively accepted. In Chile, a version of the ISO 9001 quality standard has been elaborated in order to adapt the original to the technical executioner training agencies and these agencies have been motivated to start the certification process.