

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)**ScienceDirect**

Procedia - Social and Behavioral Sciences 191 (2015) 1928 – 1933

**Procedia**  
Social and Behavioral Sciences

WCES 2014

## Quality Management In Vocational Training: Evaluation Of A Specialized Institution In Ict

Anajar Abdelhak<sup>a\*</sup>, Talbi Mohammed<sup>a</sup>,  
Radid Mohammed<sup>a</sup>, Snadrou Khalid<sup>a</sup>, Tragha Abderrahim<sup>b</sup>

<sup>a</sup>*Observatory of Research in Teaching and University Pedagogy (ORDIPU), School of Science Ben M'sik, Hassan II University, Mohammedia-Casablanca, Morocco.*

<sup>b</sup>*Research Laboratory : Information Processing and Modelisation, School of Science Ben M'sik, Hassan II University, Mohammedia-Casablanca, Morocco.*

---

### Abstract

The speed of scientific, technological and organizational progress requires more responsiveness, adaptability and anticipation from organizations, in implementing abilities that are more cognitive than technical; in this context, competence comes from the ability of being well informed and constantly trained. In Morocco, Vocational Training (VT), which is deeply rooted in the educational system, has become a means for the development of companies' competitiveness. Thus, any delay in this regard will be correlated with their substandard performance. This work is based on an experiment of rating the services provided by a Vocational Training Institute (VTI) teaching the trades relating to ITC, with a view to developing a strategy to improve the Management by Quality, via a systemic approach, which can be applicable to VT and Higher Education operators.

© 2015 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Selection and peer-review under responsibility of the Organizing Committee of WCES 2014

*Keywords:* "Vocational Training (VT), Management by Quality, ICT."

---

### 1. Introduction

Mutations in our socio-professional environment and the rapidity of scientific, technological and organizational progress require that organizations and individuals acquire more reactivity, adaptability and anticipation by implementing capabilities more cognitive than technical: in this volatile and demanding context, competency flows through the ability to learn and develop continuously. In Morocco, the rapid development of the consumer society

---

\* Anajar Abdelhak. Tel.: +3-321-321-321.

E-mail address: [abdelhak\\_anajar@hotmail.com](mailto:abdelhak_anajar@hotmail.com)

leads to an increasing need of adaptations and modifications of skills. The supply of direct Professional Trainings is expanding and the Training becomes a data to be fully integrated in the professional life. In this case, it concerns Training operational players of the economic life. Thus, questions that pose themselves are as follows: Does the Moroccan Organization have the required knowledge to cope with the new challenges and market issues? If not, how can we make Training a lever for development of the national economy? How to ensure that Training becomes a reflection resulting from a process of Quality and not of quantity measures having no connection with daily life and its requirements? The daily observation of organizations shows that Training is increasingly questioned about the Quality of service, which is meant for the customer. The value of a Training product is no more measured in terms of its development costs. What has become fundamental is its value of use; Indeed, the Training cannot be merely efficient compared to objectives set by trainers; It must be relevant to the needs of its customers. Identifying and involving stakeholders, the client system is a Quality requirement. Its importance involves the implementation of true Management by Quality. Through this research this leads us to see to what extent operators of Vocational Training in Morocco are able to meet these requirements via Management by Quality. The establishment that seems to better represent the necessary prerequisites for our research is CFMOTI (the Training Complex in the Trades of Offshoring and Information technology). We propose to diagnose the case study. The last part concerns our Strategy of Management by Quality in Vocational Training as well as the implementation of an action plan.

## 2. Diagnosis of the case study

Being a subsystem evolving in an environment increasingly complex, the CFMOTI must contend with various stakeholders: trainees, staff, branches, organizations to take advantage of the changes imposed by the political, economic, social and cultural as well as macro-system at the national and international level. The satisfaction of the latter becomes an imperative for an institution that moves in a perspective of continuous improvement. The implementation of such an approach and the implications that emerge are closely linked to the strategy of the institution and its environment. To highlight and analyze them, a field research is required. The aim is to collect information about the experiences of the CFMOTI partners (organizations client, interns, staff and headquarters) a qualitative approach through semi-structured interviews, proved to be the most appropriate working tool to achieve this purpose. The talks are aimed at a sample consisting of all partners of the CFMOTI. It includes 25 actors and partners, it is composed of: Organizations (decision makers); Trainers and administrative body; Consulting offices. Hereafter, we present schematically the methodology of analysis of the elements of the diagnosis “Fig.1”

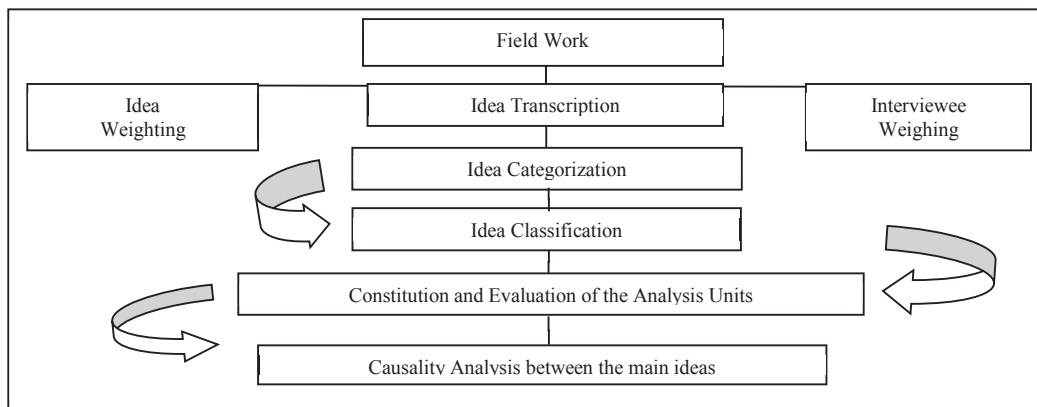


Fig.1. The Methodology of Analysis

## 3. The final classification

In a purpose of synthesis and simplicity, we summarize all key points of the diagnosis bearing their scores in the following table “see Tab.6”. We remind that the score is the result of the made weights of the idea and the quality level of the interviewee. Then, these ideas have been grouped in Units of Analysis (UA). As a first step we classified the UA by type: F, f, O, C.; then, we have prioritized them according to their overall weighting. We have retained the UA having the strongest weight; but also the UA with lower weight that seemed relevant. A 25 point threshold

was chosen for this purpose.

Tab.1.The Final Classification

Categories	Ideas	Score
FORCES	1 – The Good Alumni insertion Rate	67.15
	2 – Availability of Material Resources	54.20
	3 – The Will to Continuous Improvement	52.45
	4 – Free Public Education	51.75
	5 – Good Organization	50.80
	6 – Training tailored to the needs of the Organization	49.45
	7 – Alternating Training	48.45
	8 – Integration of Professionals in Management	46.75
	9 – Diversity of Services	37.90
	10 – The Graduates of Operationality	35.85
	11 – The Rigorous Selection of Candidates	34.60
	12 – Recognition of Diplomas	32.60
	13 – Competence of Trainers	27.20
WEAKNESSES	1 – Lack of Sharp Specialties	86.35
	2 – Lack of Participatory Management	51.15
	3 – Lack of Communication	50.60
OPPORTUNITIES	4 – Lack of Extracurricular Activities	42.40
	1 – Encouragement of the State	48.90
	2 – Technological Progress	42.25
	3 – Globalization	41.30
	4 – Positive Perception of Vocational Training	36.25
CONSTRAINTS	5 – Development of Partnerships	25.35
	1 – Resistance to Change	51.00
	2 – Termination of Special Training Contracts	44.25
	3 – Lack of Clear Vision of the Sector	43.70
	4 – Competition	30.20

#### 4. Formulation of the Strategy

In sum, it retains the identified strategic areas; they are classified according to the classification obtained in the diagnosis of Vocational Training:

1. Maintain the Client Approach (listen more, train the trainers).
2. Improve Participatory Management.
3. Develop a Communication Policy.
4. Improve the Extracurricular.
5. Develop Partnerships with professionals and Training organizations.
6. Optimize Human Resources and Hardware.
7. Strengthen the Preventive Approach.
8. Define in terms of the Quality of expected Service skills.

This work has identified strategic areas essential to the implementation of Management by Quality within the CFMOTI. We believe that they are in harmony with its institutional, regulatory and cultural context. The selected axes will be at the origin of the declined following strategy.

#### 5. Action plans

The objective of this section is to decline the various areas identified in a series of actions to make these orientations achievable.

##### 5.1.1 Priority 1: Maintain a Customer Focus

It is essential to put the customer at the heart of discussions and projects before producing skills. Such an approach encourages thinking in terms of service, establishing internal customer-supplier relationships as well as listens to the client. As part of the Training, let's just talk about the " after" training. The Quality of Training is not

only limited to the Quality of know-how, but also to that of their implementation. However, the implementation can only take place within the framework of collaboration between trainers and trainees. At this level, the hierarchy of the client organization also has a key role to play in enabling staff to perform the know-how learned during their training. To conclude this first step, it is worth mentioning that the maintenance of skills is important because the risk of forgetting is omnipresent. It would be useful to provide consolidation sessions. In addition, customer thinking leads us to think of another category of customers of CFMOTI which is trainees. How does CFMOTI plan to satisfy and prepare them for working life? To do this, would it not be appropriate to think about their welfare, their cultural, social development, etc.

#### *5.1.2 Priority 2: Improving the Participatory Management*

Participatory Management is a form of management encouraging participation in decision making through the inclusion of staff in the definition and implementation of the objectives that matter to them. This concept of Participatory Management has found its importance with the arrival of Quality circles, which allowed employees to have an influence on their work and be an open field to intelligent initiatives. Thus, it becomes important to have fulfilled people in order to succeed a Quality approach. But how can we develop the human resource unless through listening carefully to their aspirations, whether they are related to working life or not. In sum, an improvement in the Participatory Management will allow CFMOTI to take better advantage of the skills and be more efficient in the use of existing resources. It is at the cost of such a mode of management that the institution can meet the requirements of its customers and continue to maintain a client-centered approach.

#### *5.1.3 Priority 3: Develop a Communication Policy*

Communication imposes itself as being essential to all organizations as a survival status. Moreover, an organization that does not communicate is doomed to disappear sooner or later. The Training Institute must strengthen the three modes of Communication: Internal Communication, Corporate Communication directed to the external public (suppliers, partners, customers, etc.) and Promotional Communications to inform the target about the services that CFMOTI provides.

#### *5.1.4 Priority 4: Improve the Extracurricular*

Training skills of technician level capable of meeting the needs of the job market for the tertiary sector is the primary mission of the institution. To achieve this goal and make fulfilled and responsible graduates, extracurricular activities should be an integral part of the curriculum. These activities have the advantage of increasing the adhesion of students to their school. Once CFMOTI has redesigned its customer approach, it has to go to the development of partnerships to take better advantage of this and try to control the constraints imposed by the environment.

#### *5.1.5 Priority 5: Develop Partnerships*

Given the immateriality of the service, its consumption is performed at the same time as its production. Therefore, the customer can intervene at any time during the training process, hence the importance of partnerships to the success of training and achievement of objectives. The issue of partnership should not be limited only to customers, but must also be extended to professionals and other training organizations. In this context, CFMOTI must ensure the predisposition of human and material resources needed to support these actions.

#### *5.1.6 Priority 6: Optimizing Human and Material Resources*

Given the economic changes, the rapid transformation of trades, occupations and work environments, the Training must also evolve and change to adapt to the requirements of the moment. The institution must have the human and material resources to cope with these changes.

### 5.1.7 Priority 7: Strengthen the Preventive Approach

In the context of globalization and global interdependence, it is impossible to avoid risks. Any system based on the results must include the risk and try to control it. The training sector is evolving in this context of risks. To manage them, it is necessary to identify them on the first place, assess them and then seek to control them.

### 5.1.8 Priority 8: Define in terms of skills quality of service expected

The service must provide all Training is represented by a set of relevant skills in a given business context. Generally, a recognized competence in Quality if it meets the following seven criteria: Relevance, duration, the optimum level, consistency, cost, maintenance and evaluation. In his customer-centric approach; CFMOTI should focus its Training Services so that they meet the more Quality and quantity objectives.

- a. Relevance: The relevance reflects the agreement of skills produced compared to performance objectives set in advance by specifiers or contractors. In other words, relevance is the very purpose of the used skills. If the skills have no relation with the professional context in which they are to be produced, they can in no way be considered as relevant skills. The relevance will not in itself be a guarantee of competence Quality. It is also necessary that this skill is put to work just in time.
- b. Duration: In addition to being relevant skills must be implemented on time. A skill that is produced too early or too late cannot be useful. For example, what is the value of an late acquired competence compared to new hardware? Again, the relevance and duration will ensure competence of quality. Competence produced must achieve an optimum level to achieve the expected performance.
- c. The optimum level: Skills to be applied in any work situation have to be conclusive enough to be able to act concretely and at the level of performance. In other words, skills must be released in sufficient quantities to produce a conclusive result. If necessary, the skills will have only minimal effect and will not produce the said performances. To achieve the expected performance, competence must resonate with other skills: it's called consistency.
- d. The consistency: Collective performance is dependent on the skill crossing and complementarity between them. In this context, the Training must have a systematic approach whose objective is the production of an overall qualification. Relevance, the duration, the optimum level and the consistency are not sufficient to say that a skill or service is of good Quality. We still need to consider the cost element.
- e. The cost: Economies of scale have not yet put in the training field. However, due to increased competition and market complexity, organizations are increasingly looking to minimize their expenses. This increased focus to the intelligent use of investment will not remain a stranger to the training field. Once acquired, the skill must be regularly maintained.
- f. The interview: Skills are readily degradable. To train also means to upgrade. After acquiring the skills they need to be evaluated.
- g. Evaluation: An Evaluation system is essential to measure the Quality of the produced skills, such as continuous testing, exams and on-site testing.

## 6. Summary

In the case investigated by the CFMOTI, we noted the following:

CFMOTI indeed has the advantage of having distinctive skills that predispose it to engage in a process of progress; these skills are rooted for continuous improvement, which has emerged as the driving force for which it would be advisable to mobilize all energies. Indeed, it is the starting point of a virtuous circle, which, once launched, will energize all other elements allowing to act positively on the other strengths, to reduce the weaknesses, enjoy ample opportunities and especially to counteract the impact of the constraints. However, we note that for an establishment covered by officials to certify certain weaknesses could hinder the success of the management by quality. It is essentially the lack of communication, lack of sharp specialties, the failure of participatory management and failure

of the extracurricular activities, component required for the trained professional and for personal development. As mentioned above, that CFMOTI has strengths that could play the role of engine in its approach to the management by quality, this provided that it takes advantage of the opportunities and circumvents the impact of constraints that the environment in which it evolves represents. This environment offers many success factors such as technological progress and the well mastered State incentives, which will allow the institution to take advantage of its points of excellence. Similarly, well operated, the positive image enjoyed by professional training, is a capital of invaluable confidence for the establishment. However, any strategy of management by quality, as tied up as it could be, cannot succeed if faced with resistance to change, accentuated by a lack of vision; these two factors being the root of all problems. In fact, according to Matsushita “an organization who does not know where it wants to go is unlikely to get there”.

## References

- For a new breath of the Reform of Education-Training. Space Solutions Facing the cross-cutting issues of the System, “Official Document”, The Ministry of National Education, Morocco, 2008.
- Lagrosen, S. (2009). Examination of the dimensions of quality in higher education. *Quality Assurance in Education*.
- 50 Years of Human Development and Outlook 2025, *the fiftieth anniversary of the Kingdom's Independence*, Official Report.
- Rowley, J. (2000). Measuring customer satisfaction in higher education. *Quality Assurance in Education*.
- Osborne, J. (2011). Literature Review in Science Education and the Role of ICT: Promise, Problems and Future Directions. *Bristol: Futurelab*.
- <http://www.ofcertification.fr/qualite>
- [http://www.economie.gouv.fr/files/directions\\_services/daj/marches\\_publics/oeap/gem/5709/1-1.pdf](http://www.economie.gouv.fr/files/directions_services/daj/marches_publics/oeap/gem/5709/1-1.pdf)