Development of a Self-Assessment, Performance Measurement and Quality Insurance Repository

Case of Two Higher Education Institutions in Morocco

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Abstract

The self-assessment repositories are used in a perspective of quality management. They are intended to guide higher education institutions in building their training offer and enable the evaluation and performance measurement based on explicit and consistent objectives. These are essential tools for posterior training evaluation, facilitating a development based on changes affecting the science and socio economic fields.

The self-assessment thus enables a diagnosis, and identification of the strengths and possible improvement actions.The purpose of this is to increase the institutional progress capacity and evolution through a self-reflection.

In this regard, the aim through this article is the development of a self-assessment repository for the training institutions adapted to the Moroccan higher education specificities. To do this, we first recalled the state of the art in terms of the main standards and benchmarks used as the basis of our research: ISO 29990, ISO 9001, AERES repository, NF Training Service, Aqi- Umed, CTI self-assessment Guide and eduqua Manual 2012. We underlined, then, the self-assessment issues in higher education and the major elements that feed the interest and approach adopted in the case of our study. We presented the proposed repository, including the evaluation axes and criteria, and explained the choice for modifing certain references or criteria related to the particularity of Moroccan context and the appropriate evaluation methodology in order to reach results and thus allow the evaluator to find the required information and help its analysis and objective judgment.

Keywords: institution, quality, repository, self-assessment, training

1. Introduction

1.1 State of the Art

The quality assessment in higher education is a fast expanding sector since the mid 1980: quality assurance certification, institutional and program accreditation, certification, accreditation agencies, international scientific publications ranking, national higher education quality indicators, etc (Zouaoui, 2009). Assessment authorities are varied: public agencies, semi-public and private or transnational agencies, governments, professional associations, consulting firms and consultants (Vinokur, 2006).

However, the institutional self-assessment is an internal process of the higher education establishment used to periodically analyze the institution's quality. This process may allow the institution positioning control in relation with the adopted reference (Boubakour, 2014).

The Self-assessment is also used to assess the institution dynamic progress taking into account its specific activities and its environment (Boubakour, 2014). It leads to the production of a self-evaluation report for the institution internal use and serves too as another reference document for the external evaluation process (Haute Autorité de Santé, 2007).

The self-evaluation process thus is an ad hoc operation performed at a regular time intervals that must be clearly

distinguished from the institution continuous tasks and the organization of his steering on the areas defined by the selected repository (Boubakour, 2014).

The main aim is to collect the most complete possible data relating to the field of activities that the institution has decided to submit to the self-evaluation process (Côté, 2009). For this purpose, the following table presents the main standards and benchmarks in the field of higher education evaluation. The choice of these standards is mainly justified by their relevance, and the quality and reputation of organizations and agencies.

Table 1. Principal standards for the quality assessing in Higher Education

Standards	Scope
ISO 9001 (Bouzid, 2010) (Norme internationale ISO9001, 2008)	- Gives a primordial role to the organization management in the implementation of quality insurance; - Considers the internal clients (training establishment employees) as the quality actors; - Takes Into account the legal and regulatory requirements; - Measures the ad hoc client satisfaction; - Analyzes the training institution as a process rather than services and departments.
NF training services (Norme française service formation, 2005)	- Describes what must be doing and how to do the core business ; - homogenizes practices through a professional standard; - Combines the management requirements and service performance with a notion of social sensitivity ; - Measure the customer satisfaction level, the claims processing ...
The AERES Repository (Section des unités de recherche de l'AERES, 2012)	- Measures the ability of the entity to be recognized in the research community, by acquiring notoriety and visibility ; - Analyzes different activities by which research leads impacts on the economy, society or culture; - Analyzes the entity investment in the training through research in conjunction with the educational authorities; - Applied not only to research entities, but also to their "components".
ISO 29990 (Norme internationale ISO/DIS 29990, 2009)	- Represents a common framework reference for training providers and their clients ; - Destined for the design, supply, monitoring, and evaluation of training providers ; - Describes the requirements for a successful process; - Facilitates the implementation of quality management tools: strategy, management review, nonconformity management, internal audits, and stakeholder satisfaction.
Aqi - Umed (Tempus Aqi-umed Project, 2011)	- Contributes to the development of practical quality insurance and evaluation within the Mediterranean universities; - Develops quality insurance practices in the partner countries universities; - Improves the training institutions governance; - Supports national implementation policies of quality assurance systems in higher education; - Disseminates an internal and external quality and development of evaluation mechanisms culture, in higher education ; - Promotes the experiences and self-assessment practices exchange around the Maghreb and Europe universities.
Self evaluation guide of CTI (Commission des Titres d'ingénieur CTI, 2006, 2012, 2015)	- Gather the coherent evaluation criteria with the documents of international organizations of higher education evaluation, standardization and quality assessment ; - Takes into account the concepts of competence in the training management; - Distinguish different degrees of investigations and tracking ; - Each evaluation criteria correspond to different purposes related to the institution quality and its training.
Manuel of éduQua 2012 (Kocher, 2012).	- Improves transparency of training provision descriptions and clients services ; - Ensures the continuous training services quality basing on standards and promotes their optimization ; - Provides a basic decision for the authorities ; - Meets the requirements of a common basic principles of the Quality Management System (process approach , customers orientations …)

Since the last decade, the higher education training quality has become a constant concern of the public authorities in many countries. The international quality insurance harmonization in higher education has accompanied and encouraged the improvement of the existing mechanisms for national plans. Many reforms have been undertaken abroad, with the aim of improving the attractiveness of higher education and research competitiveness (Bourdin, 2008).

On the other hand, the standards and guidelines for quality management in the European higher education area, adopted at the Bergen Conference (May 2005) relate firstly the internal evaluation, by institutions, for their own practices and, secondly, the external evaluation by specialized agencies. Finally, they provide a framework for the evaluator's evaluation (Bourdin, 2008).

In the US, the higher education institutions assessment is carried out as a part of the accreditation process. The accreditation agencies are responsible for the evaluation of higher education institutions and they are the only authorized to assess the university education quality (Bourdin, 2008).

For the Chinese government, universities evaluation is a powerful lever for creating a network of excellence institutions (Project 211) and developing key disciplines at the national level (Bourdin, 2008).

Therefore, multiple convergences emerge from this overview of reforms in several countries. The dominant model is a regulation by independent agencies in order to ensure the results legitimacy.

1.2 Interest of the Study

The Self-assessment is useful for higher education institution to know, by itself, its strengths and weaknesses. Subsequently, the institution would benefit from an external look to ensure the neutrality and quality insurance of its courses and management (Boubakour, 2014).

Quality insurance and self-assessment project (part of the school project) are an opportunity to take into account both the different requirements of the environment, and also the domestic management.

This is the opportunity to explore the different components of management and develop an integrated approach that allows grouping and synergistically treat a large number of transverse themes (Agence Nationale d'Accréditation et d'Evaluation en Santé ANAES, 2002).

Thus, the self-evaluation process is a gradual process. It aims to obtain the training institution improvements on priority issues. It corresponds to a targeted effort justified by the issues importance and the need to develop and implement a solution (ANAES, 2002).

It is question of solving a problem or improving an unsatisfactory operation, but also increasing performance in a specific area. As the development of the approach, the institution develops its ability to conduct high quality actions. Prioritization criteria have to be determined by the institution which can then build and use the appropriate tools.

Thus, after explaining the interest of the self-evaluation process in higher education institutions, we saw inevitable to provide a reliable tool to carry out this process. Therefore, we have made sure that this tool will be adapted to the Moroccan context, given its peculiarity and the specific constraints which characterize it.

2. Methodology

The development and implementation process of the quality self-assessment repository requires a prior definition of the concerned target institutions. When the unit is a university, we must lead a common approach to all integral parts of the university. When the unit is a school or institute, the approach will cover the main components of management and training.

For the committee in charge of the self-assessment, several configurations are possible. The actors involved in this committee should be representative of the institution. They have to be able to engage a laborious work for the whole evaluated institution. The active actors will not have as mission to represent their original entity but an overall mission for the institution's service. The approach by the evidence will ensure impartiality. The management team involvement remains inevitable. Several variants can be adopted for the composition of the self-assessment team, in particular depending on the culture of each institution and the level of collective quality issues ownership.

To corroborate the above statement, we conducted a survey in two higher education institutions in Morocco (public institution and private institution). In our case of study, we worked in collaboration with the quality cells of these institutions while incorporating representatives of various staff categories of the two target institutions.
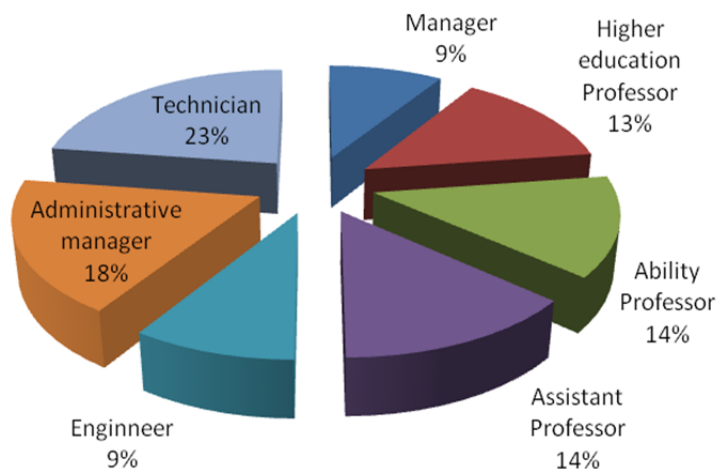
Figure 1. Constitution of the evaluation unit

In addition to the standards and norms set forth above and which are a reference in the field, we sought the already established evaluation team in order to highlight the priorities that will be the pillars of our repository and, depending on the needs expressed and / or explicit in each institution on the one hand and each stakeholder category in the other hand.

Also, the expected purpose of this survey is to highlight the real need for governance and quality insurance through a targeted questionnaire in order to measure the satisfaction, monitoring and reporting tools as well as the need for periodic self-assessment (Boubakour, 2014). The results of this survey are listed below:
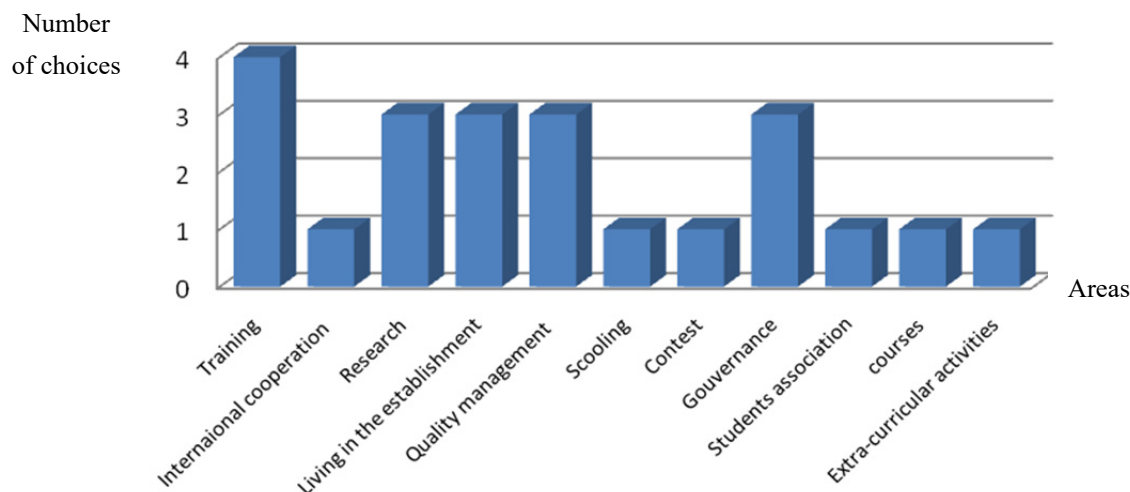

Figure 2. Results obtained by the members of the work team

According to the results, we found that the priority areas are: training, research, governance, life in the institution and the quality management system.

Based on the results, the working team has looked at a reflection intending to develop assessment criteria for each priority. It is during this step that the team highlighted the various aforementioned standards and norms, in the aim of highlighting criteria adapted not only to the specificities of the Moroccan context but also to the real needs of both our subject study institutions.

3. Results and Discussion

As described above, the proposed repository attempts to take into account the quality factors in higher education.

It is based on data obtained from the combined experiences of the team work members. For this purpose it is supposed to be applicable to many training devices, when therefore, they come within the scope of higher education training (Groupe d'assurance qualité du réseau des écoles de service public, 2006).

This repository has been made, however, taking into account the specific characteristics of the two target institutions. Indeed, some criteria may be more or less relevant or have more or less important depending on the contexts in which training is offered and expectations of different beneficiaries. Note that the references gathered here describe what is expected of each institution to be recognized as competent to provide higher education, in terms of values, norms and knowledge (UM5A-Rabat, 2006). Thus, the proposed self-evaluation repository is structured into 5 axes and 27 criteria. For each selected criterion, performance measurement indicators may be proposed depending on the specificities of each institution.

The first axis "training" is interested to the training actions administration, internal functioning, resources, as they can potentially have effects on provided training, as well as the training content relevance, methods and progress into line with its contents.

The axis "Research" accurates expectations regarding to the organization purposes in terms of research policy and strategic position.

The axis "Governance" defines expectations in steering and suitability of different resources (human, logistic, documentary, environmental, and financial) to the needs of the training and management.

The axis "Life in the institution" is interested to the students hosting and living conditions in the institution whose effectiveness is likely to promote a learning meeting specified requirements and recognized by stakeholders.

Finally, the axis "evaluation and procedures for quality management policy" specifies the main elements for a controlled development of a quality insurance project whose adherents are aware of the results they want to produce. It also specifies the management and control conditions for the prioritized improvement actions taking into account the strategy, the organization's resources and the recommendations of the external quality insurance agencies.

Table 2. The proposed repository

Axis	criterion
Training	Definition of the training offer and its management
	Development, implementation and periodic review of programs and degrees
	Student Support during training
	Student and lessons evaluation
	Educational tools and support to the students
	Orientation and professional integration
	Doctoral training
	Continuing training
Research	Organization, structuring and research development
	Scientific production and quality
	Academic Outreach and attractiveness
	Interaction with the social, economic and cultural environment
	Research promoting
	Innovation
Governance	Terms of governance policies development
	Organization and management of components and services
	Information system
	Public Information
	Internal communication
	Social responsibility
Living in the establishment	Hosting and support for students
	Living conditions (health, hygiene, security ...)
	cultural and sport activities

Assessment procedures and policy for Quality Management	The institution mission, vision and goals
	Management system
	The quality process organization, structure and resources
	The quality assessment

4.Evaluation Method

The evaluation methodology chosen by the working group is described in the diagram below (Figure 3) (Haute Autorité de Santé, 2007):
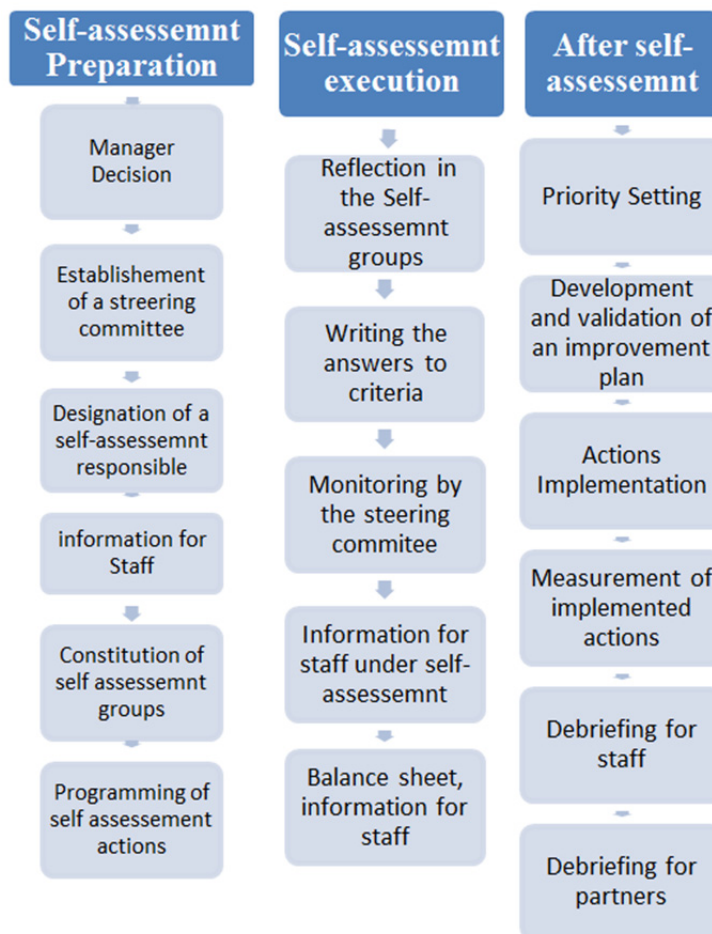
Self-assessemnt Preparation
- Manager Decision
- Establishement of a streering committee
- Designation of a self-assessemnt responsible
- information for Staff
- Constitution of self assessemnt groups
- Programming of self assessement actions

Self-assessemnt execution
- Reflection in the Self-assessemnt groups
- Writing the answers to criteria
- Monitoring by the steering commitee
- Information for staff under self-assessemnt
- Balance sheet, information for staff

After self-assessemnt
- Priority Setting
- Development and validation of an improvement plan
- Actions Implementation
- Measurement of implemented actions
- Debriefing for staff
- Debriefing for partners

Figure 3. Evaluation Method

Note that the proposed evaluation methodology was selected basing on international assessment standards and benchmarks.

5. Conclusions

The integration of the self-assessment process in higher education institutions contributes to a significant performance improvement.

Consider this as a social building and internal management tool should help to give meaning to the institutional realities and, then, allow stakeholders to give value to their professional practices and standardize therefore internal management modes for the concerned entities.

The quality repository is a development tool for organizations. The actors of each higher education institution can position themselves to participate in the quality development and have a support to design and implement an internal quality insurance policy. This can be done on the basis of evaluation and quality insurance standards and repositories like: ISO 9001 type, 29990 ... etc.

In this context, we looked through this article to highlight the practice of self-assessment and its vital role in

achieving the intended objectives.

To do so, after recalling various international standards that govern this process and in light of the data collected and the Moroccan context, we described the adopted approach in order to develop our repository and the appropriate methodology for its implementation, as part of the higher education institutions evaluation in Morocco.

Finally, in order to succeed the evaluation process, all institutional concerned actors must join effectively the self-assessment process.

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