QUALITY IN HIGHER EDUCATION: ANALYSIS AND DISCUSSION OF EVALUATIVE STANDARDS INTERNAL CONSISTENCY

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Abstract

This work is a comparison of four legal regulations and their quality assessment practices: A3ES vs EQA vs ISO 9001 vs ISO 4455. As basic elements of cross functional analysis and conceptual cross analysis, we present the analysis and discussion of the internal consistency of each of the standards. Is carried out an integrative discussion with the intention of enhancing the usefulness and signaling axes of analyses and assessment of evaluation practices on three different perspectives: perspective of the rated entity; perspective of the value; perspective of the public interest.

Keywords: Quality in Higher Education; evaluative standards; quality assessment practices.

1 MAIN FEATURES OF ISO 9001:2015

ISO 9001 is based on a set of quality management principles that were originally developed in the years 90 by a group of experts closely familiar with the teachings and philosophies of the "gurus" of quality, including Deming (1989, 1990), Juran (1992, 1994), Crosby (2000), Ishikawa (1993), Feigenbaum (1994), among others.

Before the start of the 2015 review of ISO 9001, ISO has undertaken a complete review of these principles. Is nice, but not surprising, report that the eight original principles have withstood the test of time, and that only minor adjustments were needed to upgrade to the next generation of quality management standards.

One of the changes was to join two of the original principles: "process approach" and "systemic" management approach in a new and unique principle.

The seven principles of quality management are now the following: focus on the customer (the primary focus of quality management is the satisfaction of customer requirements and the effort to exceed your expectations), leadership (established leaders, at all levels, the unit purpose and direction and create the conditions for people to undertake to achieve the objectives of the Organization; commitment of people (competent persons, empowered and engaged at all levels throughout the Organization are essential to improve the ability to create and provide value), process approach (consistent and predictable results are achieved more effectively and efficiently when activities are understood and managed as interrelated processes that function as a coherent system); improvement (organizations that succeed are permanently focused on improving; evidence-based decision-making (decisions taken on the basis of the analysis and evaluation of data and information are more likely to produce the desired results; management of relationships (for a sustained success, organizations manage their relationships with stakeholders such as suppliers).

The main features of ISO 9001:2015 are as follows:

Harmonised structure -ISO 9001:2015 uses the new harmonized high-level structure which was developed by the Joint Technical Coordinating Group of ISO, and published in the Annex SL ISO directives.

Context of the Organization-ISO 9001:2015 requires that the Organization provide specific business context in which they operate to ensure that the QMS (quality management system) is
appropriate in this context. The external factors that affect an organization may include, for example, the environment, cultural, social, political, legal, regulatory, technological, economic, financial, natural and competitive at international level, national, regional or local level. The internal factors may include the corporate culture of the Organization, administration, organizational structure, roles and responsibilities, policies, goals and strategic resources (capital, time, people, processes, technological systems), information systems, information flows and decision-making processes (both formal and informal). In short, each organization is different and there is no "single solution" of QMS that is appropriate to all situations.

Stakeholders-the ISO 9001:2015 requires organizations to think beyond the contractual requirements of their customers, and they consider the expected relevant needs of other stakeholders. This may include, for example, end users, regulators, joint venture partners, franchisees and others.

Services-the new version of ISO 9001 puts more emphasis on the service sector, making the global language of the standard more friendly to Organization of this sector, and adapting some traditional sections to focus more on the needs of the service sector. Not only was given more attention to requirements relating to the design and development process environment and measuring equipment with regard to the service sector, but the standard uses now specifically the terms product and service (P&S), instead of just products. Although this has practical implications, because ISO 9001 versions of 2000 and 2008 left already clear that included product service, is intended to emphasize the fact that the standard applies to both tangible and intangible products provided by the organization.

Process approach-the ISO 9001:2015 maintains a strong emphasis on process approach that was so successful in versions 2000 and 2008 standards, where an organization needs to manage its processes in order to achieve the desired results, which, in accordance with ISO 9001, means providing customers consistent and P&S accordingly.

Risk-based thinking-focus on "risk-based thinking" is integrated throughout the new standard, according to which an organization needs to identify the risks (and opportunities) associated with their activities, and take measures to reduce the risks of producing non-compliant P&S. All the processes needed for the QMS must be managed using the cycle Plan-Do-Check-Act, but some require a greater degree of control than the others, if they are to contribute to the ability of the Organization to meet its goals. It is not the intention of ISO 9001:2015 requiring all organizations to adopt formal risk management methodologies, but lead to a mentality of "risk-based thinking". Simply put, this means considering the risk qualitatively and, depending on the context of the Organization, to quantitatively define the accuracy and degree of formality needed to plan and control the activities and individual processes.

Focus on result-the ISO 9001:2015 also gives more emphasis to the ability of a QMS "fulfill their promises". The absolute measure of the effectiveness of the QMS is not the number of documented procedures, the hours dedicated to training or the number of pieces of measuring equipment calibrated, but rather the ability of the Organization to give confidence about their ability to consistently provide P&S that meet the requirements of customers and other stakeholders, such as regulators.

Along the new version of ISO 9001, from the strategic to the operational level was accentuated this philosophy in which "the result counts!".

2 MAIN FEATURES OF THE EQA – EUROPEAN QUALITY ASSURANCE

The main features of the EQA – European Quality Assurance are the following:


European Quality Assurance Limited (EQA) was established in 1993. They are based in Newark, Nottinghamshire but have global connections.

All ISO certificates are issued under the EQA brand name. However, EQA is a wholly owned subsidiary of EQA Korea, who have offices across Asia. They operate under their policies and procedures. The accredited legal entity on all ISO certificates is given below:

ISO 9001 is the internationally recognised standard for Quality Management Systems (QMS).
ISO 9001:2008 is recognised as the quality management system that enables you to streamline processes, minimise duplication, identify areas for cost savings and improve overall company performance.

Gaining ISO 9001 accreditation will also mean you can increase customer confidence in your business by demonstrating that you have an effective quality management system in place. Any business can benefit from obtaining ISO 9001 accreditation.

It is increasingly becoming a requisite for tendering for new business allowing you to compete on an even scale with competitors. Implementing ISO9001 is based on 8 management principles: A customer focussed company; leadership; involving people; a process approach; systematic approach to management; reciprocal with relationships with suppliers; and continuous improvement.

The main features of the NP 4457:2007 refer to the analysis of the systems of management of research, development and innovation (RDI).

Management systems research, development and innovation (RDI) highlights that the model of management of research, development and innovation (RDI) is based on the transformation of knowledge into useful applications in the markets and valued by companies, being the final consumers recipients of new or improved products or services, or citizens, users of public and private services. According to the model developed by the family of Portuguese IDI management standards, innovation activities can be considered "both in industry (goods) and services (offer of intangibles), both in traditional sectors (low-tech) as more sophisticated (high-tech)".

These guidelines were discussed and elaborated by the Technical Committee, coordinated by Portuguese Institute of Quality, and approved in January 2007, after the expiry of the period of public inquiry. With its publication, available to organizations an important tool that can support your ability to develop innovation projects that will contribute in Portugal for the economic and social growth. The standard NP 4457:2007 setting out the requirements for an effective system of management of the IDI, which, when adopted, enables organizations to greater ease in defining its policy of IDI and in monitoring and control of their innovation goals.

3 HOW TO INTEGRATE THE IDI IN MANAGEMENT SYSTEMS ALREADY IMPLEMENTED?

Innovation activities must be understood in a comprehensive sense, including the scientific basis and technological innovation (new products and processes), but also new organizational and marketing methods.

This model, which already includes the concepts of the 3rd Edition of the OECD Oslo Manual (2005), and follows an approach Plan-Do-Check-Act, enables organizations that have EDI practices and at the same time, management systems implemented in accordance with known reference (ISO 9001, ISO 14001, certification of products or services), an integration process easier.

IDI management system and its integration in risk management of innovation

Many organizations are faced with the risks of not innovate, by reflecting these effects in decreasing profitability, loss of image, obsolete products placed on the market, in short, loss of competitiveness. Innovation also has risks-high investment, excessive focus on the innovation process at the expense of existing products, non-acceptance of the new product on the market, among others. As in any act of management, the risks must be assessed in the light of the potential benefits: turn knowledge into economic development; generate value for the Organization and to society; contribute to the improvement of performance; enhance the interfaces and external relations to better develop the circulation and transfer of knowledge; build entrepreneurship needed to proceedings of innovation; streamline the planning of investments in RDI; and more efficiently manage the risk associated with the processes of innovation.

4 A3ES-AUDIT OF INTERNAL QUALITY ASSURANCE SYSTEMS

The legal framework of the evaluation of higher education in Portugal includes the "implementation requirement, higher education institutions, quality assurance systems, certification".
This legal precept is in line with, and represents, the fundamental principle underlying the quality assurance systems in the European area of higher education, that the quality and quality assurance are responsibility, first of all, of the higher education institutions themselves.

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This legal precept is in line with, and represents, the fundamental principle underlying the quality assurance systems in the European area of higher education, that the quality and quality assurance are responsibility, first of all, of the higher education institutions themselves. In order to support the institutions in the implementation of their internal quality assurance systems and, in this way, contribute to the promotion and dissemination of a culture of quality in the institutions, the Agency promoted the elaboration of a comparative study, at European level, in order to analyze the main trends in terms of specification and certification of these internal systems and from the identification and characterization of cases of good practice, learn useful for the design and development of the institutional audit model to adopt in the country, as well as some elements that may be guiding for the institutions, without prejudice, however, the flexibility required for the desirable development of innovative approaches that may arise in the exercise of institutional autonomy.

This study included a concrete proposal of references to the internal quality assurance systems in higher education institutions, as well as a suggestion of guiding principles for institutional audit. These proposals were put into public discussion during the first half of 2010, through their presentation and discussion in the representative bodies of the various sectors of higher education and also a significant number of institutions that have requested.

As a result of this process, the Agency has adopted a set of benchmarks, which are formulated in terms of propositions that characterize an internal quality assurance system well established and in line with the European standards and guidelines and with the applicable legal requirements, with the intention of providing a set of general guidelines that can help the institutions in the design and implementation of its quality systems.

5 OBJECTIVES AND GUIDING PRINCIPLES OF INSTITUTIONAL AUDIT

A fundamental assumption of the institutional audit process is the respect for the autonomy of higher education institutions.

Audit procedures do not address directly on the performance of the institution, in terms of the way it defines its mission and objectives, their operational plans and the results achieved.

The object of institutional audit has to do with the institutional strategy for quality and how it translates into an effective quality assurance system and well documented. The audit therefore focuses on the processes and procedures for promotion and internal quality assurance. It is up to each institution to define its policy for quality and establish the internal quality assurance system that best suits their own specificities, needs and stage of development, obeying, but the common guiding principles, in particular the European standards and guidelines and the applicable legal regulations.

The 'single audit' model was designed taking into consideration these same principles, as well as some other of nature, particularly the commitment to cooperation and dialogue with the institutions, the educational and formative role of the audit with a view to the continuous improvement of higher education, the involvement of stakeholders and the concern with the reduction of the bureaucratic burden placed on the institutions. There's also the concern about the social acceptance of the model, i.e., with the search from the beginning, ensure the acceptance, on the part of society and political power, that the institutional audit is an appropriate way to approach to external quality assurance. Within the generic objective of helping the development of quality assurance systems in institutions and to identify and develop good practice in the field of quality assurance, are specific objectives of institutional audit:

Analyzing institutional policy for quality and assess whether their implementation includes, clearly and objectively, the definition and documentation of the objectives, roles, and actors of the internal quality assurance system, as well as the definition and organization of associated responsibilities;

Evaluate the processes and procedures used by the institution for the maintenance and improvement of the quality of teaching and other activities practiced;
Evaluate the extent to which the quality assurance system in the institution works in accordance with established procedures, produces useful information and relevant to the improvement of the institution, and uses this information to generate effective measures for continuous improvement of the quality of the activities carried out and their results.

6 AREAS AND ANALYSIS OF INSTITUTIONAL AUDIT CRITERIA

The institutional audit has for object the quality assurance system developed by the institution on the basis of their own diagnosis, assumptions and interests to pursue.

The audit focuses on quality assurance procedures relating to different aspects of the institutional mission and cross-cutting areas that support, and the quality assurance system as a whole, as well as its articulation with the mechanisms of strategic management of the institution.

Are specific areas of analysis, in the institutional audit process:

Institutional policy for quality (objectives, roles, actors and levels of responsibility of the internal quality assurance system) and the way it is documented;

The scope and effectiveness of the procedures and quality assurance structures related to each of the nuclear mission institutional aspects (teaching and learning; research and development-research and development-oriented high-level professional, in the case of polytechnic education; inter institutional collaboration and the community; personnel management policies; support services; internationalisation);

The articulation between the quality assurance system and the organs of governance and management of the institution;

The participation of stakeholders, internal and external quality assurance processes;

The information system (mechanisms for the collection, analysis and dissemination of information; scope and relevance of the information generated);

The publication of relevant information to external stakeholders;

The monitoring, evaluation and continuous improvement of the quality assurance system;

The internal quality assurance system, assessed as a whole.

The evaluation to be carried out by the external evaluation (CAE) will focus on these areas, in terms of assessing their degree of development in the light of the objectives set by the institution, taking into consideration the references to the internal quality assurance systems defined by the Agency.

The results of this appreciation will be expressed in a way that is objective, on a scale of four stages of development of each of the items evaluated, namely: insufficient development; partial development; substantial development; very advanced development.

The assessment will be targeted on the basis of criteria analysis matrix, matrix in which are defined, for each area of analysis, the criteria for the award of each one of the entries of the scale. A decision in favour of certification of an internal system of quality assurance will, cumulatively, the following conditions: an assessment of at least "partial development" in all specific areas of analysis; an assessment of at least "substantial development" in relation to items on teaching and learning and to the system as a whole; no more than four areas with assessment of "partial development."

In the case of areas assessed as in "partial development", the favourable decision may be subject to compliance with the conditions and deadlines that are explicitly set out in the decision of the Agency.

7 NUCLEAR ASPECTS OF THE ECA (EUROPEAN CONSORTIUM FOR ACCREDITATION OF HIGHER EDUCATION)

The European Consortium for accreditation in higher education (ACE) is a recognized accreditation Association of quality assurance agencies in Europe.

The vision of the ECA is to act as a knowledgeable internationally recognized innovation and accreditation and quality assurance in higher education. With your experience, networking and services, ECA contributed to the implementation of the European higher education area (EHEA), promotes the internationalization of higher education and "state-of-the-art", activities of its members.
These systems are subject to external audits, and ISO standard 9001:2015 and ISO 4457:2007 are implemented by specialized companies in the area that are validated by the Portuguese Institute of quality.

The Portuguese Institute of quality is the public institute, part of the indirect State Administration's mission is the coordination of the Portuguese quality system, the promotion and coordination of activities aimed at contributing to demonstrate the credibility of action of economic agents, as well as the development of the required activities to their National Metrology Institution functions and of national standardisation body. Already the quality audit process carried out by A3ES is audit object by a group of experts chosen by the Agency.

8 CONCLUDING SUMMARY

This work applies the analysis and discussion of the internal consistency of each of the quality standards in education and in organizations inferred, international and European standards that are reflected in the Portuguese context.

This work, through an integrated discussion, allows to increase the lack of utility and signaling analysis axes and assessment practices axes of evaluation.

This work gives contributions to discuss inclusive practices and evaluative congruence of legal regulations.

REFERENCES