- Different approaches to QA and their impact on efficiency, effectiveness and sustainability
- **TOWARDS EXCELLENCE IN HIGHER EDUCATION THROUGH QUALITY AWARENESS**

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Abstract

Quality is a result – the result of being aware, being aware of reality but what is more important – being aware of the future. Achieving quality in higher education requires an institution to find a balance between responsibility for quality and quality improvement (Stensaker, 2003). The responsibility for quality refers to the reality, and requires an institution to meet the requirements stated by different constituencies and stakeholders. The improvement process relates to the future, demonstrating the institution's ability to fulfill its quality strategy. Given that, quality awareness becomes an indispensable component of striving towards education excellence. It brings the responsibility upon higher education institutions, as well as national and international quality assurance agencies. It relates to an ability to integrate different quality requirements and approaches by higher education institutions on one side, and the dissemination of knowledge of what these requirements and approaches are on the other. There is no doubt that meeting accreditation standards is an essential prerequisite to providing educational services at an acceptable level of quality. Accreditation becomes a reference point – a necessary benchmark needed for quality to be enhanced. It refers to accountability for quality, which is integral to the quality management system. An identification of possible areas of improvement, and afterwards taking appropriate actions, depends on the quality culture and institutional commitment to quality improvement. Having implemented a quality management system according to an ISO 9001 model, or meeting some of its requirements, may significantly contribute to quality enhancement. The enhancement which is based on accreditation or another quality standards "tailored" for the higher education sector.

The paper aims at presenting the practical approach of using the ISO 9001 requirements, focusing on spreading quality awareness – an essential prerequisite for quality to be improved.

TOWARDS EXCELLENCE IN HIGHER EDUCATION THROUGH QUALITY AWARENESS

In place of an introduction – quality, quality in higher education and quality awareness

Quality – everyone probably knows this word. Everyone refers to it while trying to express the feeling of satisfaction or dissatisfaction, happiness or unhappiness. It is directly related to a judgment; whether I like it or I don't. It is easy to classify products and services by using an experience as a guide, referring to their fitness for purpose, conformance to requirements and uniformity around the target value. If assessing quality refers to judgment (a result of the evaluation) the quality itself must be the result.

There is no doubt that quality relates to the requirements, which are stated, generally implied, or obligatory (ISO 9000: 2005). It is a degree to which the requirements are met (ISO 9000:2005). It is a result of caring (Pirsig, 1991). Accordingly, a care for quality requires knowledge about the requirements themselves and afterwards an ability to use them for

improvement purposes. Thus, quality is a result – the result of being aware. Being aware of reality, but what is more important – being aware of the future. Providing that, it appears that being aware of the requirements is a prerequisite for quality to be ensured (reality), and, further to that to be enhanced (future). According to Newton (2007) "accountability requires external scrutiny of institutions and publishable outcomes, while quality enhancement requires that this is linked into a process of continuous quality improvement, at the institutional level, and the level of academic discipline".

Quality in higher education is a very broad concept. The multi-dimensional, multi-level and dynamic nature of this concept consists of many aspects, i.e. the contextual settings of an educational model, an institutional strategy, and the specific standards within a given system, institution, program or discipline (Vlăsceanu, L., Grünberg, L., Pârlea, D., 2007). Any description of education quality, or actions relating to its enhancement, should refer to the requirements set by different constituencies or stakeholders (quality requirements set by students / university discipline / labor markets / society / government). According to Williams, which perfectly matches the above definition, "the purposes of quality enhancement and institutional development …are achievable …if an appropriate alignment can be found ...between philosophy, technology and context" (Newton, 2007).

Spreading awareness of the requirements is the first and necessary step to see a horizon of opportunities for quality improvement. It refers to an institution itself, as well as quality assurance agencies. There is a need to find such approaches and tools which enable an institution to strike a balance between accountability for quality (meeting the requirements) and quality improvement (Stensaker, 2003). Striking this balance does not mean only to be knowledgeable of the specific requirements, such as accreditation standards. It also means being aware of and using the requirements reflected in different "quality models" (e.g. ISO 9001:2008), as well as good practices which have already been embedded in different institutions of higher education. It means being aware of, and committed to advancing the quality of higher education by building a solid culture of improvement (inside and outside an institution), and an efficient management of its measurable evidence (European University Association, 2006).

Therefore, the aim of this paper is to provide some good practices and approaches of spreading quality awareness within institutions of higher education along with referring them to the quality requirements included in the ISO 9001 standard. It focuses mostly on an internal audit as a supportive tool in the self-assessment process, the role of management representatives in the quality management system and the internal communication of the results concerning quality issues. All these aspects relate to employee involvement and its role in quality improvement process.

Accreditation vs. ISO 9001 – is there any space for integrating the "quality models"?
According to Harvey (2002) there is a significant overlap in the methods of data collection for different types of outcomes (i.e. accreditation, audit, quality assessment, and standards monitoring). There are fewer differences between methods of quality assurance used in higher education than expected. A majority of adapted systems seem to find some sort of balance between accountability and improvement (Prøitz Tine S., Stensaker B, Harvey L., 2004). Results of research conducted by the European Network for Quality Assurance in Higher Education (2003) have confirmed that activities towards quality assurance in higher education differ from country to country. Some of the systems are on the initial stage while others are more advanced. Nevertheless, the most popular method used in European universities is accreditation of teaching programs (European Network for Quality Assurance in Higher Education, 2003). Although the accreditation has not been formally considered in the Bologna postulates, it has become one of the most material effects of the Bologna process.

Accreditation meaning recognition has for the first time been mentioned in the American system of higher education. Accreditation is a confirmation, that specific objects, facts or methods fulfill minimum standards – that of defined and accepted quality criteria. That is why the accreditation is often understood as a "guarantee of quality" granted by a credible institution to an educational activity performed by a given university. It means the recognition of a specific program or institution which meets educational quality standards (Wójcicka, 2001).

It is important to emphasize that the use of methods which are specific only to higher education is a prerequisite but it is not enough. For example, the awarding of accreditation implies relevance and recognition. Nevertheless, it is not necessarily an indicator of exceptionality anymore. Nowadays, accreditation seems to be an essential source for institutional survival, but not sufficient to denote institutional excellence. As a specific method in the field of quality assurance in higher education, accreditation aims at providing information about education quality. By meeting accreditation standards, an institution is capable enough to provide educational services at the acceptable level of quality. It doesn't mean, though, that there is nothing more to be done. Accreditation becomes a reference point – extremely necessary for quality to be enhanced. It refers to accountability for quality, which still requires to be linked into a dynamic quality management system. An identification of possible areas of improvement, and afterwards taking appropriate actions, depends on quality culture and institutional commitment to quality improvement.

While accreditation standards differ from country to country, the accreditation procedures are similar and consist mostly of two main stages: self-assessment and a peer review process. The purpose of the self-assessment process is to evaluate the degree to which the higher education institution meets accreditation requirements. It is like a comparison to the "tailored" higher education requirements in order to identify weaknesses considered as potential areas of improvement. Is self-assessment viewed by higher education institutions "a threat to be endured, or a challenge which presents opportunities" (Newton, 2007)? To perceive self-assessment as an opportunity for improvement, a link between the requirements is needed – cementing these requirements, which refer to a guarantee of quality, with those aiming at promoting and supporting sustainable quality improvement. There is no doubt that an ability to strike this balance (accountability vs. improvement) depends on an institutional commitment to, and awareness of the requirements themselves. Some of them guide an institution towards the desirable minimum standard of quality (accreditation), while the other ones stimulate a journey beyond the standard set (e.g. ISO 9001:2008, the European Foundation for Quality Management excellence model – EFQM).

Given that, undertaking the journey towards quality excellence is a result of a quality enculturation within an organization that intends to continually enhance its quality (European University Association, 2006). What are the requirements and prerequisites to be considered as necessary for a sustainable quality culture to be implemented? How can interest in quality be stimulated by leadership and what are the ways to stimulate staff and student involvement and ownership in quality (Stensaker, 2008)?

Although some of the requirements, present in different – not higher education related models, seem not directly fit for purpose, their use, along with the specific requirements may reveal different approaches enabling more effective improvement processes. Since the ISO 9001 requirements "are intended to be applicable to all organizations, regardless of type, size, and product provided", it might be very helpful to use some of them (if not all) to embed, maintain and strengthen a culture of improvement within an institution (ISO 9001:2008). An application of such an approach must be based on the conviction that quality "is an ongoing exercise and it's not a state that is reached once and for all (the requirements are met) but one that needs to be pursued continuously" (European University Association, 2006). It requires

an existence of quality culture within an organization, which relates directly to organizational culture focused on continuous quality improvement.

It might be questioned, "if the ISO 9001 standard fits the higher education area?" It might be because of its nature and specifically – because of the nature of its requirements. These are universal and to be used as a basis by any type of an organization. It means that the requirements must be interpreted first in order to be effectively used by a particular organization. The ISO 9001 framework of the requirements is based on quality management principles and it provides a set of recommendations for quality assurance and quality improvement. It refers, among other things, to leadership, customer requirements and employee involvement. It is based on a Plan-Do-Check-Action cycle which aims specifically at continuous quality improvement. Are these principles not to be used by higher education institutions? Might it be questioned that ISO 9001 standard, and the whole philosophy behind its structure, isn't compatible with other standards related to higher education? It is obvious that, while accreditation criteria and standards determine the way, in which educational services should be provided, the ISO 9001 standard does not. Accreditation is an essential reference point for educational services to be provided at the acceptable level of quality (guarantee of quality), while the ISO 9001 requirements may be perceived as a "guarantee of improvement". An integration of these different quality models places accreditation as an input to the improvement process. Accordingly, the ISO 9001 requirements would ensure a continuous journey towards excellence (Figure 1).

Figure 1. Accreditation as an input to quality improvement process

AQL – acceptable quality level
QL – quality level
t - time
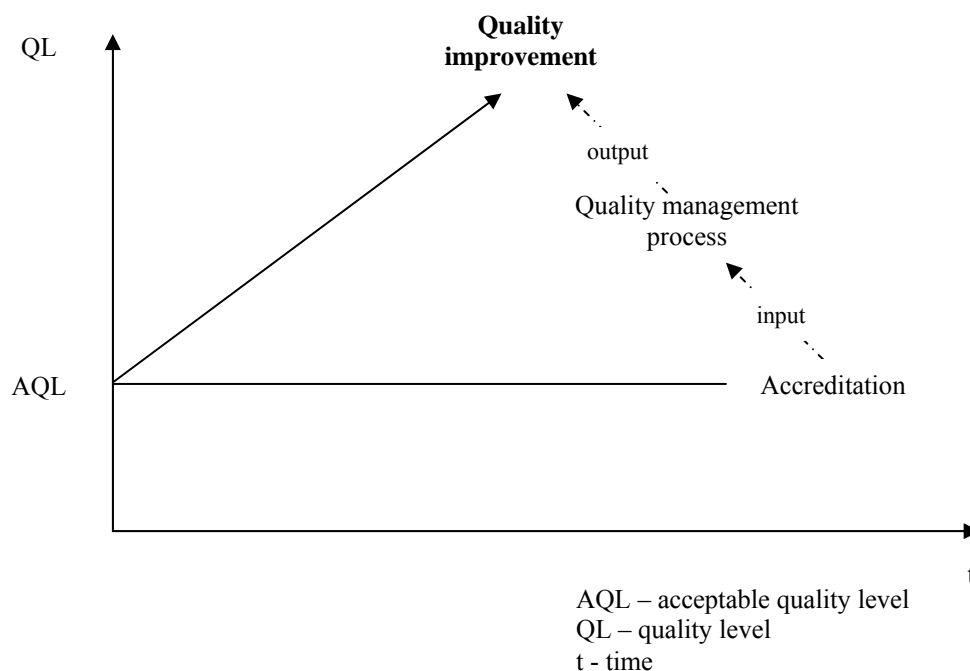
Source: Own elaboration.

Would an "internal audit" be useful to collect data for a self-assessment report within the existing quality management system (ISO 9001:2008, ISO 19011:2002)? Would it make the self-assessment process more efficient? Would it more clearly identify opportunities for improvement? Could a "management review" help to verify the degree to which accreditation standards have been met? Could it be beneficial for higher education institutions to integrate

some of the ISO 9001:2008 requirements along with their specific accreditation standards and methods?

Examples of spreading quality awareness through the integration of the requirements

Results of the research conducted in Polish higher education confirm that accreditation has a definite impact on quality improvement. This is a result of meeting those requirements which directly relate to the collection and dissemination of information on processes occurring at university. These are: the self-assessment process, implementation of the European Credit Transfer System (ECTS) and an embedding of internal quality assurance system (Wosik, 2007). These requirements may be easily compared to the ISO 9001 standard. Although the internal quality assurance system can be referred to the ISO 9001 model as a whole, the self-assessment relates specifically to an internal audit and the ECTS to the requirements focused upon "product realization" found in chapter 7 of the ISO 9001 standard.

Given that, and the title of this article, in the following part of the paper some of the ISO 9001 requirements focusing on gathering information and spreading quality awareness will be described and supported by the practical examples. A self-assessment, being an initial stage of the accreditation procedure, is "a comprehensive and systematic review of the organization's activities and results referenced against the quality management system or a model of excellence. The self-assessment can provide an overall view of the performance of the organization and the degree of maturity of the quality management system. It can also help to identify areas requiring improvement in the organization and to determine priorities" (ISO 9000:2005). An internal audit is used in order to determine a degree to which the quality management requirements are met. It is "a systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled" (ISO 9000:2005; Woodhouse, 2003). If the audit criteria are based on the accreditation standards it means that this tool can significantly contribute into preparation of the self-assessment report, and further, into an identification of strategic and operational opportunities for improvement. Having said that, the internal audit aims at the improvement process, as well as spreading awareness of what the quality requirements are. Accordingly, an integration of those requirements may result in using the internal audit as a self-assessment tool ("accreditation audit") which leads to the following recommendations:

– accreditation standards to be included in the auditing criteria (ISO 19011:2002),
– staff from each level of an organization to be involved in the auditing process,
– auditing interview to be focused on the accreditation requirements,
– conclusions from the audits to be formulated based on the above.

During the 2006/2007 academic year, the Faculty of Commodity Science of Poznan University of Economics, Poland, was granted a university and state program accreditation, along with the Wielkopolska Province Quality Award (based on the EFQM model of excellence). The faculty was also recommended by the certification body to prolong the ISO 9001 registration for the next 3 years. The self-assessment process for its accreditation purposes was supported by the internal audit. Such an approach made the faculty change its quality strategy. A new vision, mission and quality policy was established and remained the main source of quality goals within the quality management system (Wosik, 2006).

Such an approach might be seen as a good starting point for strategic and operational goals setting which focus specifically on quality improvement in higher education (an integration of ISO 9001 with specific – accreditation requirements). Moreover, if there is any non-conformity within the audit criteria identified during the internal audit (specific

accreditation standard has not been met), the corrective actions have to be taken (ISO 9001:2008). At the same time, the internal audit results should be analyzed at the "management review", which apparently brings the decision about quality improvement up to the top level of an organization. Leadership then becomes an invaluable asset.

When implementing a quality management system there is a need to appoint a "management representative" whose responsibility is to:

- ensure that processes needed for the quality management system are established, implemented and maintained,
- report to top management on the performance of the quality management system and any need for improvement,
- guarantee the promotion of awareness of customer requirements throughout the organization (ISO 9001:2008).

The Higher Colleges of Technology, UAE, though not currently pursuing the ISO 9001 certificate, there already is an Academic, Advancement and Accreditation department (AAA) established at the central level of its organization. Apart from that, there are the Quality Assurance Coordinators (QAC's) appointed at its campuses, who are responsible for the maintenance and continuous improvement of its quality management system. The Quality Improvement Advisory Committee (QIAC) consisting of the Dean, the Supervisor of the AAA department and all the QAC's acts as a professional body and focuses on the various system-wide quality requirements, instruments, and methods of quality improvement. It also serves as an important way of sharing information and spreading awareness of quality issues. The information is cascaded down to the individual colleges and upward to the QIAC. In fact, taking into account the ISO 9001 requirements, the QAC's are the "management representatives" being responsible for making the pursuit of quality certain. The QIAC meetings are held every month and rotating between the colleges. The purpose of such an approach is to disseminate quality awareness as well as to get employees of the particular college involved and committed to quality enculturation.

An efficient internal communication process contributes to the proper functioning of a quality management system in any organization. On the other hand, many problems occurring in a quality management system in any organization may result from poor communication. An efficient flow of information across the organizational structure, organizational work culture, and work-related document management build together the internal communication in a wider sense. All are needed to create appropriate communication channels and to develop a specific flow of manageable information (Sasak, 2007).

As per the ISO 9001 standard requirements, the top management shall ensure that relevant communication processes are established in an organization and that communication related to the efficiency of the quality management system is realized (ISO 9001:2008). The communication can be understood as a process of preparation and flow of information in different forms in order to ensure efficiency of realized activities. Information can thus be seen as a key asset having an impact on the management effectiveness (Sasak, 2007). When implementing and improving management systems, including those conformed to the ISO 9001 requirements, an important role of the internal communication must be considered. There are many requirements in the ISO 9001 standard referring to the top management's responsibility of spreading quality awareness across the organization. It might be related to the following (ISO 9001:2008):

- communication of quality policy and goals,

- appointment of a management representative whose responsibility is to report on the performance of the quality management system and any need of its improvement along with promoting awareness of customer requirements,
- ensuring that responsibilities and authorities are defined and communicated within an organization,
- effective arrangements for communicating with customers in relation to product information, enquiries, contract or order handling, and customer feedback.

There is no doubt that internal communication aims, among other things, at keeping everyone aware of the current requirements (reality). Moreover, it directly relates to an efficiency of the quality management system by continually disseminating information of its performance. This refers to the future, since it might be used as a potential area of quality strategy – an relentless striving towards excellence.

In the HCT system, the quality results along with the applicable requirements are communicated through the Quality Improvement System (QIS) – a web-based application which is accessible by every staff member. The QIS consists of 5 main Quality Improvement Areas (QIA's) which are further described by the appropriate performance indicators:

- stakeholder satisfaction – assessing how well HCT meets the needs of students, employers and other important stakeholders in the provision of quality programs and services,
- program design, benchmarking and accreditation – monitoring program benchmarking and accreditation efforts,
- course design and delivery – collecting and analyzing important feedback from faculty and students on the quality of our courses,
- student performance, retention and progression – using data on student success to monitor the way in which students advance through our programs,
- utilization of resources – assessing how well we make use of human and physical resources in achieving our mission (Higher Colleges of Technology, 2008).

The QIS is a "knowledge centre" which allows HCT staff to be aware of the requirements (reality) as well as the quality performance (future). It allows everyone to feel accountable for quality and be engaged in quality improvement. Is this not an effective way of building quality awareness and enculturation?

All the described ways of improving quality in higher education involve staff and making them more aware of what the quality requirements are. Such an approach definitely results in embedding quality culture. Are these not solid ways of making quality in higher education more certain? What else can we do to "reach all the employees with the quality message" (Crosby, 1980)?

Conclusion

Although an integration of different requirements (increasing of quality awareness) may be achieved by institutions themselves, much can still be done by national and international quality assurance agencies. Some initiatives could relate to the peer-review process and a frequency of the follow-up visits as well as to a nation-wide awareness campaign dedicated to the merits of pursuing quality in higher education.

What is important, knowledge and practical approaches described in this article are included in the different self-assessment reports globally and closely guarded by different quality assurance agencies. Is it possible for higher education institutions to use this

experience and draw on it to improve? How can this knowledge be found? "(…) how is the knowledge of 'quality' acquired by and embedded in higher education institutions and quality assurance agencies today utilized (…). The point is that quality assurance agencies around the world, through their evaluations, institutional visits and close contact with higher education institutions, sit on a substantive amount of knowledge about quality that seldom finds its way into formal, written evaluation reports. Most likely, this is information that is left out of the knowledge acquired, due to formal requirements with respect to a given evaluation or anxiety that the role as 'independent agency' may be questioned; however, by not addressing these issues, quality assurance agencies also miss an opportunity to influence the accountability debate in higher education (…)" (Stensaker, 2008).

According to the London Communiqué (2007) the most extensive dissemination of Bergen rules (those referring to external and internal quality assurance in higher education) seems to be the greatest challenge and necessity to fulfill the Bologna postulates. It should be stressed that different tools, methods and approaches are used in various ways. "Core knowledge", rules, and examples of good practice as a basis of quality assurance in higher education should be extrapolated as widely as possible to better serve the pursuit of quality in higher education.

References

[1]   *Bologna Process Stocktaking*, Report from a working group appointed by the Bologna Follow-up Group to the Ministerial Conference in London, May 2007.

[2]   Crosby P.B., *Quality is free*, McGraw-Hill Company, New York 1980.

[3]   European Network for Quality Assurance in Higher Education, *Quality procedures in European Higher Education*, Helsinki 2003.

[4]   European University Association, *Quality Culture in European Universities: A Bottom-Up Approach – Report on the Three Rounds of the Quality Culture Project 2002 – 2006*, Brussels 2006.

[5]   Harvey L., *Quality evaluation: some international trends*, paper presented at the Norwegian Higher Education Conference, 22-23 January, Oslo 2002.

[6]   *ISO 19011:2002 Guidelines for quality and/or environmental management systems auditing*, International Organization for Standardization,.

[7]   *ISO 9000:2005 Quality management systems – Fundamentals and vocabulary*, International Organization for standardization,

[8]   *ISO 9001:2008 Quality management systems – Requirements*, International Organization for Standardization,

[9]   Newton J., *What's quality*, „Embedding Quality Culture in Higher Education – A selection of papers from the 1st European Quality Forum for Quality Assurance, European University Association, Brussels 2007.

[10] Pirsig R.M., *Zen and the Art of Motorcycle Maintenance: An Inquire into Values*, Vintage, 1991.

[11] Prøitz Tine S., Stensaker B, Harvey L., *Accreditation, standards and diversity: an analysis of EQUIS accreditation reports*, "Assessment & Evaluation in Higher Education", 2004, Vol. 29, No. 6, p. 735-750.

[12] Sasak J., *Model zarządzania przepływem informacji w urzędzie miasta*, Konferencja „Technologie wiedzy w zarządzaniu publicznym", Katowice, 20-21.09. 2007.

[13] Stensaker B., *Outcomes of Quality Assurance: A discussion of Knowledge, Methodology and Validity*, „Quality in Higher Education", 2008, Vol. 14, No. 1, Carfax Publishing, p. 3-13.

[14] Stensaker B., *Trance, transparency, transformation: the impact of external quality monitoring in higher education*, „Quality in Higher Education", 2003, Vol. 9, No. 2, Carfax Publishing, p. 151-159.

[15] *The HCT Quality Improvement System – An Overview, How Can We Make HCT Even Better*, Academic Advancement and Accreditation, Higher Colleges of Technology, 2008.

[16] Vlãsceanu, L., Grünberg, L., and Pârlea, D., 2007, *Quality Assurance and Accreditation: A Glossary of Basic Terms and Definitions* (Bucharest, UNESCO-CEPES) Papers on Higher Education.

[17] Wójcicka M. (ed.) M., *Jakość kształcenia w szkolnictwie wyższym. Słownik tematyczny*, Centrum Badań Polityki Naukowej i Szkolnictwa Wyższego, Uniwersytet Warszawski, Warszawa 2001.

[18] Woodhouse D, *Quality improvement through Quality Audit*, „Quality in Higher Education", 2003, Vol. 9, No. 2, Carfax Publishing, p. 133-139.

[19] Wosik D. (ed.), *Systemy zapewniania jakosci w szkolnictwie wyzszym – aspekty praktyczne*, Poznan University of Economics Publishing House, Poznan 2007.

[20] Wosik D. Wosik, *Quality strategy in managing university in the light of the Bologna Process and criteria of university accreditation – experiences of Faculty of Commodity Science*, [in:] K. Leja (ed.), "Management problems at the knowledge-based university", published by Division of Knowledge and Information Management, Faculty of Management and Economics, Gdańsk University of Technology, Gdańsk 2006, p. 131-145.