

QUALITY MANAGEMENT VS QUALITY CONTROL: LATEST DEVELOPMENTS IN ESTONIAN HIGHER EDUCATION

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Quality concept

Quality in the higher education context is a complex concept. It must be understood at the global, state, institutional and individual level. One of the definitions, appropriate probably for all kind of activities at different levels is that “quality is the extent to which essential characteristics complete the requirements” (ISO 9000:2000). A characteristic is the distinctive feature and the requirement, need or expectation, which is public, generally assumed or obligatory (ISO 9000:2000).

How do we define the quality in the field of higher education? It depends on the status and purpose of the institution. One of the definitions could be: Quality is the degree to which the institution is successful in achieving its objectives to the satisfaction of itself, the students and society (Eppnik & van Raad 2005). The question is – who defines the objectives and requirements and how is satisfaction measured.

In the context of higher education we should understand under the term “product/service” the “outcome of the educational process” and use the term “customer” in the broad sense of the meaning. So there are external customers, such as prospective employers, or society as a whole, and internal customers, such as academic staff and students. It is very important to specify the student as an “internal customer”, to underline the importance of his/her role in the formation of outcomes.

Quality is determined by clear and acceptable characteristics/objectives and regulatory statements (regulations). Regulations in higher education can be divided in two main parts: **external regulations and internal regulations** (institutional self-regulations).

External regulations are the principles, rules, expectations and conditions which define the scope and the nature of regulation, and are determined by a regulatory authority which is independent of the higher education provider. These requirements must be satisfied in order to operate. (Jackson 1997). External requirements are according to their nature, usually minimum requirements, but in some cases also typical requirements.

Internal regulations relate to the activities and actions of a higher education provider which is not subject to external regulatory controls. The principles, rules, expectations and conditions which define the scope and the nature of regulation are determined by the institution although they will be influenced by interaction with the constituencies and markets it serves (Jackson 1997). These requirements are usually typical and/or maximum requirements and presume that minimum requirements are set on the external level and are met by the institutions. When talking about internal regulations, we are usually thinking about institution-wide regulations and overlooking individual self-regulations.

According to the EFQM model, adopted for higher education, there are five **developmental stages of quality management** in higher education institutions (HEI) (Expert group HBO 2006):

- activity-oriented,
- process-oriented,
- system-oriented,
- chain-oriented and
- total quality management-oriented.

The lowest level – activity-oriented level – is the fundamental level of quality management, based on the individual responsibility for quality. Total quality management can't be achieved by the HEI without individuals, and especially academics, taking responsibility for it. Also, it is possible to develop all stages simultaneously.

Brief Overview of Developments in Estonian Higher Education in 1991-2006

When Estonia regained independence in 1991, there were 6 public universities in Estonia and 2 small private universities (founded 1988-89). All the regulations for higher education valid during previous Soviet times were not valid any more. In 1991-1995 the main focus of politicians and the academic community was on instilling democratic principles and processes. In 1995 the University Act and in 1996 the Standard of Higher Education were enacted. The field of higher education was practically without regulations for four years but it did not break down the system of higher education. When the Standard of Higher Education was adopted, one of its goals was also to create an instrument to reorganize the actual landscape of higher education, while establishing formal quality requirements. Nevertheless, the induction of the Universities Act and the Standard of Higher Education could not stop the expansive growth in the higher education area. In 2001/2002 there were 49 higher education institutions in Estonia. In 1997, the Estonian Higher Education Accreditation Centre was established and the Higher Education Quality Assessment Council was appointed. The first round of accreditation started in 1997. From 1997-2005, 721 study programmes requested accreditation. Of these, 609 were granted full accreditation, 184 received conditional accreditation and 28 failed. Due to several mergers and closures, the number of higher education institution diminished to 39 in 2005 (keep in mind the population of 1, 4 million). In 15 years, the number of students has increased 2,7 times from 25489 in 1994 to 68287 in 2005. About 63% of all students are studying at HEI, where programmes are accredited up to the PhD level.

External quality assurance in Estonian higher education

In the context of Estonian higher education, there are three external quality regulations:

Universities Act (1995)

Standard of Higher Education (1996)

Estonian Government's regulation of institutional and curricula accreditation (2003)

The Universities Act defines a university, its type of studies and curricula, and the minimum requirements in the learning environment, for students and teaching staff at different academic levels. In relation to quality management, the University Act states that there is a Higher Education Assessment Council which arranges accreditation and makes decisions about accreditation of universities and curricula. Since its initial adoption, the Universities Act has been amended 20 times in parliament.

The Standard of Higher Education specifies requirements for higher education in Estonia and is a fundamental act for granting education licences and for accreditation for study at HEI.

According to the Standard of Higher Education, the content of each curriculum must differ from another curriculum in at least thirty percent of its content. It also states that lectures must not form more than 50% of the total workload. Furthermore 50% of the teaching staff must work at least 51% of the workload in the university. There are separate descriptions for curricula in each level of studies which state duration and volume of studies, needed qualification for entering university on these levels and conditions for graduating. There are also requirements for teaching staff which state that at the bachelor level, 50% of lecturers should have a doctoral degree or equivalent; at the masters level 75% should have such qualifications; at the doctoral level 100% should have such qualifications.

The Estonian Government's regulation from 2003, about institutional and curricula accreditation describes the procedures of internal self-evaluation and external evaluation by international experts and defines the requirements for university and its curricula which must be fulfilled in order to get full accreditation. Requirements for a university are as follows, a clear mission statement of university and its congruency of departmental missions and goals; existence of a developmental plan; a management system which is coherent with the mission statement and goals; curricula with described learning outcomes; co-ordinated management of studies and sufficient conditions for auditory and individual work; teaching staff who use modern study methods; research and development work which is coherent with teaching in the study field; clearly formulated work tasks, duties and responsibilities of academic staff; conditions for students which support sports activities and recreational time; systems for observing the success and failure of students during their studies; library services which are accessible for students and library holdings which are complemented continuously; inner regulations for using and taking care of every kind of material resources; clear finance and investment policy; public information about the university's activities; connections with employers, alumni and other universities; published principles of ethics and continuous quality improvement system for all the processes taking place in the university. Requirements for curricula accreditation are the same as for institutional accreditation but it is further stated that the mission of the university must be reflected in the development plan, teaching and learning activities, participation in educational policy; there must be a curricula council with representatives from employers and students; the assessment methods must be objective and consider the goals of curriculum; the academic calendar should be detailed and public; the basic data for evaluating quality of curriculum must be collected from students, alumni and employers.

In 1996, when the Standard of Higher Education was adopted, there was a need for quality control and for setting formal requirements for granting licences for higher education. That is why the main accent was on formal figures such as 50% of teaching staff must work at least 51% workload in the university. The Standard of Higher Education could have been a good working instrument for rationalizing the structure of higher education, but it was given into the wrong hands – into the hands of international experts, belonging to the group of external experts. The Estonian Government's regulation about institutional and curricula accreditation defines the curricula accreditation as a developing function. At the same time, the Universities Act § 2 states that during the process of accreditation, a decision about the conformity of the universities' curricula to the standards should be made. Everyday experience about curricula accreditation shows that too few proposals are made for curricula development. Accreditation experts mainly check the curricula's conformity to the laws and Governments' regulations. Instead, these should be checked by local boards of supervision and thus the environment for producing quality management would be possible.

Highly formalised quality standards are needed in a certain phase of development. The Estonian Standard of Higher Education accepted in 1996 was an attempt to unify requirements for academic institutions and activities. After regaining freedom in 1991, there was a situation in Estonia where very few members of academic staff had a PhD and a full time job at the university. So the government accepted the standard where 50% of the academic staff teaching on the bachelor level curriculum, 75% on the master level and 100% of the academic staff teaching on the doctoral level curriculum had to have a PhD. In 2002 the new 3+2 curricula system was introduced, but requirements stayed the same. Sometimes it caused quality problems instead of encouraging high quality. For example, according to the new curricula system, the teacher training component is provided only at the masters level. Although the lack of practical skills is the biggest problem in teacher education today, the HEI can't involve more reflective practitioners into the study process due to the aforementioned requirement of the standard. Therefore, in some cases, the formalised standards are not stimulating but preventing the quality development of the curricula.

Institutions which conduct curricula accreditation – the Estonian Higher Education Accreditation Centre and the Higher Education Quality Assessment Council – are in the domain of the Ministry of Education and Research. It means that their budget is a part of the ministry's budget. The Higher Education Quality Assessment Council consists of professors of different public universities and representative of Students Unions. According to the standards of ENQA (European Network for Quality Assurance in Higher Education) institutions which conduct external higher education quality control must be autonomous and not influenced by third parties like other universities, ministries and other stakeholders. The situation in Estonia is contrary to that at the moment.

The Universities Act and Standard of Higher Education, Government's regulation from 2003, about institutional and curricula accreditation did not validate the university's inner quality management system. Formal standards led to simulations of quality, quality assurance and management took place in virtual life and its content was not expounded.

Inter-institutional quality assurance – quality agreement of public universities

Conceptual discussion about quality was renewed in year 2003 when the Rectors Conference in co-operation with the Ministry of Education and Research initiated the process of inter-institutional quality developments:

1. The Quality Agreement between Estonian public universities on curricula, academic position and academic degrees was signed by the rectors;
2. The working group was called together to define quality indicators and elaborate a quality handbook for universities.

The Quality Agreement declares the following:

“Desirous of strengthening the competitiveness of Estonian education in Europe and the world, considering high quality university education as the main precondition for the development of Estonia, and supporting the development on an integrated university area in Estonia, ... (the parties) consider joint operation in assuring the quality of university education very important, including the establishment of common academic standards.”

Public universities in Estonia have taken the state's role and created “external” quality requirements for themselves, and other HEI attempting to be treated as universities. Those

requirements are higher and more precise than official requirements (see Annex 1). Meeting these requirements is not feasible for all higher education institutions in Estonia offering master and doctoral programmes. One reason for the agreement was to draw a distinction between universities and “non-universities” in Estonia. The other reason was to bring more transparency into the system of degrees and academic qualifications, to agree on rules and procedures in quality assurance, to make academic positions comparable and create more trust in each other’s achievements.

Every year, all the parties complete the quality report which is looked through and discussed by the Rectors’ Conference. The quality reports are based on quality indicators, agreed upon by public universities. They require data collection, processing and presentation in accordance with a unified form. The reports enable universities to evaluate the implementation of the Quality Agreement by universities and give objective information to the university’s management board about the performance of quality assurance at the university and on the relevant indicators of neighbour universities.

The first round of self-evaluation was carried out in 2005 by the Quality Commission of the Rector’s Conference. The aim of the commission is to supervise the implementation of the agreement and develop cooperation in the field of quality assurance. In 2005 and 2006, the extra attention has been paid to two aspects: requirements for professorial candidates and for doctoral theses. In 2005, all participating universities had to confess that not all requirements have been fulfilled. The results of the concise report of the commission to the Rector’s Conference led to some protests and controversies, but at the end all parties agreed on the necessity and utility of the report and acknowledged the importance of the work done by the quality commission.

Nevertheless, the quality commission has come to the conclusion, that its role as a controlling body will be reduced after some years, whereas the developmental role has to be strengthened. This is not because of the initial reaction to the result of the first reporting round, but because the necessity for such kind of external quality assurance will become exhausted after all the requirements listed in the agreement have been implemented into the internal quality management systems of universities. In addition, some of the requirements, listed at the moment in the Quality Agreement of Rector’s Conference, will be transferred to the legal acts (Universities Act and Standard for Higher Education), due to the Estonian Higher Education Strategy, accepted by the government and passed in parliament.

Internal quality assurance

Under the guidance of the Rectors' Conference, representatives of public universities created a manual called *Unified Quality Management System for Estonian Public Universities*. The manual must serve as a base for internal quality management in universities. The cooperation was continued by the project funded by the European Social Fund called *Increasing the competition capacity of university graduates through the development of the quality of study activities*. One of the subprojects is devoted to the implementation of quality culture in universities.

There are different institutional self-regulations at all universities, such as The Regulation of Studies, Curricula Statue, Regulation of Doctoral studies and theses, etc. The internal self-regulations in Tallinn University are presented in different documents but the main requirements for quality are stated in the quality manual, which has at the moment the status

of a proposal and should be accepted by the university board (Senate) in spring 2007. Prepared at the beginning on the bases *Unified Quality Management System for Estonian Public Universities* as a set of very high standards (maximum requirements), during the process of internal discussions, the quality manual has lost a lot of his standardising approach. Indeed, there are some formal requirements listed (maximum requirements), which are higher than legal requirements and even those listed in the Quality Agreement. For example, a candidate for the position of a professor should demonstrate scientific publications in the volume of three doctoral theses during last five years; or, doctoral students must study abroad at least one semester. But the most essential part of the manual is the Academic Charter of Tallinn University which is the expression of main academic values. Only if these values are communicated to academic staff and become a part of their every-day-life, can the highest level of quality and the continuous improvement be reached. The core values of Tallinn University are academic freedom, a student-centred approach to teaching and learning, trust and transparency, academic strictness (quality-awareness). Based on these core values the individual-level principles for students and academic staff are formulated. It is commonly expected that students are motivated and ready for development and learning; they participate actively, responsibly and consciously in the teaching and learning process and designing university; are demanding of themselves and the academic environment, give feedback and develop the university's academic environment; acquire social and professional competence, value these, learn to think independently, critically and creatively and are inspired to use and develop acquired knowledge.

The common expectations for academic staff are that they are professional, accept good academic traditions and are ready and motivated for academic development. They know the latest trends of their research and study field; give their contribution to and involve the students in the development of the research and study field; have international contacts with academics in the same research and study field; understand the goals of university education, the essence of learning and facilitate the academic development of students; inspire students to gain and use knowledge; know and use study methods congruent with the goals of the curriculum. They should know how to communicate, value dialogue between people and popularize the speciality. They should feel responsibility for and participate in developing the academic community. All these common expectations in the individual level need for qualitative measurement because there are no standards for such characteristics. That is why there is the intention, which is also written in the quality manual, to implement annual self-evaluation where academic staff can evaluate these characteristics as well as report their results in research. These reports are the basis for the manager of the structural unit who conducts the developmental interview.

Till now most of the Estonian universities including Tallinn University have been in the system level of quality management. But we are taking the steps to implement quality culture. The quality culture needs a framework to be secured. There are different possibilities to build up the framework consisting of typical requirements, descriptions of procedures and management of the whole system. The most appropriate model for quality management in HEI seems to be the EFQM model, but it should be redeveloped by the institution itself. Otherwise there will only be the framework, without any content.

Conclusion

M. Jeliaskova ja D. F. Westerheijden (2002) have pointed out that there are four different phases of quality assurance systems. The first phase is "serious doubts about educational

standards” where the instrument of quality assurance is curricula accreditation. The second phase is “doubts about the efficiency of higher education system and/or institutions” and the instrument of quality assurance is institutional accreditation. The third phase is “doubt about innovation capacity and quality assurance capacity of institutions” where the quality assurance takes place by institutional audit. The fourth phase is “need to stimulate sustainable quality culture in institutions” and the instrument of quality assurance is institutional audit and verifying data to be incorporated in public databases. In the same article, the authors outline a new challenge to higher education quality assurance systems. This is publication of comparative performance indicators and standardised testing to graduates (Jeliazkova & Westerheijden 2002: 435). According to these phases of quality assurance systems, Estonian higher education quality assurance system is in the first phase where there is serious doubt about educational standards, but the quality is controlled by curricula accreditation which is essentially controlling the conformity of academic activity to set standards. At the same time, public universities are making efforts to reach the third phase hoping to create a sustainable quality culture. The rectors' conference has gone even further. They are collecting quality reports information about quality which is public. According to the Estonian Higher Education Strategy state system of external assurance is entering into the new phase of development in some years, where the main instrument of quality assurance will be institutional accreditation. But still, there is long way to go to this phase where national higher education standards do not create new problems but help to solve them and introduce quality culture in Estonian universities.

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Annex 1

Examples of requirements in Quality Agreement of Estonian Rector's Conference

Requirements for academic positions

General principles

1. These requirements shall establish the requirements for applicants for professor, docent, lecturer, assistant and teacher positions filled by the way of public competition at universities.
2. Upon applying for a position, an applicant's previous activities, including research work and the results of research evaluation, teaching and creative activities, participation in expert committees in the field of training, research and creative activities, etc., shall be taken into account.
3. An applicant shall not be permitted to the competition if he/she has repeatedly got very low ratings to his/her teaching work from students (compared to the average at a university/faculty) or has committed any grave violation against the Code of Ethics of Estonian Scientists.
4. It is presumed that an applicant is familiar with modern study aids and teaching methods, has compiled study aids and methodological materials, and is improving teaching methods of his/her field.
5. It is expected that a member of the teaching staff actively improve his/her skills and knowledge necessary for teaching, research and creative activities.

Requirements for professorial candidates

6. A nationally and internationally recognized specialist who has experience in teaching and research, or in other creative activities, and who holds a doctoral degree or has qualifications equal thereto may apply for a position of professor.
7. Upon the first election, a precondition to participate in the competition shall be teaching experience at an institution of higher education, ideally including successful supervision of master's and doctoral students.
8. A constant international research and/or other creative activity shall be required.
9. A professor must be competent to organize the teaching of his/her specialty and must ensure a consistent flow of new academic generations. The performance of master's and doctoral study is the main success indicator for a professor's work.
10. A professor is able to direct research and development of his/her subject area and to seek resources needed for it. A professor is responsible for the improvement of teaching methods, the development and renewal of curricula in his/her subject area. A professor supervises members of the teaching staff involved in teaching subjects of the professor's specialty.

(...)

Right to award academic degrees

3. The body awarding academic degrees shall be called a defence committee, which may be the council of the university, a faculty, a department, or an institute, or a body formed by one of the above and it may include members outside the council. To ensure the comparability of academic degrees awarded by different universities, it is recommended to include representatives from other universities in the composition of defence committees.
4. Upon a resolution of the council of the university, faculties may form joint committees to award master's and doctoral degrees in accordance with curricula, which combine different fields of research.
5. Bachelor's degrees can be awarded in accordance with a curriculum approved by the council of the university and the defence committee shall consist of a minimum of two members, at least one of who holds a doctoral degree or has qualifications equal thereto.
6. Master's degrees can be awarded in accordance with a curriculum approved by the council of the university and the defence committee shall consist of a minimum of three members, at least two of who hold a doctoral degree or have qualifications equal thereto.
7. Doctoral degrees can be awarded in accordance with a curriculum approved by the council of the university and the defence committee shall consist of a minimum of five members who hold a doctoral degree or have qualifications equal thereto.

Right to supervise master's and doctoral theses

8. A person who holds a master's or doctoral degree obtained in the Republic of Estonia or has qualifications equal thereto may supervise master's theses.
9. A person who holds a doctoral degree obtained in the Republic of Estonia or has qualifications equal thereto may supervise doctoral theses.

Requirements for master's theses

10. A master's thesis must be an independent research or developmental or other creative work which presents an analysis of the problem, formulates a goal and presents a solution to the problem in the respective specialty.
11. Councils of a faculty, department or institute shall establish the requirements for the theses.

Requirements for doctoral theses

12. A doctoral thesis must be an independent research or developmental work, which presents an original solution to a significant problem in the respective field of research or life. In the artistic fields, a doctoral thesis may also be an internationally recognized creative activity accompanied by a scientific analysis or study.
13. A doctoral thesis constitutes (1) an independent study published as a dissertation, or (2) a series of publications supplied with a summary survey, or (3) a published monograph.

14. If not restricted by law or contract, the publication of results is one of the main features of a doctoral thesis. In general, a doctoral thesis consisting of a research work presumes the publication of three academic publications at a minimum. Academic publications are articles published in international peer-reviewed journals and collections and also in peer-reviewed Internet journals; and books (monographs, university textbooks) published by reputable publishing houses (peer-reviewed with ISBN and/or ISSN). A patent is considered to be equal to an academic publication. In the case of creative activities, a public concert, performance, exhibition or other public presentations are equal to publications.
15. The number of publications may be smaller if the dean or the body designated for thesis defence approvals decides so.
16. A doctoral thesis may be approved for defence if the articles forming the basis of the thesis have not been published but there is an official confirmation of the acceptance for publication.
17. In the case of a published monograph no separate text of a thesis is required.
18. The minimum circulation of a doctoral thesis is 70.

Defence of theses

19. One reviewer/opponent or, in exceptional cases, two reviewers/opponents shall be appointed to a master's and doctoral thesis and they must hold an academic degree at least equal to the degree sought by the applicant.
20. The defence of a master's and doctoral thesis shall take place at the meeting of the defence committee as a public academic discussion and it may occur only if attended by the applicant and at least one of the reviewers/opponents (in the case of a doctoral thesis, the opponent outside the university).
21. A defence committee has a quorum if at least 5 (in the case of a doctoral thesis) and 2 (in the case of a master's thesis) members are present, additional members included, with appropriate academic degrees, including a required number with doctoral degrees.
22. The opponent (one opponent in the case of two opponents) of a doctoral thesis must be outside the university where the theses were prepared.