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Changing education – QA and the shift from teaching to learning

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Short bio (150 words max):

I completed postgraduate degree (MBA) at Tallinn Technical University in 2004. Since 2012 I am a PhD student at the same university, my thesis are on the public sector and the environment economy.

I have worked as a lecturer of economics in 2000-2009, as a manager of educational process (different universities and positions) from 2002 up to now, as a Head on Academic Affairs in EITC since 2007.

In 2009 I started to conduct trainings regarding the recognition of prior learning, I am the (co)author of several manuals about assessing prior learning and building up the system of recognition of prior learning in the universities and vocational schools. Since 2012 I also educate teachers how to describe learning outcomes and assessment criteria, also how to choose a relevant teaching/learning method to achieve the outcomes.

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Short bio (150 words max):

I received master of Sciences degree in economics at the Tallinn University of Technology (1993). After working fifteen-year at the same university as a lecturer of Labour economics and management I moved to Audentes University where I worked as vice-rector for Academic Affairs and continued teaching (subjects: strategic management, labour economics, human resource management). Since 2007 I work as a quality manager at the IT College.

I am the co-author of manuals about assessing quality of e-learning courses and articles about Quality Assurance Process in e-Learning.

Proposal

Title:

How does the Estonian system of quality assurance in higher education support teaching to learning paradigm shift based on the example of Estonian IT College.

Abstract (150 words max):

The quality of learning has evolved into the core of the quality system of higher education institutions over the last decade. Different external evaluation processes are implemented to give stakeholders confidence that educational institutions meet the required quality.
The IT College has undergone both external evaluations of higher education mandatory in Estonia.
External evaluation assessment areas from the aspect of learning paradigm have been analysed in this article. The structure of the article follows the structure of institutional accreditation form, the assessment criteria of study programme group are involved if relevant.
It can be argued that the external evaluation of higher education rather supports shifting from teaching to learning, but it is also difficult for the external parties to assess the real functioning of an institution.
Further discussion should focus on how institutionsô own quality assurance system can identify learning-centred teaching and support the implementation of the learning paradigm.

Text of paper (3000 words max):

Introduction

An intriguing discussion whether teaching creates, supports, or in certain situations rather impedes learning, will probably continue in higher education landscape for a long time. Generally it can be said that teaching allows all three, the result depends on the methodology and structure of teaching.
At a time when universities focused on quality of entering students, and the availability of professional knowledge was limited, classical lectures and consultations were sufficient. During the last decade, the higher education in Europe has changed significantly: student oriented learning environment, learning-centred teaching methods and individual approaches are increasingly in focus. The quality of teaching has become an important part of the quality assurance (QA) in higher education, as well as periodic external evaluations.
Quality of teaching is closely related to the performance indicators as dropout rate and learners' satisfaction. These, in turn, are more or less influenced by the teaching methodology. To support learning, teaching should encourage studentsô deep learning approach and the use of the most suitable learning methods. Additionally, increasing the effectiveness of education by building up a learner-centred system is one of the educational policy aims in Estonia and should be also supported by quality assessment.
This article investigates whether and how the external quality evaluations of higher education applied in Estonia support teaching to learning paradigm shift, based on the example of Estonian Information Technology College (hereinafter IT College or EITC).

Estonian higher education quality assurance system

In Estonia a new national system of QA in higher education has been implemented since January 1, 2010. External evaluation is carried out by an independent accreditation agency, either the Estonian Higher Education Quality Agency or a competent foreign quality assessment agency.
Generally, the new system contains two main parts:
Institutional accreditation (IA) of a higher education institution (HEI) is an external evaluation during which the internal QA system of the educational institution and its functioning are assessed, including the fulfilment of tasks the educational institution has been entrusted with and the conformity of its management, administration, study and research environment to the objectives and development plan of the educational institution. Institutional accreditation is the main instrument for QA.
The purpose of institutional accreditation is to support the development of strategic management and culture of quality in higher education institutions, inform stakeholders of the outcomes of the main activities thereof, and enhance the reliability and competitiveness of Estonian higher education.
An assessment of the quality of a study programme group (SPG) is an evaluation of the conformity of the study programmes belonging to the study programme group and the instruction provided on the basis thereof to legislation as well as to national and international standards, including the level of the corresponding theoretical and practical instruction, the research and pedagogical qualification of the teaching staff and research staff, as well as the sufficiency and sustainability of resources for the provision of instruction.
Quality assessment is focused on assessing the quality of studies provided on the basis of study programmes and its objective is to support the self-evaluation and self-development of higher education institutions. Quality assessment results in an assessment decision and concrete recommendations how the educational institution can improve the quality of studies. Quality assessment of study programme groups is not followed by sanctions; expert opinions are considered recommendations.
The main difference of the new system compared to the previous one is that there is no accreditation of a single study programme, but feedback is provided to the entire study programme group.

A brief overview of IT College
IT College is a private non-profit higher educational institution (University of Applied Sciences), established in 2000 and owned by the Information Technology Foundation for Education (HITSA). Founders of HITSA demonstrate unique public-private partnership in the country ï they are: state, represented by the Estonian Ministry of Education and Research, two largest Estonian universities ï Tallinn University of Technology and University of Tartu, and private sector, represented by Estonian Telecom and Association of Information Technology and Telecommunications.
The first education licence was issued to the College on 17th May 2000. In September of 2000, 141 students were enrolled in the IT Systems Curriculum specializing either in administration or development. Today the number of students is over 900, participating in three curricula.
EITC is the leading IT institution of applied higher education in Estonia. The strengths of IT College are based on years of educational and development work using the network of highly educated and experienced specialists of Estonian ICT industry, third sector and academic world.
To provide well-balanced knowledge based on teaching and practice oriented training, IT College works very closely together with both founder universities (Tallinn University of Technology and University of Tartu) as well as with ICT industry in Estonia and Tallinn Science Park Tehnopol. The education in IT College is enriched through international

cooperation and networking with more than twenty higher educational partners in different European countries.
In terms of quality assessment, IT College is currently in a unique situation: we have successfully completed both the institutional accreditation and the assessment of the quality of a study programme group in recent years. We have also received a recognition of comprehensive approach to ensuring effectiveness of teaching and learning. This evaluation process has provided an opportunity to analyse the college as a whole, also focusing more narrowly on teaching and learning in a very short period of time.

IT College self-analysis and learning paradigm
Due to its young age and small size, IT College is a friendly, open and innovative school with a flat management structure and informal communication between people. The learning process of IT College is structured in accordance with the learning outcomes of curricula, taking into account both professional and transferable competencies while creating inspiring and interactive learning environment. We do not just offer courses, we try to create powerful learning environments, for example an international intensive program has taken place for the last three years during which students from many different countries (e.g. Finland, Lithuania, Greece, Sweden, Germany) work together to solve real life problems, where the main idea is instead of transferring knowledge from teachers to students to bring out studentsôconstruction of knowledge. Similarly performs the Robotics Club, acting since the College's early years, allowing students to test and compare their abilities in electronics and programming with others in competitions.
Designing the learning environment and the learning process is critical from the aspect whether learning occurs, which in turn supports the learners' motivation. According to the results of various studies, motivation is a significant factor in students drop-out. Taking students in the field of ICT as an example, the University of Tartu, Tallinn University of Technology, IT College and foreign partners, in collaboration with the ESF project "Conceptual framework to increase the community's commitment to ICT: ICT-related career choices motivated and ICT to implement and develop the competencies required to develop approaches in general and higher education", conducted a survey, the results of which are as follows: to retain ICT students, their studies should provide immediate practical professional training, allowing them to self-test and look for solutions. The students also appreciate the integrated assessment tasks (projects, binding several subjects), the competition between each other and the feeling of a team (the social network).
EITC also has engaged the feedback system to improve the quality of learning. Generalizing the free-response feedback gathered over the years we can similarly to the results of the above-cited project suggest that the IT College students prefer learning methods that require active participation. For example, they like to have different real-life cases to work on independently and discuss their solutions with the auditorium later. Student opinion is that during classical lectures it is difficult to focus and they lose interest to the subject/discipline.
To identify and support learning paradigm there are questions related to the purpose of the subject, understanding the assessment criteria, encouraging studentsôactivity by the teacher and adequacy of the feedback integrated into the feedback system of IT College.

Analysis
The four IA assessment areas are organisational management and performance, teaching and learning, research, development and other creative activities and service to society. Based on the position that educational institution´s main occupation, according to the learning paradigm is to produce learning, this article focuses on the assessment areas that support learning paradigm implementation in the organization.
The first assessment area ï organisational management and performance ï observes teaching and learning through the requirements for employee recruitment, development and

academic sustainability. It is formulated that the institution should take into account person´s previous performance and studentsô feedback while electing academic staff. The requirements of institutional accreditation refer to asking for studentsô feedback about the organization of studies, assessment, and support processes. There is no explicit mention that the institution should guide students to give feedback to the teaching methodology.
Indirectly the teaching and learning is also assessed through the requirements that concern higher education institution´s infrastructure, but it is not assessed whether the infrastructure is used to support learning in particular. Quality assessment of SPG focuses on the use of infrastructure to support learning a bit more, for example, the evaluation report of the IT College says that ñthe efficient use of educational technologies of the institution is clearly representedò
The second assessment area of IA ï teaching and learning ï examines the learning performance, student assessment and academic progress, curriculum development (including employers and alumni satisfaction with teaching quality, while not specifying what exactly the quality of teaching is) and learning support processes. Methodological aspects of teaching are evaluated by the requirement of students' assessment, according to what the assessment ñsupports learning and is in line with learning outcomesò Based on the premise that being aware of the learning outcomes that should be reached, and the level of competencies that should be demonstrated, significantly support the learner self-management, and thereby facilitate the move from teaching to learning, it can be argued that learning paradigm is covered with the IA. However, neither college nor assessors did have to focus on teaching methods, the relevant choice of which is an important prerequisite for the shift from teaching to learning.
The quality assessment of SPG focuses on teaching methods significantly in depth. Its teaching and learning assessment area includes the criteria according to what the modern teaching methods are used in teaching and the process of teaching and learning is flexible. Based on the feedback IT College received and which says that ñinnovation in teaching methods as distance labs and use of a Wiki, blogs, peer assessment, etc. was shown in the College and the teaching staff have developed a wide range of teaching styles fostering self-development and well-timed bi-directional flow of staff feedbackò, it can be argued that the quality assessment of SPG supports learning paradigm.
Looking at IA assessment areas, the teaching methodology can also be evaluated through the academic progress requirement as academic progress is directly related to an important indicator of higher education quality, the drop-out rate. In Estonia the drop-out rate is, especially in the field of IT, higher as it could be and therefore a sufficient number of students do not reach completion.
Through wisely chosen teaching methods, it is possible to influence the learner's motivation to pursue further studies in the situation where some parts of the studies seem too hard for successful completion. The completion of studies is also supported by implementing the idea of learning paradigm, according to which the students would be given credit for the degree relevant knowledge and skills regardless of how or where or when they learned. By testing, students could avoid wasting their time being taught what they already know and this would reward skilled and advanced students with speedy progress while enabling less prepared students the time they needed to actually master the material. So it can be said that both IA and SPG assessment take into account whether a higher education institution has an effective system of assessing prior learning and work experience.
Both assessments take the structure of the curriculum and the possibilities to complete the studies within the standard period under observation. In IA it is expressed as a requirement ï the organisation of studies creates an opportunity for students to complete their studies within the standard period and the SPG assessment criterion says that ñthe proportion of students graduating within the standard period of study is largeò Obviously, such approach is economically appropriate, but it does not fully concur with the learning paradigm principle

that schools should be able to develop every student's talents and clear the way for every student's success. Measuring teaching through quantitative indicators (credit point, study year etc.), unfortunately does not support individual approach.

While evaluating curriculum content and structure, IA focuses on a wider picture: that the institution õprovides an innovative curriculum which helps prepare students for the workplace and where the educational objectives are clearly defined and the attention paid to national needsò The HEI is also committed to improve curriculum and the student learning environment. IA assessment report says that the IT College õmeets all of the requirements and provides an integrated and comprehensive approach to effective teaching and learningò

SPG assessment requires that different parts of the study programme form a coherent whole. Learning paradigm requires creation and maintenance of coherence between curriculum parts (subjects) while planning teaching methodologies, that includes integrating missing prior knowledge or transferable competencies into existing subjects, rather than adding new courses into the curriculum. On that basis, it could be argued that SPG assessment supports implementation of the learning paradigm in every aspect of the curriculum development. Additionally, the understanding of the integrity of the curriculum can be supported by appropriately selected learning structure, varying the form (lecture, seminar, etc.), time, place and duration, and the integration of assessment (projects through different subjects, module-based, etc.).

The learning paradigm also requires a constant search for new structures and methods that work better for student learning and success, and expects even these to be redesigned continually and to evolve over time. That aspect was not under observation during IA or SPG assessment. However, this could be one area where the internal QA system of HEI can support learning paradigm.

While analysing IA assessment areas as research, development and other creative activities (RDC) and service to society, it is possible to detect an indirect link to the learning paradigm. The clearest link exists in the criteria concerning diploma theses under which HEI must engage students in research and projects.

This involvement that brings students to discover and construct knowledge for themselves and makes them members of communities of learners that make discoveries and solve problems, directly supports the learning paradigm. In IT College, as the report says, õthe conditions for students for studying and carrying out the activities of RDC meet the requirements and the expectations of a higher education institutionò Unfortunately, there is no specification of the extent to which the procedure will ensure compliance with the principle of inclusion of students. However, the SPG evaluation report brings out that students are through their studies related to the practical problems in the field of ICT, as there is the willingness of industry contacts to engage students with developing actual real-life projects for real clients during their studies.

Conclusions and Discussion

Analysing the external evaluations from the perspective of learning paradigm, it can be pointed out that their focus is mostly on describing procedures and measuring performance. Unfortunately these do not ensure the functioning of processes, and teaching to learning paradigm shift requires just that. However, it should be taken into account that it is difficult for the external assessors with currently used instruments to assess the functioning of organization's processes, also to identify whether the activities of the learning paradigm are applicable in a study process.

Irrespective of the external assessment remaining quite narrow, the organization's own QA system can support the implementation of learning paradigm, shifting the focus from describing the processes to their functioning. The decision for such change, in turn, requires a discussion on how to design a QA system which allows the identification of teaching or

learning oriented activities in the learning process, taking also into account the inevitable academic freedom in higher education institutions.

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