Improvements Realized Using Self-Evaluation based on Quality Award in Higher Education

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***Abstract**: In 2009 our university won the Higher Education Quality Award established by the Hungarian Ministry of Education and Culture. The quality award is an excellence model based on self-assessment, and is similar to the EFQM model. The self-assessment allowed the institute, which is ISO 9001 certified and operates a TQM-based management system, to hold a mirror to itself. The self-assessment revealed the improvement possibilities of quality feedback, which had been introduced with variable success.*
The institute carries out the surveys on four levels based on the extension of the management system. The surveys reflect several aspects, the responders (students, alumni, lecturers and the labour market) assessing process efficiency and results. It has become clear, however, that the assessment of the responders is not sufficient enough to intervene and achieve the defined improvement objectives. It was necessary to develop new answers and solutions for the contradictory requirements and expectations.

***Keywords**: higher education; self-assessment; education improvement; labour market*

1 Introduction

Last year we applied successfully for an application titled „Student and Institution Service Development in Higher Education" as part of the Hungarian Social Renewal Operational Programme (TÁMOP-4.1.1-08/2/KMR-2009-0005). The aim of the application was to develop a Graduate Career Track (GCT) system. The system can ensure compatibility with the national system, improvement of the quality of education, feedback about the actual needs of the labour market for the education system, alumni supporting services as well as increasing the operational efficiency of our institution.

2 The Original Status of Our Institution

Undeniable advantage of the Bologna Process was allowing the comparability of higher education on an European level and several combinations of the BSc/MSc levels, as well as ensuring the flexibility of education and the modernization of the curricula. There are questions, however, including how the Bologna Process can solve some problems occurring at the entrance point into the MSc education (e. g. an engineering BSc graduate can start an MSc in textile engineering without any special knowledge in textile industry). It is also a problem that the education has become much more theoretical, while the emphasis on practical skills has been considerably reduced. Besides these ambivalences of the Bologna Process are the weakness of scientific education on the basic and secondary level, and the tensions resulting from mass education. [1]

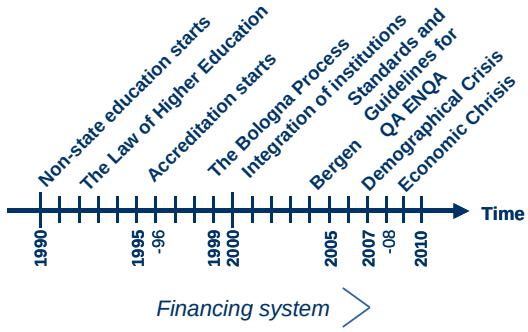

Figure 1
Major changes of higher education in Hungary in the past years [2]

We have carried out conscience quality development in our institution to keep the values of the previous decades. Our institution is ISO 9001 certified, which provided the opportunity and the background for the developments. Today our institutions operates a TQM-based management system adapted to the education environment. The basis of quality development is a multi-cycle assessment system. Inner assessment has been realized for several years, providing us with the necessary information. The application allowed us to develop a new graduate career track system, assessing the carrier competencies of alumni following their graduation.

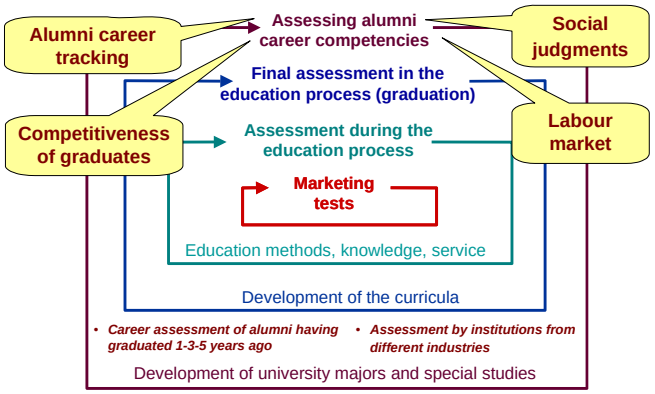

Figure 2
Multi-cycle assessment system

The self-assessment, realized as part of applying for the Higher Education Quality Award (HEQA), allowed us to assess the efficiency of the different tools in solving certain problems of higher education. Self-assessment also helps in defining adequate aims for our institution. The quality management system is extremely useful in goal-based development projects. A few development projects that have been recently implemented or, are in progress are:

- the transformation from college to university,
- maintaining the practical values of the education,
- improving the usability of the university IT system,
- process development based on multi-cycle student satisfaction measurements, increasing the efficiency of the education process (student attrition, curriculum development, development of knowledge assessment, etc.)

The interventions were effective and the results contributed to winning the HEQA. An important result was, for example, the conscious management of student attrition.

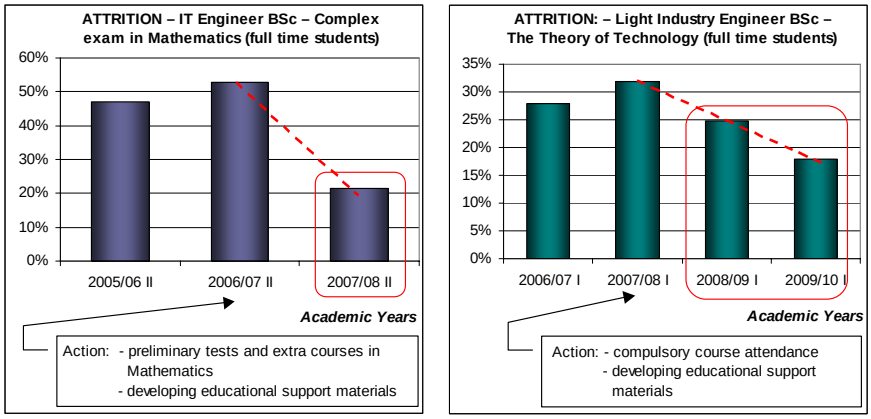

Figure 3
Example of a goal-based development project [3]

The self-assessment allowed us to identify the areas where the performance of the institution has to be developed. One area was to develop the adequate tools which allow students to be successful in their future career, and at the same time, to put into practice the Life Long Learning principle. The basis of this was the graphic analysis showing the rate of practical and theoretical knowledge. We demonstrate the differences between the previous and the current educational system. The red (dotted) arrows show the necessary developments of further training possibilities supporting the gradual education system.

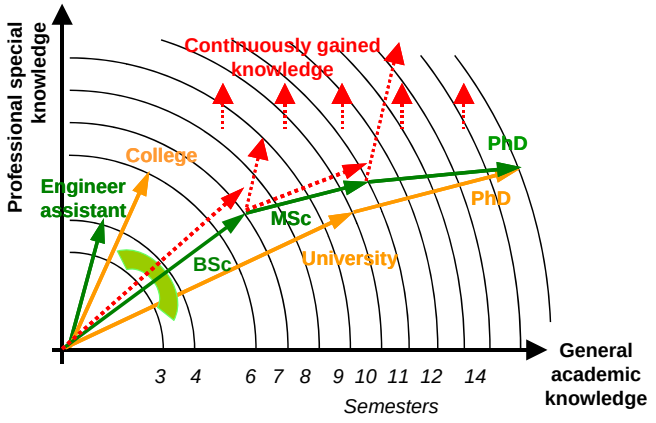

Figure 4
Relation of the practical education to the Bologna Process
(the distance from zero shows the amount of useful knowledge)

3 Planned Direction of Career Tracking

The system developed as part of the GCT project evaluates data gained from our students and alumni. The results are published towards the alumni, and constitute the basis for planning further effective interventions into the institutional processes. [2]

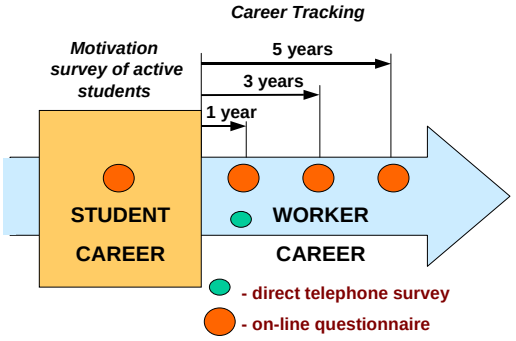

Figure 5
Surveys at different points of the student and worker career

The central part of the newly developed system is an information system. As part of this system, we ask the graduates' opinion about obtaining and using their degrees. The information system is implemented through an online newsletter. The list of the addressees is based on the student/graduate database of the institution (with permission of the students/graduates to use their data). Graduates on the list get the newsletter, with the questionnaire attached, every second or thirds month. This way we can keep an opinion history based on the information obtained from a person at different points of his/her student and worker career. The results are also connected to the students' university results and that time motivation.

For the questionnaire we identified those areas for which useful feedback can be expected and interventions can be developed. The management system of the institution claims for the assessment of the educational system (BSc, MSc, etc.) and the feedback [2]. The primary aim of the improvement is to modify the training programmes according to the real needs of the labour market. For this, we develop a continuous, multi-level asking and regulation system for each education forms, based on data sufficient for a representative sample. As a direct result of this system, modernization of the content and form of education can be realized for each existing university majors. This, in an indirect way, can also contribute to the development of new majors, new special training programmes and new training forms (life-long learning).

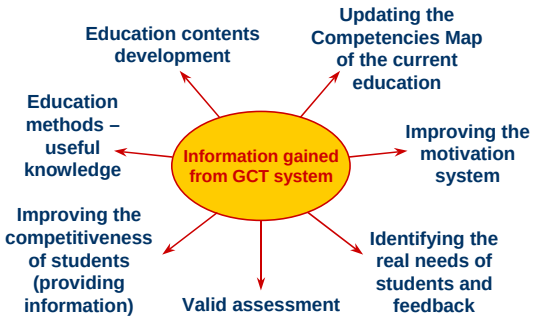

Figure 6
Planned usage of obtained information

The opinion of alumni is closer to reality, since their answers are free from anxiety, fear and direct emotions. At the same time they see facts from a different angle after several years. At present, the teachers' work is solely assessed by the students in our institution. This assessment is pretty much distorted by the actual emotions of the students, and at the same time, it does not reflect the long term interest of students. Student assessment about the teachers' work is important, but we have to take into consideration at least 4 or 5 more factors to reduce the obvious distortions. These factors include:

- professionals' opinion about the transferred knowledge
- the opinion of competent representatives of the labour market about the knowledge and the teachers' work as the source of this knowledge.

Our aim is the objective, multi-perspective analysis of the constant change in the needs of students. We believe that this way our actual students can identify competent knowledge for the labour market as a motivational factor (and not only obtaining their degrees in the easiest way).

We also aim with this project to provide value-added service for graduates, and providing real useful knowledge for them in the labour market. The sources and areas of this are:

1. The graduate receives information about his/her own knowledge, as compared to other graduates, highlighting his/her own strengths and weaknesses. This supports realistic career orientation, and choosing further education if necessary.
2. Up-to-date information about the weaknesses of the education system and certain expectations in the labour market allow the adequate formation of the adult education system. This can mean modernized contents, and different forms of education harmonizing with the graduates' work order including trainings of different length and value (graduate courses,

accredited trainings, transferring current knowledge at different degree levels). See Figure 5.

3. Successfully extended adult education can channel alumni back into the network connection of the institution, so we can address even further professionals. The feedback and the needs information provided by graduates allows the institution to develop new services based on career track. One of our important aims is to find and put into numbers the correlation between life career parameters and career profiles. Such indices would allow us to map the successful ways of realizing certain carriers and professions for our gradates. This, in practice, would mean that if one identifies a certain element of a career profile (e.g. managerial work in a creative work environment, at the product development area of the learned profession), we can define a method and an order of education and gaining competence which has proved to be a successful many having the same expectations.

4. The most important beneficiaries of the results are teachers responsible for the improvement of graduate training (heads of majors and special training courses), who can heavily rely on this valuable feedback in realizing the methodical and infrastructural updating of the curricula.

5. The system develops a network-based data base showing the research needs, the cooperativeness and the capabilities of the workplaces represented by the alumni.

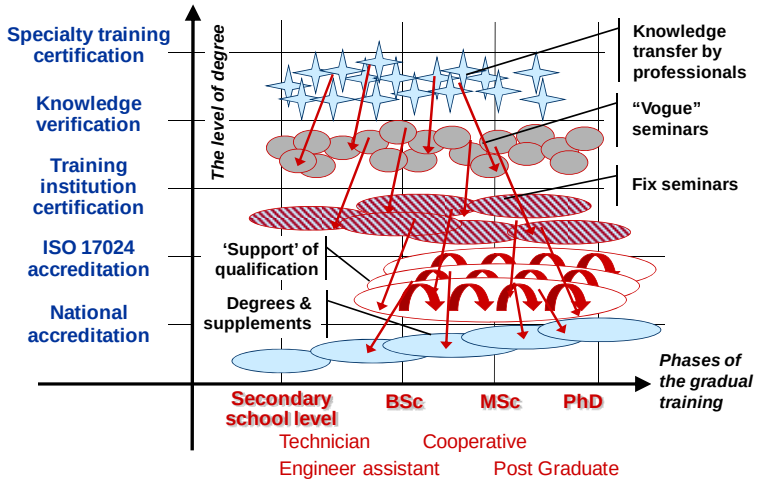

Figure 7
The planned usage of the information gained

4 Summary of Results and Handling Problems

Almost a decade of conscious quality management made it possible that by improving the processes and ensuring constant developments, our institution can boast such results as the Quality Award in Higher Education, which we have won after the third self-assessment (2007, 2008, 2009). The TQM based ISO 9001 system, and the dedication of the management and staff allowed that the new, large-scale improvement plans for the weak points of the institution have been developed. We started to develop the GCT system and looking for applications to realize the system. We designed an operative framework which analyses the assessment by graduates and at the same time, develops services for them through several feedback cycles.

Figure 8
Quality Award in Higher Education

We are prepared to handle some risk during the project. This helps to increase the chances of a successful project. The most important risks and preventive/corrective actions are as follows:

Table 1
The most important risks and preventive/corrective actions

Risk	Preventive and corrective actions
A low level of responder proportion	Quality of the survey, real value of services, motivational system, validation of questionnaires according to the perspective of the responders, maintaining the contact list
A high level of energy consumption of data process and consequently a lengthy process	Automatizing the data processing (EVA-SYS), the adequate depth of analyzing statistic data
A low level of data usage efficiency	An indicator system supporting the process and repeating measurements after interventions

Acknowledgements

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