

SOME PITFALLS OF EFFICIENCY IN CONTEMPORARY HIGHER EDUCATION

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Abstract

The strategic objective of the Long-Term Intent of the Czech Ministry of Education represents a fundamental change in orientation towards the development of higher education from quantity to quality, which is due to the enormous growth in students' figures in recent years. The aim of the implementation of the objective is to establish three priority areas: quality, openness and efficiency. The analysis of only one part of the higher education system in terms of quality management has shown weaknesses in the systems approach to the structure of economical programs especially and lack of definition of key processes generally. Moreover, the current progress of the Bologna process is not fully satisfactory, the bachelors are not ready for practice and the original principle of multi-stage education has not been efficiently applied.

Key Words

Long-Term Intent, Ministry of Education, higher education, quality, openness, efficiency, effect, economy, analysis, study program, study branch, quality management, system, systemic approach, key process, Bologna process, bachelor study, practice, multi-stage education

Introduction

All universities in the Czech Republic were familiar with the “Long-term Intent for the Scholarly, Scientific, Research, Development, Innovation, Artistic and Other Creative Activities of Higher Education Institutions for 2011-2015” by the Ministry of Education (hereinafter the “Long-term Intent”) in mid 2010 (Kopicová, 2010). The proclaimed aim of the Long-Term Intent is a fundamental change in orientation towards the development of higher education from quantity to quality. It is due to the enormous growth in students’ figures. In 2000, a number of students in tertiary education were less than a quarter of the population of corresponding age. However, in 2009 it was more than two-thirds. With the enormous expansion in students’ figures has increased the number of institutions of higher education more than two times (Ústav, 2010). The question is, whether a number of professors have increased proportionally? Certainly have not and also a number of doctoral students have nearly stagnated compared to other types of studies (Figure 1).

The meaning of implementation of the Long-term Intent is to establish three priority areas: 1. quality and relevance, 2. openness, 3. efficiency and funding. This document deals with the term efficiency (the adequacy of effect compared with cost) but it is clear just from the initial mention of an international quality assessment of higher education in relation to expenditure. The real content of area efficiency is focused on university funding without evident links to effect, and thus focused on the economy only. The efficiency can be increased by the higher economy, but it means less cost and it is not certainly on agenda now. On the other hand the efficiency can be increased by the higher effect – quantity and quality of education. The higher quantity can be counterproductive as above mentioned and therefore a focus on quality. The evaluation of quality in education is a very complex

and demanding issue, obviously besides the possibility of a short communication. The aim of this paper is to draw attention to some ways for influencing the quality without a need for cost, and how the principles of Quality Management can help.

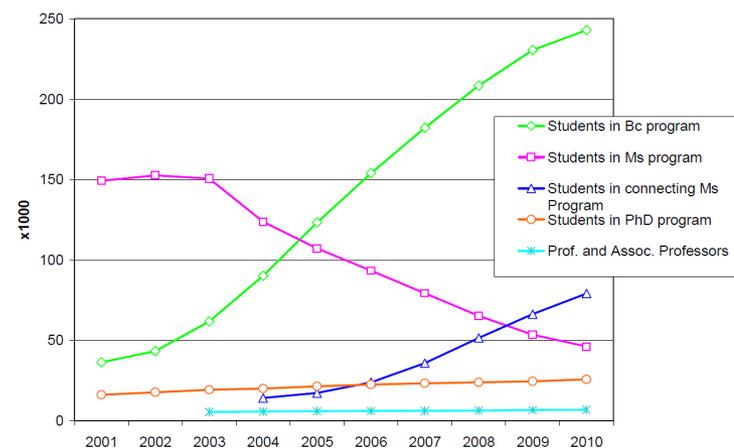


Figure 1: The development of the Czech Higher Education (Ústav, 2010)

The quality of education

According to the principles of quality management system, the first principle out of eight basic principles is the customer focus – “understand and meet current and future customer needs requirements” (ISO, 2005). But education is the product (service), which has no clear customer. As the primary customer could be taken a student, but if he/she does not pay for the education, he/she is just a user of product, which is paid by public money. The role of customer at a public school realizes student primarily

at the stage of selection branch and school, but the quality is guaranteed by the Accreditation Commission of the Ministry of Education generally and by the system of internal evaluation (if applied) individually. The paying student of private school is the customer “de facto”, but by current conditions is in the same situation as a student of public schools and also the quality is guaranteed by Ministry. The evaluation of the quality of education is not easy because the degree of fulfillment of needs in the final result can be evaluated only in confrontation with the practice and the result depends on both, the specific conditions of practice and the prerequisites of the individual student (Is it not the practice, which is the customer indeed?). Such an evaluation “a posteriori” while being crucial, can be applied only generally and in a long run. The evaluation of quality must be used also (mainly?) for its feedback interaction and therefore assessed “a priori”. Continuous assessment of the quality of education is therefore in accordance with the quality management focused on both, a product being offered (study program) and key processes (teaching, research, administration, cooperation with the practice). The question whether the principles are respected in practice will be answered below.

Systemic approach

The fifth principle of quality management system is the systemic approach – “identifying, understanding and managing interrelated processes as a system” (ISO, 2005). Have a look from this point at only one aspect of the undoubtedly multidimensional system of higher education, namely the system of study programs and branches. It will also not be easy, since in 2010 were accredited 7674 branches (Ministerstvo, 2007)! This figure seems high but some branches are accredited many times. But more important, the system is defined as an

effective set of interrelated elements, and so how the current system of study programs and branches is organized?

As an example of a not very systemic approach can be noted the study program Economics and Management (Ministerstvo, 2007), that is accredited at 22 faculties and 18 non-university colleges. When we apply the cluster analysis to this study program, we come to an interesting result: the term “economy” exists in the database of accredited programs in 145 branches, while “management” in 339! What is the cause of this significant difference, further analysis suggests - only 152 branches containing the term “management” belong to the economic programs – KKOV 62, most others particularly to the technical ones. Similarly, out of the 15 branches containing the term “logistics” only three have the economic program and out of 77 “transport” (and mutation) only one. The results highlight the fact that there is a group of analogous branches relating to a proceeding of: labor (management), material flows (logistics), transport networks (transport), and even information (informatics). The affinity of these branches is given by the characteristic attributes, namely by the functions of planning (a procedure to ensure the objectives), organization (activities and resources) and controlling (feedback). In practice, according to the nature of the problem, occur the intersections of these areas and the formation of cross-disciplines such as information management, transport logistics, telematics, etc. Because the objects of procedure in these branches are systems, use their doctrines common theoretical basis - systems theory and its methods. There is therefore no reason that the study program 6209 System Engineering and Informatics belongs just to Economics. Moreover, the “father” of systems theory Ludwig von Bertalanffy (1968) noted that “There appear general system laws which apply to any system of a certain type, irrespective

if the particular properties of the system and of the elements involved". Adding the group of Systems science into study programs would have significant synergistic effect on all areas that are still using this theory ad hoc, or as the branch of a program with a fundamentally different scientific basis. I should like mention another similar experience from study at the Naval Postgraduate School in Monterey (CA) in the early nineties. The school offered a range of Master programs in Management (Project, Quality, Information, Acquisition, etc.), Logistics and Transportation under the collective description Administrative Sciences. Management should not be only a part of Business Economics (which originated in the early 90s apparently influenced by the broader concept of the term Betriebswirtschaftslehre (Wöhe, 2010), it is an autonomous discipline with applications in all areas of human activity, based on scientific foundations different from Business Economics, and related to the above mentioned field.

Process approach

The fourth principle of quality management system is a process approach - "A desired result is achieved more efficiently when activities and related resources are managed as a process" (ISO, 2005). Let's raise up a question, how are defined the processes of education in accredited study programs? The answer is obvious: in different ways. The program or branch is defined by the content of the Application for accreditation (Ministerstvo, 2010), in particular, by Annex C "Guidelines for curriculum design and themes of works" including study plan, subjects of the final examination and admission conditions. The study program is accredited individually and therefore the curriculum content is original and different for each school. How can be then ensured openness based on the transfer of credits between

schools? The subsequent problem is in the definition of learning process in Annex D "Characteristics of the study subject". It can not be simple "characteristics", but the binding definition of the subject and the real guarantee of the quality of whole product. Just a few requests for a transfer from another school documented by listing of the content of subjects and it is just something to think about - to acknowledge the passed exams (or that were contrary to our program, just credits?) or how to overcome eventual differences and the proclaimed openness in education make possible in practice.

The solution is evidently to define the mandatory (more or less) content of the study program but maybe it would be difficult to implement in a situation, where there is a considerable resistance against the state graduation as a quality standard of secondary education. But this is possible. Ministry of Education of the Slovak Republic, like the Czech Ministry administers the system of study programs, that the Higher Education Institutions in the Slovak Republic can provide (Ministerstvo, 2002). The Accreditation Commission adopted (but approved by the Ministry) as well as detailed descriptions of these programs (Akreditačná, 2003), prepared by experts of universities as recommended information material both for schools and for assessing applications. In the subgroup 3.3 Economics and Management there are 25 programs (Management as a separate program!), each is described in terms of defining the competencies of graduates, the "core knowledge" (i.e. names of subjects) after years of study, the conditions of the final examination, and that all for each stage of study separately. Further, the rationale needs of the program, similar study programs abroad and related programs (important for the permeability of different programs). In this context it should be particularly emphasized that, unlike the practice in the

Czech Republic, there are similarly defined the processes of accreditation proceedings (Ministerstvo, 2003) and so space for subjective evaluation significantly reduced.

In connection with the quality the third principle of quality management should not be forgotten - the people involved. Nothing is valid when processes are properly defined and managed but not well performed. In this area are obvious tendencies to influence the quality of teachers from the outside through more precise and rigorous definition of staffing requirements for the study program. Less obvious are the efforts on the implementation of internal evaluation systems, where the "ball" is at the school side. It is important to realize that it is not easy to evaluate the final product of education and as well is not easy to evaluate performance of the individual holder of process. But that's another contribution.

Bologna Process in the Czech Republic

The problems of quality in higher education raise a number of questions that should be answered and solved and their solutions are possible, though not easy. More serious and right strategic problem is the embarked route - the Bologna process.

The Bologna Declaration was adopted as the European Education Program, which was to meet the needs and traditions of Europe, to be attractive for students and to strengthen competitiveness in the national, European and global scope. In the Czech Republic became as the basis the three-stage education system and in a relatively short time has been introduced. A quick process but does not always mean good process. After ten years of implementation of the Bologna objections appear to the first stage (Matějů, 2009), and also to the whole process at all (Liessmann, 2006). A Bachelor's degree program in standard length of three years was applied to universities through the

unsystematic division of "long" program with few links to practice and so practice (labor market) it did not accept. The result is an enormous share of connecting Master studies (Figure 1), which is now necessary to reduce by administrative intervention with regard to the public cost.

Unfortunately, outside of interest remains the problem of the third (doctoral) stage, as the Bologna declaration (EHEA, 2010) supposed only two-stage studies (two main cycles) like the universities in the U.S. or Great Britain. Bachelor in practice finds there that he/she needs more education and can enter Master studies or directly the science-oriented Doctoral studies, which appears to be very effective approach. The practice is usually a prerequisite for the admission to postgraduate study (Harvard, 2010); connecting Master or Doctoral studies are more the exception. It is clear that such a conceptual framework of higher education is not mass-accessible; the study during the career puts high demands on the learning as well as on personal mobility, and therefore a high proportion of distance learning. But the Berlin Conference of European Ministers 2003 (EHEA, 2010a) introduced the third cycle in the European Higher Education Area and there is no alternative in fact.

Obviously it has not been fully respected that in the U.S. and in Great Britain are Bachelor studies practically oriented, usually four years and generally accepted by labor market. Contributes the fact that in social intercourse the titles are not used, and so there is no hunt for Master's degree. When applied these models it was also underestimated, that in Great Britain and U.S. there are traditionally very good private universities and a lot of average public ones. The efficiency of education in the private sphere is based on the market principle and its substitution by public administration will always be lagging behind, namely just in efficiency. In continental Europe dominates the view that

education is a public good and there is also no tradition of major benefactors that could support private universities.

Conclusion

Czech higher education is not in a good condition, which has a number of reasons (Matějů, 2009). The proposed solutions primarily argue as the main reason the lower level of public funding compared with developed countries, and the need to increase resources - “without turnaround of adverse trend in financing, the colleges will not be able to meet demands placed on them” (Matějů, 2009). But the requirements of the Long-Term Intent can not significantly support improvements in the efficiency of education in the near future, because they are focused on administrative interventions from the Ministry and calls for “improving” the current state of the schools. Desirable changes in the efficiency of higher education can be expected from the future National Qualifications Framework of Tertiary Education, especially by defining the profile of study programs and converting them into verifiable competencies. The question remains, whether this redefinition of study programs will respond to the need for systemic changes, of which only a few mentioned in this contribution (namely study program Economics and Management).

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