The Quality of the University Education in Bulgaria in the Case of Competition and Dynamicly Developing Educational System

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Introduction

The processes of economic and cultural globalization have increasingly highlighted the problems of quality education and quality of education. The increasing interconnection between the economy and the various social spheres, triggered by the fast development of information technologies and the free movement of capital, binds more and more the prosperity of the country and the individual with the knowledge and the technology, with the ability to learn and to grasp experience. In this context, national education objectives and the formulation of relevant policies are of paramount importance.

In recent years a global trend in education has emerged and established, focusing on practical orientation of learning and adaptation to business needs so that to achieve better quality at the exit of higher education. To respond to the increased demands and expectations of the labor market and the changed business relations the universities in the country should be focused on the European standards in the training of staff (Panayotov, 2009).

The focus is the assessment of the learning process as content and form and its relation to the professional training of future specialists. The factors of the educational process, influencing students' readiness and ability to work as specialists with a wide profile, are subject of researches.

Students' attitudes towards active forms of education have been studied and a positive attitude towards them has been established, which contrasts with their comparatively not that great supply and application in practice.

A condition for the successful inclusion of the Bulgarian educational reality in a modern educational project is the updating of the concept of the quality of education as well as of the systems for control and management of this quality.

Conceptual Basis of Quality in the Field of Education

Quality of Education

Education is a process that supports the learning and the acquisition of knowledge, skills, values, beliefs and habits. It is not only a conscious human activity aimed at improving the personality in a certain area but also an organized activity of the society.

The approach to understanding the quality in the educational sphere can be presented in the form of the following sequences: the need to obtain knowledge; the fundamental nature of knowledge; knowledge carrier; knowledge transfer; good knowledge transfer methods; updating knowledge; recipient of knowledge.

According to K. Peeva, there is no unambiguous definition of quality education. Each organization has its own definition, trying to unequivocally fix the most important features of such education that can guarantee the highest results (Peeva, 2013).

The 2005 "Education For All, The Quality Imperative" Monitoring Report of UNESCO states that, despite the differences in definitions, two main elements are present everywhere:

- 1. The ability of the individual to understand and orient himself in the surrounding environment determines the cognitive development of learners as the main goal of all education systems.
- 2. The role of education is to promote the values and attitudes of civil consciousness and to encourage the creative and emotional development of the learner in the spirit of peaceful coexistence, security and civil responsibility; equality and continuity of cultural values throughout the generations.

Improving the quality and effectiveness of education is among the priorities of the academic community in the European Union (EU). In 1998 the Council of the EU adopted *Recommendation 98/561/EC* to achieve a guaranteed quality in higher education by introducing mechanisms in all EU Member States as well as cooperation between national quality assurance agencies (Peeva, 2012). *The 1999 Bologna Declaration* is fundamental to creating a common European area of higher education, quality assurance and unification of university programs. It requires the development of criteria and methodology for assessing the quality of education (by establishing minimum standards and requirements in order to measure the qualification and the competence) and accreditation (programmatic and institutional).

The Lisbon Strategy specifies these provisions in order to improve the quality and the efficiency of education, to provide universal access and to open education systems to the world. *The Dakar Framework for Action* identifies education as a practice-oriented lifelong process and links its effectiveness to the qualities that are formed in the educated individual.

Assessment of the Quality of Education

In the field of education, the assessment is a method of systematically collecting information on the efficiency of learning. The obtained results provide information on

the achievement of pre-set goals and learning outcomes in the learning process.

In assessing the quality of education, the following considerations should be considered – the quality assessment is not limited to testing the learner's knowledge (although it remains one of the indicators of the quality of education) and the quality assessment of education is carried out in a complex way, taking into account all areas of activity of the educational institution.

Quality of education in higher education institutions in Bulgaria

One of the main goals of modern higher education is to increase the quality of the students' education, to ensure quality professional training and to implement innovative approaches so that the students can adapt and work after graduation.

Standards for Assessment of Higher Education in Bulgaria

The standards for the assessment of higher education in Bulgaria are based on the Higher Education Act. Pursuant to this law external evaluation and accreditation aim to provide mechanisms to ensure the opportunity through learning to develop the potential of students, to increase and maintain the quality of the offered education. The results are considered later when the state policy on higher education is being formed.

The modern education in higher education institutions in Bulgaria is a combination of forms of organization, methods of planning and management, systems of (self-) evaluation and control of quality and competences, means of communication and activities (educational, administrative, scientific, etc.) based on divided (by location, time and status of use), heterogeneous (human, information, communication and material) and diverse resources and technologies for teaching and learning, conducted by subjects with dynamically changing roles. It is a subject of multiple assessments that cover different aspects of the overall education process.

Higher education quality assessment tasks use a variety of metrics and models – assessment of teacher's performance in higher education, based on Bayes networks (Oztekin, et al., 2010), expert assessment of electronic education resources (Bethard, et al., 2009), assessment of the quality of software with classification methods (Eskenasi et al, 1999), self-assessment in the professional education, formalization of the evaluation methods and quality management in higher education institutions, assessing the level of eligibility of curriculum subjects as part of the assessment of the quality of curricula (Antonov & Antonova, 2009), etc. The ISO IT Portal of the International Organization for Standardization (ISO) for the use of web technologies has implemented the idea of shared document development and management related to standards involving users with different roles and powers and procedures of taking decisions by "voting", for example.

Quality Management Systems in Higher Education Institutions in Bulgaria

In order to be competitive on the European higher education market, Bulgarian universities pay serious attention to the problems related to the quality of education. When examining the issue of the rating of a specialty, the main emphasis is placed on the quality of education, on the realization of the specialists and on the created, respectively applied, scientific product.

The regulatory requirements also determine the need to establish and maintain internal control systems as well as to promote and manage quality. Therefore, they set up their own systems of guarantee and assessment of the quality of education on the basis of their compliance with the curriculum, the material resources, the scientific and methodological support, the education and the specific requirements for a governance structure imposed by the society, the individual and the state. This calls for different approaches to quality assessment in universities.

The Higher Education Act (Article 6, Paragraph 4 and Paragraph 5) obliges the higher education institutions in Bulgaria to develop Systems for assessment and maintenance of the quality of education (SAMQE). In compliance with this legal provision in all Bulgarian universities there are built-in internal systems for ensuring and maintaining the quality of education, but there are significant discrepancies regarding the content and structure of the used approaches. The lack of Bulgarian experience and development in the creation and use of information systems for quality assessment is presented (Dragusheva, et al., 2017). In Figure 1 a model of the Vroeijenstijn quality management system is shown (^{Vroeijenstijn, 1995}).



Figure 1. A Model of the Vroeijenstijn Quality Management System

Although the specific policies and procedures of quality assessment systems are governed by internal university regulations, they contain some general elements of a regulatory nature: authorities and their powers to implement the SAMQE; indicators for assessing the quality of education; quality assessment standards; quality assessment procedures; rules for the functioning of the SAMQE. The organizational structure of the SAMQE includes existing and new structural units – quality assessment and management bodies. They have to: coordinate the continuous collection of data on the quality of education and analyze them; assess the outcomes of learning and teaching at different stages; organize and conduct surveys among students, lecturers, employers and graduates; explore both national and foreign experience of quality control and management of education, and develop and implement adapted options; make analysis and proposals related to the quality of education and others.

Some SAMQE contain lists of quality indicators. In general, the indicators mark the input (of the learning process) and output characteristics of the evaluated objects/ processes without specifying rules and formulas for setting specific estimates or a range of allowable values for the indicators.

The main processes which are traditionally observed, self-assessed and assessed are:

educational activity – the structure and content of curricula and programs, teaching methods and methods for assessing the achievements of the learners, the qualification of the teachers, etc.;

research activity – the research and counseling activity of teachers, the participation of students and PhD students in the development of research and applied projects;

management – the organization and management of the learning process and research;

results – the acquired professional knowledge, skills and competences, and the professional realization of students.

The data needed for self-assessment and assessment of the quality of education and the educational product at the University of Plovdiv are collected by means of: expert assessment cards, review with internal and external reviewers, surveys, analyzes, assessments, studying the opinion of students, lecturers, etc., results of attestations, information of departments, etc.

Some higher education institutions use information assurance software for quality management systems, which partially solve the problems associated with collecting, storing, processing and distributing information on the quality of education.

The common model of quality systems incl. the quality in higher education requires compliance with customer requirements and an assessment of their satisfaction (Kuzmanov & Hadjieva, 2011). A common model of quality management in universities is shown in Figure 2.



Figure 2. A Common Model of Quality Management in Universities

All individuals in the education process (candidate students, students, parents, employers, country) are interested in providing high quality education. In Fig. 3 is shown a pyramid of users of educational services in universities:

candidate students, students, PhD students, postgraduates and their parents with the desired level of quality of education at the entrance and a degree of satisfaction with the resulting education at the exit;

employers with their requirements to the quality level of the graduates in the labor market, outlining the development trends, which should define the structure and specialties in the educational programs of the higher education institutions;

the country whose main criterion for assessing the quality of education is the correspondence between the activities of the universities and the requirements and standards of the country, the assessment of the contribution of the respective university in the socio-economic development of the country, etc. (Dancheva, 2016).



Figure 3. A pyramid of Users of Educational Services in Universities

The efficiency of the quality systems is assessed through customer satisfaction by meeting its requirements (BDS EN ISO 9000: 2007). The requirements are formulated as conscious and systematized objective needs and interests and/or desires and expectations (declared mandatory or commonly implied necessity). They can be purely pragmatic, but the emotional and conjectural elements should not be overlooked. The satisfaction is assessed by meeting the requirements (Kyuchukov, et al., 2005; Pencheva & Beloev, 2009).

On 23 September 2015 the new edition of ISO 9001:2015 entered into force, introducing new requirements for quality management systems. The main change in ISO 9001:2015 is related to the alignment to the Annex SL of ISO Directive for to the ISO for unification the structure of all ISO standards for management systems.

For a smooth transition to the new edition and a successful preparation for recertification under ISO 9001:2015, the necessary measures must be taken in order to update and recast the available ISO 9001:2008 documentation. The changes will be significant – some time will be needed to understand and implement them, and to adapt the implemented quality management system.

Rating Systems for Higher Education Institutions

Rating is a tool for assessing higher education institutions building a national higher education system. With the active processes of expansion of higher education and especially with the unfolding processes of globalization there is a need for a common comparative assessment of higher education institutions in all countries.

With the emergence of the rating system two types or two approaches for the assessment of higher education institutions – *institutional* and *market* – are formed. It is necessary to emphasize the differences in their objectives, purposes and specifics between the two approaches. Institutional assessment aims to ensure the quality of higher education based on the implementation and adherence to educational standards – an object and subject of regular development, monitoring and control. The rating system is a market valuation instrument. Through objective indicators and/or subjective views, it measures the quality of higher education among its users. The rating systems, to a great extent, shape the choice of both a profession and a higher education institution. That is why the deep meaning and purpose of rating systems is to direct private investment to higher education institutions that offer good quality higher education.

While the institutional assessment focuses on the process of creating the educational product, respectively on the education institutions that create it, the rating system assesses the behavior and attitude of the market participants using the human resources capitalized in the educational system. That is why the imposition of institutional assessment is a matter of state policy, and the development and implementation of educational standards is a commitment and responsibility of state institutions. For their part, assessments through rating systems are subject to market interest or initiative of market-based organizations – chambers, associations, business editions, business centers, etc.

The development of the rating system is based on the understanding that the quality of an activity depends on its overall structure and organization. Therefore, the actual and noticeable improvement of the quality of higher education is possible only by changing the overall way of its management, organization and financing. That is why the establishment of inter-university systems for assessment and maintenance of the quality and the functioning of the National Evaluation and Accreditation Agency should be considered as important but not sufficient enough steps to solve the problem (Boyadzhieva & Dimitrov, 2005).

General Features of Rating Charts

All rating charts claim to rank higher education institutions by quality, but none of them defines this term. There is no common shared understanding of the term "quality of higher education" – ranging from quality assessment by students through expert communities to employers taking into account a variety of objective and subjective indicators (university budgets, material and information provision, assessments of the realization in scientific and labor practice).

Separate attempts to review the global activity in this area, which we do not have any reason to consider exhaustive, cover nearly 50 rankings of different universities. The total number of world rankings exceeds 100. In developed European countries there are about 5 known university rankings, while in the United States there are over 10. Many indicators are used.

Looking at how the used indicators relate to the concept of "quality of education", we find a certain gradation:

The rating charts abound by indicators related to conditions, prerequisites or consequences of possible quality education. Such are: the area of the auditorium, the number of graduates in term, the number of students per teacher, the material base for teaching activities, the living conditions, the volume of scientific activity, the awards, foreign students, etc., in order to arrive at indicators such as "contribution to society", "reputation", "presence of international lecturers". Very often indicators are used to measure the scientific activity and its results, although a very small percentage of the students participate in it.

Rarely included are indicators related to educational achievements at the entrance and to the learning process itself.

Exception are the indicators which directly reflect the quality of the outcome of education no matter how we understand it – as an external and independent assessment of the knowledge and skills of the graduates or as a professional realization. No test, exam or other form of unified measurement of the knowledge and skills of graduates is used in any of the rating systems which are under review. The salary/earnings component after graduation is rare, mostly for individual business, medical and law professions in the United States and the UK.

The Rating System of the Higher Education Institutions in Bulgaria

The rating system of the higher education institutions in Bulgaria assists the users in choosing a higher education institution. The updated version of the system for 2015 contains information about 51 accredited higher education institutions in Bulgaria offering education in specialties, distributed in 52 professional fields. The rating system also collected data on more than 74 indicators that measure different aspects of higher education activities. These indicators are based on statistics collected from various sources, including surveys.

Indicators in the Rating System

The basic information in the rating system is represented by *indicators*. These indicators were formed as a result of collected statistical information from centralized registers and surveys conducted among students, teachers and administrators from different professional fields in the higher education institutions as well as among employers employing graduates with higher education. The indicators are divided into 6 thematic groups according to the main categories in which the higher education institutions are assessed. These groups are learning process, research, learning environment, social-household and administrative services, prestige, realization and connection with the labor market.

The rating system has two main types of indicators – rating and informational. Rating indicators are those that can be used to form higher education rankings in each professional field. Informational indicators provide information about a higher education institution and its professional fields but are not used to make rating charts.

Standardized Charts

These are rankings of the higher education institutions in Bulgaria in a chosen professional field made by an expert team based on previously selected indicators. In standardized charts the number of indicators and their importance in determining the assessment of higher education institutions are fixed in advance and users cannot change them. Prior to making this type of rating, the experts examine the significance of the individual indicators for the different user groups and take into account the quality of the collected information, the number and the correlation between the selected indicators.

Impressive support is given to the idea of creating a rating for the Bulgarian higher education institutions. As "extremely necessary" or "rather needed" is determined by 82% of lecturers, 80% of bachelors, 79% of employers, 78% of graduates, 70% of public opinion and 57% of masters.

The problem of what quality in higher education means and how it can be valued is

fundamental to any higher education system and its policies, which predetermines its key importance in developing the methodology of each rating. A number of publications point out that the very concept of "quality in higher education" is "elusive", "value-laden", and that there is a lack of convincing theory on the issue (Newton, 2007; Stensaker et al, 2011).

It is important to emphasize that the rating system is only one of the mechanisms for assessing the quality of higher education.

National Evaluation and Accreditation Agency (NEAA)

All European countries have organizations for quality assessment and assurance of the higher education structured in regional networks such as the Central and Eastern European CEENQA with 29 agencies from 20 countries (including Bulgaria), the Northern NOQA comprising the agencies of 5 countries (Norway, Sweden, Denmark, Finland and Iceland) and others. The European Association for Quality Assurance in Higher Education (ENQA) is one of the main drivers of the Bologna process and includes 51 agencies from 26 countries, organized at different levels (full members, candidate and associated members) [26].

Four basic types of external evaluation procedures are used in practice:

Audit of the quality of the internal quality assurance system of basic units or of programs of a given higher education institution (auditing);

Comparing the quality of different higher education institutions in each field of study (benchmarking);

Ensuring that a few predefined criteria are met (institutional or program evaluation and accreditation);

Recognition of higher quality (excellence).

Objects subject to external evaluation and accreditation are as follows: higher education institutions – institutional accreditation; professional fields/specialties – program accreditation; programs – program accreditation; projects – for opening and transformation of higher education institutions, branches and/or basic units; projects – for opening of professional fields and specialties; others.

In Bulgaria the organization for quality assurance and accreditation is the National Evaluation and Accreditation Agency (NEAA) which is an independent, specialized state body with its own history and achievements, ensuring the accountability and transparency of the academic and research activities of the autonomous institutions of higher education.

NEAA was established on the grounds of article 11, paragraph 1 of the Higher Education Act, adopted by the National Assembly on December 27, 1995. The new agency's regulation was created by Decree № 189/01.08.1996 on the adoption of NEAA Rules of Procedure and determination of the number of staff in the Agency. The first Accreditation Council started working at the end of 1996.

With the entry into force of the amendments to the Higher Education Act in 2004 a number of changes were made in the assessment and accreditation procedures of higher education institutions, which entrusted NEAA with the functions of a specialized state body for assessment, accreditation and quality control of the higher education institutions' activities and with the ability to carry out post-accreditation monitoring and control – a new activity for NEAA.

NEAA aims to optimally cooperate with stakeholders and to update its activities, seeking the best methods and approaches to improve the quality of higher education. For the Bulgarian higher education institutions membership in ENQA and cooperation with organizations from the European education area is a priority. The efforts of the NEAA for the application of national and European standards in higher education supported by the Council of Rectors, by the National Union of Student Councils, professional associations and research institutes.

Conclusion

The unity of the educational space and the need to develop educational variability require the application of control mechanisms that would allow the quality of education to be influenced not only by the state but also by other groups of users of educational services individuals, professional associations and society as a whole.

The quality of education is a set of learning process properties that determine its ability to meet the needs of citizens, society and the state.

Improving the efficiency of quality control and management requires a received on time reliable and accurate information about the state of the education system and the real quality of the educational processes.

The quality of education is a current topic, revealing many challenges and opportunities for development.

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