QUALITY MANAGEMENT IN EDUCATION

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Abstract

Having considered the current situation of the Croatian educational system and the quality of all its individual components, we can't help but notice that the awareness of the importance of education as a foundation for the growth and development of each country isn't strong enough. Education quality is becoming increasingly important for those who are involved in it either directly or indirectly, and for those who use its services. Access to education and quality education are to be regarded as mutually dependent and indivisible needs and rights. This is primarily achieved by developing creativity, civic and democratic values, as well as by knowledge, abilities and skills needed for everyday and professional life. Basic education is not sufficient or complete, and therefore should be considered only as a basis for learning that needs to be used all life long. Lifelong learning for all has become one of the pillars of development.

Quality management is a part of management aimed at achieving quality goals through planning, monitoring, assuring and improving quality. Involving all members of the organization brings us closer to total quality control (Total Quality Management, TQM). Efficient Total quality management system in organization can facilitate quickly challenge in word market. Total quality management realize target and mission in education of young generation. TQM upgrade management quality and quality of work in education institute in general.

The key points for the improvement of education are scientific and technological development, social changes and organizational changes. Education efficiency and success don't depend just on quantity but as well on quality. The quality indicator system of education, as well as the criteria related to the quality indicators help schools to identify the crucial areas of their activities - their own advantages, disadvantages and development opportunities.

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1. Introduction

Education quality is a key factor for improving the business quality, and therefore strengthening competitive advantage. Access to education and quality education are to be regarded as mutually dependent and indivisible needs and rights. Lack of education is a basic cause of poverty. Intellectual workers are becoming a major tool in increasing productivity, and knowledge is becoming the main resource.

Accessing to the European union for the Croatian education system means new challenge which is acquirement better quality, manageability, mobility and response to the requirements and changes.

Differences between modern and traditional educational systems are evident in different educational goals, teaching approaches and roles of all participants in the educational process. Efficiency and quality are the key parameters that determine the socio-economic importance of the field of education. Quality management is a part of management aimed at achieving quality goals through planning, monitoring, assuring and improving quality. In modern conditions, quality management becomes a business function as well as any other function, involving people of all profiles and from all the departments of the organization.

2. Education quality

The word quality comes from the Latin word *qualitas* (property, quality, value, characteristic, feature, ability). In a highly competitive world with increasing consumer demands, quality has become the key factor of survival in the market, of profitability and development, not just for individual sectors and organizations, but also for the whole country's economy. Only few Croatian companies recognize the quality of education as the key factor for improving business quality, and therefore for strengthening competitive advantage.

Education quality is a dynamic, multi-dimensional concept that refers not only to the educational model, but also to the institutional mission and its goals, as well as to the specific standards of the system, facility, program or event.

The pedagogical theory and practice has been trying to determine what the quality of education is. In education it is only possible to determine the quality by comparing the results with the given goal, or by comparing it with previously established standards.

Any human activity is identified by the quality of its product. The same rule applies to education. The quality of education is therefore responsible for the quality of its "product": students. Various forms of education are present in different places, at various times, under different circumstances and terms, intentional and unintentional, organized and unorganized, with or without a program.

One of the key problems is the unification of standards and quality evaluation criteria. The key components of the evaluation process are the methodological approach in applying good methods and procedures of data collection, and the definition of key concepts and their relations with the concept of quality. The fundamental precondition for quality improvement is the establishment of an active system of internal and external evaluation. Internal evaluation implies a significant role of the judgment of students as active participants in the process of quality evaluation in education.

Education quality is to be understood as the most important asset for strengthening market competitiveness, and thus as the accelerator of the total economic growth and development of Croatia.

3. Quality management in education

Quality must be consciously managed in order to satisfy quality demands. From the previous claim we conclude that quality management is "an integral part of management, whose role is to reach quality objectives, which are reflected not just in providing but also in improving quality. This is achieved by managing the activities derived from the established quality policies and plans, and is carried out within the quality system, using, among other things, the appropriate quality monitoring plan."

The efficient management of an organization is achieved by using different models. One of them is quality management system. By quality management system we understand "structure, procedures, processes and other necessary resources required for the application of quality management."

A quality system is inseparable from the international and European norms (standards) of quality. A standard is a formalization of the basic principles of quality management. An increasing number of entities (not only business related) are striving to adapt its own quality system with the requirements, mainly, of the ISO 9000 standards.

To be accredited to ISO 9001 (from 2000), an independent auditor has to certify that the organization meets the following requirements of the Standard: quality management system, records keeping, management commitment to quality, resource management, production, and measurement, analysis and improvement.

Any higher education organization that wants to be accredited to the certificate, must go through several stages: the development of a quality system that implements the requirements of ISO 9000:2000; the selection of an accredited certification body; pre-auditing of the quality system by the certification body; the final audit of the quality system after which the certificate is issued; a series of smaller audits at least once a year. According to some experiences from the European Union, the whole process of obtaining a certificate lasts between 12 and 18 months. The certificate is valid for a period of three years.

The European Network for Quality Assurance in Higher Education (ENQA) was established in 2000 with the goal to establish agencies for quality assurance in higher education. In 2004 the Network changes its name into European Association for Quality Assurance in Higher Education. Its main purpose is to promote European cooperation in the field of evaluation and quality assurance among all the participants involved in the process of quality assurance. Agencies were established in many countries, and their goals are being realized

through the following functions:

1. Quality assurance and improvement in the traditional sense. For this purpose, agencies should encourage higher education institutions to improve the quality of education, especially by evaluating it. The evaluation process is divided into four steps, the major being self assessment (provided by higher education institutions) and external assessment (by independent experts). The role of the agencies is to initiate and coordinate the process of evaluation.

2. Serving as centers where all available information regarding implementation and assurance of quality systems can be found.

3. The last function is accreditation. Based on the evaluation, agencies confirm that the standards of quality of institutions/ programs meet the given requirements.

4. Total quality management in education

The concept of total quality, introduced by Professor W. Edwards Deming in the 1950s, can be applied to almost every organization up to a certain level. The term stands for the process of shifting the focus of the organization towards a superior quality of products and services.

TQM approach in education involves not only achieving high quality but also influencing all segments of the educational process: organization, management, interpersonal relations, material and human resources, etc. Applying the approach described above quality becomes total (integral).

The introduction of total quality management requires a number of changes in educational institutions. The first changes have to occur in the attitudes and activities of the management, in the organization and monitoring of the educational process, in the evaluation of its results, in the culture of communication, in the school atmosphere, and especially in the area of interpersonal relations.

The total quality management model includes the following: process planning, process management, continual improvement, total involvement and focus on the user. Total quality management is an efficient management technique that requires the full involvement of all employees on all organizational levels, thus representing the organizational culture. TQM stands for a way of life of the organization, which introduces constant improvement of business on all levels and activities, creating the appropriate environment through collaborative work, trust and respect. It approaches the processes in a systematic, consistent and organized way and applies total quality management techniques.

TQM is all about quality management of the users, leadership and management loyalty, continuous improvement, prompt response, actions based on facts, the participation of employees in the TQM culture. If an organization is constantly willing to direct its efforts towards business improvement, the principles presented above can lead to excellence in quality. The success of total quality management depends on its eight components: ethics, integrity, trust, education, teamwork, leadership, recognizability and communication.

5. Indicators of quality in education

The system of indicators of quality in education, as well as the quality criteria associated with the indicators, help schools to point out the important areas of their own activities - their own advantages and disadvantages and development opportunities. School quality team can debate about representation and development of particular indicator aspect and search for method for upgrade and meliorate indicator representation in specify school circumstances.

The indicators are grouped into seven areas with specific topics:

1. Curriculum

- structure of the curriculum (program/goals, tasks, focus on development of functional tasks, focus on students' activities, integration of programs within and between areas)

- courses and programs

- key competences that students develop in the given school

2. Achievements (evaluated by external, independent agencies)

- achievement quality compared with the set goals

3. Learning and teaching

- teachers' work

- students' work and experience

- meeting the needs of the students

- monitoring and evaluating the work of students and teachers

4. Students' support

- students' personal, social and spiritual growth

- progress and achievement monitoring

- support in all aspects of learning, progress, students' and teachers' personal development

5. School ethos

- school policy

- school atmosphere and relations

- specific goals of each individual school

- orientation towards students', teachers' and parents' satisfaction

6. Resources

- school resources

- teachers, professional associates, the principal; their education, teachers teamwork, cooperation; being open to innovation

- material resources and premises

- efficient human and material resources

7. Management, leadership and quality assurance

- approaches to leadership and management

6. Traditional and modern educational systems

The Croatian educational system provides educational services ranging from preschool to primary, secondary, higher as well as adult education. Lifelong learning is particularly important as a tool for stimulating adults, especially the unemployed, to join the flexible educational programs and take active part in the labor market.

In the traditional educational system, the goal is the acquisition of information. Students' activities basically consist of listening and watching. This kind of lecturing is tiring and generates a multitude of unnecessary facts that students need to memorize resulting in the fact that students are generally dissatisfied with the school. Information memorized in this way can't be successfully stored in the long-term memory. The curriculum related to individual subjects and methods of teaching, emphasizes factual knowledge and passive learning, thus not enabling students to acquire the technical, technological and social knowledge skills needed in a competitive economy. One the one hand the number of compulsory subjects is too large and on the other elective subjects are almost non existent. As there are no national standards, no impartial external evaluation or testing, schools test the knowledge of their students based on their grades not their knowledge. The traditional Croatian system has threeand four-year educational programs, special programs for under-skilled workers or students with special needs and the dual system of education combined with work. Due to technological development, the majority of the mentioned professions are becoming unnecessary. The curriculum is focused too much on special skills, expertise and views of a specific profession. Vocational education didn't adapt fast enough to the changes in the economy and the needs of small and medium-sized companies. Higher education institutions are not autonomous, as funding and employment decisions are largely controlled by the Ministry of Education. University programs are not sufficiently open to the needs of the labor market. There are no good university standards related to education and its effects. Participation in lifelong learning, in the traditional educational system, is very poor. The number of those who completed only the shorter or less demanding vocational programs (lasting two or three years) is incredibly high. However, shorter and less demanding VET programs do not guarantee the competitiveness needed in the contemporary workplace. The traditional Croatian educational system seems not to provide a sufficient number of workers with the necessary knowledge and skills. The need for modern technology is not emphasized enough. New technologies change education with the development of e-learning.

In the modern educational system understanding is therefore more important than memorizing, and teaching activities are variable and subordinated to students' needs. Students acquire smaller amounts of facts and generalizations

which they compare with their experience and apply in problem solving exercises. Understanding and application of the facts allows knowledge systematization and its durability, as it is stored in the long-term memory. Teaching skills are changing and gradually transforming into the art of teaching children to teach themselves. The main result of studying is, therefore, to learn how to study. In times of rapid social and economic change, resulting in changes in the market, it was crucial to coordinate and connect pre-primary, primary, secondary and higher education, as well as adult education and training. Learning while working is becoming an extremely important form of professional development, and innovations are often interdisciplinary and come as a result of team work. Linking education to the world of work is a key factor in changing the Croatian educational system and making it capable of meeting the market and society requirements, and by doing so increasing employment possibilities. Higher education is linked with other segments of the educational system. The outputs of secondary education are inputs for higher education. making its quality dependent on the quality of secondary education. Higher education, particularly universities should, therefore, participate in establishing an external evaluation system of students' achievement, in the production of high-school programs and textbooks, and in ensuring the educational quality of teachers. Higher education institutions are places of permanent education of higher educated employees, i.e. their further formal and informal education is a part of the lifelong educational system. Higher education institutions organize further training in co-operation with educational services of companies and other organizations and with professional associations. With the progress of knowledge, education possibilities are becoming increasingly varied. Limited state funding encourages an increasing number of institutions to look for different models of funding, primarily from private sources. There are an ever increasing number of private higher education facilities on the market. They attract only wealthy students, while those who can't pay several thousand kunas for tuition go to state universities. Except institutional program also internet become most propound media of education. Internet is a tool for not scholastically study.

By applying the postulates of TQM to education, we state that education is not a social activity, but a market-competitive activity as well as any other.

7. Application of total quality management to education

In order to assess the efficiency of total quality management in education, research was carried out during 2006/07 in 60 primary and 30 secondary schools in the Republic of Croatia. The research covered the following areas: education quality based on total quality management, the assessment of quality applying the Standards for quality management in education, NUKO 9001:2007 and the relation between total quality management and the efficiency of

education. The study also aimed at determining the opinions of the participants on the management, the managing and directing of the employees professional potential, on the policy and strategy, on resources, key processes, user satisfaction, social reputation and the key results of institutions before and after the application of total quality management based on the Standards for quality management in education NUKO 9001:2007. The research results show that by using total quality management, educational institutions successfully distribute their accumulated knowledge and increase their efficiency. Total quality management helps achieving the goals and tasks of education of young generations. TQM not only improves the quality of management but also of the entire educational institution. One of the possible uses of total quality management in education in the Republic of Croatia is the approach based on Standards for quality management in education, NUKO 9001:2007. Standards for quality management in education, NUKO 9001:2007 showed their validity and can be rightfully recommended as a model that provides educational quality to the users of institutions that apply it. Its wide application in the Republic of Croatia, as well as abroad, in the time ahead, confirms that its introduction in the integrated educational system is justified.

8. Conclusion

The term quality, which encompasses economic, social, cognitive and cultural aspects of education, is perceived as an integral feature of the educational process and its results. By providing high quality educational services, educational institutions play an important role in the development of the national economy, of the society as a whole and of its individual members.

Total quality can only be achieved by establishing an innovative organization, one that is flexible, which can adjust quickly to changes in its environment and is capable of learning.

To improve education quality, an essential factor of economic and social development in the 21st century, it is crucial to reduce the huge amount of knowledge students are supposed to master, focusing their attention to a system of basic knowledge, on creativity, problem-solving and lifelong learning.

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