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Quality of Educational Services as a Determinant of Regional Economy Development

INTRODUCTION

Regional development opportunities are conditioned by the need to implement multiple tasks in a number of interrelated areas. These include, among others tasks related to: the local labour market, maintenance and infrastructure development, acquisition and effective use of financial resources, rational use of available resources and conduct activities to raise the qualifications and skills of the population. A special role in this last action play universities, educating the future elites, that will take responsibility for the functioning of the economy in the region and country. The quality of university educational offer will depend on the level of preparedness of young cadres to take up this challenge.

For a long time universities have remained beyond the reach of the impact of market rules. Functioned as organizations which do not know the problems associated with efforts to attract customers, or with efforts to meet their needs. The reality has changed beyond the date when the non-public schools attempted to provide educational services at a higher level. The ability to find the way of functioning in a new reality has become the highest rank, in deciding whether the university can survive in the dynamically changing market. In a situation of excess supply over demand, the mismatch between the offer to the customers' requirements could cause the collapse of many universities. Therefore, universities are increasingly turning to modern management tools, including quality management. Their use is intended to lead to such a level of services that effectively meet the needs of their target audience.

QUALITY OF EDUCATIONAL SERVICES

All universities, especially those which offer education in the fields of economics, have a particular kind of responsibility. Their main goal is to prepare future elites who can meet the demands of the modern economy. In order to prepare them in accordance with current socio-economic environment, it be-

comes necessary to take into account the educational offer items such as: the expectations of potential employers, labour market needs, cooperation with economic operators, raising of level of educational standards.

The beginnings of interest in the problems of quality in Polish universities are linked to political changes that began at the early 90s of twentieth century. At that time appeared the phenomenon of the emerging need for changes. These include among others: the growing number of people interested in acquiring higher education, increase the number of private university, emerging new fields of study, significant changes in the curriculum, the scope for cooperation with foreign universities, etc.

Modern universities are becoming to be units open to innovation, actively attempting to issues related to quality of delivered services. Quality in this case means an approach which seeks to maximize the competitiveness of the organization through continuous improvement of the quality of its products, services, people, processes and the environment [Goetsch, 2010, p. 7]. In line with the philosophy of TQM (Total Quality Management), the problem of quality is subordinated to all aspects of the organization. Moreover, in the process of achieving the desired level of quality, people are involved at all levels of an organization.

Quality of services is associated with the process of delivery and all people who are involved in the process. Therefore, the quality is usually assessed basing on five groups of factors [Czubala, 2006, p. 128]: tangible elements, reliability, responsiveness, assurance and empathy. These elements determine also the quality of educational services. In this case, however, the participation of the recipient is a particularly important factor. Not only the qualifications, skills and experience of the provider, but also the expectations, abilities and commitment of students, decide on the final result of an educational service.

According to K. Sato, there can be three kinds of quality in the context of educational services [Ślusarz, 2010, p. 11]:
• required quality – expected by students,
• target quality – expected by staff of the university,
• adjusted quality – implemented by the staff and the expectations of students.

As follows from the presented division, in the case of educational services one can talk about the crucial role of quality based on the needs of the recipient. This implies the need to meet the growing demands of students who are direct recipients of services. To achieve this, it is necessary to analyze their needs and the opinion of students that have already been using these services. On this basis, there should be the continuous improvement process implemented in the university according to the Deming's cycle.

In the case of the provision of educational services at the university level, colleges are dealing with a specific type of customer. In the broad sense, our

customers are, in addition to students, the staff, faculty, employers, families, government and local government [Rodrigues, 2006, p. 473].

In the academic year 2010/2011 in Poland, there were 1841251 students enrolled, of which 1 261 175 in public universities, and 580 076 in non-public [GUS: *Szkoły...*, 2011, p. 55].

In order to meet the growing educational aspirations of youth and adults, universities are focused on providing high quality education to a group of nearly 2 million students. Educational institutions, systematically develop infrastructure (form libraries, laboratories, issue publications, cooperate with foreign scientific centers). The result of the action is to lead – on the one hand – to improve the quality of services and, second, to survive in an increasingly competitive market.

CHARACTERISTIC OF ANALYZED UNIT

University of Rzeszow is the largest Polish academy of South-Eastern part of the country. History of University dates back 1963 when the Higher Pedagogical School in Rzeszow was established. In 1969 University of Maria Curie-Sklodowska in Lublin established its branch in Rzeszów, and in 1993 the University of Agriculture in Krakow created the Department of Economics as a headquarters in Rzeszow.

The official date of establishment of the University of Rzeszów is the 1st September 2001. The university is a combination of the three universities mentioned above. Rzeszów University consists of 11 departments in which there is more than 30 fields of study at various levels. Faculty of Economics began its activity in the structure of the University in September 2001. Its main goal is to prepare well educated students that can meet the expectations of the labour market.

THE SERVQUAL METHOD

One of the most popular methods used to measure the level of service quality is SERVQUAL method. It was developed by A. Parashuram, V.A. Zeithamlai and L. Berry in the 80s of the twentieth century. The method can help to determine the level of customer satisfaction with the service provided expressed by their point-rankings. The is method used to verify the quality assessment, treating it as the difference between customer expectations and their perception of received quality of service. SERVQUAL focuses on the need for continuous process improvement, integration of all its employees in the process throughout the organization, and building an open and efficient communication system.

The methodology of SERVQUAL is based on the questionnaire which consists of 22 carefully selected and ranked pairs of questions. The first series

of questions are used to measure the expectations of buyers associated with the implementation of a service. The second is used to measure the perception of quality of service which the client received. In some cases, for simplicity, it is assumed that the level of consumers' expectations always takes its maximum value.

The method takes into consideration the five characteristics which affect the level of customer satisfaction. On the basis of each of them a list of questions is created. The characteristics of these include:

I. Tangibles – the physical aspects of service (equipment, staff appearance, promotional materials, etc.);

II. Reliability – the ability to deliver services in accordance with the specification;

III. Responsiveness – willingness to help the customers, respond quickly to their requirements;

IV. Assurance – the knowledge, behaviour and skills;

V. Empathy – understanding customer needs and problems.

In the third step respondents distribute 100 points between the five components of the quality. This is to illustrate the importance of individual items to users. Based on the results, knowing the importance of individual components of the quality, the organization can not only determine the overall level of customer satisfaction, but also gets specific information on possible sources of problems with the quality of the processes.

An overall measure of quality of service is given by the formula (1.1):

$$S = P - E \qquad (1.1)$$

where: S – a measure of SERVQUAL, P – the perception of performance, E – expectations.

In practice, the expectations of customers almost always take the maximum or close to them. This means that the difference in perceived quality – the quality expected is generally negative. The scale of the measurement results of the perceived differences service quality determines the extent to which service meets customer requirements. It also allows the identification of areas of special interest from the service provider.

RESULTS OF RESEARCH

The study was conducted for the first time among the students of the Faculty of Economics, University of Rzeszow (FE UR) in March 2010, it was repeated in March 2012. In both cases, the study involved 200 students of different years, studying in both stationary and nonstationary mode.

The questionnaire assessing the quality of educational services is based on the methods highlighted by the developers of SERVQUAL twenty-two statements. In

the study a seven-point Likert scale was used, where the numerical values from 1 to 7 are assigned to answer, where individual points are assigned with meanings:

− 1 – strongly disagree,
− 2 – I do not agree,
− 3 – is unlikely to agree,
− 4 – hard to say,
− 5 – tend to agree,
− 6 – I agree,
− 7 – strongly agree.

In the first part the aim was to identify the level of expectations of students from the perfect university. To ensure greater comparability of results, the level of expectations remained unchanged and was conducted from the last research taken in 2010.

The second part of study participants determined the degree of significance of individual components of an educational service. The relative importance of various elements was determined by the allocation of 100 points between the identified dimensions of quality of service.

Table 1 presents an assessment of the various dimensions of educational services for students. After converting the results of the gravity of individual elements, a weighted SQ score was obtained.

Table 1. The importance of individual components of an educational service

Nr	Element		Points
1	Technical equipment and material conditions of studies		19,48
2	University's ability to meet the needs of students		18,36
3	Qualifications and skills of staff (academic and administrative)		20,37
4	Building by staff of the University atmosphere of cooperation and mutual trust		15,91
5	Education quality and prestige of the University		25,87
		Total	100

Source: results of own research.

In the third part was analyzed the perception of the quality of educational services provided by the Department of Economics. The study presents results by calculating the weighted and unweighted SERVQUAL score (SQ). The overall unweighted results were obtained by the following steps:

− for all surveys were added SQ results obtained from the claims of individual dimensions and then that sum was divided by the number of claims in a given dimension,
− results of all surveys received in step 1 were summed and then divided by the number of questionnaires,

− the results obtained in phase 2 were averaged (added together and divided by the number of dimensions).

In this manner the overall weighted SERVQUAL score was obtained. The results are presented in table 2.

**Table 2. Expectations and perceptions of educational services
in 2010 and 2012**

Dimension of service	Nr of state ment	E (1-7)	P 2010 (1-7)	S 2010 (P-O)	Average measure of SQ 2010	P 2012 (1-7)	S 2012 (P-O)	Average measure of SQ 2012
I	1	6,40	3,08	- 3,32		4,24	-2,16	
	2	6,44	3,40	-3,04		3,79	-2,65	
	3	6,31	2,97	-3,34		3,12	-3,19	
	4	6,20	4,89	-1,31		4,71	-1,49	
	18	6,21	3,79	-2,42	-2,69	3,88	-2,33	-2,36
II	5	6,27	3,71	-2,56		3,88	-2,39	
	7	6,58	4,31	-2,27		4,59	-1,99	
	8	5,98	4,73	-1,25		4,85	-1,13	
	15	6,33	4,25	-2,08		4,59	-1,74	
	19	6,10	4,71	-1,39	-1,91	4,54	-1,56	-1,76
III	9	6,06	4,59	-1,47		4,71	-1,35	
	10	5,98	3,88	-2,10		3,94	-2,04	
	13	6,08	4,88	-1,20		4,71	-1,37	
	14	6,29	4,54	-1,75		4,85	-1,44	
	17	6,17	4,24	-1,93	-1,69	4,4	-1,77	-1,59
IV	6	6,13	3,94	-2,19		3,79	-2,34	
	11	6,27	4,07	-2,20		4,24	-2,03	
	12	5,87	4,27	-1,60	-2,00	4,27	-1,6	-1,99
V	16	6,21	3,76	-2,45		3,88	-2,33	
	20	6,44	4,40	-2,04		4,4	-2,04	
	21	6,47	4,02	-2,45		4,16	-2,31	
	22	6,48	4,51	-1,97	-2,23	4,71	-1,77	-2,11
Unweighted average SERVQUAL measure					**-2,1**			**-1,96**

Source: results of own research.

According to presented data, the highest average gap in the level of services provided by the EC UR occur in the I – "The technical equipment and material conditions of study." However it should be noted that the assessment of this element in the base year rose apparently comparing it to the other four areas. The second most important gap was noted in item V – "The quality of education

and prestige of the university", where the difference between expectations and perceptions amounted to -2.23 and -2.11 points. relatively best situation occurs in the third dimension – "qualifications and skills"– the difference is -1.69 and -1.59 points. Optimism can arouse the fact that in all five areas was noticed an improvement in two consecutive years.

The method for calculating the weighted total score takes into account the relative importance of SQ specific dimensions of quality of service. The next steps to achieve the result of SQ were weighted as follows:

− for all respondents the average SQ score was calculated for each of the five dimensions,
− SQ score multiplied each dimension (obtained in step 1), the average weight assigned to that dimension,
− SQ scores were weighted in all dimensions, obtained the total weighted score SQ, summed over all the results and divided by the number of questionnaires, thus obtained, in turn, weighted overall score SQ.

Table 3. The weighted average measure of SQ in 2010 i 2012.

Dimensions of quality of educational services	Weight	Result unweighted 2010	Result weighted 2010	Result unweighted 2012	Result weighted 2012
Technical equipment and material conditions of studies	0,195	-2,69	-0,52	-2,36	-0,46
University's ability to meet the needs of students	0,183	-1,91	-0,35	-1,6	-0,29
Qualifications and skills of staff (academic and administrative)	0,20	-1,69	-0,34	-1,59	-0,32
Building by staff of the University atmosphere of cooperation and mutual trust	0,15	-2,00	- 0,30	-1,99	-0,29
Education quality and prestige of the University	0,26	-2,23	-0,58	-2,11	-0,55
Overall weighted measure of Servqual			**-2,09**		**-1,91**

Source: own research.

In 2010, the unweighted and weighted scores were almost identical, amounting, respectively, -2.1 and -2.09. While two years later the figures were respectively -1.96 and -1.91. The unweighted score already pointed at the fact of improvement of the perceived quality of educational services provided by the Department of Economics UR. Inclusion of weight leads to the conclusion that there was an improvement in key areas that affect the subjective assessment of the quality of education in the opinion of students.

SUMMATION

In order to better meet the growing needs of its customers, providers use a richer and richer arsenal of quality assurance. Not otherwise in case of higher education. In fulfilling its role as centers of education for the future elite of society, the emphasis should be placed on continuous improvement in quality of educational services. For this purpose it is necessary to identify the needs of present and future students correctly, as well as continuous analysis of their needs met. Due to the universal nature, the SERVQUAL method can be applied to the study of perceived quality for all types of services. Its use allows to improve quality and thus it allows achievement of a higher degree of competitiveness. First of all, however, possible to achieve the main goal which is customer satisfaction.

In the case of the analyzed units clearly draw the areas requiring special attention when planning actions towards better meeting the expectations of students. These relate to efforts to further improvement of infrastructure and continuous improvement of education quality. For other dimensions, the gap between expectations and perceptions are somewhat smaller, however, deserve attention in the search for ways to improve the functioning and the pursuit of continuous improvement.

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Summary

Contemporary socio-economic environment puts higher demands of university graduates. In addition, common access to education at the university level, a large number of entities competing for acquisition candidates and the growing expectations of current and future students make it becomes increasingly important to offer educational services at the high level of quality. To meet these circumstances, universities are reaching for professional marketing and quality assurance tools. In order to match the offer to the customer's requirements, it is necessary to carry out a systematic measurement of expectations and the extent of their current implementation. Powerful tool, useful in the diagnosis of this condition is the SERVQUAL method, the main idea of which focuses on comparing the customer's expectations with services received. As a result of this comparison, it becomes possible to identify major gaps and disparities in relation to the expected values and received by the customer.

The article presents the results of the research on the satisfaction level of students of the Faculty of Economics, University of Rzeszow carried out using the method of SERVQUAL.

Jakość usług edukacyjnych jako determinanta rozwoju gospodarki regionalnej

Streszczenie

Współczesne otoczenie społeczno-ekonomiczne stawia coraz wyższe wymagania absolwentom wyższych uczelni. Dodatkowo powszechny dostęp do edukacji na poziomie akademickim, duża liczba podmiotów rywalizujących o pozyskanie kandydatów na studia oraz rosnące oczekiwania obecnych i przyszłych studentów sprawiają, że coraz większego znaczenia nabiera oferowanie odpowiedniej jakości usług edukacyjnych. Wychodząc naprzeciw tym zjawiskom uczelnie sięgają po coraz bardziej profesjonalne narzędzia marketingu i zapewnienia jakości. W celu dopasowania oferty do wymagań klienta niezbędne jest prowadzenie systematycznego pomiaru oczekiwań oraz stopnia ich bieżącej realizacji. Skutecznym narzędziem, pomocnym w rozpoznaniu tego stanu, jest metoda SERVQUAL, której główna idea sprowadza się do porównania oczekiwań klienta z percepcją usługi otrzymanej. Na skutek tego porównania możliwe staje się rozpoznanie najważniejszych luk i dysproporcji w odniesieniu do wartości oczekiwanych i otrzymywanych przez klienta.

W artykule przedstawiono wyniki badań poziomu satysfakcji studentów Wydziału Ekonomii Uniwersytetu Rzeszowskiego przeprowadzonych z zastosowaniem metody SERVQUAL.