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**Professional Culture of the Specialist of the Future**

**FORMATION OF QUALITY OF EDUCATIONAL SERVICES IN  
THE CONTEXT OF STUDENT EXPECTATION**

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***Abstract***

This work presents a substantiation of the importance of studying the problem of the quality of education and survey of Russian literature concerning the problem of education quality and the authors view is presented. Here an analysis of quality control methods for educational services in the view of quality management based on consumer expectations is performed. Quality levels and elements are pointed out and the necessity for consideration student opinion on educational services is justified. During the investigation major components of educational service quality are revealed, and a generalized view on the process of quality formation is presented. Also alternative methods for educational services quality assessment are considered, which traditionally had not been used in state educational institutions, but are able to show basic needs and expectations of students: SERVQUAL technique, Gap technique, Noriaki Kano technique. The authors present a short comparative analysis of the outlined methods and justify its usage for qualitative training of future specialists.

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**Keywords:** Educational service, expectation assessment, quality.



## 1. Introduction

In the Russian Federation education has always received special attention. So, the conception for long-term social and economic development of the RF up to the year 2020 specifies one of the main tasks in education sector: "Formation of mechanisms for assessment of quality and relevance of educational services with the participation of consumers". The Federal law of 29.12.2012 No. 273-FZ "On education in the Russian Federation" has established that "basing on the results of the independent assessment of education quality one may develop ratings of organizations, which implement the educational activities, or (and) its educational programs".

Educational quality affects not only level of intellectual and spiritual development of people, there appear possibilities for professional growth of citizens (Ali, Zhou, Hussain, Nair, & Ragavan, 2016; Bataev, 2018; Borisoglebskaya & Sergeev, 2018; Cheng, Tsai, & Lin, 2016; Glukhov & Vasetskaya, 2018; Gurova, Piattoeva, & Takala, 2015; Klochkov, Lepehin, Vasilega, Vasilega, Nonieva & Vasilyeva, 2018; Nemova, Bagautdinov & Mushinskiy, 2015; Razinkina et al., 2018; Teeroovengadum, Kamalanabhan, & Seebaluck, 2016).

Resolution of the issues relating to formation and assessment of education quality is one of the main directions for strategic development of any government, as it is closely connected with training of future specialists.

Professional training of specialists is a sociocultural problem, the solution of which is possible only with the simultaneous study of the priority areas of educational policy, the needs of society and the resources of the state (Butenko & Butenko, 2014; Gazizulina, et al., 2018; Gamayunova, 2015a; Gamayunova, 2015b; Klochkov, et al., 2018; Lopatin & Rumba, 2015).

Qualitative vocational training allows you to freely think and create intellectual values, and the result of training is the willingness of future professionals for professional activity in the dynamic conditions of the development of society and the economy (Fedotova, 2018).

Key parameters of social and economical significance of professional education are efficiency and quality. Education quality defines well-being of national economy not only at the present moment, but also in the future and thereby it is considered as a country national treasure (Saidov, 2016).

Thus, the problem of formation of the quality of educational services in the context of student expectation assessments is of immediate interest.

## 2. Problem Statement

Here the authors consider analysis of quality control methods for educational services in the view of quality management based on consumer expectations.

## 3. Research Questions

In this work the authors raise the following issues:

- How does the education service quality develop;
- Which of the considered alternative methods for its quality assessment might be efficient in a view of satisfaction of student expectations and training of high-quality specialists.

#### 4. Purpose of the Study

The purpose of this work is to justify formation of the quality of educational services in the context of student expectation assessments.

#### 5. Research Methods

We used the following research methods: analysis and synthesis, generalization, system approach.

Russian scientific literature review has shown a vast variety of definitions for the term "education quality". The major definitions are presented in Table 1.

**Table 01.** Major definitions for the term "education quality" according to the Russian literature

Author	Definition
Zvonnikov & Chelyshkova, (2007)	"Education quality refers to an integrated characteristics of educational system, which reflects the matching rate between the really achieved educational results and normative requirements, social and personal expectations of students".
Shishov, Kal'nej, & Girba, (2013)	"The degree of expectation satisfaction for various participants of education process depending on the educational services provided by education institution"
Andreev (1998)	"Integrated characteristics of attributes and indicators, which reflect high level of education process and results".
Par.29 Art.2 Federal law "On education in the Russian Federation"	"Education quality is a complex characteristics of education activity and student training, which expresses degree of its conformity to federal state standards, educational standards, federal state requirements and (or) needs of physical or legal body in the interests of which one perform educational activity, including the objective performance indicators for educational program".
<i>The author position</i>	<i>The education quality should be referred to maximum conformity of pedagogical results to the established normative requirements and social results to the students' expectations.</i>

Basing on the definitions presented above, the authors came to a conclusion, that education quality should be referred to maximum conformity of pedagogical results to the established normative requirements and social results to the students' expectations.

It is accepted to distinguish the following quality levels (Brezhneva, Nazarova, & Pervutinsky, 2016): quality of results, quality of the education process, quality of teaching staff competence as the leading subjects of the educational process and quality of educational institution management.

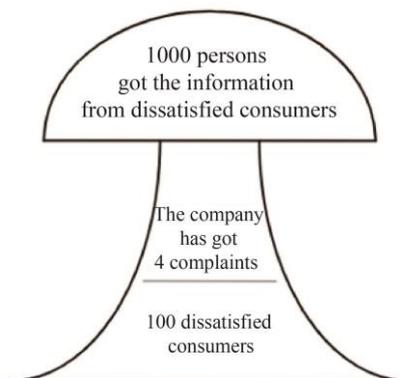
In this work the authors will consider the following quality levels: quality of results and educational process.

From the point of view of quality management, quality of the result is a technical quality, which answers the question "what", whereas quality of the process is a functional quality, which answers the question "how".

Both elements of quality have an influence on overall image and reputation of the educational institution, as they give answers to the principal issues of concern to both existing and potential consumers: how is the studying coming and what eventually will be learned and obtained.

Heads of educational institutions, especially state ones, often do not pay proper attention to the questions stated above. They consider that the possible complaints of students and (or) post-students cannot have a drastic impact on the institution reputation.

However, some researchers (Ovsyanko, 2011; Klochkov, Klochkova, Volgina, & Dementiev, 2016) note the importance of taking into account the consumer opinions. They say that "complaints are similar to the tip of an iceberg main part of which remains unseen for the company, but experienced managers should take this fact into account" (Fig.1).



**Figure 01.** Mushroom-shaped model for losses evaluation due to complaints (Ovsyanko, 2011)

A true statement is that among several dozens of dissatisfied consumers only some of them make complaints to the company which rendered them a service. However, each of these 100 dissatisfied persons will inform his friends against the company, and, as a result, 1000 persons will have a negative information on the company.

In relation to education sector one observes the same processes: only few of dissatisfied students or post-students will directly inform about it the educational institution. At this, their expressed opinion to their friends might drastically ruin the reputation of the institution. That's why in this work we pay a significant attention to formation and assessment of educational services quality.

A famous scientist Gronroos (2006) identified 7 items of good quality. The authors believe that these criteria might be used in relation to educational services:

1. Professionalism and experience: High-qualification of teachers, experience in realization of professional training programs, etc.
2. Attitudes and behaviour: homely environment in the class, friendly relations between teachers and students, etc.
3. Accessibility and flexibility: convenient class schedules, access to training materials and literature, various modes of study (full-time, extramural, part-time, distance or combined program).
4. Reliability: implementation of all teaching commitments by the educational institution, etc.
5. Reimbursements for services: reimbursements of the cancelled classes in case of emergency or unplanned situations, etc.
6. Service terms: existence of the equipment for interactive exercises, spacious classrooms, the availability of library facilities with appropriate literature, Internet facilities, etc.

7. Reputation and well-deserved trust: teaching, which provides good results (rapid employment after graduating from the University, etc.)

Quality assessment might be performed basing on assessments of both consumer expectations, and their perception of the delivered service.

The changes that are taking place today in the sphere of education testify to the change of the educational paradigm into a person-oriented paradigm, the key components of which are key competences necessary for personal development and development, active citizenship, social adaptation (Stepanova, 2010). Therefore, today it is necessary to rely on consumers' expectations for the formation of quality educational services.

The authors of the present work consider the following methods for educational service quality assessment.

### 5.1. Noriaki Kano Model

Noriaki Kano is a famous Japanese scientist, which in his researches focuses on the following statement: consumers permanently change their opinion about the service or product and that one, which attracts them today, may not cause surprise or joy tomorrow. As an example, we may consider access to Internet in educational institutions, usage of interactive equipment during the lessons, etc.

Based on this statement, Kano together with a group of scientists has developed a method for survey among the customers without a specific list of service or product characteristics, which implies, that a list of descriptive criteria must be formed only during the process of communication with customers (Kano, 1984; Walden, 1993).

However, Kano (1984) proposed classification of all characteristics of a product/service, which consists of the following categories: «A» – attractive; «M» – must be; «O» – one-dimensional; «I» – indifferent; «R» – reversal; «Q» – questionable.

Further, two exactly opposite questions are composed: maximum presence of characteristics of a product/service and absence of the necessary characteristics. For example, the following statement might act as a positive question: "How can you assess your reaction to emergence of such discipline in the framework of your program?" In this case the negative question will be the following: "What will be your reaction, if this discipline/module is absent or poorly represented in your program?"

After obtaining the assessments of respondents, the researcher uses a specific evaluation table. For evaluation of the obtained answers according to the N.Kano approach one use the Likert scale (from "Strongly Dislike" to "Strongly Like It"), which is presented below, Table 02.

**Table 02.** Kano evaluation table

Positive Question	Negative Question				
	Like	Must be	Neutral	Live with	Dislike
Like	Q	A	A	A	O
Must be	R	I	I	I	M
Neutral	R	I	I	I	M
Live with	R	I	I	I	M
Dislike	R	R	R	R	Q

Answer to a positive question is placed in a row (here marked in yellow), and the highlighted column means that the answer to a negative question is marked in graphs. At intersection of a row and a column a category is shown, which classifies a particular characteristics of a product/service.

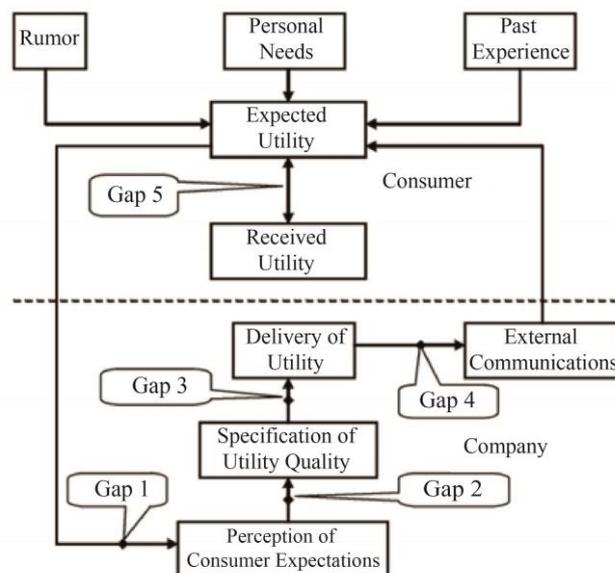
The authors believe, that this method for evaluation of consumer opinion in education sector will allow one not only to concretize consumers by types, but also predict their response to the future characteristics of the educational service.

## 5.2. Gap approach

In the beginning of this work the authors mentioned the problem of under-evaluation of customers' opinion and the extent of its impact on the image of the educational institution.

At this, it should be noted, that customer dissatisfaction is often caused by some faults of the service provider. Analysis of zones in a holistic process of consumer usefulness creation, in which problems may appear, becomes possible when using the Gap Model (Ovsyanko, 2011).

The authors believe, that this model should be used in educational environment for clear understanding of formation of educational service quality and revealing of possible reasons for students dissatisfaction, Fig.2.



**Figure 02.** Gap model (Ovsyanko, 2011)

This scheme is roughly divided into two parts, one of which is attributed to service consumer, the other one - to provider of this service.

In relation to education sector, this model can be interpreted in the following way:

*The first gap* arises between student expectations and understanding of these expectations by the head of the educational institution. Who the student wants to be after graduating the University, which knowledge he wants to possess and how does he see the educational process - these questions should be answered by the higher management of the educational institution in order to understand applicants expectations. *The second gap* is formed between the understanding of student expectations by the senior management of the educational institution and characteristics of educational service quality. *The third gap* arises between the provided service and its quality characteristics. *The forth gap* is located between the

provided educational service and interaction with students concerning this service. *The fifth gap* is between students' expectations and their perception of the educational service. The last gap is unchangeably connected with end of education, which means receiving the service, and it is this stage there the reflection takes place. A student changes his status to post-graduate and might formulate an clearly expressed opinion on the institution and quality of the completed education.

The authors believe, that usage of Gap Model in education sector is feasible, as this approach allows the senior management of the educational service to determine the key reasons for poor service quality and take some steps to eliminate the aforesaid gaps. This method allows making advances of the internal resources of the educational institution towards the student expectations due to clear determination of distinguishes between institution activities and its perception by students.

### 5.3. SERVQUAL Approach

This method was developed by empirical investigations, which were carried out by analyzing the polls in focus-groups basing on the developed Gap model (Belobzhetsky, 2012), which was examined above.

The authors of the SERVQUAL model determined 5 major quality criteria for the provided service quality assessment, among which are the following: tangibles, reliability, responsiveness, assurance, empathy (Grigorieva & Nazarova, 2015).

Usually for description of all 5 quality criteria one use 22 statements, which describe the service parameters. Further, the respondents to the survey should estimate their expectations on the service and its perception using the Likert scale (from "Strongly Dislike" to "Strongly Like It"), Table 3.

**Table 03.** Criteria and sub-criteria for educational service quality

<b>1.</b>	<b>Tangibles</b>	T1	Up-to-date office machines and equipment in class
		T2	Large classrooms and comfortable tables
		T3	Well-dressed teacher
		T4	Presence of informational stands, which show educational programs, terms and requirements for entrance
<b>2.</b>	<b>Reliability</b>	R1	Classes are conducted according to the timetable
		R2	Proper document maintenance, security of student personnel files.
		R3	Timely replacement of the absent teacher
		R4	State accreditation
		R5	Obtaining of an official document on completion of education
<b>3.</b>	<b>Responsiveness</b>	Re1	Timely information of students to failures of class timetable
		Re2	Prompt service of educational institution management to students queries
		Re3	Help in compilation of documents for student entrance/expel
		Re4	Consulting on admission campaign
<b>4.</b>	<b>Assurance</b>	A1	Teacher behavior builds the students confidence in the educational institution.
		A2	The educational institutional personnel possess the necessary skills for react on student queries
		A3	The educational institution has a high reputation

		A4	Undertaking additional commitments to the students in case of force majeure
5.	Empathy	E1	Attention to individual queries of students
		E2	Convenient opening hours of structural subdivisions of the educational institution
		E3	Personal involvement of personnel in solving of student problems
		E4	Consulting on employment
		E5	Personnel knows student needs and understands their problems

Note: Was compiled according to (Novatorov, 2017).

As a result of a survey using the SERVQUAL approach one may make an assessment of both education quality perception for a concrete educational institution, and consumer expectations of education. According to a survey, the average value should be calculated for each of the five criteria (Grigorieva & Nazarova, 2015).

The authors believe that this approach is convenient as during one poll one may evaluate both expectation and perception of education quality, and it is of immediate interest for students, which are in the middle of their education. At this, the authors recommend to adjust the SERVQUAL scale both to the training course and educational level (bachelors, masters or doctoral programs), and to the concrete field of study. This is because humanitarian and technical educations can have wide variations in program intensity, timetable and total student study load.

## 6. Findings

In this work the authors have considered three methods for assessment of educational service quality basing on student expectations: SERVQUAL technique, Gap technique, Noriaki Kano technique.

Each of the described above methods aim at obtaining of reliable information on potential problems during education process and student expectations. But each of these methods has its specific features, Table 4.

**Table 04.** Comparative analysis of quality assessment methods based on consumer expectations

	Direct contact with respondents	Assessment of the formed opinion	Forecast of respondent expectations
Noriaki Kano Model	√	–	√
Gap Approach	–	–	√
SERVQUAL Approach	√	√	√

So, the Kano Model is primarily directed at formation of opposite feeling of respondents, firstly basing on imaging of presence of a product/service, and after this basing on its absence. This method stimulated respondents to thinking on how presence or absence of a certain characteristics influences on their opinion of educational services as a whole. At this, the Kano model allows one to make a forecast of student response to innovations in educational process.

Gap method doesn't imply a direct contact with student during the process of information collection on estimation of their expectations. Furthermore, the method implies presence of precoded gaps, which have an impact on appearance of possible reasons for student dissatisfaction.

In other words, this method is aimed at understanding of development strategy by the senior managers of the educational institution without directed involvement of students. Gap method shows the problems, which can be faced with during the process of student needs satisfaction, and how it can be omitted.

SERVQUAL method is different from the others in that it proposes some quality criteria and statements, which they may evaluate. This method allows one to make a forecast of student response to some events as part of the provided service and evaluate the formed opinion on the education. However, this method, in contrast to Kano method, is limited by the statements listed in a questionnaire.

Anyway, the authors' position is that all the aforesaid methods should be considered as feasible for usage in education sector, but each of them should be used for solving of specific tasks: definition of the formed opinion, student expectation forecast or revealing major problems at satisfaction of their needs.

## 7. Conclusion

In the new socio-economic conditions of the labor market, in a crisis situation in the country, the issue of finding new ways and forms of improving the quality of training specialists (Slesarev, 2015).

In this work the authors present a survey of Russian literature on education quality assessment and give their opinion, which is as follows: the results should be distributed to pedagogical and social, there the first ones correspond to the established normative requirements, and the second ones correspond to the social ones in the form of student expectations.

As a result of investigations of quality levels and elements, the necessity for taking into account the student opinion on education services is justified aiming at its quality improvement.

During the investigation the authors considered the alternative methods for educational quality assessments: SERVQUAL technique, Gap technique, Noriaki Kano technique. According to the conducted research, the authors came to a conclusion that all the aforesaid methods are of immediate interest in education sector and might be used aiming at training of future specialists, as they are based on student expectations satisfaction.

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