

ENSURING THE EDUCATION QUALITY BY THE EXAMPLE OF REGULATION ON STUDENT SURVEY ON TEACHING QUALITY AND EFFECTIVENESS OF INTERNATIONAL SCIENTIFIC EDUCATIONAL CENTER OF NAS RA

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Abstract

Higher education quality issues continue to be the focus of education experts, researchers, and policymakers in this context.

The issue of involvement in the process of education quality assurance is also important, moreover, we are talking about both "internal" and "external" stakeholders. Stakeholders' involvement is important in the sense that decisions are based on their opinions, and the education quality is continuously improved by identifying their needs, assessing their satisfaction, and studying their views on various issues.

This article presents an example of tools and mechanisms for data collection, processing, feedback in the process of education quality assurance. The article examines in detail the main principles of the student survey on "Teaching Quality and Effectiveness" carried out by the International Scientific-Educational Center of the NAS RA, presents the data collection tool: measurable variables, measurement scales, data processing features.

The article also discusses the participation of internal stakeholders in the quality assurance process of education, the study of their opinion through quantitative research, and the use of research-based data in decision-making.

The article is based on the example of this research, because it differs from the rest of the research carried out at ISEC:

- It is carried out with the most regularity evaluating all courses in the current semester,
- Still, the largest research databases have been collected from the results of these surveys,
- Students separately assess all lecturers' activities with the defined points, the work with students of the head of the chair and the coordinator,

- It has clear mechanisms for providing feedback, which is fixed by the regulations.

Keywords and phrases: Quality of Education, Quality Assurance, Quality Improvement of Education, Stakeholders, Satisfaction Assessment, Student-Centered Learning.

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Համառոտագիր

Բարձրագույն կրթության որակի հիմնահարցերը շարունակում են մնալ կրթության ոլորտի փորձագետների, հետազոտողների և քաղաքականություն մշակողների ուշադրության կենտրոնում:

Կրթության որակի ապահովման գործընթացում ներգրավվածությունը շատ կարևոր է, ընդ որում՝ խոսքը և՛ ներքին, և՛ արտաքին շահակցիների մասին է: Շահակցիների ներգրավումը կարևոր է հատկապես այն առումով, որ որոշումները կայացվում են նրանց կարծիքների հիման վրա, և կրթության որակի ապահովումը շարունակաբար բարելավվում է բացահայտելով վերջիններիս կարիքները, չափելով գոհունակությունը և ուսումնասիրելով նրանց կարծիքները տաբեր հարցերի շուրջ:

Հոդվածում ներկայացված է կրթության որակի ապահովման գործընթացում տվյալների հավաքման, մշակման, հետադարձ կապի ապահովման գործիքների և մեխանիզմների գործող օրինակ: Հոդվածում մանրամասն քննվում է ՀՀ ԳԱՍ գիտակրթական միջազգային կենտրոնում (այսուհետ՝ ԳԿՄԿ) ներդրված և գործող՝ «Ուսանողների կողմից դասավանդման որակի և արդյունավետության գնահատման» ուղղված հարցումների հիմնական սկզբունքները, ներկայացվում են տեղեկատվության հավաքման մեխանիզմները և գործիքները՝ չափվող փոփոխականները, չափման սանդղակները և տվյալների մշակման առանձնահատկությունները:

Հոդվածի հիմքում դրվել է հենց այս հետազոտության օրինակը, քանի որ ԳԿՄԿ-ում անցկացվող այլ հետազոտություններից այն տարբերվում է հետևյալ չափորոշիչներով.

- անցկացվում է ամենահաճախ պարբերականությամբ՝ բոլոր կիսամյակների դասընթացները գնահատելով,
- մինչ այժմ հավաքագրված հետազոտական ամենամեծ տվյալադարանները հենց այս հարցումների արդյուքներով են հավաքագրվել,
- ուսումնառողները առանձին-առանձին գնահատում են բոլոր դասախոսների գործունեությունը՝ սահմանված հարցարանով, ինչպես նաև գնահատում են ամբիոնի վարիչի և համակարգողի՝ ուսանողների հետ տրավող աշխատանքները,
- ունի կանոնակարգով ամրագրված հետադարձ կապի ապահովման հստակ մեխանիզմներ:

Հոդվածում քննարկվում է նաև կրթության որակի ապահովման գործընթացում ներքին շահակիցների մասնակցության, քանակական հետազոտությունների միջոցով նրանց կարծիքի ուսումնասիրման և որոշումների կայացման հիմքում հետազոտությունների վրա հիմնված տվյալների կիրառման հարցերը:

Բանալի բառեր և բառակապակցություններ. կրթության որակ, որակի ապահովում, կրթության որակի բարելավում, շահակիցներ, գոհունակության գնահատում, ուսանողակենտրոն ուսուցում:

ОБЕСПЕЧЕНИЕ КАЧЕСТВА ОБРАЗОВАНИЯ НА ПРИМЕРЕ РЕГЛАМЕНТА ПО ПРОВЕДЕНИЮ СТУДЕНЧЕСКОГО ОПРОСА/ОЦЕНКИ ОТНОСИТЕЛЬНО КАЧЕСТВА И ЭФФЕКТИВНОСТИ ПРЕПОДАВАНИЯ В МЕЖДУНАРОДНОМ НАУЧНО- ОБРАЗОВАТЕЛЬНОМ ЦЕНТРЕ НАН РА

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Аннотация

Роль и функции образования приобретают все большее значение и в этом контексте вопросы высшего образования продолжают оставаться в центре внимания экспертов в области образования, исследователей и политиков.

В данном контексте также важен вопрос вовлеченности стейкхолдеров в процесс обеспечения качества образования, причем речь идет как о «внутренних», так и о «внешних» стейкхолдерах. Участие заинтересованных сторон важно в том смысле, что решения принимаются на основе их мнений, а качество образования постоянно улучшается за счет выявления их потребностей, оценки их удовлетворенности и изучения их мнений по различным вопросам.

В данной статье представлен пример инструментов и механизмов сбора, обработки данных, обратной связи в процессе обеспечения качества образования. В статье подробно рассматриваются основные принципы опроса студентов на тему «Качество и эффективность преподавания», проведенного Международным научно-образовательным центром НАН РА, представлены инструменты сбора данных: измеряемые переменные, шкалы измерения, особенности обработки данных.

Статья основана на примере этого исследования, поскольку оно отличается от остальных исследований, проводимых Международным научно-образовательным центром НАН РА.

- Оно проводится с наибольшей регулярностью, оценивая все курсы в текущем семестре.
- Самые большие исследовательские базы данных были собраны по результатам этих опросов.
- Студенты отдельно оценивают всю деятельность преподавателей установленными баллами, работу со студентами заведующего кафедрой и координатора

- Исследование имеет четкие механизмы обеспечения обратной связи, что закреплено регламентом.

В статье также обсуждается участие внутренних стейкхолдеров в процессе обеспечения качества образования, изучение их мнения с помощью количественных исследований и использование данных исследований при принятии решений.

Ключевые слова и словосочетания: качество образования, обеспечение качества, повышение качества образования, бенефициары, оценка удовлетворенности, обучение, ориентированное на студента.

Introduction

The concept of "Quality Assurance" is widely used in almost all spheres of public activity. The article examines this concept in the context of higher education. Taking into account the importance of studying stakeholders' opinions involved in different fields in the modern world, the need to put research-based knowledge at the basis of their inclusion, the realization of rights, and decision-making, The Quality Assurance (QA) Department of the International Scientific Educational Center (ISEC) of NAS RA uses various mechanisms to ensure and improve the students' education quality. One of these mechanisms is the regular surveys among internal and external stakeholders, which are aimed at studying stakeholders' opinions and assessing their satisfaction. The article provides an example of a survey on ISEC's internal stakeholders' satisfaction assessment, in this case, Student Satisfaction. It is an example of quantitative research by nature, which is carried out in the given academic year among all the chairs of ISEC.

Theoretical and methodological bases

The main question that we consider necessary to address first is the following: What does "quality" mean, in particular, "quality of education"? There are two aspects of quality, especially in the educational context: the quality of the system as a whole and the quality of what the system offers to students or learners [4, p.3]. It follows that quality should be seen as a set of efficiency and accountability in the educational process. Quality assurance facilitates recognition of the standards of an award, serves public accountability purposes, helps inform student choice, contributes to improved teaching-learning and administrative processes, and helps disseminate best practices to lead to the overall improvement of higher education systems [4, p. 4]. "The document on the definition of the education quality adopted by the UNESCO International Working Group in Florence in 2000 states that the quality of education depends on the context in many cases, as well as the demands of different stakeholders (especially parents) and their perceptions of the quality of education" [11, p. 4]. The World Bank attempted to define the concept of education quality in its "Education Priorities and Strategies" (1995) report. It is particularly mentioned here. "The quality of education is difficult to define and measure. An adequate definition should include the results of students' knowledge. Many educators can include in the definition educational experience that helps them get those educational outcomes, in other words, the educational environment" [9, p. 46]. It should be noted that by quality assurance we mean planned and coordinated actions. Quality assurance has been defined as "systematic management and assessment procedures adopted by higher education

institutions and systems in order to monitor performance against objectives, and to ensure achievement of quality outputs and quality improvements" [2, p. 2]. For this goal, the Quality Assurance Handbook of the International Scientific-Educational Center of the NAS of RA was published in 2014 [see 1]. At the same time, in order to effectively organize the process of education quality assurance in ISEC, and to carry out the implemented activities following the criteria set by the National Center for Quality Assurance of ESCS RA, the QA Department of ISEC develops and executes the following documents:

- Charter on the Quality Assurance Department of ISEC NAS RA
- The Quality Assurance Policy of ISEC NAS RA
- The Quality Assurance Principles of ISEC NAS RA
- Quality Assurance Concept

In this context, the issue of stakeholders' involvement in the process of education quality assurance is also important, moreover, we are talking about both "internal" and "external" stakeholders. Stakeholders' involvement is important in the sense that decisions are based on their opinions, and the education quality is continuously improved by identifying their needs, assessing their satisfaction, and researching their views on various issues.

It should be noted that several theories present and differentiate their role in the process of education quality assurance. According to Freeman (*Freeman, 1984; Mitchell, Agle & Wood, 1997*), it can be any person or a group of people that can influence the process of achieving the aims of a given organization – an academic institution in this case. The division into internal and external stakeholders was introduced by Burrows (*Burrows, 1999*). In his work, Watson (*Watson, 2012*) states that not all groups seen as stakeholders are, indeed, stakeholders, as the role they play and their influence on an organization is very low or non-existent [7, p. 99]. At the same time, various stakeholder groups have different perceptions regarding the educational needs and education quality [8, p. 94].

One of the ways of influencing the stakeholders in the process of continuous improvement of the education quality is research conducted among them: qualitative and quantitative. Taking into account all this and based on the need to involve internal and external stakeholders in the process of education quality assurance, the International Scientific-Educational Center of NAS RA has many regulations, procedures, and other related documents, including the followings:

- Student Survey Procedure for Disclosure of Educational Needs of Students at ISEC NAS RA
- Regulation on Student Survey on Teaching Quality and Effectiveness of International Scientific Educational Center of NAS RA
- Regulation on Satisfaction Survey of PhD students (applicants for PhD) at ISEC NAS RA

- Survey on Assessing Management and Administration Effectiveness by Academic Staff
- Regulation on evaluation-survey of the educational program by graduates of International Scientific-Educational Center of NAS RA
- Regulation on internship evaluation-survey by students of International Scientific-Educational Center of NAS RA
- Regulation on evaluation-survey of graduates of ISEC NAS RA by employers;
- Focus group discussion with alumni
- Focus group discussion with students
- Survey on assessing the quality and effectiveness of distance learning courses by students organized on VLE
- Survey on satisfaction of lecturers with the effectiveness of distance learning courses
- Survey on satisfaction of the participants to training entitled “Organization of educational programs and internal monitoring”
- Regulation on surveying student participants in International Mobility Projects at ISEC NAS RA;
- Survey on lecturers' satisfaction with the interconnection of research activities and educational process;
- Survey on students' satisfaction with the interconnection of research activities with the educational process.

This article focuses on the research into student satisfaction.

Satisfaction is a feeling of happiness and joy that individuals obtain when they have fulfilled their human needs and desires [6, p. 174]. The idea is to consider students as “consumers”, a reductive view of the entire university experience. Customers are satisfied when the service fits their expectations, or very satisfied when the service is beyond their expectations, or completely satisfied when they receive more than they expect [5, p. 354]. At the same time, student satisfaction can be defined as the short-term attitude resulting from the assessment of students' educational experience, services, and facilities. And how is student satisfaction measured? It can include various factors: both objective and subjective. Theoretically, these factors are distinguished as personal and institutional factors: “Personal factors cover age, gender, employment, preferred learning style, student's GPA and institutional factors cover quality of instructions, promptness of the instructor's feedback, clarity of expectation, teaching style” [3, p. 354]. It must be stated that these are common factors and there are many other factors in real practice.

Thus this article aims at discussing the main principles and mechanisms of the student survey on “Teaching Quality and Effectiveness” carried out by the International Scientific-Educational Center of the NAS RA. The article is based on the example of this research, because it differs from the rest of the research carried out at ISEC:

- It is carried out with the most regularity evaluating all courses in the current semester

- Still, the largest research databases have been collected from the results of these surveys
- Students separately assess all lecturers' activities with the defined points, the work with students of the head of the chair and the coordinator
- It has clear mechanisms for providing feedback, which is fixed by the regulations

Research methods and fixed mechanisms

The International scientific educational center of NAS RA carries out surveys on "Teaching Quality And Effectiveness" among the students based on the Regulation [see 10], where the principles of carrying out surveys, data storage, and feedback are presented in detail. Quantitative information is collected during the research (It should be noted that the QA Department uses mechanisms to collect and develop qualitative data as well). The data collected during the research are analyzed in the Quality Assurance Department of ISEC NAS RA using Excel and also SPSS software packages as needed. It can be stated that the QA Department strictly preserves the anonymity of the research participants, thus ensuring maximum objectivity of the answers. Each question has a specific purpose in the questionnaire. In particular, these questions were selected to assess Teaching quality and effectiveness, because they allow us to measure the followings:

- Lecturer's professionalism, time management skills, ability to use interactive methods, respect for students
- The lecturer's willing to evaluate objectively, encourage students' self-study, as well as to encourage research skills development.

As mentioned in the Regulation, the revised questionnaire contains the following items to be assessed by students:

1. The lecturer conducted the course professionally.
2. The lecturer presented the course structure, teaching, learning, and assessment methods.
3. The material was presented in a simple, understandable, interesting, and accessible way. The lecturer supported digesting the content.
4. The lecturer manages time and plans course delivery.
5. The lecturer was available for students to clarify course-related questions out of class.
6. The lecturer was placing enough electronic resources on the Moodle platform (files-course materials, links, pages, videos, lectures, presentations, etc).
7. The lecturer encouraged self-study of the students.
8. The lecturer was objective and assesses the students in line with the set criteria.
9. The lecturer demonstrated a kind and respectful attitude toward the student.
10. The course allows the developing of research skills.
11. The list of provided literature was available.
12. Generalized grade of the course

It should be noted that the questionnaire has changed over time based on the opinions of students and lecturers, as well as the challenges facing the Center. For example, in point 6, there were no notes in parentheses before, which turned out to be easy for students to understand, so the question was supplemented with this section for additional clarification. Taking into account the importance of research skills, point 10

was added. Students assess the points in the questionnaire on a scale of 1-5, at the same time they have the right to indicate the "Did not teach" option, which has been introduced from the point of view of accounting for the objectivity of the electoral courses' lecturers' evaluation. Each point is assessed for all lecturers separately. The data are calculated and presented according to the average values of the assessments given for the point.

$$m = \sum_{i=1}^{12} / N,$$

where "m" is the mean value, and "N" is the number of actual evaluators. Table 1 presents an example of ongoing assessments. The example is based on the grades given to one lecturer. The students who participated in the survey were numbered with the letter S in the table. As the table presents there are 10 students who participated in the survey, in one of these cases, the lecturer's course was optional, since S9 marked "DT" in all the fields of questions, that is, did not teach. The last column of the table presents the lecturer's means for all the questions, which are calculated by the mentioned formula.

Table 1. Example of calculating scores given by students

	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	Mean
1. The lecturer conducted the course professionally.	5	5	5	5	3	2	3	5	DT	5	4.22
2. The lecturer presented the course structure, teaching, learning, and assessment methods.	5	5	5	5	3	2	3	5	DT	5	4.22
3. The material was presented in a simple, understandable, interesting, and accessible way. The lecturer supported digesting the content.	5	5	5	5	3	2	3	5	DT	5	4.22
4. The lecturer manages time and plans course delivery.	5	5	5	5	3	2	3	5	DT	5	4.22
5. The lecturer was available for students to clarify course-related questions out of class.	5	5	5	5	3	2	3	5	DT	5	4.22
6. The lecturer was placing enough electronic resources on the Moodle platform (files-course	5	5	5	5	3	2	3	5	DT	5	4.22

materials, links, pages, videos, lectures, presentations, etc).											
7. The lecturer encouraged self-study of the students.	5	5	5	5	3	2	3	5	DT	5	4.22
8. The lecturer was objective and assesses the students in line with the set criteria.	5	5	5	5	3	2	3	5	DT	5	4.22
9. The lecturer demonstrated a kind and respectful attitude toward the student.	5	5	5	5	3	2	3	5	DT	5	4.22
10. The course allows the developing of research skills.	5	5	5	5	3	2	3	4	DT	5	4.11
11. The list of provided literature was available.	5	5	5	5	3	2	3	5	DT	5	4.22
12. Generalized grade of the course	5	5	5	5	3	2	3	5	DT	5	4.22

In the end, the lecturer's rating score is calculated using the following formula

$$M = \sum_{i=1}^{12} / 12,$$

where M is the lecturer's rating score. In the example above, all mean values are added to and divided by 12, as a result, the given lecturer's rating score is 4.21.

In this questionnaire, students should also answer whether they would like to take part in the particular lecturer's other course or not. For the answer, they have three options: *Yes, No, Didn't teach*.

It is obvious that in modern developing societies the process of education quality assurance (including stakeholder satisfaction assessments) can't be accompanied by new challenges. Covid-19 has created such challenges for education quality assurance. Along with its negative effects, it also had some positive effects, among which was the ability to adapt quickly to new conditions, and to make up-to-date decisions. The QA Department of ISEC quickly responded to the existing challenges and made decisions according to the situation using the resources of the QA and IT Departments. Quality assurance officers' support was very important in this situation. Specific questions about distance learning were added to the questionnaire, which allowed measuring the relevance of the methods used by the lecturers to conduct distance learning courses, the presence or absence of a variety of distance learning tools during the distance learning course, and the presence or absence of a variety of remote instrumentation tools while conducting distance learning.

In particular, the following questions have been added:

On the other hand, the questionnaire measuring the satisfaction with distance learning courses allows us to understand whether the training was as effective as the classroom training courses.

In open questions, stakeholders indicate if

- What pleased them most during the distance learning
- What made them least satisfied during the distance learning

The defined questionnaire may allow measuring the students' satisfaction with the Head of Chair's and coordinator's work with the students. Students assess these also on the 1-5 scale.

At the end of the survey, students have the opportunity to submit their suggestions and comments.

After processing, the QA Department submits student survey results to the relevant chair, if needed, to other divisions., and then to the lecturers by personal e-mail. It is important that with the help of developed tools there is classification and corresponding methods that apply individually, lecturers can not see other's classifications. The data is generally presented twice by the head of the QA department to the members of the directorate during the meeting of the directorate. There is a mandatory requirement by the ISEC that the survey results must be discussed at the chair meeting and must be fixed in the relevant protocols. Especially in case of problems, it is necessary to indicate clear actions by the chair, after it the improvement processes take place.

Conclusion

The concept of "Quality Assurance" has always been relevant in almost all spheres of public activity, but also in the context of education, in this case, higher education. To examine the quality assurance processes, main mechanisms, tools, and principles, the article presented an example of the quantitative research carried out by the QA Department of ISECNAS RA.

The presented example showed that in data collecting information process are some important facts:

- Available tools/questionnaires designed for data collection
- Measuring scales of existing variables
- Design techniques for analyzing collected data

- Continuous improvement of the questionnaire based on stakeholders' opinions and current challenges

On the other hand, the existence of clear mechanisms for ensuring feedback with stakeholders and research-based decision-making throughout the whole cycle of education quality assurance was used.

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