Evaluation of the “Quality of Education” in higher educational institutions (on the example of the Batumi State Maritime Academy)

M. Diasamidze
Ts. Gvindzhilia
Ia. Motskobili
I. Takidze

Batumi State Maritime Academy, Batumi, Georgia

Article info

Accepted 28.02.2019

Department of Exact and
Natural Sciences, Professor,
Batumi State Maritime
Academy, Batumi, Georgia

m.diasamidze@bsma.edu.ge
ts.gvindzhilia@bsma.edu.ge
i.motskobili@bsma.edu.ge
i.takidze@bsma.edu.ge

Diasamidze, M., Gvindzhilia, Ts., Motskobili, I., Takidze, I. (2019). Evaluation of the “Quality of Education” in higher educational institutions (on the example of the Batumi State Maritime Academy). Fundamental and applied researches in practice of leading scientific schools, 31 (1), 54–57.

The article addresses the problem of higher education - improving the quality of graduates' professional training, provides a brief analysis of research results, Recommendations on how to use the results “Quality of education” is a complex characteristic of education, the task of which is to train specialists who are competitive in the world market. It is impossible to develop a single, scientifically based system of indicators for the quality of student training, since the education system is different in all countries of the World, moreover, a different system of training students, which is one of the influencing factors on the quality of Higher Education. It is necessary to take into account the specifics of the university.

One of the elements of the quality assessment system is monitoring, which is considered to be a comprehensive system for diagnosing the quantitative and qualitative characteristics of the effectiveness of an educational system. The assessment of the quality of education should be formed as a cumulative indicator of all the qualities that influence the educational process. During the work we used the results of sociological research of the subjects of the educational process: students, teachers, monitoring of the educational process (academic performance of students).

Keywords: quality of education; assessment of the quality of education; monitoring.

Introduction

In different universities there are different systems for assessing the quality of education. The existing local approach to assessing the level of students' training excludes the possibility of comparing learning outcomes in various educational institutions. Therefore, the assessment of the “quality of education” should be formed as a cumulative indicator of all factors influencing the educational process. One of the elements of the evaluation system of “quality education” is monitoring. Monitoring can be described as a comprehensive systemic diagnosis of quantitative and qualitative characteristics of the educational process, which includes such components of education as: purpose, content, didactic and technical means, conditions, results, forms and assessment methods [5].

The main role of monitoring lies in the analytical comparison of these assessments over time, and not simply

in the statement of facts and data. Batumi State Maritime Academy has the status of an educational university, which is accredited by the state and is a specialized, prestigious educational institution in the region. The main function of the BSMA is to provide qualified personnel for the Maritime and Commercial Fleet and cruise companies, as well as maritime transport infrastructures. Educational activities at the Maritime Academy are carried out in accordance with the legislation of Georgia and the International Convention on the Training, Certification and Watch keeping of Seafarers (STCW). The Academy promotes the development of marine institutions located on the Black Sea coast of Georgia. The ports of Batumi, Poti and Kulevi, the terminal in Supsa - are good conditions for providing students with swimming practice. At the same time, BGMA provides the above ports with qualified personnel. Our previous studies dealt with the identification of relevant and sought-after specialties in our

region. According to the results, it turned out that in the first place was the seafarer's specialty, more precisely, the sailor and the navigator [1, 2, and 6]. We continued our research in a different direction. This time, the following information was collected (specialty "Sea Navigation"): Form and type of assessment: F (0-40), E (51-60), D (61-70), C (71-80), B (81-

90), A (91-100); Minimum, maximum and average score (statistics by points); Monitoring of the educational process, student survey.

Academic performance data for 2016-2017 academic year (834 students)				
Grades (expressed in points)	I semester		II semester	
	Interim Assessment	Final assessment	Interim Assessment	Final assessment
Minimum	0	4	0	5
Maximum	60	100	60	100
Average score	42,73	60,99	44,1	70,8

a)

b)

c)

d)

From diagram a) it is clear that the number of students by category is as follows: „A“ - 31,1%, „B“ - 32,5%, „C“ - 21%, „D“ - 10,2%. 94,8% of the total number of students is distinguished by medium and high academic performance, and the total number of students in the categories „E“ and „F“ is 5,2%. From the diagram b) it is clear that the number of students by category is as follows: „A“ - 13,6%, „B“ - 14,1%, „C“ - 18,3%, „D“ - 20,4%. The final results of the final examinations are different; there is a tendency to reduce the academic performance of students: 66,4% of the total number of students is distinguished by medium and high academic performance. The indicator of positive assessment results is 84,6%, of which „E“ - 18,2% and „F“ - 15,4%. From

the diagram c) it is clear that the number of students by category is as follows: „A“ - 30,4%, „B“ - 38,7%, „C“ - 20,8%, „D“ - 6,9%. 96,8% of the total number of students is distinguished by medium and high academic performance, and the total number of students in the categories „E“ and „F“ is 3,2%. From the diagram d) it is clear that the number of students by category is as follows: „A“ - 15%, „B“ - 16,3%, „C“ - 20,9%, „D“ - 19,8%. The final results of the final examinations are different; there is a tendency to reduce the academic performance of students: 72% of the total number of students is distinguished by medium and high academic performance. The index of positive results is 89,5%, of which „E“ - 17,4% and „F“ - 10,5%.

Academic performance data for 2017-2018 academic year				
Grades (expressed in points)	I semester		II semester	
	Interim	Final	Interim	Final
Minimum	0	5	0	6
Maximum	60	100	60	100
Average score	42,88	67,82	44,1	66,82

i)

f)

g)

h)

From the diagram i) it is clear that the number of students by category is as follows: „A“ – 27,3%, „B“ – 36,3%, „C“ – 23,4%, „D“ – 8,8%. 95,8% of the total number of students is distinguished by medium and high academic performance, and the total number of students in the categories „E“ and „F“ is 4,2%. From the diagram f) it can be seen that the number of students by category is as follows: „A“ – 14,4%, „B“ – 13,4%, „C“ – 18,4%, „D“ – 21,6%. The final results of the final examinations are different; there is a tendency to reduce the academic performance of students: 67,8% of the total number of students is distinguished by medium and high academic performance. The indicator of positive assessment results is 87,6%, of which „E“ – 19,8%

and „F“ – 12,5%. From diagram g) it is clear that the number of students by category is as follows: „A“ – 26,3%, „B“ – 37,3%, „C“ – 24,4%, „D“ – 7,8%. 95,8% of the total number of students is distinguished by medium and high academic performance, and the total number of students in the categories „E“ and „F“ is 4,2%. From the diagram h) it is clear that the number of students by category is as follows: „A“ – 14,4%, „B“ – 12,4%, „C“ – 19,4%, „D“ – 21,6%. The final results of the final examinations are different; there is a tendency to reduce the academic performance of students: 67,8% of the total number of students is distinguished by medium and high academic performance. The indicator of positive assessment results is 87,6%, of which „E“ – 19,8% and „F“ – 12,5%.

Table 1. General statistics (on the basis of intermediate and final exams)

Overall Assessment		Interim Assessment		Final Assessment			Number of students
Academic year	semester	min.	Max	Interim	min.	Max	
2016-17	I	0 points	60 points	42,73	4	100 points	874
	II			44,1	5		821
1017-18	I			42,88	5		818
	II			44,1	6		821

To understand the reasons for the decline in student performance, we made a comprehensive monitoring of the teaching and learning process: 1) prepared checklists and within our department (mathematics, physics, chemistry, information technology, and marine ecology) began to attend lectures unplanned. There were at least 3 teachers in the lecturers, each evaluated according to the following

scheme: “-” unsatisfactory, “+” satisfactory, “++” good, “+++” excellent. According to the principle of arithmetic average, the average estimate was established. The attending teachers studied the strengths and weaknesses of the lecture, reviewed it together with the lead lecturer, and gave appropriate recommendations.

Evaluation table 2.

Rating by category		interim assessment (%)						final assessment (%)					
Acad. year	Semes-ter	51-62	41-50	31-40	21-30	11-20	0-10	A	B	C	D	E	F
2016-17	I	31,1	32,5	21	10,2	2,2	3	13,6	14,1	18,3	20,4	18,2	15,4
	II	30,4	38,7	20,8	6,9	1,1	2,1	15	16,3	20,9	19,8	17,4	10,5
2017-18	I	27,3	36,3	23,4	8,8	3,1	1,1	14,4	13,4	18,4	21,6	19,8	12,5
	II	26,3	37,3	24,4	7,8	2,9	1,3	14,3	12,4	19,4	21,6	18,8	13,5
the average		28,83	36,2	22,35	8,43	2,33	1,88	14,33	14,05	19,25	20,85	18,55	12,98

Checklist - Lecture Assessment Aspects		
Nº	(anonymous survey, 806 students): 1 - complete discrepancy; 2 - not match; 3 - partial correspondence; 4 - match; 5 - full compliance	
1	The teacher acquainted the students with the course description (syllabus)	1 - 2 %, 2 - 4 %, 3 - 5 %, 4 - 29 %, 5 - 60 %
2	The training course is clearly written, it is clear, the lecture goes according to the subject	1 - 2 %, 2 - 3 %, 3 - 4 %, 4 - 24 %, 5 - 67 %
3	The teacher presents the lecture clearly, consistently and clearly	1 - 1 %, 2 - 1 %, 7 - 5 %, 4 - 28 %, 5 - 63 %
4	Optimally distributes time, applies adequate forms and methods of assessment	1 - 1 %, 2 - 1 %, 3 - 9 %, 4 - 32 %, 5 - 57 %
5	Adequately uses auxiliary teaching materials and modern technologies	1 - 1 %, 2 - 2 %, 3 - 8 %, 4 - 16 %, 5 - 73 %
6	Components and evaluation criteria are clearly and clearly defined.	1 - 1 %, 2 - 2 %, 3 - 10 %, 4 - 18 %, 5 - 69 %
7	The indicated literature is available and sufficient.	1 - 13 %, 2 - 16 %, 3 - 21 %, 4 - 24 %, 5 - 26 %
8	Material and technical base meets the requirements of the curriculum	1 - 10 %, 2 - 16 %, 3 - 19 %, 4 - 23 %, 5 - 32 %
9	Teacher Relationship with Students	1 - 2 %, 2 - 3 %, 3 - 8 %, 4 - 38 %, 5 - 49 %

Estimated classroom work 20 teachers. Results:			
Nº	Weaknesses	Strengths	recommendations
1	Lectures are conducted mainly by assistant professors	The coincidence of the content of the lecture with syllabus	Improve teaching methods and forms
2	Little attention is paid to the connection of this subject with others [3, 4]	Clear timing	Monitoring student attendance. Division of groups into subgroups
3	Some lecturers do not indicate relevant literature	Relationship with students	Clearly highlight the topic, purpose and objectives of the lecture accessible and understandable
4	Do not always have the ability to use the projector (malfunction or lack of equipment)	Feel interconnected during lecture	create a "workbook" for students - tasks and examples of problem solutions concerning the entire course
5	Low student activity during the lecture	Consolidation of the material, focus on the practical application of theoretical knowledge	Homework check and student's oral survey
6	Low student attendance, low inclusiveness	The lecture is framed by diagrams, drawings, slides, etc.	Increase the quantity and improve the quality of professors
7	Low basic level of student preparation	Ability to achieve goals	marine-related examples

In preparing the conclusion, we reviewed the students' results for the first semester of the 2018–19 academic years. It can be clearly argued that student performance has improved (but this is a topic for further research).

Conclusion

In the framework of the investigated problem:

- A comprehensive methodology for assessing the quality of education was carried out, including objective sociological information (survey);
- Recommendations are offered to improve the quality of education;
- Continue monitoring to achieve the best results both in the learning process and in the student assessment process;
- Summing up, it should be noted that the growth of competition in the field of education - in particular, maritime transport, the requirements of consumers themselves to the quality of educational services, etc. Led to the fact that consumer orientation is becoming a key principle in the organization of the educational process and the quality of education in any university. A university that is not able to adapt at the individual level, in terms of meeting the needs

and interests of various subjects of education, increasing the value of educational services, is doomed to failure and will inevitably be ousted by other educational institutions from the educational space.

References

- Diasamidze, M., Motskobili, I., Gvindzhiliya, Ts., Takidze, I. (2018). Implementation of the conceptual model of forecasting the needs of qualified specialists in the Region, Baku.
- Diasamidze, M., Motskobili, I., Gvindzhiliya, Ts., Takidze, I. (2018). Realization of the conceptualization of technical education Specialists in the region, 4 ways of solving them", Jun3 24, 2018, Batumi-Georgia
- Diasamidze, M. (2018). Gravity and Maritime Navigation (IX International Conference of the Georgian Mathematical Association, September 3-8, 2018, Batumi-Tbilisi.
- Diasamidze, M., Takidze, I., Gvindzhiliya, C. (2017). Natural Sciences in the Service of Improving Maritime Transport, Baku.
- Diasamidze, M., Motskobili, I., Gvindzhiliya, Ts. (2017). HENTI. Kutaisi, Georgia,
- Didmanidze, I. Motskobili, I. (2016). The Concept Model Of Prognoses, XXVII International Conference "Problems of decision making under uncertainties" (PDMU-2016), May 23-27, 2016, Tbilisi-Batumi, Georgia.