Reforms and Experiments in Secondary Education

written by BRI Economic Team BAİ İqtisadi Qrupu 30 years have passed since Azerbaijan regained About independence with the breakup of the Soviet Union. This process is not a short duration in order to build a new educational system, which is capable of attaining the country's strategic goals, developing a reservoir of knowledgeable young generation in the most diverse spheres requiring a high level of expertise from space-related industry to nanotechnology, medical industry and alternative energy sources. A comprehensive report by institutions responsible for shaping and implementing education policy that assesses the country's education system, its achievements and lost opportunities on the basis of specific quantitative and qualitative indicators could be a key source of reference for specialized think tanks, independent researchers and the business sector regularly focusing on the labor market ...

The development of education has a dual significance for a country willing to eliminate dependence on natural resources at a time and establish a diversified economy. The estimates of multiple international research centers also show that currently the value of human capital in developed countries significantly exceeds that of physical capital, including its natural resources. Nowadays, the top 10 most prosperous places to live in the world, with regard to both its economy and the benefit of its population, are understood to be countries with the highest level of education.

On the basis of the foregoing, we can consider 2017 as a reported year for the institutions shaping and implementing Azerbaijan's education policy. Because the leading line of formal propaganda in education has been a transition to a new curriculum for over a decade. The official explanation is that

the introduction of the new national curriculum should focus on improving the subjects taught in general-education schools in line with the needs of society, ensuring interactivity in training, and avoiding cramming by encouraging pupils to think and develop thinking. The new system had to allow groups to organize mutual discussions based on conversations and 'brainstorming', involving each pupil in both the group and individual learning process. The abandonment of traditional mechanisms did reveal new standards and a different content to assess the pupils' knowledge.

The official explanations are bringing to the fore the differences between the new rules proposed for evaluating knowledge and previous (traditional) methods. For example, it is emphasized that traditional methods assess the pupils' knowledge, while the new mechanism does their achievements. Or it says that unlike the previous system that was based on daily and final measurements, the new system is based on diagnostic (measuring the pupils' basic knowledge and skills), formative (total academic monitoring to evaluate pupil strengths and weaknesses) and summative (for internal and external assessment) assessments.

According to the new content standard, in case the pupils' knowledge is applied in practical exercises, their logical thinking will be further strengthened. At the same time, among the core targets of the content changes are to facilitate pupils to build dialog about descriptions they can see, to widely use artistic illustrations and emotional activities (commenting, reaction, dancing) in their speeches, and to enhance speaking.

Thus, these arguments can also be regarded as a generalized position of the official entity that develops and implements reform proposals on the essence and distinctive features of the new curriculum.

The first pupils admission on the basis of new curricula and

teaching methods was launched in 2008 and 122,546 pupils went to secondary general education schools that year. In 2017, these pupils completed 9th grade and were involved in the final exams conducted by the State Exam Center (SEC) to assess their results. These exams can be regarded as the first formal assessment of 10-year reforms in the general education system. In fact, it would be more accurate for the Ministry of Education to prepare and publicize an objective report, as well as to organize public debates based on statistical data. All these should reflect the Ministry's view of the curriculum reform carried over the past 10 years. Because the official commitment to the society was that the new reforms should help your children build a brighter future and become more knowledgeable. And this reform-oriented education system has spent billions of public money in manats. An official answer based on the outcome and effectiveness of the spent money should have been absolute. It is important to have a brief look at the government's moves taken in 2009-2017 as part of the curriculum reform before we focus on the analysis carried out by Baku Research Institute experts based on SEC's statistics. The Cabinet of Ministries in its Decree 9 approved "The Assessment Concepts for the General Education System of the Azerbaijan Republic" on January 13, 2009. The new assessment system should ensure the following:

- provision of reliable information about "student's learning outcome", which is a key indicator for education quality;
- implementation of relevant changes in subject curricula and textbooks after obtaining of sufficient information about students' knowledge and skills through assessment;
- assistance in development of students' logical thinking skills during learning process unlike from assessment based on memory in new approaches in assessment.

According to the concept, the 1st level reflects the lowest level and the 4th level reflects the highest level. The 1st and 2nd level is envisaged for most students, and the 3rd,

especially 4th level is envisaged for more gifted students. Final examinations in grades 9 and 11 for issuing the education certificate are conducted in centralized way, while school-based assessments are conducted for the rest grades. Final examinations in grades 9 are conducted using tests including relevant number of items in two main subjects, namely Mother tongue (Azerbaijani in Azerbaijani sector, Russian in Russian sector) and mathematics, while in grades 11 in Mother tongue, mathematics and a foreign language. It underlines that the national sample-based assessment is a system that is implemented periodically in the end of certain teaching period and ensures assessment of student achievements. Purposes of national sample-based assessment are to identify students' general mastering level and dynamics through detection of strengths and weaknesses of their learning outcomes, to obtain relevant information on education in order to identify national education policy, to improve accountability of education policy-makers, to name just a few.

The new Education Law became effective as of June 2009. This Law prescribes the rights and responsibilities of both learners and educators, the governance principles for education institutions, and the State responsibilities in the field of education. According to this Law, the general education provides the learners with general basics of sciences, promoting the necessary knowledge, skills, and abilities, and preparing them for life and professional activity; the general education enables the learners to develop physically and intellectually, to provide them with the necessary knowledge, to develop the civic-oriented thinking based on a healthy lifestyle and values, etc. The basic education (9) in the Azerbaijan Republic is compulsory under the Law.

The Cabinet of Ministers' Decree # 103 on National Standard and Programs (Curricula) of General Education was approved on 3 June 2010. It is a framework for the principles to apply the efficiency and integration principles, to identify the students' potential as essential requirements for general education, to ensure the necessary knowledge and skills in independent life, and to develop their information and communication skills.

According to the new State standards, general education management should be based on accountability, responsibility distribution and monitoring of the development, and accountability should ultimately ensure the responsibility of each staff member at the institution where general education is implemented.

At the same time, the Decision determines in detail the rights and responsibilities of students that have received general secondary education (grade 9). Children completing this stage of general education must analyze texts in different styles and genres they listen and read, convey their content in a compact, but wider form, use monologue and dialogue forms of speech, make plans, theses, projects and opinions, substantiate their logical arguments by means of examples and proofs, summarize the main points expressed in different opinions, make calculations and predictions, use mathematical language, construct algorithms, make assumptions, perform work that requires creativity in the learning process, communicate in a foreign language, and so on.

Finally, the "National Strategy for the Development of Education in the Republic of Azerbaijan" was approved by Order # 13 of Azerbaijan's President dated 24 October 2013. The document identifies main directions, such as the creation of personality-long learning content, modernization of human resources in the field of education, and responsive, transparent and effective management mechanisms in education, which are strategic targets. As part of these targets, it is envisaged to implement directions, such as increasing the professionalism of educators, building new systems for evaluating the achievements of students, identifying the talents of learners, developing curricula for all educational levels, creating new information and reporting systems for the quality assurance and management of education.

Thus, significant steps have been taken to improve secondary education and student achievement over the past decade. From this point of view, it is impossible to ignore the abundance of the adopted legal instruments and mechanisms. Plus hundreds of new school buildings were built across the country during the influx of large oil revenues and the official propagation regularly presented infrastructure reconstruction as the main achievement of the education system. But the main indicator, showing how well all the steps and mechanisms are, and the targets are selected, is the results of the students - the point is not about the internal assessments carried out by the stakeholders (the Ministry of Education and schools), but about the external evaluation of the independent party (SEC). In this regard, it would be interesting to look at the results of the first phase of the new learning and education reform in the summer of 2017 based on the results of the centralized examinations of the first graduates of the new system.

The analysis of the statistical results of the first final (graduation) examinations under the new educational program

In accordance with "The Rules of Final Assessment of Learners Educated under the General Education" approved by Cabinet's of Ministers Decree # 498 dated December 2016, the State Exam Center holds final examinations through two stages in centralized way: Azerbaijani language and mathematics for general-education learners where education is carried out in Azerbaijani, Russian language and mathematics for those where education is carried out in Russian. At the first stage, learners are asked 10 open-type questions (the test that have no answer variant and require to write the right answer defining) in order to read and understand Mother tongue and to examine writing skills. Extra 10 questions in Azerbaijani are expected to be closed-type questions (the tests require to define and note one right answer of variants). At the first stage, in mathematics 10 open-type tests are given to the pupils in order to examine their mathematical skills.

In general, at the first stage, learners can get maximum 30 points in educational language (Azerbaijani or Russian), maximum 30 points in mathematics, maximum 10 points instead of essay writing. The pupils write the essay selecting voluntarily one of the topics presented. However, writing an essay is compulsory for those who want to obtain a certificate of excellence about the general secondary education. According to the results of the educational process, pupils who are eligible to obtain the distinguishing certificate must get maximum seven points out of 10 points at least to be eligible for this right. At the first stage of exit exams, the exam duration is two hours 30 minutes. It takes about two hours to perform the test and 30 minutes for the essay writing.

At the second stage, 30 tests on every subject, generally, 60 closed-type tests are offered in order to examine the knowledge and skills of other content standards. At the second stage, the exam duration is an hour and 30 minutes. At this stage, pupils can get 70 points separately for each subject.

Thus, according to the current legislation, graduates' knowledge of the secondary schools (9 year) is based on two subjects and estimated at 100 points.

Analysis of the results of regions and cities based on the exam subjects

Another important statistical indicator is the mean score for each subject taken on regions and cities as a whole. A data analysis shows that in 2017, the mean score in the educational language (Azerbaijani and Russian) in the final exams in grades 9 in regions and cities was not less than 30.

Among the regions and cities of the country the highest average scores in the educational language are the urban areas and the lowest ones are rural areas representing different economic regions of the country. The number of graduates who had the highest mean score in Mother tongue in 10 regions and cities was 46832, representing 43.4 percent of the total country indicator. At the same time, the total number of graduates who had the lowest mean score in Mother tongue in 10 regions (cities) was 10533, or 9.8 percent, of all graduates.

The difference was about 1.8 time among regions (cities) according to the highest and lowest standards of average scores.

Areas that have the lowest and the highest average score in educational language



As it can be seen from the above data, seven out of 10 administrative territories with the highest average standard in the educational language are cities and settlements in the capital agglomeration, and only three of them are rural areas. The administrative territorial units that show the lowest results are mainly South, Central and West economic regions.

The mean score in each of the regions and cities was lower than the maximum (100 points). More than 60 average scores were recorded only in Baku schools subordinated to the Ministry of Education and private lyceums. The total number of those lyceums was 61, and the total number of graduates participating in the exams was 3077 (2.8 percent of all graduates of grades 9 in the country in 2017).

The share of regions and cities in average score in educational language



I.

The average score in educational language was 31-40 points across 25 administrative areas, 40.1-5- points across 39 administrative areas and 50.1-68.6 points across nine administrative areas. There are significant differences among regions and cities for the average territorial score in final exams in mathematics as well.

Areas that have the lowest and highest average score in mathematics



The result is that eight out of 10 administrative areas that got the highest score in mathematics are overlapping with the territorial units that got the highest score in educational language. Only Ganja and Absheron region in top 10 went to Shahbuz and Ordubad.

Five out of 10 regions that got the lowest scores in mathematics are the same with those with the lowest scores in educational language. These administrative units include Jalilabad, Dashkasan, Aghsu, Yardymly and Kurdamir. These units – Zardab, Shamkir, Tartar, Gadabay and Gobustan have replaced these five regions with the lowest score in educational language – Goranboy, Sadarak, Lerik, Aghjabadi and Sabirabad.

Another point that attracts attention is that student achievements on mathematics was even lower. The top 10 regions' points that gained the highest standard of the educational language were 50-60 and mathematics 40-5-; or 10 regions' lowest points varied between 30-40 on educational language, but 25-30 on mathematics.

The share of regions and cities in average score in mathematics



The mean score in mathematics was higher than 50 in none of 73 regions and cities; it has changed in the range of 20-40 points in 13 regions and cities, in the rest of them, in the 60 administrative areas it has changed in the range of the

40.1-50 scores.

According to the average score, if we come across the criterion of overlapping results on both subjects, the best results in the 9-grade final exams were in eight regions and the worst results were in five administrative units. The areas that demonstrated the best result were Baku, Sumgayit, Mingachevir, Naftalan, Nakhchivan, Oghuz, Gakh and Gubadly. According to the ontological criterion, the lowest points were in Jalilabad, Dashkasan, Aghsu, Yardymly and Kurdamir.

During the first stage of final exams 26703 graduates from all regions wrote essays, with 13388, or 50.1 percent, of them falling to the share of Baku, Sumgayit and Absheron, and 133159 (49.9 percent) to rest of administrative units. Generally, 24.8 percent of all graduates wrote essays in the exam. In turn, 6272 pupils, or 23.5 percent, who wrote essays received seven or more points required to obtain the distinctive certificate.

There was a sharp difference among the regions and the cities in terms of their ratio to the total number of exams.

The analysis of regions and cities in accordance with the ratio of pupils writing essays to all exam participants, %



As is seen from the chart, of the 26 regions, only 10 percent

of the all graduates wrote essays. In some regions included in this group, pupils either did not write essays, or the figure was very low. For example, none of the students participating in the final exams in Lerik and Kangarli regions wrote essays. The data vary between 0.3-0.7 percent in Khizi, Gadabay and Zangilan.

Regarding other regions, the ratio of students writing essays to all graduates was 10.1-20 percent in 16 regions, 20.1-30 percent in 17 regions and 30.1-40 percent in 8 regions. In general, wholly in 5 regions (Beylagan, Goranboy, Shamakhi, Aghstafa and Ujar) 40-50 percent of all graduates wrote an essay.

The statistical comparisons of regions and cities based on the graduates' results

Final exams were organized in 73 provinces (region and city) in total. The number of graduates participating in the exam was 107,417. 37,003 (34.4 percent) studied in the Greater Baku region (Baku and Sumgayit cities, Absheron region) while 70,414 (65.6 percent) of them educated in the schools of country's other regions.

There are significant differences between the country's regions according to the percentage of students to total graduates as per low (0-30) and high (70-100) scores in both educational languages (Azerbaijani and Russian) and mathematics.

Regions (cities) with the highest and lowest points according the ratio of graduates who scored less than 30 and over 70 points in the language examination to all graduates

Ratio of graduates who	Ratio of graduates who scored	
scored less than 30 in the	over 70 points in the language	
language exam, percent	exam, percent	

10 regions with the highest score		10 regions with the highest score		
1.	Sumqayıt	13.1 percent	Sumqayıt	36.1 percent
1.	Baku	17.1 percent	Naftalan	31.3 percent
1.	Nakhchvan City	17.8 percent	Mingachevir	28.9 percent
1.	Mingachevir	20.0 percent	Nakhchvan City	28.3 percent
1.	Gubadly	20.5 percent	Baku	27.6 percent
1.	Abşeron	21.1 percent	Abşeron	25.6 percent
1.	Oghuz	21.9 percent	Gubadly	25.0 percent
1.	Gakh	23.6 percent	Oghuz	23.5 percent
1.	Naftalan	23.8 percent	Ganja	23.1 percent
1.	Ganja	24.1 percent	Gakh	23.1 percent
10 1	regions with	the lowest	10 regions with the lowest	
score		score		
1.	Yevlakh	46.9 percent	Yevlakh	10.1 percent
1.	Aghjabadi	47.5 percent	Sabirabad	9.9 percent
1.	Saatlı	47.8 percent	Kurdamir	9.7 percent
1.	Aghsu	48.5 percent	Yardymly	8.2 percent

1.	Yardymly	50.2 percent	Sadarak	8.1 percent
1.	Sabirabad	51.0 percent	Qusar	8.0
1.	Kurdamir	53.0 percent	Jalilabad	7.5 percent
1.	Jalilabad	53.1 percent	Aghsu	7.4 percent
1.	Gadabay	55.1 percent	Gadabay	7.4 percent
1.	Dashkasan	56.0 percent	Dashkasan	7.4 percent

For example, the best figures for the percentage of pupils who scored less than 30 points in the language examinations, compared to all graduates, were registered in Baku, Sumgayit, Mingachevir, Naftalan, Ganja and Nakhchivan cities, as well as Absheron, Gubadly, Gakh and Oghuz regions. Among the administrative units, from 13.1 percent (Sumgayit City) of all graduates to 24.1 percent (Ganja city) have scored less than 30 points. However, in the regions such as Yevlakh, Aghjabadi, Saatly, Yardymly, Gadabay and Dashkasan, the indicator's level varied between 47-56 percent. As is seen, the difference between the highest and the lowest indicator in terms of the percentage of students who scored low in the educational language is a few times. For example, in Sumgait, the first place for the best indicator, 13 out of every 100 students scored less than 30 points. And in Dashkasan, the last place for the worst indicator, the same indicator was 56 out of 100 students. Sumgait was the first with 36.1 percent while Dashkasan was the last with 7.4 percent as per the ratio of graduates who scored over 70 points in the language examination to all graduates.

The statistical data of the State Exam Center show that

students' mathematics results of 9th grade final exams are worse.

Regions (cities) with the highest and lowest points according the ratio of graduates who scored less than 30 and over 70 points in mathematics exam to all graduates

Ratio of graduates who scored less than 30 in mathematics exam to all graduates, percent		Ratio of graduates who scored over 70 points in mathematics exam to all graduates, percent		
10 regions with the highest score		10 regions with the highest score		
1.	Sumqayit	30.4 percent	Shahbuz	22.8 percent
2.	Mingachevir	30.9 percent	Nakhchvan City	22.1 percent
3.	Nakhchvan City	31.2 percent	Mingachevir	20.9 percent
4.	Shahbuz	34.2 percent	Sumqayıt	20.3 percent
5.	Baku	35.6 percent	Gakh	19.7 percent
6.	Ganja	36.1 percent	Sheki	16.3
7.	Gakh	37.2 percent	Ordubad	16.2 percent
8.	Gubadly	38.1	İsmayylly	15.8 percent
9.	Oghuz	39.0 percent	Ganja	15.2 percent
10.	Siyazan	42.2 percent	Naftalan	15.0 percent
10 regions with the lowest score		10 regions wi sc	th the lowest ore	

11.	Aghsu	63.4 percent	Gadabay	6.2 percent
12.	Terter	64.0 percent	Zardab	6.0 percent
13.	Sabirabad	64.2 percent	Terter	5.8 percent
14.	Shamkir	64.4 percent	Sadarak	5.8 percent
15.	Hajigabul	64.5 percent	Zangilan	5.8 percent
16.	Gadabay	65.2 percent	Aghsu	5.6 percent
17.	Dashkasan	65.4 percent	Shamkir	4.9 percent
18.	Yardymly	65.8 percent	Qobustan	4.8 percent
19.	Kurdamir	69.0 percent	Jalilabad	4.5 percent
20.	Jalilabad	70.4 percent	Dashkasan	3.9 percent

As can be seen from the data, the indicators in mathematics are so bad that even Siyazan, which has 42.2 percent of all graduates with less than 30 points, can be included in the list of 10 best cities (regions) according to the indicator's level. The best figures were registered in Sumgayit so that 30.4 percent of all graduates of secondary schools (9 year) in the city scored less than 30 on mathematics. The worst indicator was recorded in Jalilabad that 70.4 percent of all grade 9 graduates in the region scored less than 30 points.

The best indicators as per the ratio of graduates who scored over 70 points in exam to all graduates were recorded in Sumgayit, Mingachevir, Naftalan, Ganja and Nakhchivan cities, as well as Shahbuz, Gakh, Ordubad, Sheki and Ismayilli regions. Among these administrative units, from 15 percent (Naftalan city) of all graduates to 22.8 percent (Shahbuz region) scored more than 70 points. Zardab, Terter, Aghsu, Zangilan, Gobustan, Jalilabad, Gadabay, Sadarak, Shamkir and Dashkasan regions had the lowest indicators according to the percentage of graduates who have scored 70 or more points. Of these regions from 3.8 percent (Dashkasan region) of all graduates to 6.2 percent (Gadabay region) have scored more than 70 points.

The comparison of urban and rural schools based on the results of the exams

Comparative analysis of final exam results of rural and urban schools allows for a clearer picture of the education level. According to the statistical database of State Exam Center, in 2017 final exams for 9th grades were held in 4079 schools across the country. When comparing the results of the rural and urban schools based on this database, it is necessary to set aside the areas occupied fully or partially and analyzed them separately. Because many schools in these regions were presented unnamed, just with number (e.g. Lachin Secondary School No 102), or without the division of urban and rural areas.

According to the State Exam Center, 107,417 graduates of 4,077 schools entered 9th grade final exams in 2017. Of the 571 schools and 7,000 pupils belonged to the occupied regions and cities. These territorial units include Agdam, Fuzuli, Jabrayil, Gubadly, Zangilan, Kalbajar, Lachin, Shusha, Khojali and Khojavand regions. Given the difficulties in official statistics, comparative analysis of rural and urban schools did not include data on the occupied territories. Thus, final exams for 9th grades were held in 3,506 secondary schools in 2017, with the exception of schools in the occupied regions. Of these, 934 were urban schools while 2,572 were rural ones. 58,975 (58.7 percent) of the 9th grade students were graduated from urban schools (including Baku, state subordinated and region subordinated cities) and 40,912 (41.3 percent) from rural schools.

The distribution of urban and rural schools according to the average level of educational language



As can be seen from the data, the ratio of rural schools with mean score less than 30 scores in the final Azerbaijani (or Russian) language exams to all rural schools was 21 percent. The mentioned figure was only 3.7 percent for urban schools. In general, the mean score of 544 rural schools and 34 urban schools was less than 30 points. At the same time, rural schools is significantly behind the urban schools as per the percentage of schools with the mean score above 50 in the educational language: rural schools with the mean score over 50 points had a total of 11.4 percent (297 schools) of all rural schools, while urban schools had 53 percent (485 schools).

The results of rural schools were also significantly behind the results of urban schools in the mathematics subject. The division of urban and rural schools in the mean score in the mathematics examination



As can be seen from the data, the ratio of rural schools with mean score of less than 30 in the final Azerbaijani (or Russian) language exams to all rural schools was 21 percent. This figure was only 3.7 percent for urban schools. In general, the mean score of 544 rural schools and 34 urban schools was less than 30 points. At the same time, rural schools is significantly behind the urban schools as per the percentage of schools with the mean score above 50 in the educational language: rural schools with the mean score of over 50 had a total of 11.4 percent (297 schools) of all rural schools, while urban schools had 53 percent (485 schools).

The results of rural schools were also significantly behind the results of urban schools in the mathematics subject.

The division of urban and rural schools in the mean mathematics score



According to the graduates' language examination results, the difference between rural schools and urban schools is as follows: 49.2 percent of all rural school graduates and 32.8 percent of urban school graduates have scored less than 30 points. The ratio of rural school graduates who scored 70-100 in this subject to all rural graduates was 10 percent. The same indicator for urban schools was 26.7 percent.

Compared to the language test, the difference between the final exam results of the mathematics subject is greater.

The distribution of urban and rural schools as per the graduates' results in the mathematics examination



Apparently rural graduates who scored less than 30 are 61.6 percent of all rural graduates, although the similar indicator for urban schools was 29.1 percent. In turn, the proportion of rural graduates who scored more than 70 in the mathematics examination was 7.1 percent and urban graduates was 15.6 percent.

Finally, it is interesting to compare the results of urban and rural schools' essay writing. In 2017, 25369 students wrote essays in the ninth-grader final exams, of which 6773 (26.7 percent) were rural graduates and 18596 (73.3 percent) urban graduates. At the same time, only 917 or 13.5 percent of rural graduates writing essays could score 7 and more required to receive a school-leaving certificate with distinction. But 5146, or 27.7 percent, of urban graduates writing essays have scored in the range of 7-10.

Key results of statistical analysis

The first students that started education using new educational programs and standards launched about 10 years ago completed the ninth grade education in 2017 and centralized assessments were conducted to measure their knowledge. These exams could also be a source to assess the 10-year results of curriculum reforms. The following can be summarized as key results of statistical analysis for all regions and cities, as well as separate schools, across the country:

- The State Exam Center has published statistical results of the final exams for all schools, but the Ministry of Education authorized to implement the education reforms has not released any report on the results of the first stage of curriculum reforms, exam results, gained achievements, lost opportunities, errors and future steps based on lessons learned from the next stage.
- The mean score in the language examination was lower than the maximum score (100) in all regions and cities of the country and no region has reached 60. But relatively high score (68) has been recorded only in Baku-based lyceums attached to the Ministry of Education and private lyceums. A total of 3077 graduates from 61 secondary schools (2.8 percent of all ninth-grade graduates) taking a final exam in 2017 have participated in the exit exam.
- The highest score in the language examination has been recorded in large cities: the mean score in the language examination was 58 in Sumgayit and 54 in Baku and Nakhchivan. This score is lower in all other regions.
- The difference is slightly less than twice between Sumgayit (58) where the best result for the language examination was recorded and Goranboy (33.4) where the worst result was recorded according to the mean score level.
- •7 out of 10 administrative areas where the mean score for the language examination is higher are large cities and Absheron region and only 3 of them are country's rural areas. Administrative-territorial units where the mean score in the language examination is the lowest are mainly those in the southern, lowland and western regions.
- The mean score in the language examination was 50-60

scores only in 9 out of 73 cities and regions where the results were analyzed. In turn, in 25 cities and regions the lowest mean score in the language examination ranged from 30 to 40.

- Compared with the language examination, the results of mathematics examination were lower: the mean score in the language examination in cities and regions, where the highest result was recorded, was 58, but this figure was 46.7 in the mathematics examination. The highest score in the mathematics examination has been recorded in Shahbuz (46.7), the lowest score has been recorded in Jalilabad (25.2).
- 8 out of 10 regions and cities with the highest score in the language examination were included in the first 10 regions with the highest score in the mathematics examination. They are Sumgayit, Baku, Nakhchivan, Mingachevir and Naftalan cities and Oghuz, Gakh and Gubadly regions.
- 5 regions with the lowest score in the language examination have also achieved the lowest result in the mathematics examination. They are Jalilabad, Dashkasan, Aghsu, Yardymly and Kurdamir regions.
- In any of 73 cities and regions the mean score in the mathematics examination was not higher than 50 scores and it has changed in the range of 20-40 scores in 13 cities and regions and in the range of 40.1-50 scores in the remaining 60 administrative areas.
- According to the proportion of students who scored lower in the language examination (less than 30 scores), the best situation was in Sumgayit – only 13.1 percent of all graduates have scored less than 30. The worst situation was in Dashkasan – 56 percent of all graduates have scored less than 30.
- According to the proportion of students who achieved the highest result in the language examination (more than 70 scores), the best result was in Sumgayit (36.1 percent of all graduates), the worst result was in Dashkasan (56

percent).

- According to the proportion of students who achieved the lowest result in the mathematics examination (less than 30 scores), the best result was in Sumgayit (30.4 percent of all graduates), the worst result was in Jalilabad (70.4 percent).
- According to the proportion of students who achieved the highest result in the mathematics examination (more than 70 scores), the best result was in Shahbuz (36.1 percent of all graduates), the worst result was in Dashkasan (3.9 percent).
- The mean score in the language examination was less than 30 scores in 21 percent of rural schools and 3.7 percent of urban schools.
- The mean score in the language examination was more than 50 scores in 11.4 percent of all rural schools and 53.0 percent of urban schools.
- The mean score in the mathematics examination was less than 30 scores in 54 percent of all rural schools and 15.0 percent of urban schools.
- The mean score in the mathematics examination was more than 50 scores in 1.1 percent of all rural schools and 14.4 percent of urban schools.
- 2 percent of all graduates of rural schools and 32.8 percent of graduates of urban schools have scored less than 30 in the language examination.
- 10 percent of rural graduates and 26.7 percent of urban graduates have scored more than 70 in the language examination.
- 6 percent of rural graduates and 29.1 percent of urban graduates have scored less than 30 in the mathematics examination.
- 1 percent of rural graduates and 15.6 percent of urban graduates have scored more than 70 in the mathematics examination.
- 25 percent (26703) of all graduates have written essays in the final exam, of which only 23.5 percent (6272)

were able to have scored seven and more in order to receive a school-leaving certificate with distinction.