

**Table 23. Number of drop-out pupils**

№	Intellectual school	Number of drop-out pupils	Reason				
			health	change of domicile	Inability to pay	complex curriculum	chose vocational education
1	Ust-Kamenogorsk	13	2	7	1	3	0
2	Semey	2	1	0	0	0	1
3	Taldykorgan	8	0	2	6	0	0
4	Kokshetau	7	0	3	2	2	0
5	Astana, Physics and Mathematics	5	0	3	2	0	0
<b>Total</b>		<b>35</b>	<b>3</b>	<b>15</b>	<b>11</b>	<b>5</b>	<b>1</b>

**Finding new approaches to pupils' competitive selection**

We use tests and exams to define the level of subject knowledge while selecting pupils for the Intellectual schools. These tools do not allow to evaluate pupil's abilities to apply knowledge in practice and aptitude to natural sciences and mathematics. As a result we may select pupils who are not capable of successful learning under the NIS curriculum.

The AEO have studied the international experience in terms of development and creation of assessment models providing effective assessment of pupils' achievements in acquisition of curricula content, their ability to apply knowledge in practice and think critically.

We signed the Memorandum of Cooperation with Cito, Institute for Educational Measurement (the Netherlands). During a seminar with Cito experts we discussed development of the competitive selection model of pupils to the Intellectual schools based on the analysis and comparison of existing assessment models. The new model of competitive selection suggests:

- replacing the two-stage procedure (test and exam) with a one-stage procedure (only test);
- developing tests aimed at checking the ability to apply knowledge in practice and think critically instead of tests that only examine pupils' knowledge;
- increasing the number of tasks in mathematics, as one of the specialized subjects, for more effective assessment of pupils' mathematical literacy in order to make adjustments in their learning process at the Intellectual schools.

To introduce psychometrical assessment of pupils' aptitude to natural sciences and mathematics we studied CTY (the USA) experience in finding and selecting the most gifted youngsters to assess and develop their abilities. Afterwards the Memorandum of Cooperation was signed.



As a part of experiment in October we conducted a test for prospective pupils of the Intellectual school in Uralsk in order to assess their psychometrical characteristics. Results of the test demonstrated that 35% of Grade 7 pupils, 51% of Grade 8 pupils and 32% of Grade 9 pupils applying for the Presidential Grant had aptitude to study natural sciences and mathematics. According to CTY forecast that process test results these pupils are likely to become very successful. Pupils showing no aptitudes during the test can do well at the Intellectual schools if the educational process will be organized properly.

### Work to be done in 2012

1. Raising public awareness about pupils' competitive selection to the Intellectual schools:
  - organization of field briefings;
  - making announcements via mass media.
2. Organization of competitive selection for pupils at newly opened Intellectual schools.
3. Organization of training seminars for teachers on test development technologies, expertise of all problems by Cito experts and making corresponding adjustments in line with comments.
4. Cooperation with the Johns Hopkins University (the USA) on psychometric assessment of pupils' abilities applying to the Intellectual schools.
5. Consultations for pupils of general secondary schools in Mathematics, Kazakh, Russia and English languages to prepare them for entry into Intellectual schools.

## 5.2. Virtual and Vacation schools

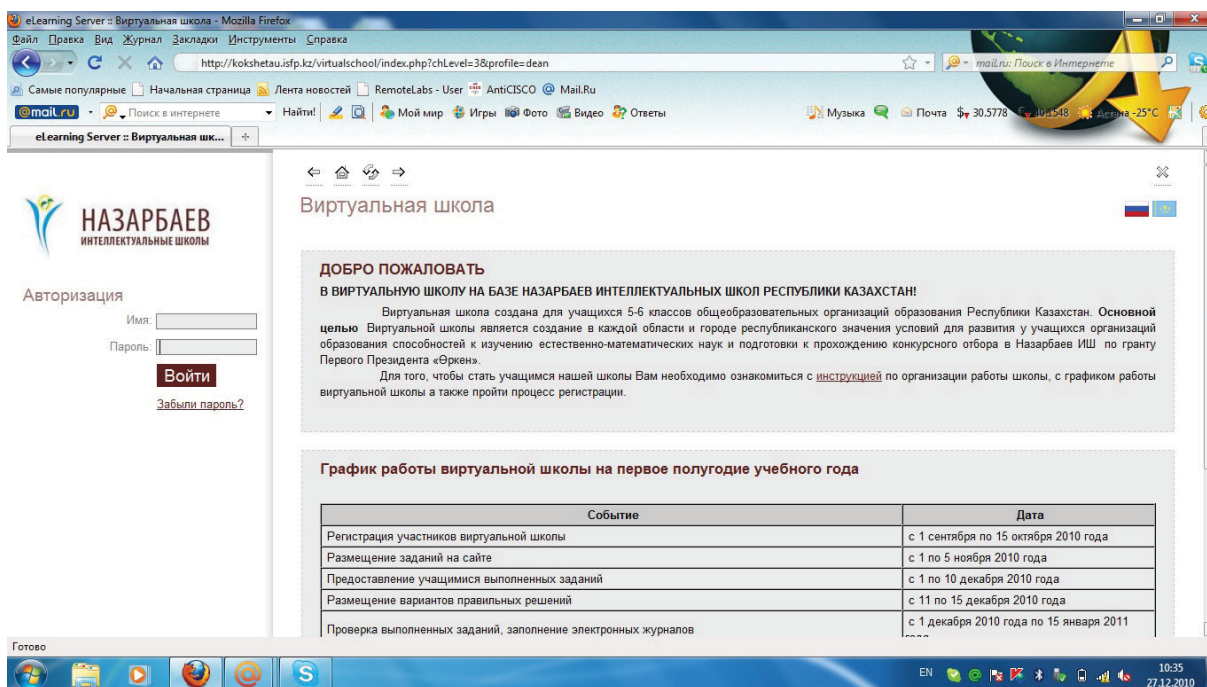
To find and select children with aptitudes to natural sciences and mathematics in 2011 we continued work on implementation of "Virtual school" and "Vacation school" projects.

These projects give Grade 5 and 6 pupils of various schools of the Republic of Kazakhstan opportunities to develop their aptitudes to studies of natural sciences and mathematics and increase their chances to get the Presidential grant "Orken".

Through Virtual school website pupils can register for study at the regional Intellectual school, receive tasks and recommendations and get individual consultations from teachers.

Those who successfully solve tasks of the Virtual school are invited to the regional Intellectual school for full-time studies in specialized subjects and consultations on subjects included into the competitive selection.

**Figure 5. Home page of Virtual school website**



915 pupils from five regions of the Republic of Kazakhstan registered at the Virtual school website in September 2011.

**Table 24. Number of pupils registered at the Virtual school website**

Intellectual school	Grade 5		Total, Grade 5	Grade 6		Total, Grade 6	Total
	Kazakh	Russian		Kazakh	Russian		
Astana, Physics and Mathematics	7	14	21	7	7	14	35
Astana, IB	4	9	13	0	8	8	21
Kokshetau	115	102	217	70	91	161	378
Semey	27	50	77	22	50	72	149
Taldykorgan	93	38	131	97	20	117	248
Ust-Kamenogorsk	12	40	52	6	26	32	84
<b>Total</b>	<b>258</b>	<b>253</b>	<b>511</b>	<b>202</b>	<b>202</b>	<b>404</b>	<b>915</b>

The rate of pupils registered at the Virtual school website accounted for 0.9% of total number of Grade 5 pupils and 0.7% of total number of Grade 6 pupils in the regions. Only pupils with good and excellent marks were allowed to register at the website.

Astana saw the least number of registered pupils - 0.11% of Grade 5 pupils and 0.08% of Grade 6 pupils of the total number of good and excellent pupils.

All registered participants of the Virtual school got set of tasks in specialized subjects of the Intellectual school, their assessment criteria, methodological recommendations on how to make the tasks and list of necessary books. Teachers of the Intellectual schools examined how pupils performed their tasks, offered their comments on common mistakes and individual consultations to the best pupils.

Virtual and vacation schools were operational on the basis of five Intellectual schools in the first half of 2011.

### Work to be done 2012

- Continue cooperation with regional departments of education within Virtual and Summer schools projects;
- Improving regulatory framework of the Virtual and Summer schools;
- Testing of new Virtual school website and its launch in 2012.



## 5.3. Elective courses organization

### Work done in 2011

To achieve high quality of educational services and effective activity of the Intellectual schools in 2011 there were offered measures to support children. For instance, elective courses in the country and abroad in Physics, Mathematics, Chemistry, Biology and English (language courses).

Pupils who won at the Olympiads, research competitions showing positive dynamics in learning had a chance for in-depth study of subjects within the framework of elective courses at foreign and national educational institutions.

We chose only relevant electives encouraging pupils and developing their potential. Their content promoted intellectual, creative and emotional development of pupils, ensured wide use of active learning methods and focused on the modern educational technologies.

The elective courses were aimed at solving the following problems:

- facilitate pupil's self-determination and choice of further profession;
- create positive motivation for learning in the chosen field;
- familiarize pupils with the leading types of activity in the given field;
- activate cognitive activity;
- enhance pupils' information and communication competence.

**Table 25. Information on electives for NIS pupils**

<b>№</b>	<b>Name of the course</b>	<b>Venue</b>	<b>Number of pupils</b>
1	Lab works at the Royal Institution of Great Britain (RI)	London, Great Britain	20
2	Nauryz Lectures	Astana, Republic of Kazakhstan	40
3	Summer school (SSAT)	Canterbury, Great Britain	17
4	Summer school (CTY)	Lancaster, Carlisle, Great Britain	12
5	Course on crop production	Shortandy village, Akmola region	18
6	Christmas Lectures at the Royal Institution of Great Britain (RI)	London, Great Britain	11
7	IELTS preparation course	Belfast, Northern Ireland	14
8	Preparatory course in natural sciences at Bell Bedgebury School	Kent, Great Britain	16
9	Training course in Biology and Chemistry "Introduction into phytochemistry" at JSC "Phytokhimiya"	Karaganda, Republic of Kazakhstan	18
10	Training course "Development of research abilities in the field of Biology, Chemistry, Physics and Computer science at the Kolmogorov Specialized Training and Research Center under the Moscow State University	Moscow, Russia	35
<b>Total</b>			<b>201</b>

On September 27-28, 2011 we had a joint seminar with the international experts of Bell (Bell Educational Trust) on organization of the summer school for pupils at the Intellectual schools. Presently we examine the Intellectual schools capacity to organize and run summer schools for our pupils.

### **Work to be done in 2012**

- analysis of effectiveness and quality of the courses attended in 2010-2011 in order to plan organization of elective courses;
- creation of database of pupils who attended elective courses in 2010-2011;
- collecting information about the courses in the country and abroad, search for partners acknowledged in a specific field of educational services;
- search for international partners in organization of the summer schools, establishing contacts with the potential international partners;
- conduction of consultative seminars within the international cooperation;
- trainings for teachers of the Intellectual schools who will work at summer language schools.

## SECTION 6. PUPILS PROGRESS

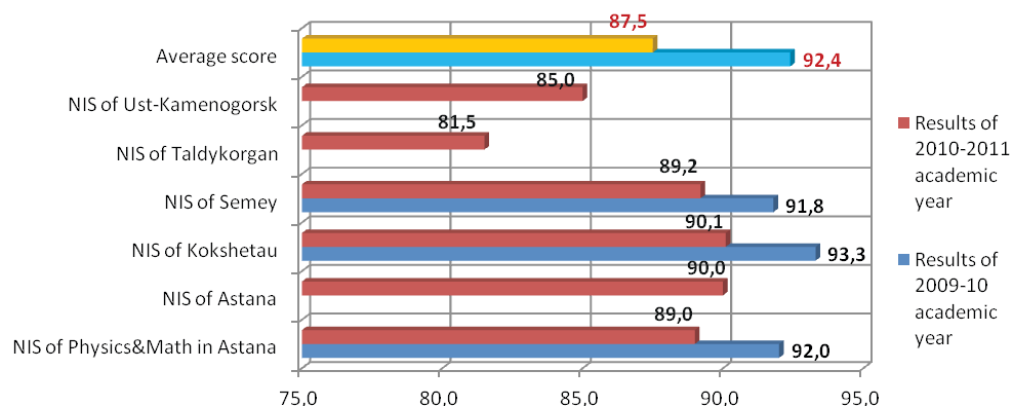
### 6.1. Pupils' progress in 2010-2011 academic year

3708 pupils including 2102 (57%) with Kazakh medium of instruction and 1606 (43%) with Russian medium of instruction completed 2010-2011 academic year at the Intellectual schools in Astana, Kokshetau, Semey, Taldykorgan and Ust-Kamenogorsk.

**Table 26. Number of pupils at the Intellectual schools by the end of 2010-2011 academic year**

Intellectual school	Total number of pupils	Kazakh medium of instruction	Russian medium of instruction
Astana, Physics and Mathematics	828	430	398
Astana, IB	100	42	58
Kokshetau	757	454	303
Semey	688	366	322
Taldykorgan	647	368	279
Ust-Kamenogorsk	688	442	246
<b>Total:</b>	<b>3708</b>	<b>2102</b>	<b>1606</b>

Upon results of 2010-2011 academic year pupils' progress at the Intellectual schools amounted to 100%, whereas quality of knowledge made 87.5%.

**Chart 7. Comparing quality of knowledge upon results of 2009-2010 and 2010-2011 academic years**

Average rate of quality of knowledge by Intellectual schools upon results of 2010-2011 academic year:

- School of Physics and Mathematics, Astana - 89%;
- IB School, Astana - 90.0%;
- Kokshetau -90.1%;
- Semey -89.2%;
- Taldykorgan -81.5%;
- Ust-Kamenogorsk -85.0%.

Pupils of elementary school demonstrated the highest rate of quality of knowledge making 96.7%, pupils of secondary and high school demonstrated lower results 85.3% and 80.1% respectively.

3708 pupils successfully finished the academic year, including 1190 pupils (or 32.1%) with excellent marks, 2043 pupils (or 55.1%) with excellent and good marks and 475 pupils (or 12.8%) with good and satisfactory marks.

**Table 27. Pupils marks upon results of 2010-2011 academic year**

Intellectual school	Total number of pupils	Number of pupils with the following marks in 2010-2011 academic year				Rate of pupils with the following marks in 2010-2011 academic year			
		5	4	3	2	5	4	3	2
Astana, Physics and Mathematics	828	298	436	94	0	36.0	52.7	11.4	0.0
Astana, IB	100	33	57	10	0	33.0	57.0	10.0	0.0
Kokshetau	757	241	441	75	0	31.8	58.3	9.9	0.0
Semey	688	195	419	74	0	28.3	60.9	10.8	0.0
Taldykorgan	647	152	376	119	0	23.5	58.1	18.4	0.0
Ust-Kamenogorsk	688	271	314	103	0	39.4	45.6	15.0	0.0
<b>Total:</b>	<b>3708</b>	<b>1190</b>	<b>2043</b>	<b>475</b>	<b>0</b>	<b>32.1</b>	<b>55.1</b>	<b>12.8</b>	<b>0.0</b>

The highest rate of pupils with:

- excellent marks - Intellectual schools of Physics and Mathematics in Astana (36.0%) and Ust-Kamenogorsk (39.4%).

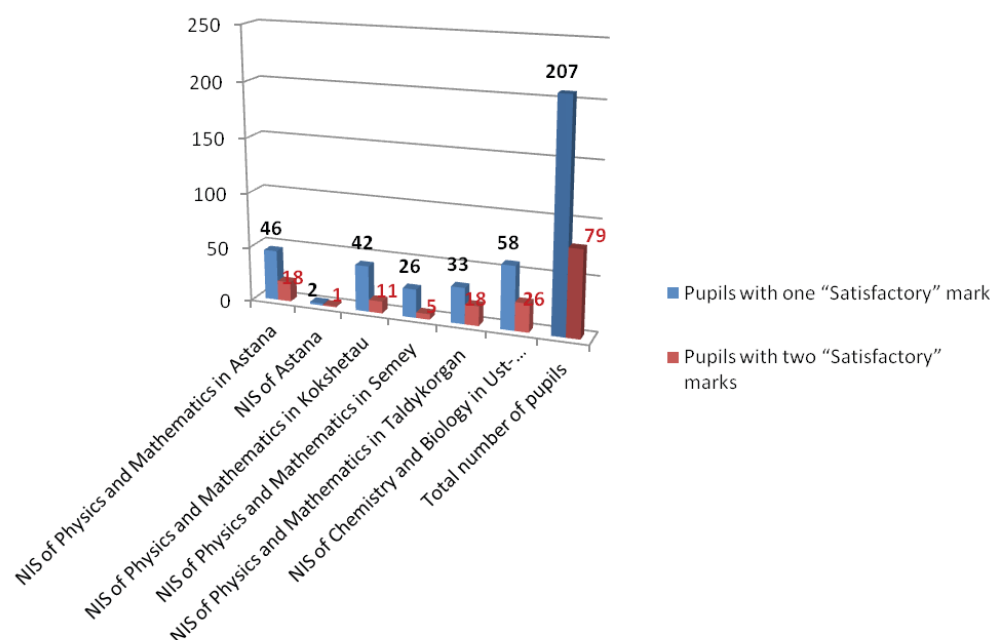
- excellent and goods marks - Intellectual schools of Physics and Mathematics in Astana (52.7%), Kokshetau (58.3%) and Semey (60.9%). 3.8% (or 140 pupils) completed the academic year with one

“good” mark, including 6.4% (49 pupils) in Kokshetau and 6.1% (51 pupils) at the Intellectual school of Physics and Mathematics in Astana.

- satisfactory marks at the Intellectual schools in Taldykorgan -18.4% and Ust-Kamenogorsk - 15.0%. 5.6% (or 207 pupils) finished the academic year with one “satisfactory” mark including 8.4% or 58 pupils of the Intellectual school in Ust-Kamenogorsk, 5.5% of pupils of the Intellectual school of Physics and Mathematics in Astana and Kokshetau (46 and 42 pupils accordingly).

2.1% (79 pupils) of the total number of NIS pupils finished the academic year with two “satisfactory” marks.

**Chart 8. Number of pupils with one or two satisfactory marks in 2010-2011 academic year**



Quality of knowledge of Grades 1-6 pupils (1841 pupils) made 47.31%

779 pupils (42.3%) finished the academic year with excellent marks, 944 pupils (51.3%) with excellent and good marks and 118 pupils (6.4%) with satisfactory marks.

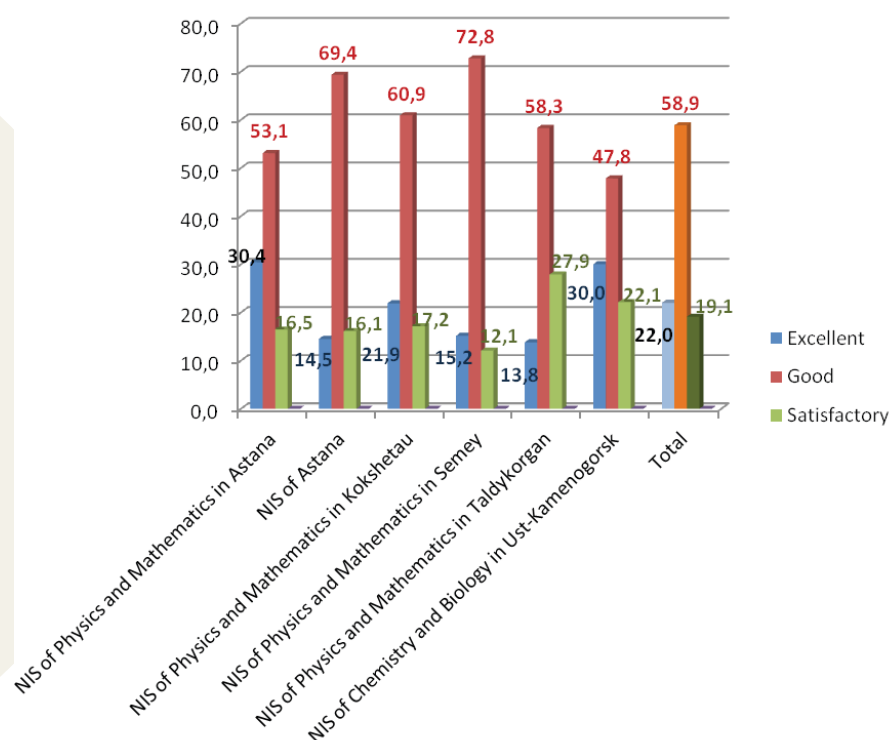


**Table 28. Pupils marks (Grades 1-6) upon results of 2010-2011 academic year**

Intellectual school	Total number of pupils	Number of pupils of Grades 1-6 with the following marks in 2010-2011 academic year				Rate of pupils of Grades 1-6 with the following marks in 2010-2011 academic year			
		5	4	3	2	5	4	3	2
Astana, Physics and Mathematics	506	200	265	41	0	39.5	52.4	8.1	0.0
Astana, IB	38	24	14	0	0	63.2	36.8	0.0	0.0
Kokshetau	378	158	210	10	0	41.8	55.6	2.6	0.0
Semey	332	141	160	31	0	42.5	48.2	9.3	0.0
Taldykorgan	292	103	169	20	0	35.3	57.9	6.8	0.0
Ust-Kamenogorsk	295	153	126	16	0	51.9	42.7	5.4	0.0
<b>Total:</b>	<b>1841</b>	<b>779</b>	<b>944</b>	<b>118</b>	<b>0</b>	<b>42.3</b>	<b>51.3</b>	<b>6.4</b>	<b>0.0</b>

Quality of knowledge of Grades 7-11 pupils (1867 pupils) amounted to 40.7%.

411 pupils (22%) finished the academic year with excellent marks, 1099 pupils (58.9%) with excellent and good marks and 357 pupils (19.1%) with satisfactory marks.

**Chart 9. Pupils marks in % (Grades 7-11) upon results of 2010-2011 academic year**

It is worth mentioning that pupils studying under the educational grant gradually improve their progress: in the 1st semester of 2010-2011 academic year 29.0% of these pupils had satisfactory marks, however, by the end of the academic year this rate decreased to 19.1%.

## 6.2. Results of pupils participation in olympiads and research project contests

Upon results of 2010-2011 academic year 701 or 18.9% of Intellectual schools pupils became winners of international (France, Korea, Russia, and Cyprus), republican Olympiads, and research project contests. The Intellectual school of Physics and Mathematics in Astana and Kokshetau boast on having the highest number of awardees of the international and republican competitions, 225 and 216 pupils accordingly.

**Table 29. Number of winners of various Olympiads and research project contests**

Intellectual school	International	Republican	Total
Astana, Physics and Mathematics	225	82	307
Astana, IB	7	10	17
Kokshetau	216	58	274
Semey	22	12	34
Taldykorgan	43	11	54
Ust-Kamenogorsk	6	9	15
<b>Total:</b>	<b>519</b>	<b>182</b>	<b>701</b>

Our pupils participates in such intellectual contests as International contest "Kenguru-linguist-2011", West China Olympiad, Asian-Pacific Olympiad, Silk Road Olympiad, Russian as a Foreign Language International Olympiad, International Olympiad in sciences, the 8th All-Russian Distance Olympiad in Mathematics "Erudit", the II All-Russian Distance Course "Mathematics in fairytales", the V republican competition "Language is the symbol of independence", republican youth Olympiad, republican subject Olympiad, and "Ak bota" intellectual games.

## 6.3. Participation of Grade 11 pupils in international exams

Graduates of the Intellectual schools passed SAT1, SAT2, SET, IELTS, TOEFL, and BCEPT exams.

At SAT1 pupils passed Mathematics, Critical Thinking and Writing. You are required to score at least 500 points in each subject to be admitted to the US universities with the highest possible score of 2400 points. 15 pupils from Astana and 9 pupils from Kokshetau passed the exam and scored 1586 and 1600 points respectively.

SAT-2 is an international exam in two specialized subjects (Mathematics and Physics, Mathematics and Biology) was taken by 5 pupils from Astana. They scored 1236 points with the highest possible result of 1600, i.e. they can be enrolled by the US universities.

7 pupils from Astana passed SAT-2 in three specialized subjects (Mathematics- Level 1, Mathematics- Level 2, Physics or Biology) and scored 2030 points with the highest possible score of 2400. Again these pupils are eligible to apply to the US universities.

SET exam was taken by 12 pupils from Kokshetau and 12 pupils from Semey in two of the following subjects: Mathematics, Physics, Chemistry, Biology, and Critical Thinking. Only 9 pupils reached the threshold level.

55 NIS pupils including 34 from Astana, 14 - from Kokshetau and 7 - from Semey took IELTS exam. The average overall band score amounted to 6.0 with the highest possible score of 9.0.

4 graduates from Astana scored 583 points at TOEFL exam (the highest possible score is 677). However, to conform to C-1 level of the European model of language learning an individual is required to score at least 560 points.

BCEPT exam developed by the British Council brought together 73 pupils: 18 pupils from Astana, 27- from Kokshetau, and 28- from Semey. 36 pupils reached the threshold level upon results of the exam.

**Table 30. Results of international exams**

Exam	Number of participating pupils	Highest possible score	NIS result
SAT-1	Astana-15	2400	1586
	Kokshetau-9		1127
SAT-2 (2 subjects)	Astana-5	1600	1236
SAT-2 (3 subjects)	Astana-7	2400	2030
SET	Kokshetau-12 Semey-12	passed/not passed	passed-9 pupils
IELTS	Astana-34 Kokshetau-14 Semey-7	9.0	6.0
TOEFL	Astana-4	677 C1-560	583
BCEPT	Astana-18 Kokshetau-27 Semey-28	passed/not passed	passed-36 pupils

### Work to be done in 2012

1. In accordance with the decision №3 of the Board of Trustees dated September 16, 2011 and the order №159 of the Chairperson of AEO "Nazarbayev Intellectual schools" dated October 4, 2011 all graduates of the Intellectual schools are to take IELTS exam.
2. Exploration of ESOL exam. ESOL exam or English for Speakers of Other Languages determines the English language competence and is administered by University of Cambridge ESOL Examinations. In the context of implementation of the polylingual model of education at the Intellectual schools application of this exam will help evaluate effectiveness of the model through pupils' results.

## 6.4. Results of common national testing

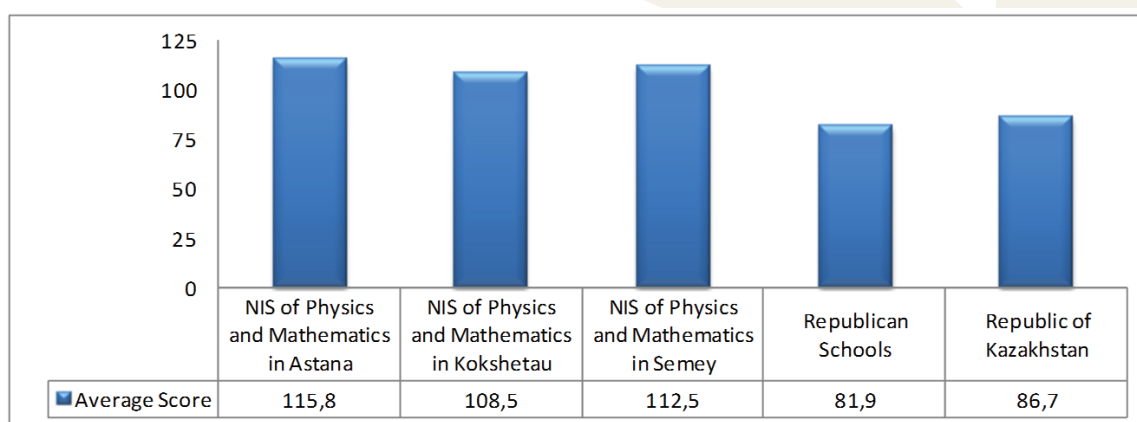
132 pupils finished Intellectual schools of Physics and Mathematics in Astana, Kokshetau and Semey in 2010 - 2011 academic year. 111 pupils (84%) including 49 pupils with Kazakh medium of instruction and 62 pupils with Russian medium of instruction participated in the common national testing.

21 pupils of Intellectual schools (19 pupils from Astana and 2 - from Kokshetau), participants and winners of the international Olympiads and scientific contests, were exempt from the common national testing by the order №217 of the Ministry of Education and Science of the Republic of Kazakhstan dated May 27, 2011.

Pupils scored 112.3 points on average. In addition, pupils of the Intellectual schools of Physics and Mathematics in Astana, Kokshetau and Semey scored 115.8, 108.5 and 112.5 accordingly.

The average result of NIS pupils in common national testing is significantly higher than the average score across the country (at least 30.4 points higher).

**Chart 10. Average common national testing score in comparison with the republican schools**



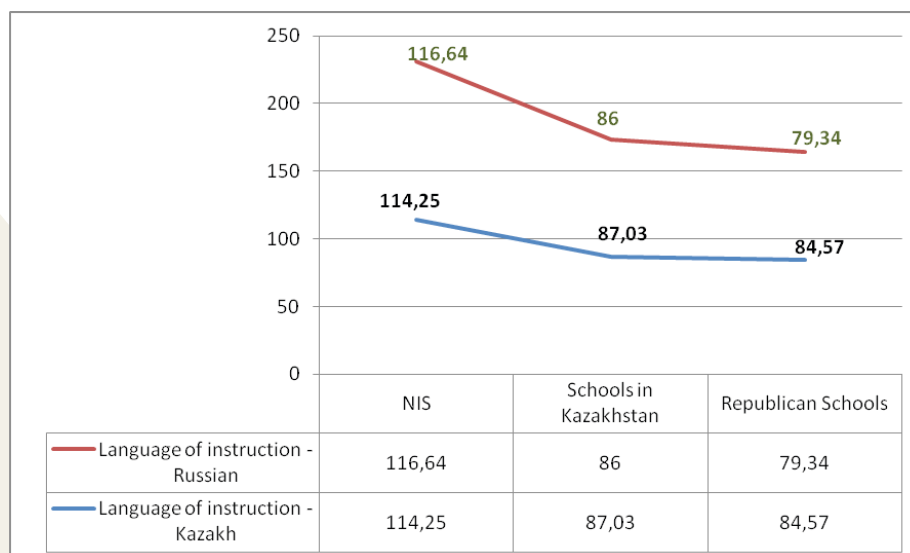
90% or 100 students from Intellectual schools scored more than 101 points. Only 24.18% of graduates of the republican schools demonstrated the same result.

**Table 31. Graduates by points scored**

Location	Number of graduates	Common national testing score						
		80-90	91-100	101-110	111-120	121-123	124	125
Astana	22	-	-	5	12	5	-	-
Kokshetau	32	2	5	9	14	1	1	-
Semey	57	2	2	15	31	6	1	-
<b>Total</b>	<b>111</b>	<b>4</b>	<b>7</b>	<b>29</b>	<b>57</b>	<b>12</b>	<b>2</b>	<b>-</b>

The average score among graduates of the Intellectual schools with Kazakh medium of instruction made 114.25 points, with Russian medium of instruction - 116.64 points. These figures by far surpass results of the republican schools and results across the country.

**Chart 11. Average common national testing score by language of instruction in comparison with the average result of republican schools and across Kazakhstan**



The average common national testing scores in obligatory subjects are considerably higher than the analogous rates at the republican schools and across the country. 98 (89.2%) graduates of the Intellectual schools reached the highest possible score of 25 points in one subject. However, one pupil has the lowest score - 13 points - in History of Kazakhstan.



**Table 32. Comparing common national testing results in obligatory subjects**

Subject, average score	Intellectual schools	Kazakhstan	Republican schools
Kazakh language	22.75	18.82	17.25
Russian language	22.59	15.95	15.44
History of Kazakhstan	22.76	18.44	17.77
Mathematics	22.01	15.36	14.74

12 pupils (10.8%) scored the highest possible score of 25 points in elective subject (the 5th subject) and only one graduate scored the lowest possible score of 13 points (in Semey).

**Table 33. Comparing common national testing results by elective subject**

Subject, average score	Astana	Kokshetau	Semey
Physics	21.9	20.9	21.0
Chemistry	21.0		24.0
Biology		22.7	23.0
Geography		20.0	21.0
World history			23.0
Literature			23.0
English language	22.8	22.6	24.0

31 and 8 graduates of the Intellectual schools were expected to become holders of Altyn Belgi mark and the General Certificate of Secondary Education with honors respectively. However, only 27 pupils (87.1%) received Altyn Belgi mark and 7 pupils obtained the General Certificates of Secondary Education with honors.

**Table 34. Number of graduates with Altyn Belgi mark and General Certificate of Secondary Education with honors**

Intellectual school	Altyn Belgi mark			Certificate with honors		
	Kazakh	Russian	Total	Kazakh	Russian	Total
Astana	2	5	7	3	2	5
Kokshetau	2	3	5			
Semey	13	2	15	1	1	2
<b>Total:</b>	<b>17</b>	<b>10</b>	<b>27</b>	<b>4</b>	<b>3</b>	<b>7</b>

Intellectual schools of Physics and Mathematics in Semey and Kokshetau took the 28th and 61st places in the list of 100 best schools upon results of common national testing. The Intellectual school of Physics and Mathematics in Astana is not featured into the list because it includes schools where more than 75% of pupils participated in the common national testing. 46.3% of pupils of this Intellectual school were exempt from the common national testing as participants of international Olympiads. In terms of average result of the common national testing the Intellectual school of Physics and Mathematics in Astana would take the 6th spot in the list of 100 best schools in Kazakhstan.

In accordance with the Law of the Republic of Kazakhstan "On status of the Nazarbayev University, Nazarbayev Intellectual schools and Nazarbayev Fund" pupils of the Intellectual schools are exempt from the final attestation in the form of common national testing. The AEO will organize and carry out the final attestation of secondary and high school graduates in 2011-2012 academic year while introducing new educational programs developed in association with the University of Cambridge.

The list of subjects and the mode of final attestation was approved and endorsed by the decision №3 of the Board of Trustees dated September 16, 2011 and the order №159 of the Chairperson of the AEO Board dated October 4, 2011. We conducted a seminar with developers of the final attestation materials and discussed the assessment criteria.

Work to be done in 2012

1. To publish exam materials for secondary and high school graduates on the official website in January 2012.
2. To organize the final exams for secondary and high school graduates.

## 6.5. NIS graduates enrollment

132 pupils finished the Intellectual schools in 2010-2011 academic year: 122 graduates (92.4%) entered national HEIs, 10 graduates (7.6%) chose foreign universities. 22 NIS graduates (18%) were admitted to the Nazarbayev University.

117 pupils or 88.6% have become holders of the educational grant and 15 (11.3%) study on fee-paid basis, including 10 pupils at the foreign university.

**Table 35. Enrollment of NIS graduates by universities**

Intellectual school	Number of graduates	Enrolled by universities				Grants	Fee-paid
		Total	KZ universities		Abroad		
			NU	Other			
Astana	41	41	17	21	3 - the USA, Czech Republic, Great Britain	40	1
Kokshetau	34	34	0	32	2 - Great Britain, Poland	29	5
Semey	57	57	5	47	Malaysia - 1 Russia - 4	48	9
Total:	132	132	22	100	10	117	15

91 graduates (68.9%) chose technical majors, 16 graduates (12.1%) - tourism, international relationships and languages, 13 graduates (9.8%) - medicine, psychology and biotechnology and 6 graduates (4.5%) - Economics, Law and Social Sciences.

**Table 36. Types of majors chosen by graduates**

Intellectual school	Number of graduates	Number of types of majors	Number of graduates who chose:				
			Technical majors	Languages, international relations, tourism	Medicine, Psychology, Biotechnology	Economics, Finance	Law, Social Sciences
Astana	41	23	30	4	2	0	5
Kokshetau	34	22	24	3	3	4	0
Semey	57	29	37	9	8	2	1
<b>Total</b>	<b>132</b>	<b>22-29</b>	<b>91</b>	<b>16</b>	<b>13</b>	<b>6</b>	<b>6</b>

## 6.6. Pupil body and academic progress in the 2 term of 2011-2012 academic year

By the end of the 2nd term of 2011-12 academic year there were 4022 pupils at six Intellectual schools, including 2264 pupils with the Kazakh medium of study and 1758 pupils with the Russian medium of study.

**Table 37. NIS pupil body**

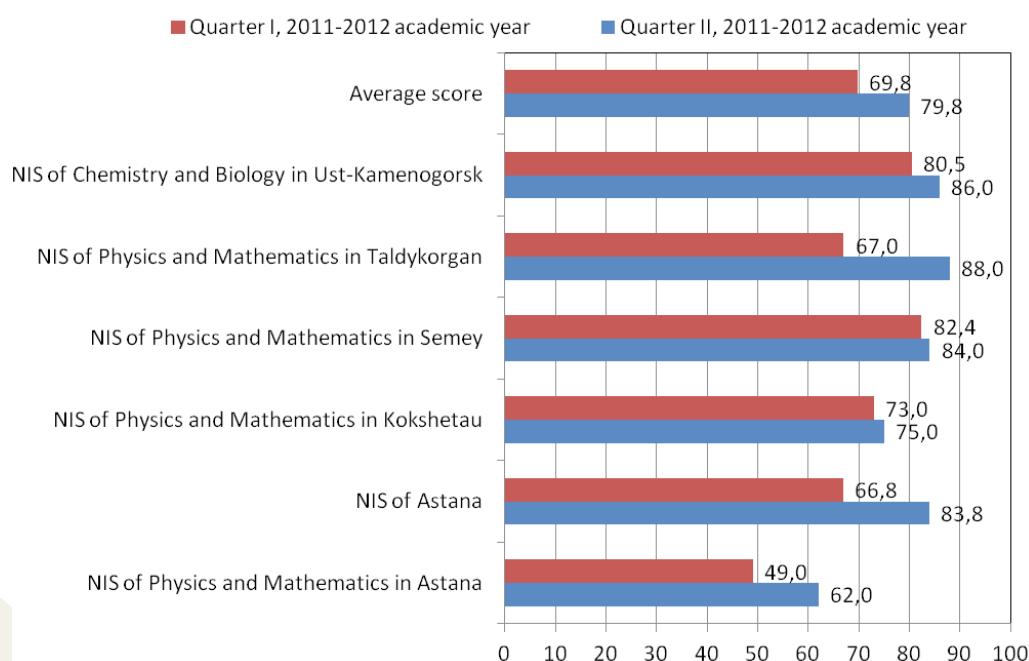
Intellectual school	Number of pupils		
	Kazakh medium of instruction	Russian medium of instruction	Total
Astana, Physics and Mathematics	434	401	835
Astana, IB	119	113	232
Kokshetau	412	345	757
Semey	384	305	689
Taldykorgan	421	321	742
Ust-Kamenogorsk	494	273	767
<b>Total:</b>	<b>2264</b>	<b>1758</b>	<b>4022</b>

The academic progress of pupils upon results of the 2nd term amounted to 100 %, whereas upon results of the 1st term the analogous rate made 99.9%.

The average rate of pupils' knowledge in the Intellectual schools upon results of the 2nd term accounted for 79.8%. One can clearly see an increase in quality of knowledge in all Intellectual schools making 10% on the average.

The quality of knowledge at the Intellectual schools in Taldykorgan (for 21%), in Astana (for 17%) and IB School in Astana (for 13%) has dramatically increased.

**Chart 12. Quality of pupils knowledge upon results of the 1st and 2nd terms of 2011-2012 academic year, %**



Comparison of quality of knowledge by language of instruction proved that in grades with Kazakh language of instruction (84.05%) this rate is higher than in grades with Russian language of instruction (82.83%). You can trace this tendency at all levels of learning: at elementary, secondary and high schools. The difference in rate of language of instruction in the 2nd term makes 1.22%, whereas in the 1st term it amounts to 5.9%.

**Table 38. Quality of knowledge of the language of instruction, %**

Intellectual school	1-4		5-9		10-11		Total	
	Kazakh	Russian	Kazakh	Russian	Kazakh	Russian	Kazakh	Russian
Astana, Physics and Mathematics	91.61	92.81	78.50	75.63	85.71	85.07	84.26	83.13
Astana, IB			81.0	65.0	55.0	47.0	68	56
Kokshetau	93.0	94.0	70.0	65.0	72.0	82.0	73	78
Semey	96.0	96.0	78.0	73.0	95.0	97.0	86	82
Taldykorgan	99.0	94.0	81.0	82.0	100	90.0	91	86
Ust-Kamenogorsk	96.0	97.0	85.0	84.0	79.0	78.0	86	85
<b>Total:</b>	<b>95.12</b>	<b>94.76</b>	<b>78.92</b>	<b>74.11</b>	<b>81.12</b>	<b>79.85</b>	<b>84.05</b>	<b>82.83</b>

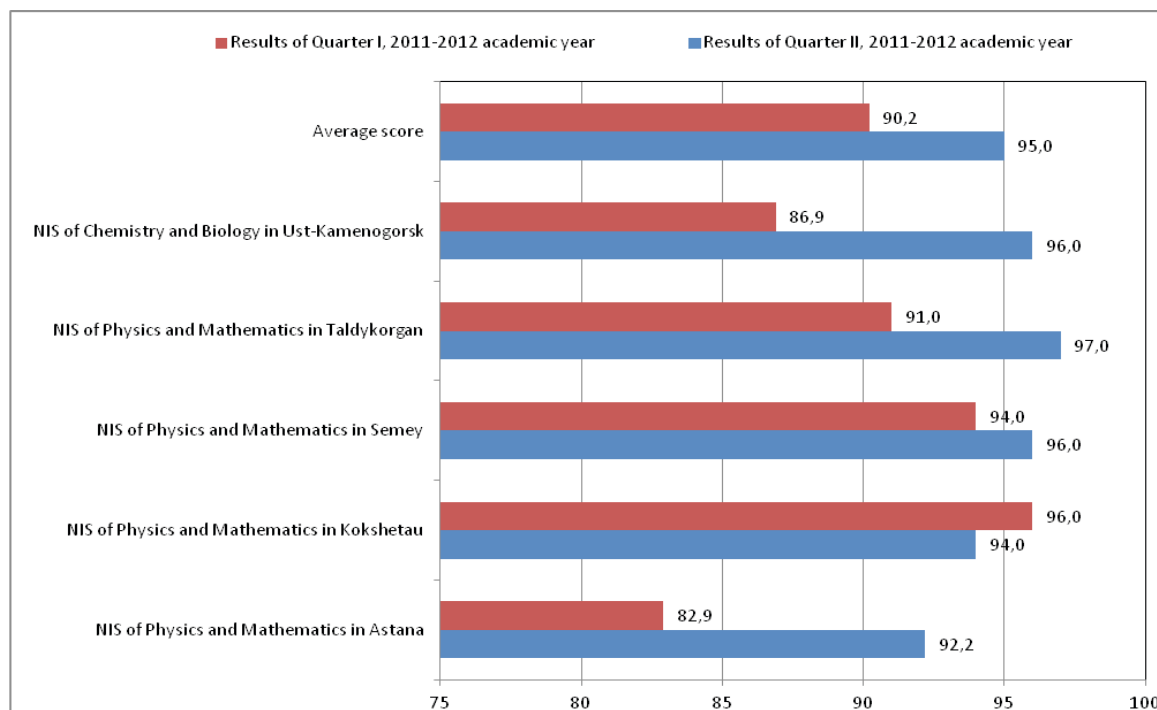
The highest rate of quality of knowledge is registered at elementary school - 95.04%, it decreases at secondary school (76.69%) and rises at high school (80.90%).

**Table 39. Quality of pupils' knowledge by level of education, %**

Intellectual school	Grades 1-4	Grades 5-9	Grades 10-11	Average rate
Astana, Physics and Mathematics	92.18	77.13	85.38	83.83
Astana, IB	-	73.00	51.00	62.00
Kokshetau	94.00	68.00	77.00	75.00
Semey	96.00	76.00	96.00	84.00
Taldykorgan	97.00	81.00	95.00	88.00
Ust-Kamenogorsk	96.00	85.00	81.00	86.00
<b>Total</b>	<b>95.04</b>	<b>76.69</b>	<b>80.90</b>	<b>79.81</b>

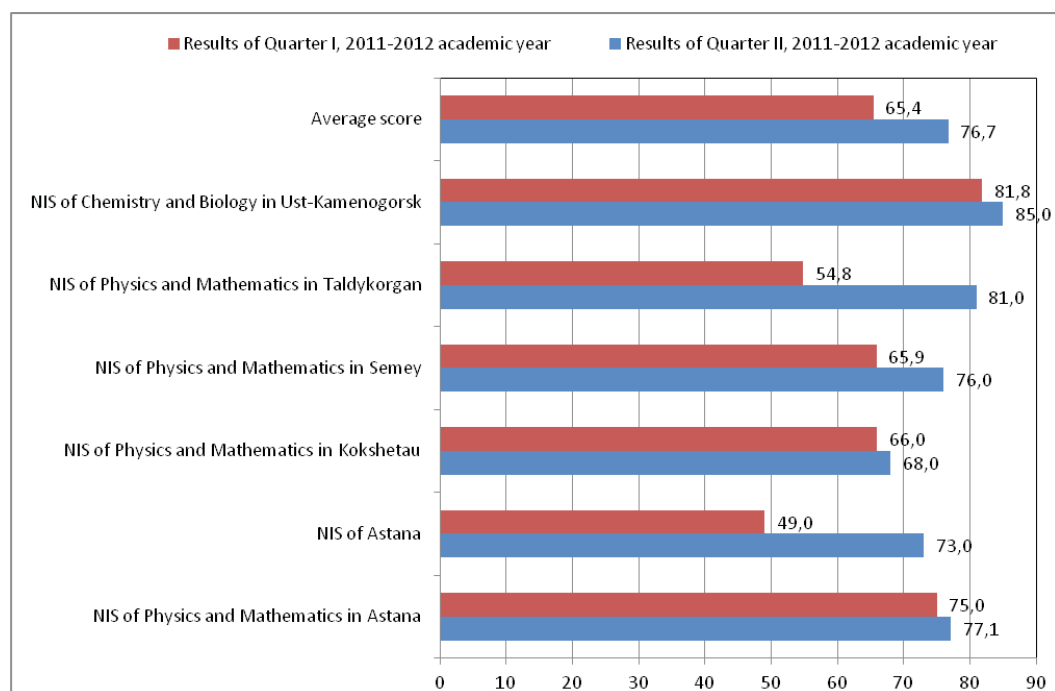
Pupils' quality of knowledge at elementary school in the 2nd term is 4.8% higher than in the 1st one. The analogous rates increased at the Intellectual school of Physics and Mathematics in Astana for 9.28% and in Ust-Kamenogorsk - for 9.1%. In Kokshetau the quality of knowledge lowered for 2%.

**Chart 13. Quality of elementary school pupils' knowledge, (%)**

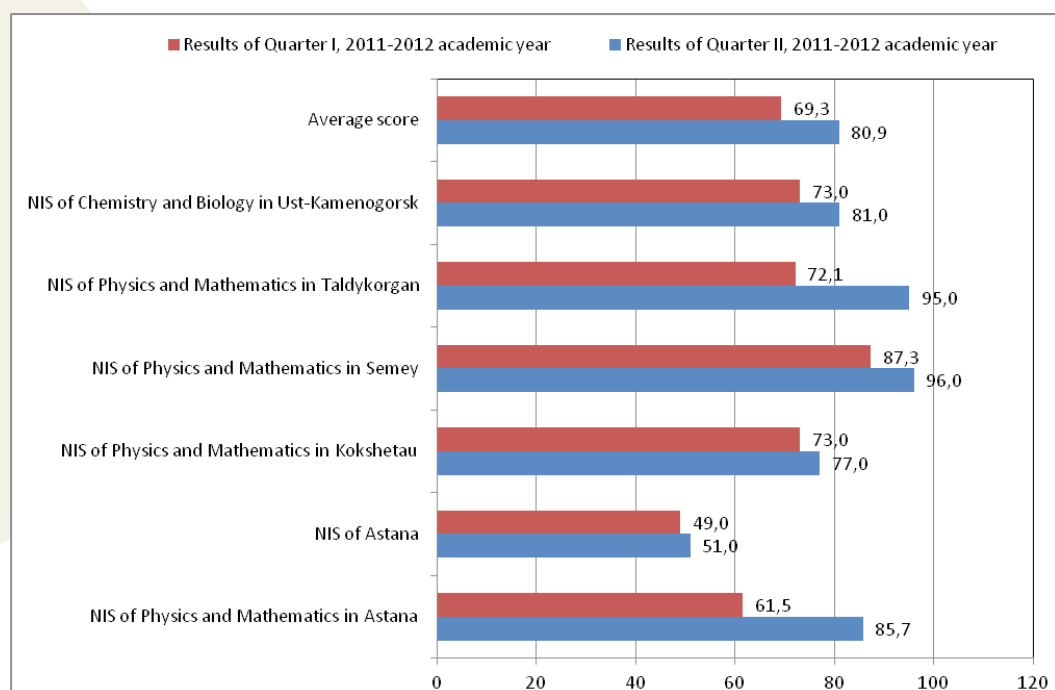


In the 2nd term quality of knowledge at secondary school increased for 11.3% in comparison with the 1st one. The same rate significantly rose in Taldykorgan for surprising 26.2%, in IB school of Astana - for 24%, whereas at the Intellectual school of Kokshetau it grew only for 2%.



**Chart 14. Quality of secondary school pupils knowledge, (%)**

During the 2nd term quality of knowledge at high school stepped up for 11.6% in comparison with the 1st one. This rate considerably increased at the Intellectual schools of Physics and Mathematics in Astana and Taldykorgan 23.88% and 22.9% respectively leaving behind IB school of Astana and Kokshetau with 2% and 4%.

**Chart 15. Quality of high school pupils knowledge, (%)**

Since September 1, 2011-2012 academic year an experiment on implementation of the criteria-based assessment was launched at Grade 7 of the Intellectual school of Physics and Mathematics and at Grade 8 of the Intellectual school of Chemistry and Biology in Astana. Use of criteria-based assessment allowed to assess pupils more objectively and affected quality of knowledge indicators. The average quality of knowledge rate upon results of the 1st term in Grades 7 made 42.6% and in Grades 8 - 68.3%. Systematic work on raising parents and pupils awareness on criteria-based assessment, organization of the academic process with due account of new approaches to assessment and engagement of pupils into the process of assessment dramatically improves the 2nd term results. Quality of knowledge at Grades 7 increased for 14.7% and made 57.3%, in Grades 8 this rate grew for 14.6% and amounted to 82.9%.

**Table 40. Quality of knowledge of Grade 7 and 8 pupils upon results of the 1st and 2nd terms of 2011-2012 academic year, %**

Intellectual school	Grade 7, schools of Physics and Mathematics		Grade 8, IB school and schools of Chemistry and Biology	
	1st term	2nd term	1st term	2nd term
Astana, Physics and Mathematics	49.0	58.3		
Kokshetau	45.3	44.4		
Semey	28.2	51.6		
Taldykorgan	47.9	75.0		
<b>Average</b>	<b>42.6</b>	<b>57.3</b>		
Astana, IB			60.4	87.5
Ust-Kamenogorsk			76.1	78.3
<b>Average</b>			<b>68.3</b>	<b>82.9</b>

Analysis of pupils' academic progress by marks demonstrated that 3290 pupils or 82.5% of the total number of pupils successfully finished the 2nd term. 803 pupils (20.1%) have excellent marks, 2487 pupils (62.4%) - good and excellent marks and 697 pupils (17.5%) have satisfactory marks.

**Table 41. Pupils' progress by marks \***

Intellectual school	Total number of pupils	Number of pupils with the following mark upon results of the 2nd term of 2011-2012 academic year				Rate of pupils with the following mark upon results of the 2nd term of 2011-2012 academic year, %			
		5	4	3	2	5	4	3	2
Astana, Physics and Mathematics	835	176	525	134	0	21.1	62.9	16.0	0.0
Astana, IB	232	18	143	71	0	7.8	61.6	30.6	0.0
Kokshetau	757	131	436	190	0	17.3	57.6	25.1	0.0
Semey	689	116	464	109	0	16.8	67.3	15.8	0.0
Taldykorgan	707	131	493	83	0	18.5	69.7	11.1	0.0
Ust-Kamenogorsk	767	231	426	110	0	30.1	55.5	14.3	0.0
<b>Total:</b>	<b>3987</b>	<b>803</b>	<b>2487</b>	<b>697</b>	<b>0</b>	<b>20.1</b>	<b>62.4</b>	<b>17.5</b>	<b>0.0</b>

\* this data does not take into account 35 Grade 1 pupils since they are not assessed during the 1st semester.

Comparison of the pupils' academic progress by marks upon results of the 1st and 2nd terms proved that during the 2nd term:

- Rate of pupils with excellent marks increased for 5.3%;
- Rate of pupils with good and excellent marks increased for 6.3%;
- Rate of pupils with satisfactory marks decreased for 11.4%;
- There were no pupils with unsatisfactory marks whereas during the 1st term this rate accounted for 0.2%.

Despite considerable decrease the rate of pupils with satisfactory marks remained high and upon results of the 2nd term made 17.5% of the total number of pupils. At the same time the rate of pupils:

- with satisfactory mark in one subject made 7.4% or 296 pupils. The largest number of these pupils was registered at the Intellectual schools in Astana and Kokshetau;
- with satisfactory mark in two subjects made 5.4% or 217 pupils. The largest number of these pupils was registered at the Intellectual school in Astana.
- with satisfactory mark in three or more subjects made 4.6% or 184 pupils. The largest number of these pupils was registered at the Intellectual school in Kokshetau.

**Table 42. Number of pupils with satisfactory marks \***

Intellectual school	Total number of pupils	Number of pupils with sat mark				Rate of pupils with sat mark, %			
		Total	In 1 subject	In 2 subjects	In 3 subjects	Total	In 1 subject	In 2 subjects	In 3 subjects
Astana, Physics and Mathematics	835	134	61	29	44	16.0	7.3	3.5	5.3
Astana, IB	232	71	27	18	26	30.6	11.6	7.8	11.2
Kokshetau	757	190	89	68	33	25.1	11.8	9.0	4.4
Semey	689	109	40	33	36	15.8	5.8	4.8	5.2
Taldykorgan	707	83	31	26	26	11.7	4.4	3.7	3.7
Ust-Kamenogorsk	767	110	48	43	19	14.3	6.3	5.6	2.5
<b>Total:</b>	<b>3987</b>	<b>697</b>	<b>296</b>	<b>217</b>	<b>184</b>	<b>17.5</b>	<b>7.4</b>	<b>5.4</b>	<b>4.6</b>

\* this data does not take into account 35 Grade 1 pupils since they are not assessed during the 1st semester.

Analysis of the academic progress of Grades 7-11 pupils studying under the educational grant demonstrated that 17.7% of these pupils completed the 2nd term with satisfactory marks. One can see a positive change in this rate because number of such pupils made 27.9% upon results of the 1st term.

**Table 43. Information on Grade 7-11 pupils studying under grant and having sat marks upon results of the 2nd term**

Intellectual school	Total number of pupils	Number of pupils with sat mark				Rate of pupils with sat mark, %			
		Total	In 1 subject	In 2 subjects	In 3 or more subjects	Total	In 1 subject	In 2 subjects	In 3 or more subjects
Astana, Physics and Mathematics	379	89	40	18	31	23.5	10.6	4.7	8.2
Astana, IB	232	53	27	17	9	22.8	11.6	7.3	3.9
Kokshetau	488	130	76	31	23	26.6	15.6	6.4	4.7
Semey	455	73	32	26	15	16.0	7.0	5.7	3.3
Taldykorgan	449	57	23	21	13	12.7	5.1	4.7	2.9
Ust-Kamenogorsk	534	48	22	19	7	9.0	4.1	3.6	1.3
<b>Total:</b>	<b>2537</b>	<b>450</b>	<b>220</b>	<b>132</b>	<b>98</b>	<b>17.7</b>	<b>8.7</b>	<b>5.2</b>	<b>3.9</b>

The highest rate of Grades 7-11 pupils:

- with satisfactory mark in one subject is registered at the Intellectual schools in Kokshetau, Astana and Astana (IB);
- with satisfactory mark in two subjects is registered at the Intellectual school in Astana;
- with satisfactory mark in three or more subjects is registered at the Intellectual school of Physics and Mathematics in Astana.



## SECTION 7. ASSESSMENT SYSTEM OF PUPILS' ACADEMIC ACHIEVEMENTS

Development of new content of education required defining new approaches to assessment of pupils' academic achievements in order to create and implement an objective and trusted system.

The criteria-based assessment model is used to assess pupils across the world. The AEO has done a tremendous job in terms of creating the new assessment model.

### **Work done in 2011**

In order to develop and implement the criteria-based assessment model the Intellectual schools held consultations with the following international experts:

- CIE, Great Britain;
- UPENN, the USA;
- Cito, the Netherlands;
- IB experts, and;
- International schools in many countries of the world.

Workshops organized in Astana and Perm for teachers of specialized subjects and languages by the IB HR Center of the Perm State University enabled teachers to explore the basics of criteria-based assessment model. Teachers constantly exchange their experience within the Intellectual schools' network.

Participants of the seminar in Ust-Kamenogorsk "Use of the criteria-based assessment model in assessment of NIS pupils' academic achievements" discussed results of using the criteria-based tasks and tests in pupils' assessment.

Upon results of the seminar the teachers suggested carrying out an experiment on validation of the criteria-based assessment since September 2011-2012 academic year.

The following documents were developed and approved by the decision №9 of the AEO Board dated August 16, 2011:





- the Concept of implementation of the criteria-based assessment model of pupils' achievements at the Intellectual schools;

- The Rules of pupils achievements assessment at Grade 7 of the Intellectual schools of Physics and Mathematics and Grade 8 of the Intellectual schools of Chemistry and Biology in 2011/2012 academic year.

The experiment on implementation of the criteria-based assessment in 12 subjects of the curriculum at Grade 7 of the Intellectual schools of Physics and Mathematics and Grade 8 of the Intellectual school of Chemistry and Biology and IB school in Astana was launched on September 1, 2011.

In November we arranged a roundtable with vice principals and teachers on results of the criteria-based assessment validation in the 1st term. Suggestions on further improvement of regulatory documents and assessment criteria were made.

Together with the University of Cambridge we developed the integrated educational program and assessment model at the Intellectual schools, defined grades and subjects in the conditions of implementation of new educational programs for:

- summative assessment - externally validated at the end of Grades 5, 10, 11 and 12 administrated by the independent educational organizations;
- formative assessment carried out by the teacher throughout the curriculum;
- records of achievement at certain grades and subjects - particularly in the elementary phase.

For systematic monitoring of pupils' achievements and timely academic and pedagogic support the AEO in association with Cito, the Netherlands, developed monitoring model of pupils' academic achievements. In line with the model the assessment will be carried out three times per year (beginning, middle and end of the academic year) in specialized subjects (Mathematics, Physics, Chemistry and Biology) in three levels (basic, intermediate, advanced). Information upon results of monitoring will aid our teachers in coordinating the academic process in line with pupils' needs.

## Work to be done in 2012

1. Development of a teacher's guide in order to encourage teachers to use new curriculum and formative assessment.
2. Organization of trainings for teacher on criteria-based assessment.
3. Development of summative assessment instruments at the end of Grades 5, 10, 11 and 12. Training for teachers in development of assessment instruments aimed at evaluating pupils' ability to solve problems (tests with open questions, creative tasks, various forms of portfolio, essay, etc.).
4. A group of NIS specialists will be trained to administer the final exams of the Intellectual schools graduates in 2012-2013 study based on the University of Cambridge materials.
5. Assessment instruments for Grade 7 in Mathematics will be developed to create the monitoring system. The first assessment will be carried out in September, the second one - in December 2012-2013 academic year. The number of grades and subjects will be gradually expanded.
6. Creation of external assessment system of schools' activity.

Accreditation is an independent instrument of monitoring and assessment in a specific field of activity. School's accreditation is carried out in order to obtain independent assessment of its conformity to the international standards. Within the accreditation process independent experts assess the following aspects of school's life:

1. Mission and values (to what extent does school activities conform to its mission and values).
2. School management (quality of planning, financing, pupils' database management and creation of safe and healthy environment).
3. Curriculum (timetable, number of academic hours, ICT use).
4. Quality of teaching (teachers' qualification and experience, teaching methods, professional development system and relations with pupils).
5. Quality of learning (pupils' results, how pupils' aptitudes are defined and taken into account, effectiveness of individual and team learning).
6. School resources (library stock, gyms, children's social protection).
7. Psychological climate (services for pupils with academic or personal problems, fighting discrimination bullying and other methods of children abuse).
8. Information about pupils (attendance, drop-out, disciplinary punishment, enrollment).
9. Participation of public in school's activities (Parents are provided with information about school, parents meetings and school's contribution to the local community).

The external assessment system evaluating school's effectiveness will be created within the Intellectual schools network in order to get accreditation by independent companies.

With this aim in view the AEO together with the University of Cambridge will study the international experience of school's assessment, develop assessment standards, coordinate directions assessment instruments, the form in which recommendations for the NIS improvement will be made. Afterwards we will conduct experimental assessment of separate Intellectual schools in order to validate assessment model and get feedback from schools on strengths of assessment. After making adjustments the assessment model may be successfully used by the Intellectual schools to prepare for the independent organizations' assessment.

At the same time we will analyze and evaluate services provided by companies dealing with accreditation of schools and having good standing at the international market.



## SECTION 8. DEVELOPING THE INTELLECTUAL SCHOOLS NETWORK

### 8.1. Existing Intellectual schools

There were 6 operational Intellectual Schools at five buildings at the end of 2011.

#### **The Intellectual School of Physics and Mathematics and IB School in Astana**

Customer: "Astana Construction Administration" Public Entity

Contractor: "Mechanical Works Administration" (MWA) LLP

Act of the state committee on commissioning of the constructed facility was signed on December 22, 2008. The Intellectual school of Physics and Mathematics was put into commission on January 7, 2009 and was adopted for trust management on May 6, 2009. The IB School was opened at the building of the Intellectual School of Physics and Mathematics on September 1, 2010.



#### **The Intellectual School of Physics and Mathematics in Kokshetau**

Customer: "Akmola Oblast Construction Administration" Public Entity

Contractor: "SK Kulager" LLP

Act of the state committee on commissioning of the constructed facility was signed on November 20, 2009. The school was put into commission on September 1, 2009 and was adopted for trust management on December 7, 2009.





### **The Intellectual School of Physics and Mathematics in Semey**

Customer: "West-Kazakhstan Oblast Construction Administration" Public Entity

Contractor: "Interstroy NS" LLP

Act of the state committee on commissioning of the constructed facility was signed on June 29, 2009. The school was put into commission on September 1, 2009 and was adopted for trust management on October 1, 2009.



### **The Intellectual School of Physics and Mathematics in Taldykorgan**

Customer: "Taldykorgan Construction administration" Public Entity

Contractor: "Almatyobltyazhstroj" JSC.

The Intellectual School was put into commission on September 1, 2010. Act of the state committee on commissioning of the constructed facility was signed on December 20, 2010.



### **The Intellectual School of Chemistry and Biology in Ust-Kamenogorsk**

Customer: "East-Kazakhstan Oblast Construction Administration" Public Institution

Contractor: "Kazdorsctroy 2005" LLP



The AEO performed constant monitoring of the Intellectual Schools construction by local executive bodies. The information about current status of the construction was sent weekly to the Ministry of Education and Science of the Republic of Kazakhstan.

"Nazarbayev Intellectual Schools Construction Directorate" Private Entity was set up on August 19, 2011 in order to perform customer's functions. It was duly licensed to render services on technical supervision over construction.

## 8.2. Design work

### Work done in 2011

The acts of municipal administrations on allocation of land plots for projecting and construction of 17 Intellectual schools were amended. The state land acts for all land plots were issued in all cities except for Almaty and Ust-Kamenogorsk.

In Astana at the crossing of Kabanbay Batyr, Turan Avenue and 31st Street, 10 hectares of land plot was allocated for projecting and construction of two Intellectual Schools of Physics and Mathematics and Chemistry and Biology. There were 178 suburban land plots on the territory, 152 plots were demolished, 5 plots are still under consideration at courts. Additional land plot (3.9 hectares) was allotted for alley, park, recreation area and parking.

The design data was collected for designing of the Intellectual school in Ust-Kamenogorsk. Technical specifications in other cities were updated (extended).

Since there are no relevant Sanitary Norms and Regulations or other regulatory documents the authorized bodies developed special technical requirements for designing of two Intellectual schools of Chemistry and Biology and Physics and Mathematics for 720 pupils each with dormitory, administration building, pedagogic center for 386 people and a hotel for 100 people.

Technical specifications for design works on the Intellectual schools in Astana and Almaty were prepared separately.

Furthermore, the technical specifications and technological equipment list for the Intellectual Schools are prepared and agreed with the Ministry of Education and Science of the Republic of Kazakhstan.

### Work to be done in 2012

In the framework of designing works it is necessary:

- to obtain the state acts on land plots in Almaty and Ust-Kamenogorsk;
- to purchase and demolish summer cottages on the territory of land plot in Astana and execute the single state act on the land plot.

## 8.3. Projecting

### Work done in 2011

The design projects were altered in terms of omitting kindergartens and playgrounds from the projects and substituting elementary school blocks with secondary and high school blocks (Grades 7-12).

To speed up the projecting and construction terms of the Intellectual schools in the regions tenders were arranged and contracts were signed on construction of new buildings and development of design specifications and estimates.

The design specifications and estimates on construction of 10 Intellectual schools in Uralsk, Taraz, Petropavlovsk, Atyrau, Aktobe, Shymkent (School of Physics and Mathematics), Pavlodar, Almaty (schools of Chemistry and Biology and Physics and Mathematics) and Kyzylorda were developed. Affirmative conclusions of the Republican state enterprise "State examination" were received on all design projects. The Agency for Construction, Housing and Utilities of the Republic of Kazakhstan approved technical and economic indices of all projects.



### Work to be done in 2012

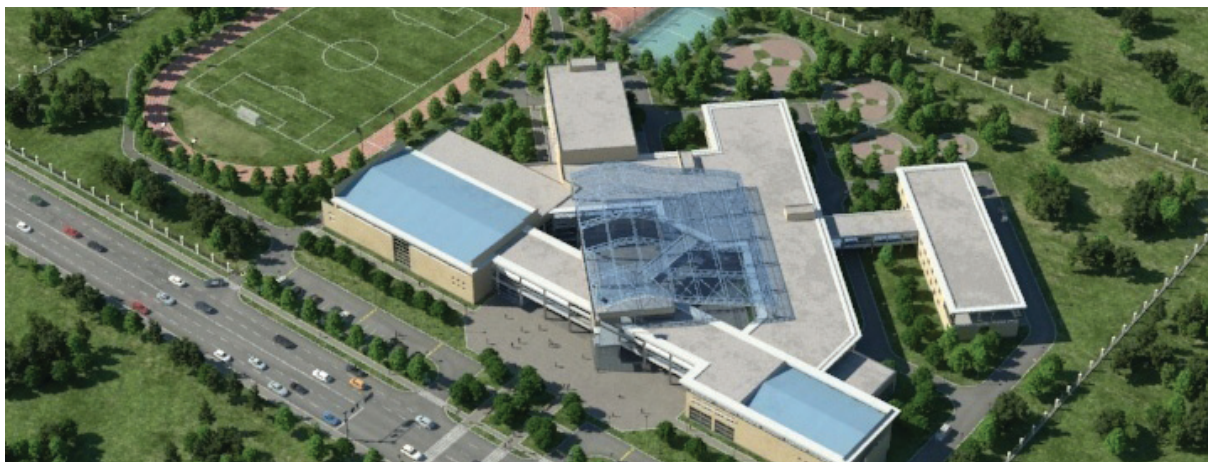
Design works on construction of the Intellectual schools in Aktau, Shymkent (School of Chemistry and Biology), Kostanay, Astana and Ust-Kamenogorsk are to be completed.

The design specifications and estimates of the Intellectual schools in Uralsk and Taraz are to be amended due to additional modifications.



## 8.4. Costruction

### Work done in 2011



In 2011 construction of the Intellectual school in Uralsk continued (general contractor - "SPP "Metalloizdeliya" LLP).

Construction of 10 Intellectual schools in Aktobe, Atyrau, Taraz, Shymkent (schools of Physics and Mathematics and Chemistry and Biology), Petropavlovsk, Almaty (school of Chemistry and Biology), Pavlodar, Karaganda and Kostanay is underway.



Duly licensed engineering companies carry out technical supervision over the Intellectual schools in Uralsk, Aktobe, Atyrau, Taraz and Shymkent (school of Physics and Mathematics).

### Work to be done in 2012

Construction of 12 Intellectual schools is to be completed in 2012. "Nazarbayev Intellectual Schools Construction Directorate" Private Entity supervises the construction of 12 Intellectual schools in Pavlodar, Petropavlovsk, Almaty (schools of Chemistry and Biology and Physics and Mathematics), Pavlodar, Petropavlovsk, Almaty (schools of Chemistry and Biology and Physics and Mathematics), Karaganda, Shymkent (school of Chemistry and Biology), Aktau, Kostanay, Kyzylorda, Astana (schools of Physics and Chemistry and Chemistry and Biology) and Ust-Kamenogorsk.



## SECTION 9. MATERIAL AND TECHNICAL PROVISION

### 9.1. Classroom equipment

Creation of material and technical basis (further (MTB) is an important component of qualitative provision of the educational process and creating good learning environment for pupils. That is why initially in accordance with requirements of the curriculum the Intellectual schools should be provided with necessary furniture, school equipment as well as reference books and consumable materials. These components of MTB affect the quality of educational process on the whole.

#### **Work done in 2011**

Within the framework of improvement and rational use of the material and technical basis of the Intellectual schools we performed the monitoring of basic equipment and facilities. The Intellectual schools in Semey, Kokshetau, Ust-Kamenogorsk, Taldykorgan and Astana were equipped with lab furniture and equipment to carry out research in Physics, Chemistry, Biology, Biotechnology and Nanotechnology. Languages, Geography, mathematics, Arts and History rooms were additionally equipped.

The Intellectual schools use the common list of material and technical provision coordinated with the Ministry of Education and Science of the Republic of Kazakhstan.

#### **Work to be done in 2012**

1. Creation of e-base of schools' equipment and furniture at each classroom of the Intellectual schools.
2. Development of the common standard (list) of educational process and equipment provision of the Intellectual schools.
3. Transfer of buildings of the Intellectual schools in Astana, Kokshetau, Semey and Taldykorgan into the AEO property.

## 9.2. Provision with textbooks and literature

The basic principles of forming the library stock of the Intellectual schools is freedom of textbooks and teachings aids choice for teachers, choice of learning and scientific information for pupils from different resources according to the content of experimental integrated programs.

### Work done in 2011

The library stock of the Intellectual schools consists of educational, additional and popular science literature, information and bibliography and specialized periodicals in paper and electronic formats.

While arranging the library stock of educational, teaching-methodological literature specialization in Natural Sciences and Mathematics is taken into account. The library offers a wide choice of literature to pupils.

In 2011 we paid a lot of attention to completing the library stock with educational, additional, fiction and reference books in specialized subjects and languages of national and international publishing houses.

Number of books at the Intellectual schools' libraries amounts to 327 088 units.



Table 44. Number of books in 2009-2011

Intellectual schools	Academic year	Library stock	Textbooks	Teaching materials	Encyclopedias	Dictionaries	Fiction literature	Additional literature in subject	E-textbooks	Periodicals
Astana, Physics and Mathematics	2009-2010	33108	9597	12662	13	44	900	9030	780	82
	2010-2011	27002	11063	10284	67	21	1304	4064	40	159
	2011-2012	7762	3959	2846	2	6	707	92		150
<b>Total</b>		<b>67872</b>	<b>24619</b>	<b>25792</b>	<b>82</b>	<b>71</b>	<b>2911</b>	<b>13186</b>	<b>820</b>	<b>391</b>
Semey	2009-2010	29450	14350	15085	0	0	0	0	0	15
	2010-2011	25242	9670	13382	53	33	506	1500	40	58
	2011-2012	8634	4181	2834	36	84	719	687	0	93
<b>Total</b>		<b>63326</b>	<b>28201</b>	<b>31301</b>	<b>89</b>	<b>117</b>	<b>1225</b>	<b>2187</b>	<b>40</b>	<b>166</b>
Taldykorgan	2010-2011	32871	16692	13354	37	26	1615	1107	40	0
	2011-2012	14392	6261	6072	5	16	1217	752		69
<b>Total</b>		<b>47263</b>	<b>22953</b>	<b>19426</b>	<b>42</b>	<b>42</b>	<b>2832</b>	<b>1859</b>	<b>40</b>	<b>69</b>
Kokshetau	2009-2010	31 153	16 452	14 633	0	0	0	0	0	68
	2010-2011	25 014	9 523	13122	53	31	626	1526	40	93
	2011-2012	7 243	3375	2560	35	12	705	479		77
<b>Total</b>		<b>63 410</b>	<b>29 350</b>	<b>30 315</b>	<b>88</b>	<b>43</b>	<b>1 331</b>	<b>2 005</b>	<b>40</b>	<b>238</b>
Ust-Kamenogorsk	2010-2011	31786	15203	13733	19	47	1488	1256	40	0
	2011-2012	17258	7541	7351	11	111	1392	831	0	21
<b>Total</b>		<b>49044</b>	<b>22744</b>	<b>21084</b>	<b>30</b>	<b>158</b>	<b>2880</b>	<b>2087</b>	<b>40</b>	<b>21</b>
Uralsk	2011-2012	28060	16112	9315	50	86	1973	524	0	0
<b>Total</b>		<b>28060</b>	<b>16112</b>	<b>9315</b>	<b>50</b>	<b>86</b>	<b>1973</b>	<b>524</b>	<b>0</b>	<b>0</b>
Astana, IB	2010-2011	1579	994	313	0	18	2	195	0	57
	2011-2012	6534	3979	408	89	72	1228	758	0	0
<b>Total</b>		<b>8113</b>	<b>4973</b>	<b>721</b>	<b>89</b>	<b>90</b>	<b>1230</b>	<b>953</b>	<b>0</b>	<b>57</b>
<b>Library stock</b>		<b>327 088</b>	<b>148 952</b>	<b>137 954</b>	<b>470</b>	<b>607</b>	<b>14 382</b>	<b>22 801</b>	<b>980</b>	<b>942</b>

The library implements new information technologies, develops information culture of pupils and teachers, provides pupils and teachers with useful information, helps develop search skills and analysis of required information in Internet.

All books were registered via KALIS (Kazakhstani Automated Library and Information System).

At libraries teachers and pupils have access to paper and electronic resources.

We conducted full inventory survey of library stock of the Intellectual schools in July 2011.





A seminar on “Modern approaches to organization of school libraries” for librarians IT experts was held on November 7-12 with the participation of representatives of the National Academic Library of the Republic of Kazakhstan, specialist in hybrid libraries of the Education Development Center from Samara L.A.Serykh and KALIS developers.

Librarians of the Intellectual schools were trained in Singapore in December 2011.

Work to be done in 2012

1. Developing regulatory documents that will improve the work of libraries.
2. Search for ways to optimize the work on books registration via library programs.
3. Search for new library programs taking into account book registration at branch libraries.
4. Organization and administration of hybrid libraries.
5. Defining the list of equipment for effective library functioning.
6. Search for ways to optimize the work on books registration via library programs.
7. Compiling the list of basic and additional literature for each grade and subject within development of curricula and reference books for teachers by subjects.
8. Establishing cooperation with the world and country's leading libraries.
9. Librarians professional development.
10. Regular update of library stock of the Intellectual schools with new pedagogic, reference, fiction literature and textbooks.

## SECTION 10. INFORMATIZATION

### Work done in 2011

To create infrastructural conditions for upgrading the level of education and research activity through use of IT technologies in the educational process we adopted a number of measures.

From the very beginning of the academic year all operational Intellectual schools were additional equipped with computers, interactive and licensed software.

Currently there are 3742 PCs at the Intellectual schools, including:

**Table 45. PCs provision**

Intellectual schools	Astana, Physics and Mathematics	Astana, IB	Semey, Physics and Mathematics	Kokshetau, Physics and Mathematics	Ust-Kamenogorsk, Chemistry and Biology	Taldykorgan, Physics and Mathematics	Kindergarten, Taldykorgan	Total
PCs	1131	270	494	578	639	624	6	3742

Number of interactive boards at the Intellectual schools amounts to 315 units. The Intellectual schools of Physics and Mathematics in Astana, Semey, Kokshetau and the Intellectual school of Chemistry and Biology in Ust-Kamenogorsk are now equipped with videoconference systems. The Intellectual school of Physics and Mathematics in Taldykorgan purchased video surveillance system.

**Table 46. Interactive boards provision**

Intellectual schools	Astana, Physics and Mathematics	Astana, IB	Semey, Physics and Mathematics	Kokshetau, Physics and Mathematics	Ust-Kamenogorsk, Chemistry and Biology	Taldykorgan, Physics and Mathematics	Kindergarten in Taldykorgan	Total
Interactive boards	57	13	58	74	60	48	5	315

In the light of new educational standards it is necessary to create comfortable conditions for pupils at school. In this connection in the 4th term of 2011 the Intellectual schools in Semey, Kokshetau and Ust-Kamenogorsk purchased local school radio that will be an accessible information channel embracing a wide audience. At the Intellectual schools the local radio will be the main entertainment center uniting youth. Work on school radio shows will help us find active and talented children. This work will be divided into several directions: informative, educational and academic. School radio will develop such important qualities as communication, expertise, level of culture, etc.

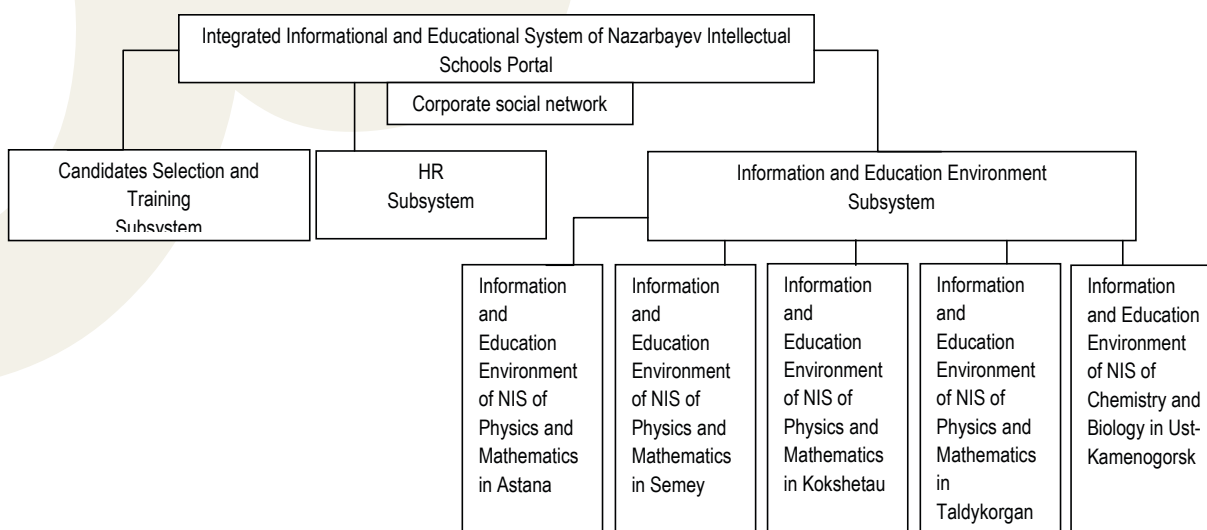
The Intellectual schools in Semey, Kokshetau and Ust-Kamenogorsk were equipped with mini television studios allowing pupils to do their work in a creative way. At these television studios high school pupils can carry out project works, video recording, video editing, make broadcasts about school activities and post those at schools' websites

In June 2011 pupils applying for the educational grant "Orken" of the First President used "Testing system" software within the competitive selection for the first time ever. This system considerably shortened time required to select pupils and process test results. It also diminished the number of test papers printed.

Online lessons were launched at all Intellectual schools via Elluminate live software in September 2011. Specialized computers, video cameras and microphones were purchased for each operational Intellectual school in order to deliver online lessons. Online lessons are broadcasted live at [www.sabak.kz](http://www.sabak.kz) by the Ministry of Education and Science of the Republic of Kazakhstan online for all general secondary schools in the country. Each online lesson of the Intellectual schools is additionally recorded during live broadcast.

Within the framework of development of the information and educational environment and its integration into a single network we studied additional requirements and business processes of structural subdivisions relating to the Intellectual schools life. As a result of our research, we developed and approve the terms of reference according to which systems of pupils' preparation and selection and HR management would be elaborated, information and educational environment would be developed, NIS information and educational environments would be united into a single environment and corporate social space would be created. RFID cards are to be gradually replaced with the FP identification system in order to check pupils and staff attendance.

**Figure 6. Structure of the single information and educational environment**





Special modules were introduced for effective budgeting and making adjustments to the budget. The module for AEO Procurements Plan formation based on the approved annual budget was developed.

Six IT specialists of the company were trained under Interconnecting Cisco Network Devices and SQL Server courses due to the fact that all Intellectual schools are equipped with Cisco and Microsoft SQL Server facilities. Now they have in-depth knowledge of modern local and global networks with integrated IP-telephony and information security; advanced expertise in work with Cisco equipment, including routers, voice gateways, network firewalls and intrusion prevention systems. They also possess necessary skills and expertise to administer the relational data bases SQL Server.

### **Work to be done in 2012**

1. Within further development of single information and educational environment e-document flow system, material and technical facilities control system, budgeting and procurements system will be introduced.
2. Additional equipment for mini TV studios, copying facilities and software provision for libraries network that will be launched at the Intellectual schools in 2012.
3. Replacement of PCs equipment at the Intellectual school of Physics and Mathematics in Astana purchased in 2008 and outdated.
4. PCs, interactive equipment and licensed software for the Center of Educational Programs and Center of Pedagogic Measurements.
5. Additional PCs equipment and facilities for AEO branches in line with their needs.
6. Professional development courses for IT specialists of the Intellectual schools.



## SECTION 11. DISSEMINATION OF ACCUMULATED EXPERIENCE

### 11.1. Center of Excellence

In line with the instruction of the Head of the State on dissemination of the Nazarbayev Intellectual schools experience given at the extended session of the Government of the Republic of Kazakhstan on April 18, 2011, the Government approved conceptual approaches to the AEO experience dissemination, development of teachers' training and professional development system, and establishment of the Center of Excellence (hereinafter COE).

The project offers secondary schools teachers an in-service program of training at three levels that corresponds **the best international practices**.

The program includes the following modules:

- New approaches in education;
- Development of Critical Thinking;
- Criteria-based assessment of learning and learning outcomes;
- Use of ICT and digital systems to improve the learning methods;
- Working with talented and gifted children;
- Psychological and pedagogic peculiarities of teaching in specific age groups;
- Management and leadership in secondary education in transfer to 12-year education.

The AEO negotiated development of the training program with representatives of the University of Cambridge. As a result a contract №2011-099 was signed on November 11, 2011 on joint development of the COE programs, assessment model, trainers and evaluators training.

**The Center of Excellence was established in November 2011** (certificate of state registration №0567457), five mini-centers of excellence were opened on December 1 on the basis of operational Intellectual schools.

Together with the University of Cambridge experts we carried out **a research at the Intellectual schools of Astana** in order to define needs of Kazakhstani teachers. The training program is developed in accordance

with the previously mentioned research, competitive selection of teachers to the Intellectual schools and careful analysis of existing school practices.

The following positive and negative aspects were brought to light while carrying out the research:

**Positive aspects:**

- A teacher knows the content of his/her subject
- A teacher commands the attention of the class and organizes the educational process
- Use of various methodological and learning tasks
- ICT use (projector, interactive board, laptops)
- Pupils are involved into the educational process via Q&A
- Teachers have good understanding of Mathematics and teaching of Mathematics
- Pupils work in groups and do some practical tasks
- A teacher evaluates pupils' work and tells them whether they were successful in solving the tasks and achieving the goals of the lesson
- Assessment of successfully solved tasks

**Negative aspects:**

- Teacher's work is aimed at dissemination of knowledge and is of reproductive character
- Educational process is governed by teacher only
- Methodical and learning tasks are aimed at repetition of materials and do not develop pupils' understanding and thinking
- Limited ICT use at classrooms (as teaching aids)
- Equal treatment of all pupils
- Teaching of Mathematics does not form conceptual understanding and does not develop effective methods of learning
- Teachers are initiators of the educational process, pupils are passive participants, no feedback from pupils
- Teaching methods are not transparent, do not encourage learning through cut and try method
- Assessment system does not encourage development and learning

**Upon results of research the University of Cambridge experts submitted the following recommendations:**

- New approaches in teachers training (management and leadership in education)
- Critical thinking development
- ICT use
- Criteria-based assessment training
- Taking into account age peculiarities while working with talented and gifted children.

Key principle of the University of Cambridge approach is based on the academic research of the educational process that proves that simple addition of several new strategies teachers can not transform the system of education. In order to implement new ideas or changes in the pedagogic practice we need real school conditions. One of the basic requirements is practice at school at the stage of distance learning.

Taking into account the conducted research and suggestions of experts the Program of trainings for teachers of the general secondary schools is divided into following levels:

- 3rd level, Basic - at the regional Professional Development Institute, Republican Institute of Professional Development for leading and research pedagogic staff (RIPD) and COE;
- 2nd level, Intermediate - at RIPD and COE;
- 1st level, Advanced - at COE.

Each level offers a training program that includes all modules and provides 2-month training face-to-face and 1-month computer-based distance learning.

The following resources were prepared on the basis of developed program:

- Trainer's guide
- Teacher's guide
- Structured online materials (VLE);
- Pre-course tasks instruction.

**286 trainers** were selected for organization of courses (286 trainers for the 3rd level, 126 trainers for the 2nd level and 78 trainers for the 1st level).

All candidates had an interview in line with the developed criteria.

The trainers will be given the University of Cambridge Certificate and the Nazarbayev intellectual schools certificate upon completion of training and assessment by independent experts.

**The Assessment model** is being developed for organization of independent assessment. 25 evaluators are to be trained. They are expected to assess teachers and confer qualifications in line with which teachers' salaries will be raised.

Credits obtained at the 1st level at School of Education of the Nazarbayev University will be taken into account and allow teachers to get Master's degree.

The Draft Development Concept of COEs was published (500 copies) and submitted to the Ministry of Education and Science of the Republic of Kazakhstan for dissemination among participants of the Republican Pedagogic Forum that was held in August 2011.

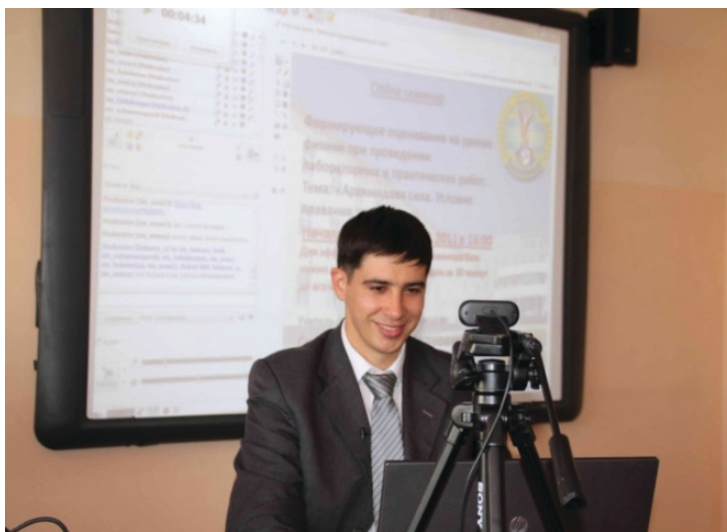
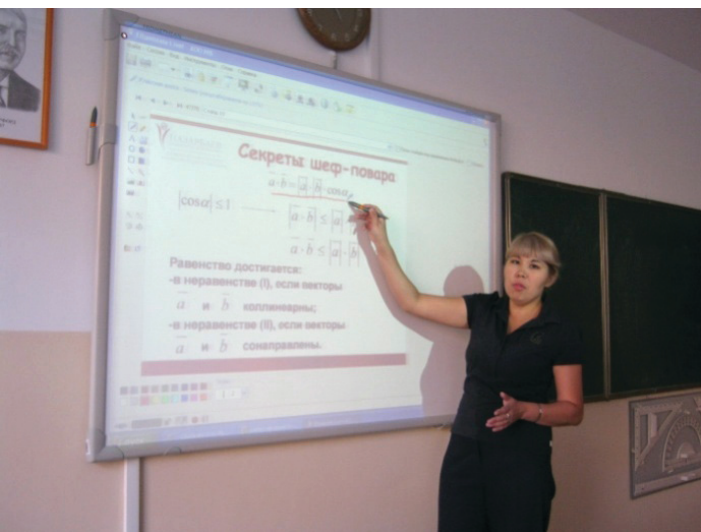
**One of the sessions of the Republican Pedagogic Forum** in August 2011 was held at the Nazarbayev University and brought together representative of the University of Cambridge Gerard Delaney, foreign teachers of the NIS schools, etc. Those present were familiarized with basic directions in the sphere of teachers' professional development. Actual problems were discussed.

The International Conference "Teachers' Professional Development: traditions and changes" dedicated to the 20th anniversary of Kazakhstan's Independence was held in Astana on December 5 - 6.

The aim of the conference is to discuss problems of Kazakhstani teachers' professional development in line with the best international practices; to define priorities of the COE activities and dissemination of the Intellectual schools experience.

Kazakhstani scientists and practitioners, teachers from Russia, Great Britain, the USA, the Netherlands, Canada and Japan took part in the conference.

Teachers of the Intellectual schools conducted master classes. There was held an exposition "Teachers' professional development: territory of partnership".



## 11.2. Online lessons and seminars

Online lessons for pupils and online seminars for teachers of the general secondary schools were launched on September 1, 2011 in order to disseminate NIS accumulated experience these projects are to improve quality of teachers at schools.

The lessons are delivered in such subjects as Mathematics, Physics, Chemistry and Biology. The seminars are dedicated to Critical Thinking. The Regulations on conduction of online lessons and seminars for the general secondary schools of the Republic of Kazakhstan were developed. Teachers of the Intellectual schools deliver the seminars and lessons.

The content of lessons is to expand and deepen pupils' knowledge, skills and expertise. During the lessons pupils carry out lab and practical works and solve advanced problems.

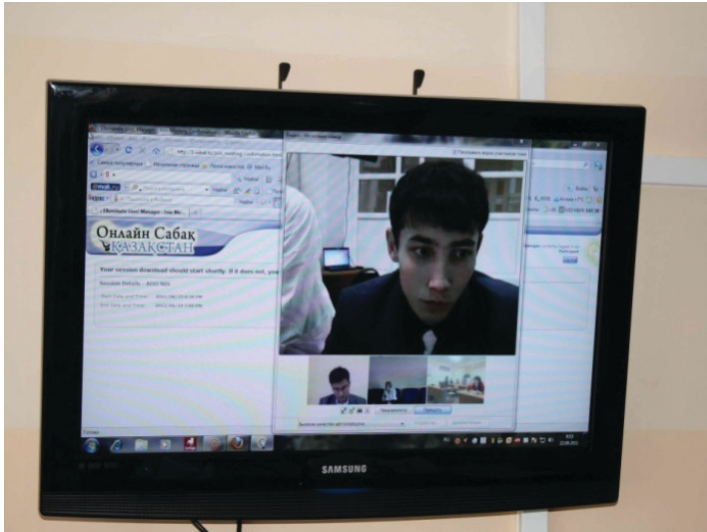
The content of seminars will familiarize teachers of the general secondary schools with new teaching technologies.

Online lessons and seminars are delivered via elp.kz website of the Ministry of Education and Science of the Republic of Kazakhstan based on Eluminate Live software. This software is used in more than 150 countries of the world and successfully applied in distance learning by universities of Illinois, Iowa and Pittsburg and many others. After the lesson pupils can ask questions online. They are also requested to do home work at each lesson.

Lessons and seminars (video clips, experiments and presentations) are available at <http://moodle.nis.edu.kz/>, where pupils and teachers of the general secondary schools may leave their comments and questions.

In 2011 there were delivered 160 online lessons and 17 online seminars.





### Work to be done in 2012

1. Online seminars in Critical Thinking in 2012-2013 academic year.
2. Development of elective courses programs.
3. Development of assessment criteria of online lessons and seminars.





## SECTION 12. ECONOMICS AND PLANNING. FINANCIAL PROVISION

In order to fulfill tasks set by the President of the Republic of Kazakhstan Nursultan Nazarbayev on improvement of the secondary education system and development of the intellectual abilities of pupils through implementation of the project "Twenty intellectual schools of the First President of the Republic of Kazakhstan", the AEO developed the 2020 Development Strategy that was approved by the decision № 4 of the Board of Trustees dated November 29, 2011.

In line with the strategic documents the AEO budget planning will be carried out in the following directions:

- projecting and construction of the Intellectual schools;
- material and technical provision of operational and newly opened Intellectual schools;
- defining of the content of education;
- development and implementation of IB programs;
- development and implementation of experimental educational programs;
- teachers professional development;
- dissemination of accumulated experience;
- pupils' learning and upbringing;
- methodological support of the educational process;
- providing housing to teachers.

In 2011 the abovementioned activities were implemented at the expense of the republican budget and pupil fees.

The AEO budget is planned, implemented and adjusted in accordance with the budgetary legislation of the Republic of Kazakhstan, the Law of the Republic of Kazakhstan "On status of the Nazarbayev University, Nazarbayev Intellectual schools and Nazarbayev Fund" and 2020 Development Strategy of the AEO "Nazarbayev Intellectual Schools".

The AEO budget is approved by the Board of Trustees.

We constantly monitor cash flows in order to plan and implement the budget effectively and make timely decisions. The AEO works on automation of budget planning and implementation process.

The AEO carries out accounting in line with the Law of the Republic of Kazakhstan "On accounting and financial reporting" dated December 4, 2008. Authenticity, continuity, fullness and transparency are the basic principles of accounting that are reflected in our policy. The AEO financial activity was examined by an audit company chosen within a tender in the reporting year. After the audit the financial reporting was submitted to the Ministry of Education and Science of the Republic of Kazakhstan and approved by the AEO Board of Trustees.

In 2010-2011 the accounting staff of the company and its branches upgraded its qualifications in line with the International standards of financial reporting. 3 employees of accounting department passed exams and received corresponding certificates in 2011. They will continue to upgrade their qualifications in 2012.

## SECTION 13. BRAND BUILDING

A trademark or AEO brand name is an intellectual part of the properties expressed in the name and design characteristics having sustainable and strong positive communication.

The company's logotype reflecting the essence and value of provided services is an important element in brand building.

### 13.1 The AEO logotype

The logotype (Greek, LOGOS and TYPOS or WORD and PRINT) is a graphic symbol of company's name.

The joint-stock company "Orken" was established by decree № 452 of the Government of the Republic of Kazakhstan dated May 13, 2008 for the purpose of running the Nazarbayev Intellectual schools network. The logotype of the joint-stock company was depicted in the form of a sprout where one could clearly see Kazakh letter "Ө" - the first letter in the name of the joint-stock company.

**Figure 7. Former logotype**



In accordance with Decree № 532 of the Government of the Republic of Kazakhstan dated June 7, 2010 the joint-stock company "Orken" was renamed into the joint-stock company "Nazarbayev Intellectual Schools".

In order to introduce modern forms of educational management, develop academic freedom and autonomy necessary for implementation of the innovation educational programs and research projects a specific law was adopted in line with which the joint-stock company "Nazarbayev Intellectual Schools" was reorganized into the autonomous educational organization "Nazarbayev Intellectual Schools".

In this light the graphic symbol of the company was reviewed.

In 2011 the AEO worked on creating a new logotype of the company. To develop the new logotype we carefully explored the positive international and domestic experience in this respect and analyzed the market of the companies that develop logotypes.

After careful analysis and discussion the new logotype of the autonomous educational organization was developed.

**Figure 8. New logotype**



The new version of logotype is depicted as a green-coloured sprout and the first letters of the name of the company in English (NIS - Nazarbayev Intellectual Schools). The green colour symbolizes life and in combination with the graphic symbol it commemorates the Beginning and Growth. We chose mix of red and bronze colours for "NIS" letters because they symbolize "Reliability, Adulthood, Formation".

**The new logotype means: "from beginning of Growth to Adulthood"**

The graphic and text symbols are above the name of the company. All three parts of logotype are an indispensable part of the logotype and are used together except some cases (when used in image products, etc.).

The Guide on use of logo-book was approved by the decision № 28 of the AEO Board dated December 8, 2011 in order to regulate the use of new logotype. Design of image products was elaborated according to this Guide.

Design of the corporate badge for AEO staff was developed based on the image of green sprout. We hope

that the badge will encourage development of new corporate style. The image of our employees is the image of the whole company.

**Figure 9. Badge for AEO staff**



## 13.2. Information support

Information system inside and outside the company plays an important role in brand building. Information is a crucial object that can have either positive or negative impact on the corporate style. Wise use of information may positively affect the brand building.

In order to avoid misuse of information about the company and create positive associations about it we use a single information block in internet resources and other mass media.

During the reporting period the AEO monitored newspaper and magazine articles, TV shows and internet publications about the company and its branches. It was necessary, first of all, to respond to news about the company on a timely basis, secondly, to define the strategy that we would follow while working with mass media. Monitoring of positive and negative information about the AEO enables us to define how to work with mass media representatives, etc.

The AEO makes announcements about its activity via mass media (Knowledge Day, Open Day, Teacher's Day, Nauryz lectures, news about schools to be unveiled or constructed, etc.). The AEO prepares press releases for mass media. During the reporting period articles were published in the republican and regional newspapers and video materials were demonstrated.

The main methods of public awareness are publication of articles in newspapers and magazines, TV shows, and the information content of the Company's website.

The Company cooperates with a range of mass media, namely:

1. Information agency "Kazinform" and "KazTag";

2. National newspapers "Kazakhstanskaya Pravda", "Yegemen Kazakhstan", "Liter", "Alash Ainacy", "Zhas Kazakh";
3. Astana city newspapers "Astana Akshamy", "Vecherniya Astana";
4. TV Channels RTRK "Kazakhstan" (including regional branches), "Khabar", "7 kanal", "Astana";
5. Almaty oblast channel "Zhetysu", channels of Eastern Kazakhstan and Akmolinskiy region.
6. Regional newspapers "Alatau", "Ogni Alatau" (Almaty region), "Bukpa", "Mobilnaya", "Stepnoi maiak", "Akmolinskaya pravda" (Akmolinskiy region), "Didar", "Ustinka" (East Kazakhstan region).

The AEO demonstrates its active civil position responding to important public events such as the State-of-the-Nation Address of President Nazarbayev, the 20 anniversary of Kazakhstan's Independence, etc. The Company's top management as well as its ordinary staff members publish articles and give interviews.

Since beginning of the year 31 articles were published and 18 video clips were screened about the AEO activity by republican and regional mass media and TV channels. These materials provide coverage of AEO activity and show positive achievements within the reporting period.

In February 2011 we held a press conference that brought together representatives of "Yegemen Kazakhstan", "Kazakhstanskaya Pravda", "Vecherniyaya Astana" and "Alash Aynassy" newspapers, Kazinform news agency, stan.kz web portal, "Khabar", "Kazakhstan" and "STV" TV channels.

10 newspaper articles were published, 3 video plots and 4-minute video clip were screened upon results of this press conference.

In November 2011 we arrange a meeting with journalists of republican and regional mass media in the field of education. Members of the AEO Board and heads of its departments took the floor and told about company's activity. Representatives of "Eurasia" and "Kazakhstan" TV channels, "Khabar" Agency, Kazinform, KazTAG and BNews news agencies, "Kazakhstanskaya Pravda", "Yegemen Kazakhstan", "Anatili", "Strana i mir" news papers were presented at the meeting..

Within the meeting a number of journalists were chosen for further cooperation and supporting the AEO positive image in mass media.

All branches of the company interact with mass media.

The regional mass media published 64 newspapers articles, conducted 14 radio shows and screened 16 video materials during this year. It is worth mentioning that young journalists - pupils of the Intellectual schools cover school news in their newspapers. One of our pupils and an aspiring journalist Violetta Shvarts became a prize holder of the republican contest this year thanks to her active position.

### 13.3. Internet resource

The AEO's website is an important element in management of its trademark. Through great design, structure and content of the website the visitors may familiarize with company's activity, find company and schools' location, etc.

For the purpose of improving public awareness system in 2011 the AEO launched an updated version of its official website [www.nis.edu.kz](http://www.nis.edu.kz).

The design, structure and content of the official website were changed dramatically. At the website one can find information about company's activity and structure. At the website one can get a full version of Admission Rules, get acquainted with the legal regulatory acts of the Company, look through materials about Internet resources of currently operating schools and partners of the Company. For the users' comfort the news are presented in the form of scrolling messages. In 'Announcements' category one can find information about some important events, i.e. starting date of documents intake, competitions, test results. You can leave a message, submit your proposal or ask a question and get an answer via 'Q&A' category. Through 'Submit your CV' banner we receive resumes from perspective candidates for vacancies both at the central office and at branches of the Company. In general, the content of the website is updated on a daily basis; there is an effective system of high-demand content supply.

The Company takes all necessary steps for public awareness system development and optimization and information flow management between the Company and the society (internal and external communications).

#### Work to be done in 2012

We will develop the "rumours management system", i.e. preparation of information in the form of a text or a slide about the company that will be spread and reach the community in its original form and volume. AEO employee will play the main role in this system since it is up to him/her to spread the necessary information.

We plan to cooperate with mass media on a constant basis, which implies publicity and openness, provision of full information materials to mass media agencies, timely prepared press releases and press packets, ongoing contact of the Company's top management with mass media representatives, timely response to diverse informational pot shots, newspaper or magazine articles, TV shows, etc.

The AEO will continue its fruitful cooperation with mass media, which is the awareness mechanism for the population.

The design and structure of the official website will be brought into harmony with our new image and style.

The principles of corporate governance will be introduced at the Company in order to develop its image. Today joint-stock companies in Kazakhstan widely use principles of corporate governance. The Company plans to explore the international experience in terms of corporate governance and analysis of compliance of some principles with the AEO structure (the Corporate Governance Code development, Corporate Secretary Institute implementation, etc.).



## CONCLUSION

Summing up results of the AEO activity in 2011, we can proudly say that we did an effective job in defining the content of education, pedagogic staff professional development, work with pupils, education quality assessment system, establishment and development of the Intellectual schools network and AEO brand building.

### **These are results of our activity in 2011:**

- the main provisions of the experimental integrated educational program were developed;
- 9 experimental integrated educational programs were developed;
- 23 curricula with account of IB Diploma Program requirements were developed;
- Intellectual school in Astana became IB candidate school;
- the memorandums of cooperation were signed with the international educational organizations.
- the Center of Excellence and five mini-centers on the basis of the Intellectual schools were opened;
- the International conference "Teachers' professional development: traditions and changes" was held;
- 35 foreign teachers were employed by the Intellectual schools;
- 100 teachers of the Intellectual schools are trained under programs prepared by the Nazarbayev University and UCL, Great Britain;
- 1795 teachers attended courses at the Intellectual schools, 3358 teachers attended courses in the country, and 195 teachers - abroad;
- Virtual and Vacation Schools are operational for pupils in the regions and towns of the country;
- monitoring and education quality assessment instruments and technologies were validated during 2011, they are expected to be implemented in 2012;
- classrooms are fully equipped with PCs and interactive facilities;
- 6 Intellectual schools are operational, the Intellectual schools network is being developed;
- online lessons for high school pupils of the general secondary schools in Mathematics, Chemistry, Physics and Biology are delivered since September 1, 2011;
- online seminars for teachers of the general secondary schools are delivered since September 1, 2011;
- sections for teachers of Mathematics, Physics and Chemistry are available at the AEO website.



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