ANNUAL REPORT
2011

Nazarbayev
Intellectual
Schools

NIS

AUTONOMOUS EDUCATIONAL ORGANIZATION
«NAZARBAYEV INTELLECTUAL SCHOOLS»
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2011

AEO "NAZARBAYEV INTELLECTUAL SCHOOLS" MADE 1407 STAFF ACROSS THE COUNTRY
(including the intellectual schools, lower organizations and representative offices)

NUMBER OF TEACHERS WHO ACHIEVED ORTADAN ZHOGARY AND ZHOGARY LEVELS IN KAZTEST
made 145 and 70 people respectively (positive dynamics in comparison with 2010, only - 35 and 47 teachers accordingly)

IN 2011 101 TEACHERS PASSED IELTS TEST
(65 teachers more in comparison with 2010)

VARIOUS COURSES WERE ARRANGED FOR TEACHERS AT THE INTELLECTUAL SCHOOLS
Courses in Kazakh, English and Russian languages, ICT (1 795 teachers, 1 198 teachers more than in previous year)

AS OF JANUARY 1, 2012 4018 PUPILS STUDY AT THE INTELLECTUAL SCHOOLS
(1482 pupils - at Grades 1-6, 2536 pupils - at Grades 7-11)

PUPILS ACADEMIC PROGRESS IN ALL INTELLECTUAL SCHOOLS MADE 100% IN 2010-2011 ACADEMIC YEAR

AT THE MOMENT 662 TEACHERS ARE EMPLOYED BY NIS
(including 35 foreign teachers, i.e. 5.3% of the total number of teachers)

UPON RESULTS OF THE TEACHING KNOWLEDGE TEST (TKT)
20 teachers got their certificates, 3 of them became internationally qualified TKT teachers

653 PEOPLE (TEACHERS AND TUTORS) SAT THE PLACEMENT TEST,
i.e. 93.8% of the total number of teachers and tutors (the analogous rate made 64% in 2010)

OUR TEACHERS ATTENDED 11 PROFESSIONAL DEVELOPMENT COURSES ABROAD AND 21 - IN KAZAKHSTAN
(195 teachers attended courses abroad, 3358 teachers attended courses in the country)

UPON RESULTS OF 2011 COMPETITIVE SELECTION 1350 PUPILS WERE ENROLLED BY THE INTELLECTUAL SCHOOLS
(58 pupils - Grades 2-6, 1292 pupils - Grades 7-10)

3708 PUPILS SUCCESFULLY COMPLETED 2010-2011 ACADEMIC YEAR
(1190 straight-A pupils, i.e. 32.1%)

RESULTS OF INTERNATIONAL EXAMS

Exam	Number of participants	Highest possible score	NIS result
SAT-1	Astana-15 Kokshetau-9	2400	1586 1127
SAT-2 (2 subjects) SAT-2 (3 subjects)	Astana-5 Astana-7	1600 2400	1236 2030
SET (first time)	Kokshetau-12 Semey-12	pass/fail	9 pupils passed
IELTS	Astana-34 Kokshetau-14 Semey-7	9,0	6,0
TOEFL	Astana-4	677 C1-560	583
BCEPT (first time)	Astana-18 Kokshetau-27 Semey-28	pass/fail	36 pupils passed

IMPORTANT EVENTS

2011

January

- The Law of the Republic of Kazakhstan «On status of the Nazarbayev University», «Nazarbayev Intellectual Schools» and «Nazarbayev Fund» was adopted

February

- Members of the Board met with teachers of the Intellectual Schools
- A project group on study and implementation of the International Baccalaureate Diploma Program was created
- A project group to develop "Tri-lingual language policy" for the Intellectual schools was set up
- The draft Language Policy and its conclusion were developed
- a group of NIS representatives visited the Center for Talented Youth (CTY) at Johns Hopkins University to arrange a training seminar for NIS staff
- the Center of Educational Programs, Nazarbayev University selected candidates for its Critical Thinking course carried out by UCL experts (University College London) (48 teachers were selected)
- the elective courses of the German language as the second foreign language were organized at the Intellectual school in Kokshetau together with the Goethe Institute and the German Embassy
- NIS representatives paid a visit to Cito, the Netherlands, in order to discuss the process of pupils and teachers' competitive selection, the monitoring system of pupils' achievements

March

- A meeting with CIE focused on entering into the memorandum and further cooperation with UCL (University College London)
- Representatives of the Center for Talented Youth at the Johns Hopkins University represented their experience of working with talented youngsters
- An internal seminar «The usage of criteria-based assessment system to assess pupils achievements»
- The Nazarbayev Lectures in Physics
- Individual consultations and discussion of pupils' works for pupils of secondary general schools was organized during the spring break
- NIS sent the School Information Form to the IB headquarters and registered at www.ibis.ibo.org

April

- NIS delegation took part in the 5th annual conference of the IB Schools Association of the Commonwealth of Independent States member states in order to familiarize with the IB program; NIS staff attended a course offered by IBSCA (International Baccalaureate School & College Association) in Oxford
- The approaches to development of the teachers' training and professional development system and Centers of Excellence creation were approved in order to implement the instruction of the Head of the States given at the extended session of the Government of the Republic of Kazakhstan on dissemination of the Intellectual schools experience

May

- An agreement was signed with the Cambridge International Examinations in order to improve the experimental integrated educational programs of the Intellectual schools and bringing them into accord with the international approaches
- The Memorandum of Understanding was signed with SSAT - Specialist Schools and Academies Trust
- Together with SSAT (Specialist Schools and Academies Trust) NIS selected highly skilled international experts - teachers from Great Britain, the USA, New Zealand, Canada and other countries
- A seminar on the problems of education quality assurance with the international consultant doctor of UPPEN university Sharon Ravich, the USA, was organized
- The Federal Development Institute, Russia, conducted a course "Conceptual approach to organization of the academic system of the Intellectual school" for vice principals and tutors
- teachers of the Intellectual Schools participated in the I Mathematicians Convention where they conducted master classes
- Joint-stock company "Nazarbayev Intellectual Schools" was reorganized into Autonomous Educational Organization "Nazarbayev Intellectual Schools"

June

- The Government of the Republic of Kazakhstan adopted a decree on the establishment of the Autonomous Educational Organization "Nazarbayev Intellectual Schools"
- The joint-stock company "Nazarbayev Intellectual Schools" stocks were cancelled
- The Charter of the Autonomous Educational Organization "Nazarbayev Intellectual Schools" was approved
- The first meeting of the High Board of Trustees of the Autonomous Educational Organization "Nazarbayev Intellectual Schools" was held
- The Regulations on the High Board of Trustees were approved
- Members of the Boards of Trustees of the autonomous educational organizations were designated
- The High Board of Trustees approved NIS strategic directions
- A meeting with NIS strategic partners took place, including CIE, CTY, SSAT, CITO and the Kolmogorov Specialized Training and Research Center under the Moscow State University. Representatives of the British Council, Queen's and Ulster universities took part in the meeting as well
- NIS and CITO, the Netherlands, signed a memorandum of understanding aimed at implementation of joint projects on creation of the pupils' achievements assessment system
- Teachers attended a seminar on the Concept of implementation of the criteria-based assessment
- Individual consultations and discussion of pupils' works for pupils of secondary general schools was organized during the summer break

July

- A working seminar with the CIE and Kazakhstani experts on discussion, development and approval of the basic principles of the educational program was held
- In association with the University of Cambridge specialists NIS prepared the draft Educational program of the Intellectual schools identifying the strategic fundamentals, Intellectual schools structure, values and goals, expected learning outcomes
- NIS teachers attended an intensive course of English (SSAT, Cantebury, Great Britain)
- Remote courses for teachers of Biology and Chemistry: "Modern problems of Biology", "General course in the sphere of cellular biology, molecular biology and biochemistry" was conducted by experts of the Kolmogorov Research Center under the Moscow State University
- The Regulations on the NIS Board of Trustees were approved
- The NIS Board of Trustees approved the Regulations on the NIS Board
- The Board of Trustees approved the establishment of the Nazarbayev Intellectual Schools Construction Directorate

August

- NIS teachers attended the August Conference prior to the start of 2011-2012 academic year
- A workshop on "Modernization of the professional development system of pedagogic staff" for heads of the regional professional development institutes, private educational organizations, parents, non-governmental organizations and republican educational institutions was organized within the framework of the Republican Pedagogic Forum
- Professional development course for NIS teachers is organized at the Center of Talented Youth at the Johns Hopkins University, the USA
- The Board of the Autonomous Educational Organization "Nazarbayev Intellectual Schools" approved the Charters of Private Entity "Center of Excellence" and Private Entity "Nazarbayev Intellectual Schools Construction Directorate"

September

- The Memorandum of Understanding based on mutual trust and principles of equal cooperation was signed with the IB headquarters in Geneva, Switzerland
- New projects were launched, namely "Online lessons in Physics, Mathematics, Chemistry and Biology for pupils of the general secondary schools" and "Online seminars on criteria-based assessment for teachers of the general secondary schools"
- A meeting with international experts of the Bell Educational Trust focused on organization of the summer schools for NIS pupils
- Criteria-based assessment was launched in 12 subjects at Grade 7 at Schools of Physics and Mathematics and at Grade 8 of Schools of Chemistry and Biology

October

- Professional development course for heads of methodological associations and vice principals of the Intellectual schools in Stockholm, Sweden
- The Ministers of Education of Russia, Tajikistan and Kyrgyzstan paid a visit to the Nazarbayev Intellectual School in Astana where they familiarized themselves with the Development Strategy, new online projects (online lessons and seminars), work of the Center of Excellence and professional development system for teachers
- NIS selected pupils who will study at the Intellectual school in Uralsk using assessment instruments developed by the Center for Talented Youth at the Johns Hopkins University, the USA

November

- The Intellectual school in Astana became the IB school candidate
- "The Best Teacher of the Nazarbayev Intellectual Schools-2011" contest was launched
- Professional development course for teachers of specialized subjects was organized at FIF Technologies LLP, Singapore
- "The Development Strategy of the Autonomous Educational Organization "Nazarbayev Intellectual Schools for 2020" was approved at the meeting of the NIS Board of Trustees

December

- Mini-centers of excellence were established on the basis of the existing Intellectual schools
- The international scientific practical conference "Teachers' professional development: traditions and changes" was conducted
- NIS pupils took part in "Ziyatker ult bolashagy" forum where they presented their research projects
- The project group developed 23 educational programs for secondary and high schools taking into account IB Diploma Program requirements
- A contract with the University of Cambridge was signed for provision of the educational services in 2012
- NIS summed up results of the republican essay contest among pupils "Discover Kazakhstan"
- New corporate style was developed
- Professional development course "Person-oriented learning and principles of subject communities organization" was organized at HIFAB (Sweden)
- NIS teachers attended professional development course "Intensive course of English" at the International House Belfast, Northern Ireland
- Together with the University of Cambridge NIS developed the educational program of the third level of professional development for teachers of the secondary schools
- Trainers for the Center of Excellence and the republican professional development system were selected

SECTION 1.
ABOUT THE ORGANIZATION

In order to introduce the up-to-date forms of management in the field of education, academic freedoms and autonomy development necessary for implementation of the innovative educational programs and research projects the Law of the Republic of Kazakhstan "On status of the Nazarbayev University, Nazarbayev Intellectual Schools and Nazarbayev Fund" was adopted on January 19, 2011.

According to this Law, the new institute for management of the autonomous educational organizations (AEO) was established.

The AEO governing bodies are as follows:

1) the high governing body is the High Board of Trustees of "Nazarbayev University, Nazarbayev Intellectual Schools and Nazarbayev Fund" (hereinafter referred to as the High Board of Trustees);

2) the governing body is the Board of Trustees;

3) the executive body is the Board.

High Board of Trustees:

Nursultan Nazarbayev	President of the Republic of Kazakhstan, the First Chairman of the High Board of Trustees
Karim Massimov	Prime Minister of the Republic of Kazakhstan
Asslan Mussin	Head of President's Administration of the Republic of Kazakhstan
Yerbol Orynbayev	Deputy Prime Minister of the Republic of Kazakhstan
Bakhyt Sultanov	Deputy Head of President's Administration of the Republic of Kazakhstan
Bakytzhan Zhumagulov	Minister of Education and Science of the Republic of Kazakhstan
Shigeo Katsu	President of Nazarbayev University

Board of Trustees:

Yerbol Orynbayev	Deputy Prime Minister of the Republic of Kazakhstan, Chairman of the Board of Trustees
Bakhyt Sultanov	Deputy Head of President's Administration of the Republic of Kazakhstan
Maulen Ashimbayev	Kazakhstan Parliament Mazhilis Deputy
Lena Karmazina	Vice Minister of Finance of the Republic of Kazakhstan
Makhmetgali Sarybekov	Vice Minister of Education and Science of the Republic of Kazakhstan
Earl John Ball	Co-Director, School Leadership Program, UPPEN, the USA
Aslan Sarinzhipov	Chairman of the Executive Council of the Autonomous Educational Organization "Nazarbayev University"
Kulyash Shamshidinova	Chairperson of the Board of the Autonomous Educational Organization "Nazarbayev Intellectual Schools"

Board:

Kulyash Shamshidinova	Chairperson of the Board
Nazipa Ayubayeva	Deputy Chairperson
Ruslan Jamenkov	Deputy Chairperson
Sholpan Muratbayeva	Deputy Chairperson
Aigul Kazzhanova	Managing Director
Nuraly Manapov	Managing Director
Kairat Sultanov	Managing Director - Director of IT Department

SECTION 2. REGULATORY PROVISION

In its activity AEO is governed by the Constitution of the Republic of Kazakhstan, laws of the Republic of Kazakhstan, decrees of the President and Government of the Republic of Kazakhstan, other regulatory acts and the AEO's Charter.

Work done in 2011

To implement the abovementioned Law, the joint-stock company was reorganized into the autonomous educational organization, regulatory and local acts were developed and adopted:

• Government's decree №647 dated June, 9 2011 on creation of the Autonomous Educational Organization "Nazarbayev Intellectual Schools";

• The AEO's Charter was approved by the State Property and Privatization Committee of the Finance Ministry of the Republic of Kazakhstan on June 13, 2011;

• The Rules of awarding and amount of the educational grants "Orken" of the First President of the Republic of Kazakhstan approved by the Government's decree №317 dated March 14, 2009 were amended as regards expanding competencies of the AEO "Nazarbayev Intellectual Schools";

• The joint-stock company "Nazarbayev Intellectual Schools" stocks were cancelled, certificate No.A5671 dated June 13, 2011.

The following regulatory acts were developed and approved:

- The Regulations on the AEO Board of Trustees, the AEO Board;

- The Rules of property disposal

- The Regulations on housing facilities of AEO "Nazarbayev Intellectual Schools" and procedure of service housing provision to pedagogic staff of AEO "Nazarbayev Intellectual Schools";

- The Regulations on the purchase of goods, works and services by AEO;

- The Rules of keeping the Register of dishonest providers;

- The Regulations on AEO departments and job descriptions;

- The Rules of imposition of disciplinary penalty on AEO staff;

- The Rules of paperwork management;

- The Rules of AEO pedagogic staff attestation;

- The Regulations on AEO's remuneration scheme;

- The rules of current monitoring of pupils' progress, interim and final attestation of pupils;

- The Rules of admitting 1-6 graders to the branch of the Nazarbayev Intellectual Schools in Taldykorgan;

- The Rules of running the online seminars for teachers of the general secondary schools;

- the Rules of running the online lessons for pupils of the general secondary schools;

- The Rules of conducting the essay contest "Discover Kazakhstan" dated to the 20th anniversary of Kazakhstan's Independence among pupils of the Nazarbayev Intellectual Schools.

The AEO organizational structure was altered and improved (it was approved by the Protocol of the meeting of the AEO Board №1 dated June 28, 2011).

Upon results of the functional analysis the Regulations on AEO departments and job descriptions were amended.

Documents required for establishment of the Private Entity "The Nazarbayev Intellectual Schools Construction Directorate" and Private Entity "Center of Excellence" as well as AEO branches and representative offices were developed, approved and duly registered by the authorized agencies. The AEO Board approved the Charters of the abovementioned private entities as of August 5, 2011.

Within the framework of implementation of its basic goals and objectives, the AEO entered into memorandums with its strategic partners:

The University of Cambridge International Examinations, providing development of innovative educational programs and professional development of teachers (signed March 9, 2011);

Specialist Schools and Academies Trust (SSAT), according to which the parties intend to develop the network of schools that would create the innovative and experimental educational environment, to offer professional development courses to teachers, organize summer schools and hire personnel (signed May 25, 2011);

Center for Talented Youth (CTY) at the Johns Hopkins University, the main directions of cooperation include creating the system of pupils' selection able to study natural and mathematical sciences using psychometric instruments of aptitude assessment, organization of the summer schools, online courses, professional development of teachers (signed June 13, 2011);

The memorandum with CITO provides creation of the pupils' competitive selection system, academic achievements monitoring system and training of the staff in testing technology (signed June 22, 2011).

These memorandums provide implementation of the contracts with the strategic partners that focus on the protection of the AEO rights to the intellectual component.

Based on mutual trust and principles of equal cooperation the AEO and the IB Organization signed the Memorandum of Understanding on September 21, 2011. In line with the document, the basic directions for cooperation are the sustainable social development and exchange of experience in the sphere of high quality secondary education.

The AEO interests are protected when contracts with other international and local partners are signed and at the law courts. During 2011 the AEO was involved into seven legal trials and won them all.

Taking into account new schools' management model and planning institute, the AEO arranged a seminar dedicated to familiarizing with the U.S. experience (Philadelphia, Pennsylvania). UPENN was the moderator of the seminar that took place from February 6 to February 12, 2011.

At this seminar AEO staff familiarized with the basic approaches to management of the autonomous educational organizations, i.e. how to define its mission, establishing the governing bodies (Boards of Trustees at schools), activity of the Executive body, problems of interaction between the management structures, etc.

To explore the legal framework and experience of other countries in regulatory provision the AEO staff did a training course on "The legal regulation of educational institutions activity" in Saint Petersburg on November 21-25, 2011. Within this seminar the participants studied the problems of judicial practice, legal framework governing the human resourcing, regulatory provision of paid educational services, and disposition of the educational institution property.

Work to be done in 2012

In 2012 we plan to continue the work on implementation of laws and legal provision of the AEO's activity. We will develop and submit for approval the documents on organization of the AEO's activity, including competitive selection of candidates for awarding of the First President of the Republic of Kazakhstan grant "Orken"; work of the summer school; attestation of the pedagogic staff; organization of the educational activity; enrollment and transition; internal procedures, etc.

In order to ensure the AEO's activity we plan to develop and submit for consideration of the AEO Board of Trustees the Criteria of major transactions and their consummation.

We will work on protecting the AEO intellectual property and other issues on a regular basis.

SECTION 3. CONTENT OF EDUCATION

In line with the Development Strategy for 2020 the AEO implements two educational models.

The first educational model is an experimental integrated educational program in natural sciences and mathematics (hereinafter referred to as the Education program). It is developed to be implemented at the Intellectual schools. The new experimental integrated educational program and educational programs in subjects will be disseminated among the secondary schools of the Republic of Kazakhstan only after they are tested and implemented by the Intellectual schools.

The second educational model implements the programs of the secondary and high schools in line with the principles and philosophy of the IB Organization (hereinafter referred to as the IB). This model involves authorization of the Intellectual school in Astana. Implementation and authorization of the IB programs will ensure the accession of the Intellectual schools to the international network of schools that offer the educational programs of international level.

3.1 The experimental integrated educational program and integrated educational programs

Work done in 2011

The third stage of improvement of the experimental integrated educational programs was implemented within the first educational model in 2011.

A special project group on improvement of the experimental educational programs (hereinafter referred to as the Project Group) comprised of AEO staff and teachers was set up to organize the work on the content of education by the order №268/1/ОД as of December 27, 2010. The Project Group worked on defining the model of the AEO Educational program since early 2011.

The draft model of the AEO Educational Program was outlined by the AEO team and the CIE experts. Within the framework of the joint work a range of training seminars was held. The main objectives of the seminar held in July 2011 were to discuss, develop and approve the main principles of AEO educational system as regards each level of education, tri-lingual model and assessment system. As a result of the seminar the draft Educational program of the Intellectual schools was developed. The draft program defines the strategic basics, structure, values, skills, objectives, expected learning outcomes, etc.

Developed together with the international partner and adopted in 2011 measures reflect the systematic and gradual approach to development of the content of educational programs of the Intellectual schools: defining the model of educational program, assessment system and framework pattern for educational programs development.

STRATEGIC FUNDAMENTALS:

- Integration of the best NATIONAL and INTERNATIONAL educational models
- Implementation of a principle EQUAL ACCESS for pupils able to study natural sciences and mathematics in three languages;
- Improving education quality in Kazakhstan and levels of pupils achievements allows Kazakhstani pupils TO ENTER UNIVERSITIES AROUND THE WORLD;
- Contribution to THE NATIONAL ECONOMIC AND SOCIAL DEVELOPMENT ensured by high level of educational standards;
- INTEGRATION AT THE SUBJECT LEVEL (science, world cognition, art, language and literature, Kazakhstan in a modern world and others).

MISSION	STRIVING FOR DEVELOPMENT OF INTELLECTUAL INDIVIDUAL: An individual with HIGH INTELLECTUAL CAPACITY able to think critically and creatively, strong in spirit, able to APPLY HIS/HER KNOWLEDGE for the benefit of social progress.	
VALUES	Creative, with critical thinking	Healthy, amiable and attentive
	Communicative	Responsible
	Respectful to other cultures and opinions	Ready for lifelong learning
SKILLS	CRITICAL THINKING Ability for CREATIVE application of knowledge RESEARCH skills ICT skills Capable of TEAM AND INDIVIDUAL WORK GOOD COMMUNICATION skills (including language competencies)	PROBLEM SLOVING skills

The basic directions of work with the strategic partner in the sphere of the Educational program are as follows:

1. development of the program model and assessment model;

2. development of the framework patterns for educational programs by subjects;

3. content of the framework patterns and educational programs in mathematics, science and the English language for elementary school, in mathematics, chemistry and the English language for secondary and high schools.

1st direction

Educational program

Table 1. Draft structure of the Educational program and subjects by stages of education

Phase	Elementary	Secondary	High
Grade	Grade 1 -5	Grade 6 -10	Grade 11 -12
Age	6 - 11 years	11 - 16 years	16 - 18 years
Subject	maths	maths	maths, statistics
	science	biology, physics, chemistry	biology, physics, chemistry
	integrated mother-tongue language and literature	separate mother-tongue language and literature	mother-tongue language
	second language	second language	second language
	English language	English language	English language
	ICT	computer science	computer science
	world cognition	geography, history, basics of law	geography, Kazakhstan in a modern world
	self-cognition	self-cognition	self-cognition
	PE	PE	PE
	arts	art	
	electives	electives	
	extracurricular	extracurricular	extracurricular

Unlike the existing standard of secondary education the new educational program provides the following in line with the modern tendencies of defining the content of education:

1. Elementary school	• study at elementary school for 5 years instead of previous 4 years; • the introduction of science as a separate subject; • a focus on history and geography in world cognition; • clarification of the study of languages and literature; • study of the language from elementary to advanced level.
2. Secondary school	• biology, chemistry and physics from Grade 6; • graphic art integrated into computer science; • basics of law in Grade 9 only; • move towards full English-medium teaching earlier on.
3. High school	• significant reduction in number of subjects for each pupil; • subjects taught at higher and standard levels; • an element of choice for pupils; • introduction of project work; • preparation for higher education institutions.

Assessment model

The assessment model was developed along with the educational program. We also defined grades and subjects in the conditions of implementing new educational programs for:

- summative assessment or external assessment after Grades 5, 10, 11 and 12 produced by the independent educational institutions;

- formative assessment or school-based assessment conducted by teachers at school;

- records of achievement - teachers' reports on pupils' performance for subjects which are taken for pleasure.

2nd direction

The framework pattern for development of the educational programs in subjects consisting of the following sections was developed:

- a subject's significance in the educational program.
- objectives of the educational program fir a subject.
- implementation of tri-lingual policy.
- description of requirements to organization of the academic process in a subject.
- pedagogic approaches to organization of the academic process.
- Fostering respect to various cultures and beliefs.
- proficiency in ICT.
- development of communication skills.
- approaches to assessment.
- Content of the program, organization and continuity in subject.

3rd direction

Within the framework of the third direction of work on improvement of the educational program we filled in the framework patterns and educational programs in mathematics, science, chemistry and the English language for elementary, secondary and high schools. Prior to this we had a working seminar that brought together international and local developers in October 2011.

The Project Group together with the University of Cambridge partners completed work on filling in, comparison and development of the first version of nine educational programs by December 15, 2011:

1. in mathematics, science and the English language for elementary school;

2. in mathematics, chemistry and the English language for secondary school;

3. in mathematics, chemistry and the English language for high school.

Table 2. Draft scheme of transition to new educational programs

Academic year \ grade		Elementary school					Secondary school					High school	
		1	2	3	4	5	6	7	8	9	10	11	12
1	2012-2013												
2	2013-2014												
3	2014-2015												
4	2015-2016												
5	2016-2017												
6	2017-2018												
7	2018-2019												
8	2019-2020												
9	2020-2021												
10	2021-2022												
11	2022-2023												
12	2023-2024												
13	2024-2025												

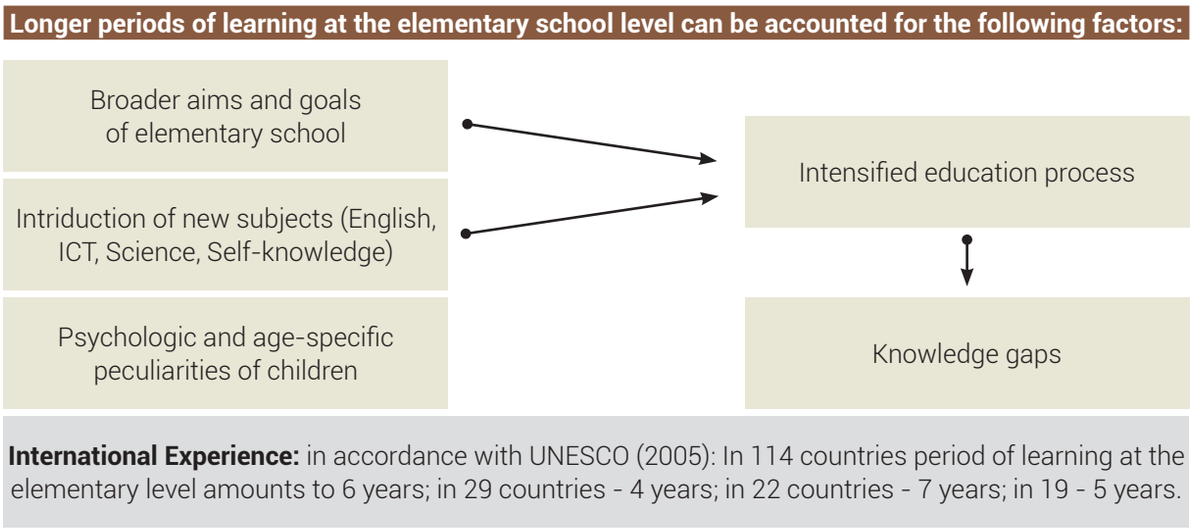
* for intellectual schools, except for Taldykorgan school, the educational programs at elementary school are not introduced.

For further work on improvement of the Educational program and development of the educational programs in subjects and helping teachers to implement the new model, we signed an agreement with the University of Cambridge on provision of the educational services in 2012 on December 7, 2011.

AEO staff constantly carries out research of domestic and international experience in the sphere of education and proving why these or that changes should be implemented.

One of the basic provisions was prepared based on the duration of studies at elementary school.

Figure1. Duration of studies



We continue to explore the main tendencies of defining the content of education in the world (materials about education of the Organization for Economic Cooperaiton, UNESCO, IB, experience of Great Britain, the USA, Russia, Singapore, Finland, etc.). In this context AEO staff attended a number of international conferences and seminars.

Work to be done in 2012

Within the agreement with the University of Cambridge in 2012 we plan to work in six directions.

1st direction - Educational programs by subjects

We will work on development, revision and follow-up revision of the educational programs in other subjects according to the framework pattern developed by the AEO and the University of Cambridge. Within a year we will test, assess and constantly support the development and implementation of the educational programs.

2nd direction - Study plans and teacher's guide

To support the activities on reformation of the educational program within the second direction teachers of the Intellectual schools in association with the international consultants will develop study plans and teacher's guide. We will co-ordinate the concept and content of study plans and teacher's guide.

3rd direction - Subject preparation and teachers' support

Here we will develop the program of training support on the use of teacher's guide and implementation of new educational programs. Directions 1, 2 and 3 are closely connected and include activities associated with implementation of the tri-lingual policy.

4th direction - Model of summative and formative assessment and potential development

The 4th direction is aimed at development of the assessment model corresponding to the new educational program of the Intellectual schools.

5th direction - Encouraging innovations and development of social practices at schools

The 5th direction will include a number of activities to encourage successful introduction of the educational program and new assessment model. Due to the fact that the educational program and assessment model will be subjected to innovations for a long period, the University of Cambridge will develop the program offering support to teachers. In order to improve the work in the sphere of social practices at the Intellectual schools the project-research will be introduced.

6th direction - External assessment of school

Within the sixth direction we plan to develop an approach towards external assessment of the Intellectual schools and validation of this model.

All these measures are aimed at implementation of the Educational program at the Intellectual schools and further validation of the educational programs in 2012-2013 academic year.

3.2. IB program

The International Baccalaureate is an non-governmental educational organization that has a consultative status under the UNESCO and the Council of Europe. The organization embraces 3000 schools in more than 130 countries of the world. The IB Diploma is acknowledged by more than 1300 universities in 102 countries across the globe (including Oxford, Cambridge, Harvard, Yale, Sorbonne, London School of Economics, etc.). One of the basic principles of the International Baccalaureate is to foster a well-educated, critically thinking individual, able to communicate in two or more languages and integrate into the international community.

Work done in 2011

The project group on exploration and implementation of the IB Diploma Program was formed on January 5, 2011.

This project group worked in the following directions:

- teachers' selection;

- defining project group goals and objectives;

- organization and running of workshops;

- preparation and sending of necessary documents to the IB headquarters;

- attraction of experienced IB teachers;

- signing of the memorandum;

- development of educational programs and other documents.

Teachers' selection. We selected teachers of the Intellectual schools in Astana, Semey, Taldykorgan and Kokshetau to work on this project. We also had interviews with teachers and experts of other schools and organizations.

Defining Project Group goals and objectives

The main goal of the Project Group is to make the Intellectual school in Astana the authorized IB World School.

The major objective is to organize all necessary activities to support the authorization process involving development of secondary and high school education programs and preparation of required documents in line with the IB requirements.

Organization and running of workshops

To familiarize the Project Group with the IB program we arranged a number of workshops "Criteria-based assessment", "Theory of cognition", "Project technologies" with the help of our collegues from Perm State pedagogic Unviersity (Russia).

Heads and teachers of the Project Group took part in the 5th annual conference of the Association of IB World Schools to get acquainted with IB program and work of the CIS IB Schools Association.

Members of the Project Group did a training course in Oxford, Great Britain organized by International Baccalaureate School & College Assosiation (IBSCA). Administrators of the Project Group attended Category 1 and 2 seminars in St. Pete Beach, the USA thanks to Florida League of IB Schools.

11 teachers visited IB schools in Norway, Italy, Great Britain, Switzerland, and France. Teachers saw how IB principles are applied in practice, familiarized with the organization of the educational and academic process.

Preparation and sending of documents to IB office

We sent the School Information Form to the IB office and registered at www.ibis.ibo.org with code of registration 049279 and user's ID 093116 . We were highly recommended to visit http://www.ibo.org/become/guidance/ in order to study all necessary documents.

The Nazarbayev Intellectual school in Astana applied for IB World School status in September 2011 and got the status of IB candidate school on November 15, 2011.

Attraction of experienced IB teachers

To effectively plan chemistry lessons and implement the Diploma Program we invited Dr. Jeoffrey Neuss, Great Britain to help us. Under his supervision the administrative structure was defined, preparation and IB DP program implementation plan was reviewed. We reached an agreement to attract foreign tutors to conduct correspodning seminars and strengthen local teachers' potential.

As a result of this agreement seminars in the following subjects for teachers of the Project Group and other Intellectual schools were held in June, July and August 2011: "History", "English" "Chemistry", "Arts", "Biology", "Physics", "Mathematics", and "IT in global community". In October the Project Group attended seminars on basic components of the DP program: "Society, Action and Service" and "Theory of cognition".

The moderators of these seminars, experienced teachers of IB World Schools, highly praised school's preparation. They were invited for further cooperation in organization and running of workshops next year; they will help NIS teachers familiarize with other IB World Schools, consult them and aim in review of secondary and high school curricula.

We established links with the following authorized IB Schools to prepare for IB Diploma Program authorization:

- Dartford Grammar School (Great Britain);
- Sevenoaks School (Great Britain);
- International School of Luxemburg;
- International School of Geneva;
- British International School of New York;
- United World College of the Atlantic (Great Britain);
- UWC Red Cross Norway;
- UWC Adriatic Italy;
- International School of Toulouse.

Signing of the memorandum

NIS and the International Baccalaureate office signed the Memorandum of Understanding in September 2011.

Within the framework of this memorandum NIS will follow the coordinated authorization route in order to achieve high academic, social and technical standards required for all IB World Schools. Within this document corresponding procedures and works on IB DP program authorization at the IB Intellectual school in Astana are underway. The memorandum contributes to the DP program promotion and IB diplomas recognition in the Republic of Kazakhstan.

Development of educational programs and other documents

Teachers of the Project Group developed 23 educational programs for secondary and elementary schools taking into account IB DP program requirements. These programs were reviewed by experienced IB World Schools teachers. They also worked out the Academic Honesty Policy, Assessment Policy, Language Policy, Disciplinary Policy, Special Educational Needs Policy. These documents are an indispensible requirement of successful IB program authorization.

Work to be done in 2012

1. Validation of developed programs. Within the experiment we will continue to improve the programs by attracting IB international experts in Chemistry, Biology, Physics, Mathematics, Computer science, Kazakh, Russian, English, History, Arts, Theory of cognition and Creativity, Action, Service.

2. participation in the annual international vacancy fair in order to hire highly skilled teachers with IB experience to work at the IB Intellectual school in Astana.

3. a consultant designated by IB office to prepare the Intellectual school in Astana for authorization is expected to pay a visit.

4. Application for IB Intellectual school in Astana authorization as the IB World School.

5. work on professional development of Intellectual school's teachers and staff. Teachers and school's administration are to visit the official IB workshops. We plan to organize an intensive course of English for pupils and teachers of the Intellectual school and workshops in various subjects with attraction of foreign experts.

3.3. Polylingual education

The educational programs of Intellectual schools allow for tri-lingual education to develop communication skills of pupils, ensure successful integration into the world educational space, pupils' access to up-to-date information in any of three languages: Kazakh, Russian and English.

Work done in 2011

A project group on development of the tri-lingual education language policy for Intellectual schools was created in February.

After a meeting with Alan Crawford, Professor Emeritus at California State University and project coordinator of the Reading and Writing for Critical Thinking Project in February we started developing "stages of language learning" model, language policy and tri-lingual education programs combining the best traditions of Kazakhstani and world systems of education enabling to acquire three languages: Kazakh (state language), Russian (language of inter-ethnic communication), and English (language of international communication). During his visit to Kazakhstan Dr. Alan Crawford conducted a seminar for the Intellectual schools teachers.

The draft Language Policy was developed.

In April 2011 together with Helen Imam, CIE Manager, and Dr. Alan Crawford we reviewed and added the draft Language Policy, tri-lingual education model and "stages of language learning".

Figure2. Language Learning Stages

EARLY STAGE (kindergarten, pre-school, elementary school 1-5 grades)

Age	Grade	L1	Level	Hours	L2	Level	Hours	L3	Level	Hours
3-4 4-5	K	Oral	0	2*30 min Mon, Wed	Language play	0	2*30 min Tue, Thu	-	-	-
5-6	Pre-school	Conversation Posters Concept 1&2	0	5 lessons*30min Mon-Fri	Language play		2*30 min Mon, Wed	Language Play	0	2-30min Tue, Thu
6-7	1	Beginning reading	0	5*40=200	Conversation Posters Big books	0	4*40=160	Language Play Conversation posters	0	4*40=160
7-8	2	Reading Writing Teaching grammar but without grammar books	0	5*40=200	Beginning reading + L2 Instructions	0	4*40=160	Conversation posters Big books	0	4*40=160
		Exam Prove Level A1								
8-9	3	Reading Writing Teaching grammar but without grammar books	A1	4*40=136	Reading Writing Teaching grammar but without grammar books + L2 instruction	0	4*40=136	Beginning reading L 3 Instruction	0	5*40=170
					Exam Prove Level A1					
9-10	4	Reading Writing Teaching grammar but without grammar books	A1	4*40=160	Reading Writing Teaching grammar but without books+L2 instruction	A1	4*40=160	Reading Writing Teaching grammar but without grammar books + L3 instruction	0	5*40=200
		Exam Prove Level A2						**Exam Prove Level A1**		
10-11	5	Reading Writing Teaching grammar but without grammar books	A2	4*40=160	Reading Writing Teaching grammar but without grammar books + L2 instruction	A1	4*40=160	Reading Writing Teaching grammar but without grammar books + L3 instruction	A1	5*40=200
					Exam Prove Level A2					

II STAGE (secondary school 6-10 grades)

Age	Grade	L1	Level	Hours	L2	Level	Hours	L3	Level	Hours
11-12	6	Reading Writing Teaching grammar but without grammar books	A2	4*40=160	Reading Writing Teaching grammar but without grammar books + L2 instruction	A2	4*40=160	Reading Writing Teaching grammar but wihout grammar books + L3 instruction	A1	5*40=200
		Exam Prove Level B1						**Exam Prove Level A2**		
12-13	7	Reading (literature historical, social, sciences, current events) Writing (types of texts)	B1	3*40=120	Reading Writing Teaching grammar but without grammar books + L2 instruction	A2	4*40=160	Reading Writing Teaching grammar but without grammar books + L3 instruction	A2	5*40=200
					Exam Prove Level B1					
13-14	8	Reading (literature historical, social, sciences, current events) Writing (types of texts)	B1	3*40=120	Reading (literature historical, social, sciences, current events) Writing (types of texts) + L2 instruction	B1	4*40=160	Reading Writing Teaching grammar but without grammar books + L3 instruction	A2	5*40=200
		Exam Prove Level B2						**Exam Prove Level B1**		
14-15	9	Reading (literature historical, social, sciences, current events) Writing (types of texts)	B2	3*40=120	Reading (literature historical, social, sciences, current events) Writing (types of texts) + L2 instruction	B1	4*40=160	Reading (literature historical, social, sciences, current events) Writing (types of texts) + L3 instruction	B1	5*40=200
					Exam Prove Level B2					
15-16	10	Reading (literature historical, social, sciences, current events) Writing (types of texts)	B2	3*40=120	Reading (literature historical, social, sciences, current events) Writing (types of texts) + L2 instruction	B2	4*40=160	Reading (literature historical, social, sciences, current events) Writing (types of texts) + L3 instruction	B1	5*40=200
		Exam Prove Level C1						**Exam Prove Level B2**		

III STAGE (high school 11-12 grade)

Age	Grade	L1	Level	Hours	L2	Level	Hours	L3	Level	Hours
16-17	11	Reading (literature historical, social, sciences, current events) Writing (types of texts)	C1	3*40=120	Reading (literature historical, social, sciences, current events) Writing (types of texts) + L2 instruction	B2	4*40=160	Reading (literature historical, social, sciences, current events) Writing (types of texts) + L3 instruction	B2	5*40=200
					Exam Prove Level C1					
17-18	12	Reading (literature historical, social, sciences, current events) Writing (types of texts)	C1	3*40=120	Reading (literature historical, social, sciences, current events) Writing (types of texts) + L2 instruction	C1	4*40=160	Reading (literature historical, social, sciences, current events) Writing (types of texts) + L3 instruction	B2	5*40=200
		Exam Prove Level C2			**Exam Prove Level C2**			**Exam Prove Level C1**		

A workshop for languages and arts teachers of the Intellectual schools of Kokshetau and Astana took place at the Intellectual school of Physics and Mathematics in Astana in June. During the event the teachers familiarized with the updated draft of tri-lingual education model and Language Policy. This workshop was aimed at showing teachers how to work with big books, posters, methods of communication skills development by using natural approach in language teaching.

Teachers were shown some examples of posters and how those should be developed taking into account cultural values of Kazakhstan to use at lessons of Kazakh, Russian and English.

In October Professor Alan Crawford conducted seminars at the Intellectual schools in Astana, Taldykorgan and Ust-Kamenogorsk. He told about the ways to develop pupils' communication skills in Kazakh, Russian and English, and how to use SOLOM (Pupil Oral language Observation Matrix) to evaluate oral speaking skills. In Taldykorgan and Ust-Kamenogorsk teachers worked in pairs and developed a lesson using natural approach and taking into account pupils' language proficiency. Teachers used "criticizing friend" principle and analyzed the lessons. It was stressed that lessons should always start on a positive note.

35 foreign teachers are working at the Intellectual schools in 2011-2012 academic year. The Intellectual schools practice team-teaching. Teachers deliver electives and extracurricular activities, such as drama, creative writing, SAT, IELTS, TOEFL preparation and photo art. These would create artificial language environment where pupils can easily communicate and express their thoughts in a foreign language.

Work to be done in 2012

1. Implementation of the tri-lingual policy within the framework of improvement of the Integrated educational program. The tri-lingual education policy is featured into all six strands of joint work with the University of Cambridge.

2. Defining the tri-lingual policy implementation strategy in association with the University of Cambridge. In February 2012 the University of Cambridge is to provide the initial draft tri-lingual policy implementation plan as the first step towards defining this strategy.

3. Organization of a seminar aimed at the use of:

- Teaching strategy of communication competencies when teaching L2 (second language) and L3 (English) to Intermediate and Advanced pupils;
- big books when teaching how to read in L2 and L3;
- teaching strategy in reading in L2 and L3 using children's literature and authentic material;
- teaching strategy in writing in L2 and L3, including orphography and spelling in L3;
- pragmatic approach to enriching pupil's vocabulary (without cramming);
- assessment of text comprehension and writing skills in (L1(mother-tongue), L2, and L3).

Assessment, comments on the policy content and strategy of its implementation will be included into the tri-lingual policy while it is implemented.

3.4. Academic work

Academic work is not something done outside the educational process, it harmoniously fits in and will be integrated into the NIS experimental educational program through academic subjects. We offer additional education and extracurricular activities.

The key to success in implementation of the academic work is to engage all stakeholders of the Intellectual schools into the educational and academic process and interaction between school and parents, local community and public.

Key qualities that we try to develop in our pupils are patriotism, commitment to Kazakhstani and human values, tolerance, technical, information, social and civil literacy, critical thinking, responsibility, riskiness and pragmatism, cooperation, readiness to lifelong learning, competitiveness.

Work done in 2011

In 2011 we have explored trends and approaches to modern upbringing of pupils and international experience in national upbringing systems functioning that proved interrelation of social values with goals and results of upbringing. Cooperation with Privolzhsky branch of the Federal Development Institute of Russia and experts of Hwa Chong International School, Singapore, IB consultants in CAS programs enabled us to develop draft document on basic directions of academic work at the Intellectual schools approved by the AEO Board of Trustees.

According to the draft we outlined six basic directions of academic work: patriotic upbringing, intellectual development, moral values, physical and mental development, polycultural development, development of leadership qualities and artistic and aesthetical development.

The abovementioned directions are implemented through educational programs, additional education and extracurricular activities: social practices, pupils' autonomy, hobby clubs, summer schools and camps, in-school events, exchange programs with international schools and Zhas Ulan organization membership.

One of the instruments of upbringing is the school's disciplinary policy that determines the rules of conduct and pupils' code. It will ensure good discipline and effective learning and implement the educational goals through establishing desirable behavior framework.

School communities called "Shanyrak", a key feature of the educational system of the Intellectual schools, will form united and close-knit Teams, foster corporate spirit and ensure effective competition, communication and cooperation. The school communities will allow to restore the patronage when older pupils patronize younger pupils and thus promote development of pupils' leadership skills.

As a result of draft document implementation we expected to develop citizens who:

are patriots of their country, improve life of the community, country and people around;

are confident, flexible and mobile, critical thinker and able to communicate effectively;

independent learners;

active participants, good team players, creative and able to introduce innovations and strive for perfection;

have high moral values.

Work to be done in 2012

1. Review and analysis of research in the sphere of Kazakh society values;

2. Defining core moral values of education and upbringing and ways to instill those;

3. Exploring reasons of children and teenagers' social misconduct;

4. Training of pedagogic staff of the Intellectual schools and establishing cooperation with the international organizations to learn about the world's best experience in academic work;

5. Development of policy of parents and local community engagement into the educational process;

6. Establishing cooperation with social objects to implement "Public service" project;

7. Development of rules and regulations of the Intellectual schools including rule of conduct, disciplinary policy, etc.;

8. Development of introduction program of "Basic directions of educational work at the Intellectual schools" project;

9. Development of the Intellectual schools academic system provisions.

SECTION 4. PEDAGOGIC STAFF

4.1. Qualitative composition of pedagogic staff

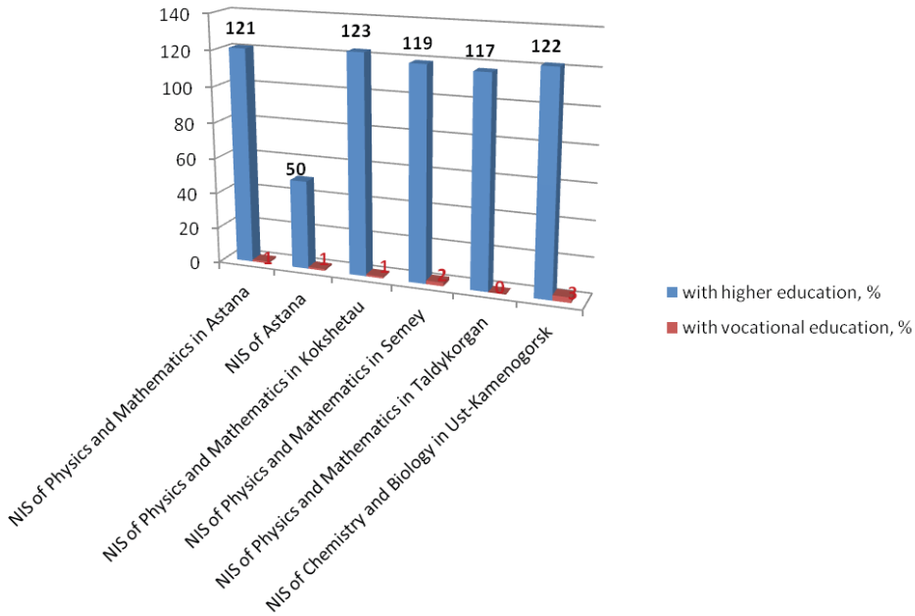
As of December 1, 2011 662 teachers including 35 international teachers work at the Intellectual schools.

The majority of teachers (98.8%) have higher education and only 1.2% have secondary vocational education, these are teachers of the elementary school. These teachers can boast extensive experience and are graduates of pedagogic and humanitarian colleges. The highest rate of teachers with secondary vocational education working for the Intellectual school in Ust-Kamenogorsk amounts to 2.5%.

Table 3. Qualitative composition of teachers by education

№	Intellectual school	Total number of teachers	Rate of teachers having education, %	
			higher	secondary vocational
1.	Astana, Physics and Mathematics	122	121 (99,2%)	1 (0,8%)
2.	Astana, IB	51	50 (98,1%)	1 (1,9%)
3.	Kokshetau, Physics and Mathematics	124	123 (99,2%)	1 (0,8%)
4.	Semey, Physics and Mathematics	121	119 (98,4%)	2 (1,7%)
5.	Taldykorgan, Physics and Mathematics	118	118 (100%)	-
6.	Ust-Kamenogorsk, Chemistry and Biology	126	123 (97,6%)	3 (2,4%)
	Total	**662**	**98,8 %**	**1,2 %**

Chart 1. Qualitative composition of teachers by education



3 NIS teachers are Bolashak Scholarship Program alumni, 5 teachers proceed their studies under this program, 78 teachers hold Master's degree, 11 teachers are Candidates of Science, 1 teacher has PhD degree and 1 is a professor.

The analysis of teachers' qualification categories proved that about half of all NIS teachers (41.8%) have the highest, 23.7% - the first, and 11.2% - the second category. At the same time 23.3% of teachers have no category. Please note that data on 35 foreign teachers was not included into the comparison study of qualification categories.

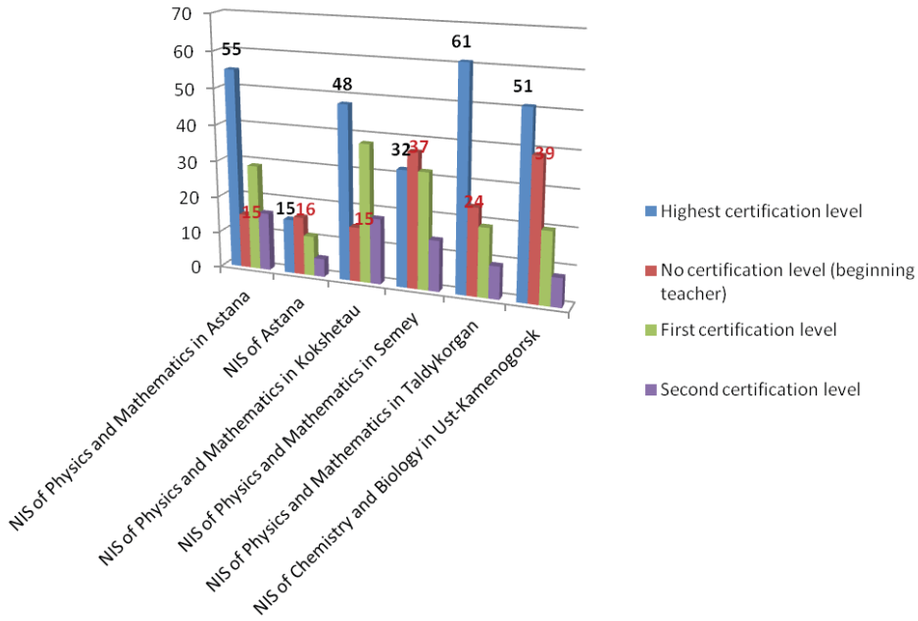
Teachers of the Intellectual schools of Physics and Mathematics in Taldykorgan and Astana are the most qualified. Pedagogic staff of the Intellectual schools of Chemistry and Biology in Ust-Kamenogorsk and Semey has lower categories.

Table 4. Qualitative composition of teachers by categories

№	Intellectual school	Number of teachers, total*	Categories in %			
			Highest category	1st category	2nd category	No category
1	Astana, Physics and Mathematics	115	55 (47.8%)	29 (25.2%)	16 (13.9%)	15 (13%)
2	Astana, IB	47	15 (31.9%)	11(23.4%)	5 (10.6%)	16 (34%)
3	Kokshetau, Physics and Mathematics	119	48 (40.3%)	38 (31.9%)	18 (15.1%)	15 (12.6%)
4	Semey, Physics and Mathematics	115	32 (27.8%)	32 (27.8%)	14 (12.2%)	37 (32.2%)
5	Taldykorgan, Physics and Mathematics	113	61 (54%)	19 (16.8%)	9 (8%)	24 (21.2%)
6	Ust-Kamenogorsk, Chemistry and Biology	118	51 (43.2%)	20 (17%)	8 (6.8%)	39 (33.1%)
	Total	**627**	**262 (41.8%)**	**149 (23.7%)**	**70 (11.2%)**	**146 (23.3%)**

** data on foreign teachers not included*

Chart 2. Qualitative composition of teachers by categories

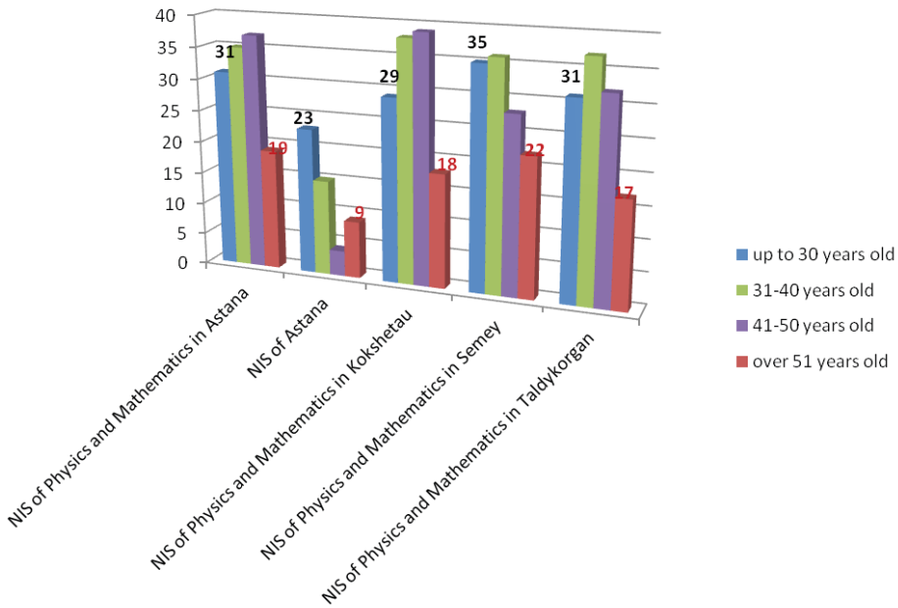


The analysis of teachers qualitative composition by age showed that teachers are proportionally represented in all age groups and make about 30%. At the same time the rate of young teachers (younger than 30 years) in Astana accounts for 45.1%. The rate of teachers older than 51 years at the Intellectual schools makes 16.7%, however the analogous rate is significantly higher in Ust-Kamenogorsk, 21.6%.

Table 5. Qualitative composition of teachers by age

№	Intellectual school	Number of teachers, total	Rate of teachers of corresponding age group, %			
			Younger than 30 years	31-40	41-50	Older than 51 years
1	Astana, Physics and Mathematics	122	31 (25.4%)	35 (28.7%)	37 (30.3%)	19 (15.6%)
2	Astana, IB	51	23 (45.1%)	15 (29.4%)	4 (7.9%)	9 (17.7%)
3	Kokshetau, Physics and Mathematics	124	29 (23.4%)	38 (30.7%)	39 (31.5%)	18 (14.5%)
4	Semey, Physics and Mathematics	121	35 (28.9%)	36 (29.8%)	28 (23.2%)	22 (18.2%)
5	Taldykorgan, Physics and Mathematics	118	32 (26.5%)	37 (31.6%)	32 (27.4%)	17 (14.5%)
6	Ust-Kamenogorsk, Chemistry and Biology	126	42 (32.8)	25 (20%)	32 (25.6%)	27 (21.6%)
	Total	**662**	**192 (28.8%)**	**186 (28.1%)**	**172 (26.1%)**	**112 (17%)**

Chart 3. Qualitative composition of teachers by age

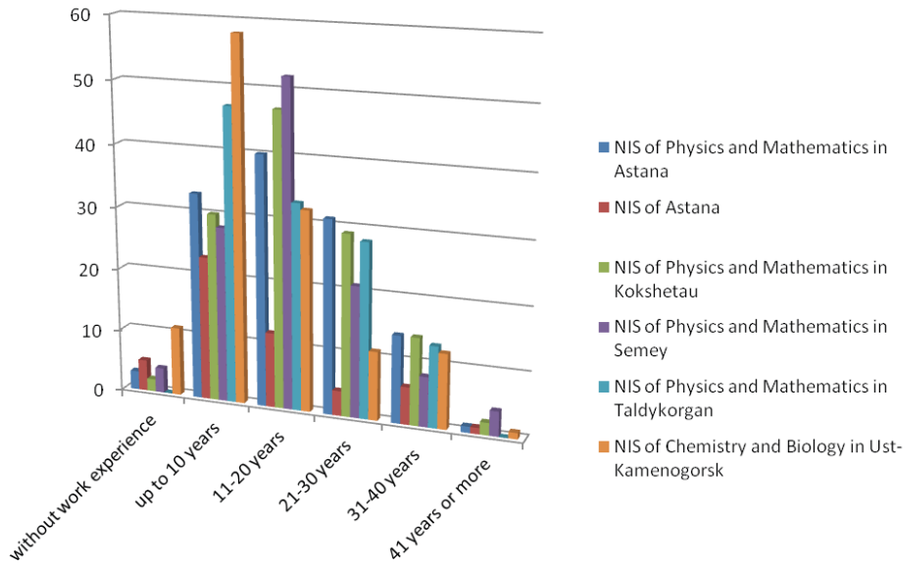


The analysis of qualitative composition of teachers by record of service demonstrated that majority of teachers (approximately one third) worked at school for more than 20 years. On the one hand, these are teachers with extensive experience in organization of the academic process at high level. On the other hand, implementation of integrated educational programs, new assessment system of pupils' achievements requires constant update of knowledge, participation in seminars and trainings. This group of teachers is the most conservative in terms of application of new approaches to the educational process.

Table 6. Qualitative composition of teachers by record of service

№	Intellectual school	Total number of teachers	Rate of teachers with record of service of total number of teachers					
			No record of service	Up to 10 years	11-20 years	21-30 years	31-40 years	41 years and more
1	Astana, Physics and Mathematics	122	3 (2,5%)	33 (27,1%)	40 (32,8%)	31 (25,4%)	14 (11,5%)	1 (0,8%)
2	Astana, IB	51	5 (9,8%)	23 (45,1%)	12 (23,5%)	4 (7,9%)	6 (11,8%)	1 (2%)
3	Kokshetau, Physics and Mathematics	124	2 (1,6%)	30 (24,2%)	47 (37,9%)	29 (23,4%)	14 (11,3%)	2 (1,6%)
4	Taldykorgan, Physics and Mathematics	118	4 (3,3%)	29 (23,2%)	52 (43%)	21 (17,4%)	8 (6,6%)	4 (3,3%)
5	Semey, Physics and Mathematics	121	-	47 (40,2%)	33 (28,2%)	28 (23,9%)	13 (11,1%)	-
6	Ust-Kamenogorsk, Chemistry and Biology	126	11 (8,8%)	59 (46,4%)	32 (25,6%)	11 (8,8%)	12 (9,6%)	1 (0,8%)
	Total	**662**	**25 (3,8%)**	**219 (33,2%)**	**216 (32,7%)**	**124 (18,8%)**	**67 (10,2%)**	**9 (1,3%)**

Chart 4. Qualitative composition of teachers by record of service



4.2. Teachers' professional development

Teachers of Intellectual schools upgrade their qualifications through specially developed system of teachers' professional development.

The system provides multilevel system of teachers' professional development consisting of the following modules:

1.Module - "ICT" - Information and Communication Technologies,

2. Module - "Kaztest" - Kazakh language,

3. Module - "English" - English language,

4. Module - "Pedagogic knowledge".

The modules are comprised in line with necessity of effective use of modern pedagogic knowledge, opportunities of the ICT environment and polylingual policy implementation in the educational process of the Intellectual schools.

The content of modules (topics and levels) is to be improved and changed in accordance with teacher's professional development and the Intellectual school requirements.

Training at the Intellectual schools is based on "peer-to-peer" principle, i.e. teachers of Kazakh and English deliver language courses, teachers of Computer science deliver IT courses. This ensures effective use of teachers' potential who are highly qualified and have been selected within the Intellectual schools competitive selection.

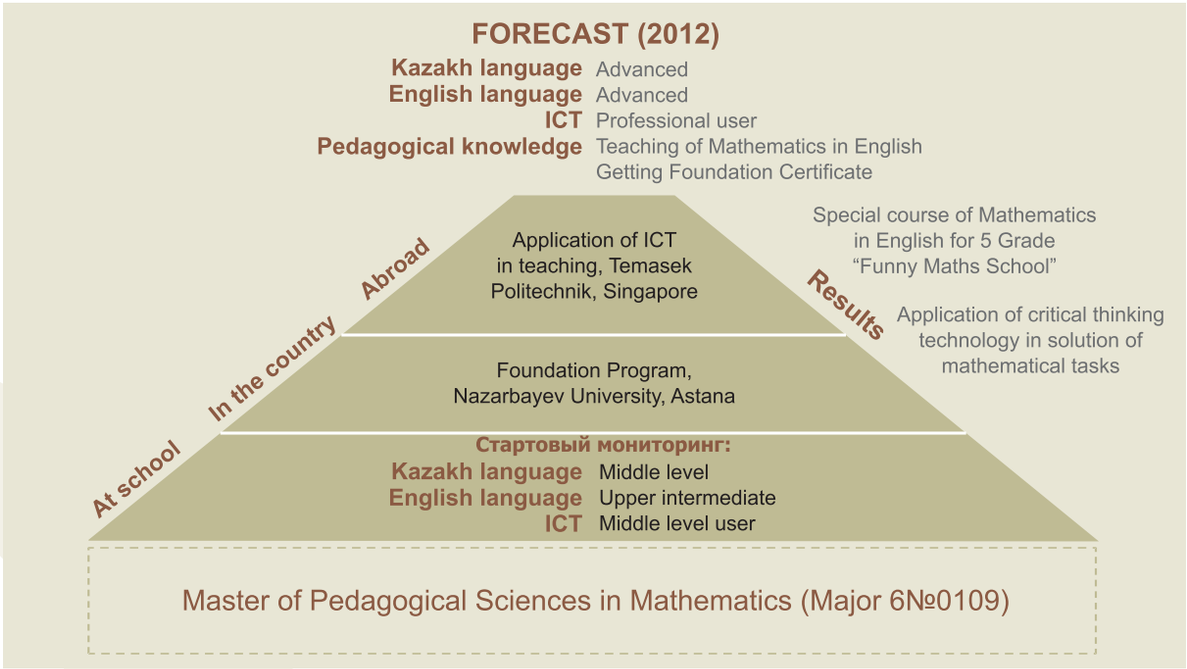
Training in the country attracting the best republican and international experts.

Training abroad on the basis of the best educational institutions attracting the best international experts.

The system of professional development provides the individual route of teacher's training.

We developed individual professional development routes for all teachers that provide their professional training via courses at the Intellectual schools, abroad and online. For example, below you will find the professional development route of the teacher of Mathematics G.R.Rakhimova

Figure 3. Professional development route of the teacher of Mathematics G.R. Rakhimova



The monitoring of professional development system provides:

- formation of teacher's achievements portfolio that will be represented within the framework of interim monitoring (once a year) and final attestation;
- a teacher demonstrates how he or she uses the skills and knowledge obtained during training in practice (master class, etc.);
- analysis of pupils' progress dynamics;
- teacher's attestation once a year;
- obtaining certificates.

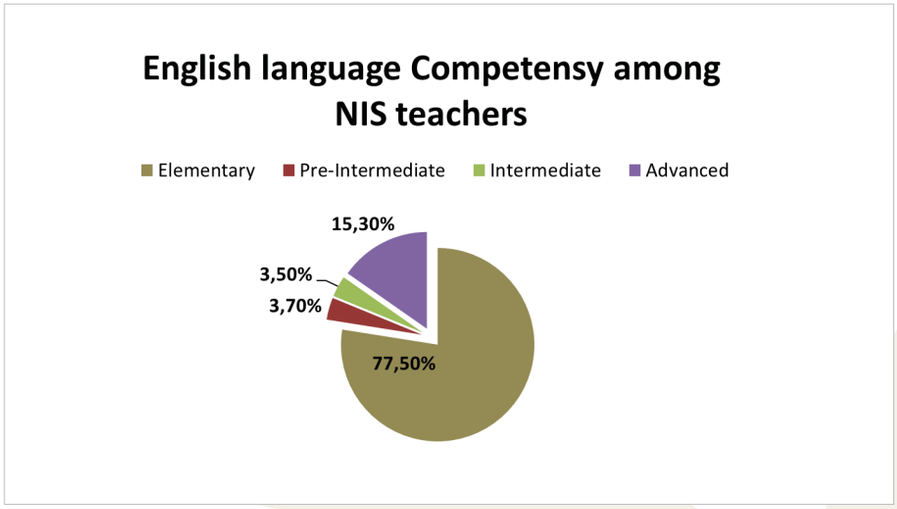
Analysis of the first results of the professional development system implementation shows that level of teachers' professional competencies at the Intellectual schools has soared.

Language courses significantly improved professional competencies of the English language teachers.

In 2011 the British Council administered the Placement test for 653 out of 696 teachers and tutors working for the Intellectual schools, i.e. 93.8% of the total number of teachers. Only 64% of teachers sat the placement test last year. So we can clearly see that teachers' interest to this particular exam has increased. The test was divided into three sections: Grammar, Vocabulary and Reading. According to results of the placement test, 530 teachers have Beginner level, i.e. 81.1% of the total number of teachers who participated in the test. 22 teachers (3.7%) have Pre-Intermediate level. 84.8% of subject teachers have Beginner and Pre-Intermediate level of the English language proficiency.

14 teachers (2.2%) have Intermediate level. Information about teachers who passed IELTS exam is not included into this data

Chart 5. Placement test results



More and more teachers of the Intellectual schools tend to pass IELTS. In 2010 only 36 teachers had IELTS certificates whereas in 2011 there were 101 teachers including subject teachers who had the same certificates.

Table 7. Number of teachers who took IELTS exam

Intellectual school	Number of teachers		Tendency «+», «-», people	Average score
	2010	2011		
Astana, Physics and Mathematics	12	15	+3	6.5
Astana, IB	-	19	+19	6.2
Kokshetau	13	19	+6	6.3
Taldykorgan	-	17	+17	5.4
Ust-Kamenogorsk	-	17	+17	6
Semey	11	14	+3	6.6
TOTAL:	**36**	**101**	**+ 65**	**6.2**

Professional development courses in English allowed to enhance English language proficiency of the English language teachers.

Table 8. Improvement of language competence

Intellectual schools	3-4	4.5-5.5	6-6.5	7	7.5	8	Total number
Astana, Physics and Mathematics		3	6	3	3		15
Astana, IB		7	8	3	1		19
Kokshetau		3	11	2	3		19
Taldykorgan	1	12	3	1			17
Ust-Kamenogorsk		3	9	3	1	1	17
Semey			8	4	1	1	14
Total	**1**	**28**	**45**	**16**	**9**	**2**	**101**

We offered our English language teachers Teaching knowledge test (TKT). Upon TKT results, 20 teachers obtained their certificates and 3 of them became acknowledged international TKT trainers. All attendees of the TKT course are members of the project group on integrated educational programs development.

We checked our teachers ICT competencies at all Intellectual schools in Astana, Kokshetau, Ust-Kamenogorsk, Semey and Taldykorgan.

We did so in order to elicit the level of teachers' ICT competencies and dynamics of ICT competencies development within the individual professional development routes. We tested their user's skills, how they apply interactive means of instruction, e-mail, Internet, etc.

In 2011 teachers' ICT competencies were examined via two-level (basic and advanced) test and a practical work. We included the advanced level because the general level of teachers' ICT competencies had improved. It allowed us to make tasks more complex and appraise teachers' ICT level.

Below are the results of the test.

Table 9. Results of ICT test

Level	Total score	Number (teachers and tutors)	% of total number of teachers tested
High level (from 85% to 100%)	255-300	204	29%
Intermediate level (from 75% to 84%)	225-254	193	28%
Low level (from 50% to 74%)	150-224	196	31%
Critical level (from 0% to 49%)	0-149	71	12%
TOTAL		**664**	

Table 10. Level of ICT competencies by schools

Intellectual school	High level (from 85% to 100%)	Intermediate level (from 75% to 84%)	Low level (from 50% to 74%)	Critical level (from 0% to 49%)
Ust-Kamenogorsk	64	39	22	1
Semey	47	39	31	10
Astana, Physics and Mathematics	21	22	47	30
Astana, IB	8	7	21	11
Kokshetau	36	47	35	6
Taldykorgan	28	39	40	13
TOTAL:	**204**	**193**	**196**	**71**

Table 11. Level of ICT competencies (%)

Intellectual school	High level (from 85% to 100%)	Intermediate level (from 75% to 84%)	Low level (from 50% to 74%)	Critical level (from 0% to 49%)
Ust-Kamenogorsk	51%	31%	18%	0,01%
Semey	37%	31%	24%	8%
Astana, Physics and Mathematics	18%	18%	39%	25%
Astana, IB	17%	15%	45%	23%
Kokshetau	29%	38%	28%	5%
Taldykorgan	23%	33%	33%	11%
TOTAL:	**29%**	**28%**	**31%**	**12%**

Based on the ICT test results the following conclusions have been drawn:

1. 81% of teachers are good users of Microsoft Office and OS Windows packages and have the intermediate level of ICT competencies.

2. We work on improving ICT competencies of teachers of the Intellectual schools of Chemistry and Biology in Ust-Kamenogorsk, Physics and Mathematics in Semey and Kokshetau. On the whole, teachers of these schools have the intermediate level of ICT competencies.

3. Teachers of the Intellectual schools of Physics and Mathematics in Astana and Taldykorgan and Astana IB school demonstrated low level of ICT competencies.

In order to continue improving quality of knowledge, skills and expertise of teachers in the sphere of information and communication technologies, recommendations were made on planning teaching of the key ICT topics.

The Intellectual school in Ust-Kamenogorsk demonstrated positive dynamics in development of ICT competencies. The comparative analysis of basic level tests' results in 2010 and 2011 showed that percentage of teachers who reached high level of ICT competencies increased in comparison with the previous year from 25% to 76%, whereas the number of teachers with low level of ICT competencies decreased from 31% to 8% and from 1% to 0%. This proves how efficient the external assessment of ICT competencies is. It is crucial for further development of ICT competencies and assuring the quality of courses conducted at the Intellectual schools.

Table 12. Results of ICT test in 2010 and 2011

Level of knowledge	2010	2011
High	25%	76%
Intermediate	43%	17%
Low	31%	8%
Critical	1%	0%
Average %	67%	88%

Presently the knowledge of the Kazakh language is tested via Kaztest system (according to Government's decree №835 "On introduction and development of KAZTEST system" dated September 11, 2008).

Kaztest is a national system of assessment of the Kazakh language proficiency among teachers of all categories working for the Intellectual schools. In 2010 we checked the Kazakh language competencies of our teachers for the first time in order to form their individual professional development routes. After that the NIS teachers attended the Kazakh language courses for a year. In 2011 the National Testing Center of the Ministry of Education and Science of the Republic of Kazakhstan administered Kaztest to elicit the Kazakh language competencies of NIS teachers after the one-year course.

Participants of the test who scored at least 60% during the test were presented with corresponding certificates.

Table 13. Kaztest results

Intellectual school	Total number of teachers	Overall result of testing									
		Karapayim	%	Bazalyk	%	Orta	%	Ortadan zhogary	%	Zhogary	%
Astana, Physics and Mathematics	119	8	6.7	49	41.1	46	38.6			16	13.4
Astana, IB	38	5	13.1			7	18.4	24	63.1	2	5.2
Kokshetau	121	26	21.5	19	15.7	26	21.4	20	16.5	30	24.7
Semey	103	21	20.3	7	6.7	28	27.1	37	35.9	10	9.7
Taldykorgan	133	43	32.3	19	14.2	36	27.06	27	20.3	8	6.0
Ust-Kamenogorsk	119	12	10.08	19	15.9	47	39.5	37	31.0	4	3.36
TOTAL	**633**	**115**	**18.1**	**113**	**17.8**	**190**	**30.0**	**145**	**22.9**	**70**	**10.5**
Total in 2010	**576**	**122**	**21**	**135**	**23**	**237**	**41**	**35**	**6**	**47**	**8**
Dynamics of results	**+57**	**-7**	**-2.9**	**-22**	**-5.2**	**-47**	**-11**	**+110**	**+16.9**	**+33**	**+2.5**

Despite little reduction in percentage of teachers who reached the basic level, dynamics of Kaztest results saw that majority of teachers significantly improved their Kazakh language competencies. Number of teachers who achieved Ortadan zhogary and Zhogary levels made 145 and 70 respectively (positive dynamics, in 2010 35 and 47 teachers respectively).

Upon results of testing analytical conclusions were made in each section in order to outline the individual language competencies improvement route.

During the academic year we organized courses in Kazakh, English and Russian languages, ICT and pedagogic knowledge at the Intellectual schools.

Table 14. Courses at the Intellectual schools

Courses at schools	2010 (teachers)	2011 (teachers)	Tendency «+», «-»
Kazakh language	75	437	+ 362
English language	317	697	+ 380
Russian language	-	16	+ 16
ICT competencies	205	645	+ 440
Total	**597**	**1 795**	**+ 1 198**

4.3. Professional development courses

11 and 21 professional development courses were arranged abroad and in Kazakhstan accordingly. Our teachers attended professional development courses at the Johns Hopkins University (the USA), Temasek Polytechnic University (Singapore), HIFAB (Sweden), the Kolmogorov Specialized Training and Research Center under the Moscow State University, etc.

The professional development courses focused on the goals of professional development in specific spheres.

Table 15. Courses in the country and abroad

	Courses	Number of courses	Number of teachers
1	Courses abroad	11	195
2	Courses in the country	21	3358
	TOTAL	**32**	**3553**

4.3.1. Professional development courses in the country and abroad in 2011

The following courses were organized for further development of teachers' subject competencies:

Table 16. Professional development courses in the country and abroad

№	Name of the course	Timeframes	Venue	Number of teachers
1	Training seminar for NIS teachers of Physics: "Methods of delivering Physics lessons at high school" within the Nauryz Lectures	March	Astana	18
2	Short-term course of professional development for teachers of Mathematics : "New approaches in teaching Geometry at school", "Russia's experience in creating monitoring and test materials and common state exam in Mathematics" within the 1st Mathematicians Convention	May	Astana	40
3	Distance professional development course for teachers of Chemistry and Biology: "Modern problems of Biology"	May-July	At the Nazarbayev Intellectual schools	21
4	Professional development course for NIS staff and teachers within August Conference	August	Astana	226
5	Professional development course for teachers of Kazakh language and Literature "Satylai keshendi taldau technologiyasymen okytudyn adistemelik negizi"	August	Astana	36
6	Professional development course for teachers of Mathematics and Physics: "Methods of delivering the Intellectual Management Course at secondary and high school"	August	Astana	44
7	Professional development course for teachers of the Nazarbayev Intellectual school in Taldykorgan: "School 2000: implementation within mathematics course "Learning to learn"	August	Taldykorgan	11

8	Professional development course for teachers of the Nazarbayev Intellectual school in Kokshetau "Relevant problems of teacher's professional competence at the innovative school of Kazakhstan "	September-October	Kokshetau	120
9	Course for teachers of History "Active training forms in teaching subjects"	October	Astana	27
10	"Modern methods of teaching with use of the newest technologies and distance learning skills development", Edusoft, Israel	December	Ust-Kamenogorsk	48
11	Professional development course for NIS teachers of Kazakh and Russian languages, HIFAB	March	HIFAB, Stockholm, Sweden	19
12	Professional development course for teachers of specialized subjects in use of laboratory equipment	August	FWEVE , Gottingen, Germany	5
13	Professional development course "Problem-based learning" for teachers of specialized subjects at NIS schools by FIF Technologies LLP, Singapore	November	Temasek Politechnic University, Singapore	25
14	Professional development course "Developing subject competence and teaching skills by teachers of specialized subjects"	December	The Kolmogorov Specialized Training and Research Center under the Moscow State University	23
15	Professional development course "person-based learning and principles of subject communities activities' organization	December	HIFAB, Sweden	30
16	"Modern methods of teaching with use of the newest technologies and distance learning skills development", Edusoft, Israel	December	Ust-Kamenogorsk - Kokshetau	60 teachers of NIS schools in Kokshetau and Ust-Kamenogorsk

It is worth mentioning that number of distance courses increased dramatically in 2011 due to improvement of user's skills of NIS teachers. Thanks to this we decrease the costs associated with the courses and organized on-the-job trainings for teachers.

The following courses were offered in order to boost management quality and explore the modern management system in the sphere of education:

17	Professional development course: "Administration and management of the Intellectual schools"	February	Pennsylvania University, the USA	6 principals of NIS schools
18	Professional development course at the Center for Talented Youth, Johns Hopkins University (CTY), the USA	August	Johns Hopkins University, Baltimore, the USA	4
19	Professional development course "School management" for heads of methodological communities and vice principals of NIS schools in Stockholm, Sweden	October	HIFAB, Sweden	25

In order to shape the system of academic work at the Intellectual schools and define conceptual approaches to improving quality of work vice principals and tutors attended the following workshops and seminars:

20	Professional development course for NIS schools vice principals and tutors "Conceptual approach to organization of NIS academic system"	May	May-July at NIS schools, October - Astana	80
21	A workshop for NIS schools vice principals and tutors "Organization and implementation of school communities"	December	Astana	18

NIS teachers continued to improve their language competencies within the framework of the following courses:

22	Intensive course of English	July	SSAT, Great Britain	1
23	Professional development course for teachers of Ust-Kamenogorsk NIS school "Communicative English"	August	Ust-Kamenogorsk	50
24	Professional development course "Intensive course of English"	December	International House, Belfast, Northern Ireland	29

Majority of NIS teachers (500 teachers) did a distance course "Website portfolio: Basics of development and loading" from September through November 2011. During the course our teachers learnt how to create website-portfolios, one of resources for professional competencies and skills development and an important element of evaluating teacher's activities during attestation.

We signed a contract with the Center for Talented Youth at the Johns Hopkins University, Baltimore, the USA, to develop the professional development course for teachers "Developing children's aptitudes" within which 30 people would be trained and disseminate accumulated knowledge and expertise at the Intellectual schools.

During this course the participants will familiarize with the models for programs' creation and thinking stimulation as well as the principles of differential learning. Training will focus on the development of differential plans of lessons, research dedicate to gifted children, etc.

Results of professional development largely affect the level of educational and methodological work. From year to date teachers have done tremendous work on dissemination of accumulated experience in various forms; they conduct master classes, publish teaching aids and develop lessons. Teachers of the Intellectual school of Astana prepared a book "Geometry of Astana" dated to the 20th anniversary of Kazakhstan's Independence.

Each Intellectual school submits information upon results of the professional development courses to the database. We have accumulated various teaching aids and plan to create teaching materials in courses at the Intellectual schools after expert evaluation.

S.A.Varlamov, Candidate of physical and mathematical sciences, conducted a workshop on teaching methods in Physics within the first ever Nauryz Lectures in March 2011. The best teachers of the Intellectual schools delivered master classes for teachers of Physics of the general secondary schools during the Nauryz Lectures.

Teachers of the Intellectual schools of Astana city held a number of master classes on Improvement of innovative and educational environment contributing to pupils' research development at the 1st Mathematicians Convention. The master classes mainly focused on the topics offered within professional development courses ("Experience in organization of pupils' research", "How to solve Olympiad problems", etc.). A range of article was published within the Republican scientific practical conference "Pupils' research, its role in formation of the intellectual nation", "The II International scientific practical conference "Intellectual nation: education, science, innovations", etc.

Foreign teachers at the Nazarbayev Intellectual schools

With a view to introduce the best international teaching practices in specialized subjects the AEO attracts foreign teachers.

The organization have prepared the regulatory framework and approved "The Regulations on expatriate workforce recruitment" and "Job specifications for international teachers".

In 2011 we worked together with our strategic partner - SSAT, an independent non-profit charity organization operational in 36 countries of the world.

We employed a group of highly skilled foreign teachers from Great Britain, the USA, New Zealand, Canada, Republic of South Africa and other countries with the help of SSAT.

Table 17. Information on academic degrees of foreign teachers

Intellectual school	Master's degree	Bachelor's degree	Total
Astana, Physics and Mathematics	5	2	7
Astana, IB	3	1	4
Semey	5	1	6
UST-Kamenogorsk	5	3	8
Kokshetau	3	2	5
Taldykorgan	3	2	5
Total	**24**	**11**	**35**

Day-to-day remit of foreign teachers is significantly extended due to additional assignments and academic work with pupils. They deliver SAT and IELTS preparation courses, "Smart Thursdays" course, School of young professionals, creative writing club, drama in English, publish school newspapers in English, etc.

In addition the Intellectual schools implement team teaching project when two teachers - Kazakhstani and a foreign one deliver one lesson.

This project is crucial at the initial stage of the NIS network development due to lack of highly qualified domestic professionals. In future we plan to hire Kazakhstani teachers who will significantly improve their qualifications.

4.3.2. One-year professional development course at the Nazarbayev University

We have dramatically expanded specialized training for teachers of operational Nazarbayev Intellectual schools and newly opened Intellectual schools at the Nazarbayev University.

Since 2011 in association with the Nazarbayev University the AEO offers one-year professional development course for newly opened and operational Intellectual schools. 100 teachers will complete programs jointly delivered by the Nazarbayev University and UCL (University College London) in 2011-2012 academic year.

The AEO has done a lot to raise public awareness as regards the one-year course offered by the Nazarbayev University. The AEO staff informed teachers - graduates of pedagogic HEIs in Aktobe, Uralsk, Atyrau, Aktau, Taraz, Shymkent, Kokshetau, Petropavlovsk, Almaty, Karaganda and Pavlodar of this unique opportunity.

With support of the British Council promising candidates sat IELTS exam in Astana, Almaty and Uralsk.

Following results of competitive selection a group of 100 teachers was formed and enrolled by the Nazarbayev University.

Table 18. Results of IELTS exam

IELTS results by scores	7.5-7.0	6.5-6.0	5.5-5.0	4.5-4.0
Number of teachers	10	46	30	14

Table 19. Number of attendees by regions

№	Region	Number of teachers
1	Akmola region	3
2	Aktobe region	9
3	Almaty region	4
4	Atyrau region	3
5	East Kazakhstan region	10
6	Zhambyl region	7
7	West-Kazakhstan region	10
8	Karaganda region	13
9	Kostanai region	2
10	Pavlodar region	7
11	North Kazakhstan region	7
12	South Kazakhstan region	4
13	Almaty	4
14	Astana	17
	Total	**100**

Table 20. Number of teachers by subjects

№	Subject	Number of teachers
1	English language	70
2	Biology	1
3	Chemistry	4
4	Computer science	6
5	Geography	2
6	History	3
7	Kazakh language	3
8	Mathematics	7
9	Physics	2
10	Russian language and Literature	2
	Total	**100**

The main objective of the course is to familiarize with the up-to-date teaching practices and practical methods of teaching to build talent pool of the Intellectual schools. Within the course its participants explore innovative teaching strategies, methods of critical thinking skills development and methods of research projects in the classroom.

After improving their English language competencies during the course, teachers will be able to deliver lessons in English using modern methods and ICT.

Moodle (Modular Object-Oriented Dynamic Learning Environment) or Virtual Learning Environment is a key element of training. The training consists of passive and active part and obligatory final lessons to assess knowledge quality.

Course participants are expected to be evaluated within IELTS exam and Cambridge Teaching Knowledge Test (TKT). Based on the data collected we will define language competencies dynamics at the start and end of the professional development course.

The year 2011 saw dramatic increase in terms of cooperation in teachers' professional development at the Intellectual schools. In 2010 there were only 10 teachers trained at the Nazarbayev University, but in 2011 the number of teachers studying at the NU amounted to 100 teachers.

4.3.3. Critical Thinking course at the AEO "Nazarbayev Intellectual Schools"

Course attendees were selected in February 2011.

We imposed the following requirements to the candidates:

- experienced teacher,

- at least 6.0 IELTS overall score, provided that candidates will score at least 7.5 IELTS after the course.

Currently 48 teachers are trained at the Center of Educational Policy of the Nazarbayev University under "Critical Thinking" course delivered by UCL experts (University College London).

Information on course participants was collected and divided into sections: region, sex, age, education, record of service, qualification category, English language proficiency (IELTS certificate).

Course participants come from 5 different cities of Kazakhstan, majority of which resides in the city of Astana.

They are aged between 22 and 55 years, however, only 62% of course participants are aged 21-30 years.

According to the contract signed, course graduates will act as certified by CIE trainers and moderators in their regions.

The academic process consists of 4 stages.

Table 21. Stages of the academic process

Stage	Dates	Duration	Mode of study	Content
1	March 28 - 31, 2011	4 days x 2 Parallel sessions, 25 teachers per group	Full-time	General pedagogics - active learning - pupil-based learning - experimental learning
2	June 27 - July 1, 2011	5 days x 2 Parallel sessions, 25 teachers per group	Full-time	Lesson planning Assessment of tasks Adaptation and application of corresponding resources Critical thinking Observation
3	September 5 - October 15, 2011	6-week course under supervision of 2 trainers online	Online	CICTT course under supervision of trainers: collecting information during the course and assessment
4	November-December 2011	2 schools x 2 days, 4 schools x 3 days (depending on distance)	Full-time	Classroom observation and assessment

Nowadays teachers can pursue their Master's degrees in Educational Management, carry out research and explore the world's best practices at the School of Education of the Nazarbayev University.

Teachers upgrade their qualifications in order to use their knowledge and expertise as means of solving relevant problems and goals of education. The key principle is the teacher's personal development. Teachers explore techniques of the academic process, mechanism of action and thinking. They acquire the ability to act, accumulate the knowledge about action, use intellectual tools of self-organization in pedagogic activities.

4.4. «The Best Teacher of the Nazarbayev Intellectual schools-2011» Contest

The best teacher of the year 2011 of the Nazarbayev Intellectual schools was named at the Intellectual school of Physics and Mathematics in Astana November 26, 2011. 18 candidates, 3 nominees from each Nazarbayev Intellectual school in Astana, Kokshetau, Ust-Kamenogorsk, Taldykorgan and Semey, took part in the republican competition. Those were teachers of elementary school, Mathematics, History, Biology, Chemistry, English language and other subjects.

The Best Teacher - 2011 was organized in order to boost creativity among the participants, enhance prestige of teachers' profession and develop professional skills of teachers of the Nazarbayev Intellectual schools.

The competition was divided into 5 stages and those participating had to do their best to demonstrate their professional and creative abilities as well as ICT competence. The panel evaluated the candidates based on a number of criteria: professional skills and personal qualities, individual style and effectiveness as a teacher. Upon results of the contest, **Gulzhaina Imashpayeva** - teacher of Biology of the Nazarbayev Intellectual school of Chemistry and Biology in Ust-Kamenogorsk was named the best teacher of the year 2011. The runner-up of the contest **Zhupat Yerniyazova** teaches History at the Nazarbayev Intellectual school of Physics and Mathematics in Astana. Both **Nadezhda Kulik**, teacher of elementary school of the Nazarbayev Intellectual school in Taldykorgan and **Roman Shelyag**, teacher of the Russian Language and Literature at the Nazarbayev Intellectual school of Physics and Mathematics in Astana took the third prize. Gulzhaina Imashpayeva was awarded with the title "The Best Teacher of the Nazarbayev Intellectual schools - 2011".

4.5. NIS teachers attestation

The NIS teachers attestation model was developed on the basis of the Law "On status of the Nazarbayev University, Nazarbayev Intellectual schools and Nazarbayev Fund", the AEO Charter and the Rules of NIS teachers' attestation in order to assess NIS teachers' performance.

We have taken into account the existing Kazakhstani model of teachers' attestation while developing

the basic terms of our model. We studied the international experience in teachers' assessment in such countries as Great Britain, the USA, Australia, New Zealand, Turkey, etc.

Analysis of the international and Kazakhstani experience helped us outline the main tendencies and basic problems arising within organization and running of teachers' attestation and accreditation.

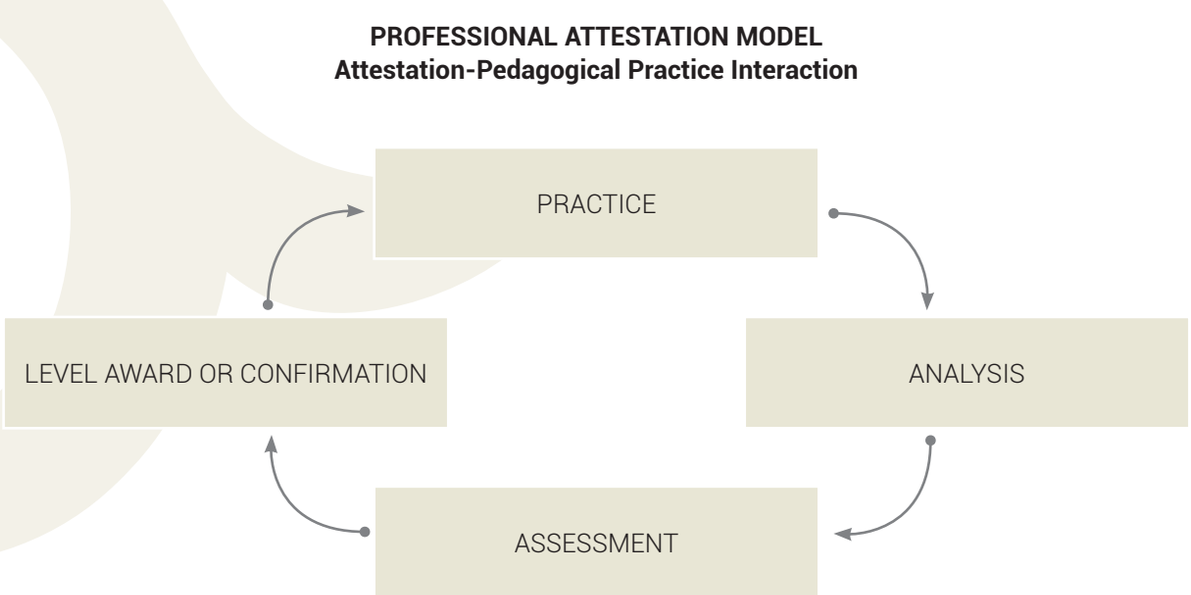
First of all, this is the matter of reformation of the secondary education system itself taking into account current needs and the following aspects:

- Transparency;
- Leaner-centered education;
- Responsibility of each member of school community in comparison with previously used approach of elite management;
- Increased accountability of secondary schools in terms of quality of education.

In this context teachers' attestation has several functions:

- Qualitative analysis of human resources involved into academic process;
- Defining the best examples of pedagogic practice;
- Encouragement of professional growth.

Figure 4. Interaction of attestation and pedagogic practice



Proposed model of attestation is based on the teacher's assessment through his/her pedagogic activity. This pragmatic approach ensures that teacher's assessment as a unit of school's community is objective.

Attestation encourages implementation of the NIS mission through activity of a teacher as a part of pedagogic staff assessment

To carry out the pedagogic attestation we developed:

- The Rules of conducting NIS teachers attestation;

- Qualification requirements reflecting professional competencies to confirm specific levels of pedagogic mastership: teacher-intern, teacher, teacher-moderator, teacher-expert, teacher-researcher and teacher-specialist;

- attestation tasks;

- measuring instruments.

It should be noted that goals of attestation are harmonious in many countries, however, instruments of attestation may vary because they take into account educational traditions and peculiarities of the Intellectual schools.

The proposed model of attestation provides assessment of subject teachers, school's administration and methodological experts.

SECTION 5. NIS PUPIL BODY

5.1. Pupils' competitive selection

The competitive selection of pupils to the Intellectual schools is carried out in line with the Government's decree №317 dated March 14, 2009 "On approval of the Rules of awarding and amount of the educational grant "Orken" of the First President of the Republic of Kazakhstan for gifted children at the Intellectual schools of the First president of the Republic of Kazakhstan (hereinafter - the Rules), order №167 of the Ministry of Education and Science of the Republic of Kazakhstan dated April 7, 2009, the Rules of admission to Grades 1-6 of the Nazarbayev Intellectual schools approved by the decision of the Board of Directors of the Joint-stock company "Nazarbayev Intellectual schools" dated June 10, 2010.

The AEO have developed and approved documents required for organization of the competitive selection:

- orders of the Chairperson of the Board of JSC "Nazarbayev Intellectual schools" "On organization and conduction of the pupils' competitive selection to Grade 7 and additional competitive selection to Grades 8, 9 and 10";
- number of grades and groups for the Intellectual schools;
- schedule of competitive selection;
- composition of the penal board and review board.

According to the rules of pupils' admission to Grades 2-6 and 7-10 of the Intellectual schools pupils are selected based on results of the competitive selection that shows whether the pupils are ready to study the advanced program in Physics and Mathematics.

The competitive selection to Grades 2-10 includes the following:

- complex examination of knowledge in core subjects;
- written test in specialized subjects;
- determining the level of language proficiency (Kazakh, Russian and English languages).

The competitive selection in the regions was organized with the help of regional and municipal departments of education.

We selected pupils to Grades 7, 8-10 of the Intellectual schools in the cities of Astana, Kokshetau, Semey, Taldykorgan and Ust-Kamenogorsk. Additional selection of pupils to Grades 7-9 was carried out in Uralsk.

Four competitive selections of candidates to the Intellectual schools in Astana, Semey, Kokshetau, Ust-Kamenogorsk, Taldykorgan and Uralsk took place in June, August, October and November 2011.

Table 22. Results of pupils' competitive selection

Intellectual school	Number of grant holders upon results of competitive selection										Total
	1st selection, number of pupils (June)			2nd additional selection, number of pupils (August)			3rd selection, number of pupils (October)			4th selection, number of pupils November	
	Grade 7	Grades 8-10	Total	Grade 7	Grades 8-10	Total	Grade 7	Grades 8-10	Total	Grades 2-6	
Astana, Physics and Mathematics	97	36	133								133
Astana, IB	98	33	131								131
Kokshetau	126	18	144	20	16	36					180
Semey	100	25	125	29	26	55					180
Ust-Kamenogorsk	100	41	141	21	11	32					173
Taldykorgan	96	63	159							58	217
Uralsk							203	133	336		336
Total	**617**	**216**	**833**	**70**	**53**	**123**	**203**	**133**	**336**	**58**	**1350**

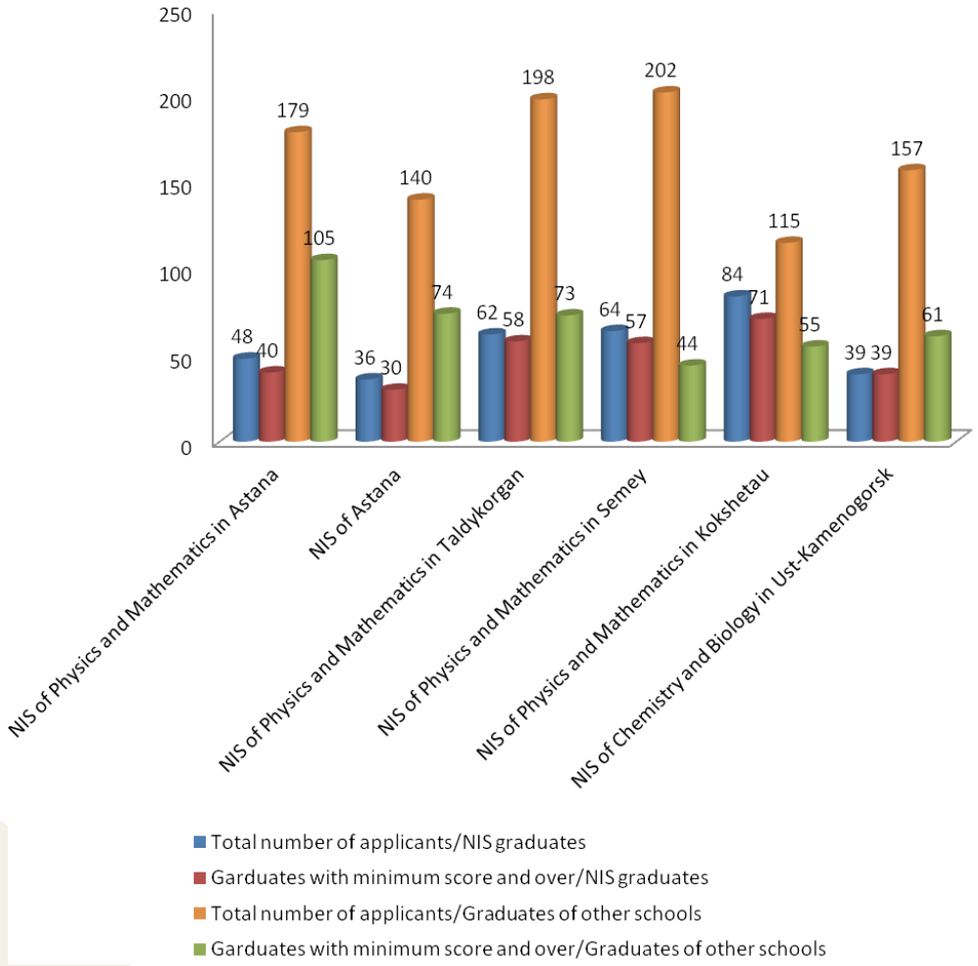
Following results of 2011 competitive selection 1350 pupils were selected by the Intellectual schools; 58 pupils to Grades 2-6 and 1292 pupils to Grades 7-10.

The competitive selection proved that Grade 6 graduates of the Intellectual schools have higher results in comparison with their peers from general secondary schools. We registered 48 applications from Grade 6 graduates of the Intellectual school of Physics and Mathematics in Astana; 40 of them (or 90%) successfully achieved the threshold level during the competitive selection.

We analyzed 10 best works of prospective Grade 7 pupils of the Intellectual school of Chemistry and Biology in Ust-Kamenogorsk with Kazakh language of instruction after the first tour of competitive selection. 9 out of 10 works were done by Grade 6 graduates of the same school.

Grade 6 graduates of the Intellectual schools occupied 284 out of 720 vacant places at Grade 7, i.e. 85% of the total number of Grade 6 graduates of the Intellectual schools participating in the competitive selection. Grade 6 graduates of general secondary schools took 43% of vacant places.

Chart 6. Comparative data on Grade 6 graduates of NIS school who scored threshold level



The republican commissions on awarding the educational grant "Orken" of the First President of the Republic of Kazakhstan held on July 28, August 27 and November 17, 2011 summed up results of the competitive selection. 975 candidates became holder of the educational grant in line with the decision of the Republican Commission. In 2011 a reserve list was compiled of 121 candidates who achieved the threshold level. These pupils will be invited to join the Intellectual schools without additional competitive selection in case vacancies arise. 19 pupils from reserve list were enrolled by the Intellectual schools in 2011.

A range of problems associated with formation of the pupils' body occurred upon results of 2011 competitive selections. For instance, due to poor level of knowledge of pupils participating in the 1st competitive selection to the Intellectual schools in Ust-Kamenogorsk, Semey and Kokshetau we had a lot of vacant places and arranged additional intake.

4018 pupils, including 1482 pupils at Grades 1-6 and 2536 pupils at Grades 7-11 study at the Intellectual schools as of January 1, 2012.