NIS ANNUAL REPORT 2013
AUTONOMOUS EDUCATIONAL ORGANIZATION
«NAZARBAYEV INTELLECTUAL SCHOOLS»

CONTENTS

LIST OF ABBREVIATIONS

RK - the Republic of Kazakhstan

AEO - an autonomous educational organization "Nazarbayev Intellectual Schools"

Development Strategy - Development Strategy of the autonomous educational organization "Nazarbayev Intellectual Schools" 2020

Intellectual School - branch of educational autonomous organization "Nazarbayev Intellectual Schools"

CoE - a private institution "Center of excellence"

CPM - branch "Center for pedagogical measurements" of autonomous educational organization "Nazarbayev Intellectual Schools"

CEP - branch "Centre of Educational Programmes" of autonomous educational organization "Nazarbayev Intellectual Schools"

ERC - private institution "Educational Resource Center"

CIE - International Examination Council of Cambridge University

PMD - physics and mathematics direction

CBD - chemistry and biology direction

INTRODUCTION

In 2013 AEO extended the network to 15 Intellectual Schools. Eight new schools were opened in the cities Aktobe, Atyrau, Karaganda, Kyzylorda, Pavlodar, Taraz and Shymkent (2). There was opened the branch of AEO "Nazarbayev Intellectual Schools" International School in Astana.

In April 2013 a meeting of the High Board of Trustees was held with the participation of the Head of the State Nursultan Nazarbayev, where the Development Strategy of AEO until 2020 was approved and also the membership of the Board of Trustees was increased to15 people.

AUTONOMOUS EDUCATIONAL ORGANIZATION "NAZARBAYEV INTELLECTUAL SCHOOLS" FACTS AND FIGURES 2013

OPENING OF 8 INTELLECTUAL SCHOOLS in Aktobe, Atyrau, Karaganda, Kyzylorda, Pavlodar, Taraz, Shymkent (2)

OPENING OF A BRANCH OF THE AEO "NAZARBAYEV INTELLECTUAL SCHOOLS" INTERNATIONAL SCHOOL IN ASTANA

ENROLLMENT GREW TO 9,700 STUDENTS in **15** operative Intellectual Schools in Astana (2), Aktobe, Atyrau, Karaganda, Kokshetau, Kyzylorda, Pavlodar, Semipalatinsk, Shymkent, Taraz, Ust-Kamenogorsk, Uralsk, Shymkent (2) (of which 1108 students from rural schools live in boarding schools)

5508 STUDENTS have passed the elective courses in the country (including summer schools) and abroad

411 STUDENTS have become the prizewinners of various Oympiads, contests and research projects, among them of the international level - 159, republican level - 252

451 students have graduated from **THE INTELLECTAL SCHOOLS** (among them with "Altyn Belgi" - 78, with honor certificate - 46)

427 GRADUATES have received educational grant (among them - 140 graduates entered Nazarbayev University)

76% OF GRADUATES have chosen technical, medical and scientific specialties (47%, 16% and 13% respectively)

1805 TEACHERS hold classes in Intellectual Schools (among them 260 foreign teachers, 1517 Kazakhstani teachers, 28 part-time teachers)

AMONG 1805 TEACHERS 705 are males, 1100 - females

34 ADVANCED TRAINING COURCES HAVE BEEN COMPLETED BY THE TEACHERS of Intellectual Schools (among them 8 foreign courses, 22 domestic courses, 4 courses within the school)

15 TEACHERS have won scholarships "Bolashak"

5237 RK SCHOOL TEACHERS have been trained in the leveled programs of CoE

SECTION 1.
EDUCATION CONTENT

1.1 Educational Programs

According to the Development Strategy there are implemented two educational models in Intellectual Schools:

- Integrated educational program;
- International Baccalaureate program.

In 2013 in accordance with the decision of the Board of Trustees of AEO the International School in Astana was established, where the International Programme for Primary Schools (International Primary Curriculum) was introduced.

1.1.1. Integrated educational program

In accordance with the plans for 2013 in the framework of the Integrated Education Program (hereinafter - the Educational program) the staff of AEO in collaboration with teachers of Intellectual Schools have worked in the following areas:

- Elaboration of training programs and plans;
- Implementation of the Educational program;
- Monitoring of the Educational program implementation;
- Recognition of the Educational program.

Elaboration of educational programs and plans

66 curricula have been elaborated for the 1-6 grades; ***28 curricula – for the*** 9th and 10th grades

CEP staff with teachers from Intellectual Schools and CIE international consultants elaborated 66 curricula for the 1-6th grades and 28 curricula the 9th and 10th grades. More than 30 seminars have been organized for that.

In this area the curriculum for the subject "Global Perspectives and project work" for the high school have been finalised together with CIE.

Thus, training programs and plans for all subjects from the 1st to 12th grades have been elaborated[1].

Introduction of the Educational Program

In accordance with the planned arrangements pilot introduction of the Educational program was carried out in the 7th and 11th grades in 2012-2013 school year, in the 1st, 8th and 12th grades - in 2013-2014 school year.

57 subject trainings have been conducted; 802 teachers of the Intellectual Schools have been trained

In summer 2013 Intellectual Schools organized travelling seminars In order to prepare teachers of Intellectual Schools for the Educational program.

[1] except for the subjects "Physical Education" and "Fundamentals of Law", curricula and plans for these subjects are planned to be developed in 2014.

From June to August 2013 32 trainings were conducted with the participation of CIE international consultants, there were trained 484 teachers of the 1st, 8th and 12th graders of Intellectual Schools, as well as 21 trainings were conducted by subject staff of CEP where 318 teachers of the 7th and 11th grades were trained.

By agreement with CIE there was organized a new form of providing methodological support to the teachers through school visits. Thus, CIE international consultants visited lower grades of the Intellectual Schools in Kokshetau and Shymkent, by the results of that visits the schools were provided with the recommendations for improvement.

To support the teachers of the Intellectual Schools the AEO's and CEP's staff elaborated:

1. Instructional and methodical letter "On the specifics of teaching in the 1st, 8th and 12th grades at the introduction of the Integrated Educational program in the Intellectual Schools in 2012-2013 school year";
2. Teacher edition for lessons planning in teaching programming for the subject "Computer Science";
3. Guidelines on the review of new curricula;
4. Guide on preparation for survey visits in schools;
5. Series of lessons based on the methodology CLIL (language immersion) for the subjects "History of Kazakhstan" and "Kazakhstan in the modern world";
6. Recommendations for the optional course "Fundamentals of the Religion studies";
7. Teacher edition "Use of methods of content and language integrated learning (CLIL) at Nazarbayev Intellectual Schools";
8. Recommendations for homework.

Monitoring of the introduction of the Education Program

Monitoring of the introduction of the Educational program in 2012-13 school year

According to the results of monitoring of the introduction of the Educational program in the 7th and 11th grades from September 2012 to May 2013 *14 training* programs for primary and high schools and *18 curriculum* for the 7th and 11th grades were insignificantly amended.

Amendment of the curriculum and plans is based on the methodology developed by CIE and CEP which involves collection of problematic questions at specific categories from the teachers of the Intellectual Schools and CIE.

Categorization of the issues:
Category 1. Changes, introduced after full introduction of curricula and plans in each grade.
Category 2. changes, which will be introduced annually relating the issues revealed.
Category 3. technical amendments of the documents, which should be introduced as far as they are revealed.
Category 4. needing no amendments

Monitoring of the Educational program introduction in 2013-14 school year

To monitor the introduction of the Educational program in the 1st, 8th and 12th grades of the Intellectual Schools the CEP staff organized visits to 14 Intellectual Schools with participation of local and international teachers, students, school administrators, school psychologists, supervisors, managers of methodic associations, subjects coordinators and students' parents.

During the visits the CEP staff visited more than 500 lessons in the 1st, 7th, 8th, 11th and 12th grades and interviewed in the format of "question-answer" and group work.

According to the results of the lessons visiting, surveys, and interviews with the interested parties the positive aspects of the introduction of the Educational program have been revealed, namely:

1) a new approach to the study of Kazakh, Russian and English languages, focused on the development of four activities: listening, speaking, reading and writing;
2) use by teachers of active learning methodologies, work in pairs and groups that increase motivation, develop communication and cooperation skills of students;
3) more practical and laboratory work on natural subjects lessons that provides the ability to apply acquired knowledge in practice.

However a number of difficulties in the introduction of the Educational programs, so-called "transition problems" have been noted:

1) teaching the subjects "History of Kazakhstan" and "Geography" in Kazakh language in the classes with Russian language of education for an unprepared audience;
2) lack of knowledge of the Intellectual Schools' teachers in modern teaching methods, especially in the newly opened Intellectual Schools;
3) lack of necessary resources, especially educational resources in Kazakh language.

To solve the "problems of transition" it has been decided to organize a summer language school based on the Intellectual Schools, training of teachers with modern pedagogical approaches, including "Content and language integrated learning" (CLIL).

One of important tool to collect from the schools feedback on the Educational program being introduced is online forum designed to support teachers of the Intellectual Schools. During the year 1099 new users have been registered in the online forum, 1460 new topics and 3599 posts have been created.

The reports have been prepared and recommendations have been elaborated for the schools to solve the problems identified during the monitoring. In addition, the data collected are used to categorize and make changes in the curriculum and plans at the end of 2013-2014 school year.

Recognition of the Educational program and evaluation

In 2013 a new project was started on the recognition and evaluation of the Educational program by the higher education institutions of Kazakhstan and the world. Recognition and evaluation of the Educational program and involves providing students with the possibility of a successful transition from secondary to higher education. Two seminars on obtaining recognition within the country and at the international level with participation of CIE consultants have been organized in frame of this project.

During the seminar CIE consultants presented processes and policies of enrollment in higher education institutions in countries such as UK, USA, Canada and countries in Europe, Asia and the Pacific. According to the results there have been developed: Action Plan to obtain recognition, a briefing document on the Educational program and evaluation system, as well as a form of recognition.

The process of obtaining recognition in Kazakhstan assumes a constant work with the universities and the public to inform them about the peculiarities of the Educational program and evaluation of the Intellectual Schools. Therefore, a meeting has been held with representatives of Nazarbayev University.

Plan for 2014

- Continued work on the revision of curricula and syllabuses for the 1st, 8th and 12th grades, as well as the 7th and 11th grades for subjects "History of Kazakhstan", "World History", "Kazakhstan in the modern world "and" Global Perspectives and project work. "Elaboration of training programs and plans for the subjects "Physical Education" and "Fundamentals of Law".
- Implementing the Educational program in the 2 and 9th grades, organization of trainings for teachers with participation of CIE.
- As part of monitoring of the implementation of programs CIE will visit the Intellectual Schools. During these visits the meetings of interested parties will be held and the lessons will be observed. Due to the results of the monitoring the curriculum and plans will be adequately amended according to the developed methodology.
- Continued work on obtaining recognition of the Educational program within the country and at the international level.

1.1.2 International Baccalaureate Program

In accordance with the Development Strategy the Intellectual School in Astana carried out work in the following areas during the reporting period:

- authorization and implementation of the International Baccalaureate Diploma Program (IB DP) for high school;
- preparation for authorization of the International Baccalaureate Middle Years Programme (MYP) for primary school.

Diploma program for high school

In April 2013 the Intellectual School in Astana has successfully passed the authorization of the IB diploma program and received the status of MB World School.

The Intellectual School of Astana has ***successfully passed the authorization of the IB Diploma Program.***

Previously developed curricula for the Diploma programs continued to be tested in high school. Since April 2013 the school administration has organized lessons for the whole team. Attention was paid to how properly the school teachers use critical thinking, evaluation of students, in general practical use of everything what they learned in the travelling seminars and seminars within the school.

Trainings and seminars on professional development of teachers and the development of the student profile have been organized within the Diploma program. These trainings and seminars have been organized by foreign colleagues and experts involved, who have extensive experience in the Diploma program.

A guide has been developed for writing an extended essay, as extended essay is a core course in the Diploma Programme.

Program for primary school

The Intellectual School in Astana has obtained the ***status "candidate school"*** for authorization of the primary school program - MYP.

The Intellectual School in Astana has obtained the status "candidate school" for authorisation of the primary school program - MYP.

Teachers of the Intellectual School in Astana have elaborated 31 curricula for 17 subjects for primary school program.

31 curricula have been elaborated for 17 subjects for primary school program.

Testing of these programs was started, in which teachers were paying special attention to the content, combination of theoretical knowledge and practical skills, taking into account the individual characteristics of students, checking compliance of selected resources. During testing additions and changes were made to improve the programs , Unit-plans were developed for lesson planning and assessment of students achievement.

For the implementation of the program in the primary school there was created a working group in the Intellectual School in Astana, which included the school administration and teachers with experience in the International Baccalaureate program.

Plan for 2014

- Preparing for the authorization of the middle school.
- Approbation of curriculum in middle school.
- Organization of work on internal and external examinations of Diploma Program students.
- Development of intercultural awareness of students and teachers.
- Improvement of educational subjects teaching methods by introducing in the educational process of new educational technologies based on the conceptual provisions of the program of primary and high schools of the International Baccalaureate (problem-searching character of classes, group technology, a holistic approach to the organization of learning activities, transdisciplinarity, developing training, reflection).
- Professional development of teachers.
- Continued work on cooperation with international experts and MB schools.

1.1.3 International Programme for Primary Schools

International School in Astana (hereinafter - ISA) is a licensed participant of the program International Primary Curriculum (IPC). Selection of a program for ISA is based on a comparative analysis of three educational models:

Opening of ***The International School of Astana***

- International Baccalaureate program for primary schools (Primary Years Programme);
- Cambridge Programme for Primary Schools (Cambridge Primary Curriculum);
- International Programme for Primary Schools (International Primary Curriculum).

Opting IPC is based on the fact that this program:

1) makes it possible to integrate content with the national standard of any country;
2) is focused on the holistic development of students and their skills for a successful life in the 21st century;
3) is a popular educational program in the world - the fastest growing among all programs for elementary school;
4) is the only one of the three programs, the implementation of which is possible without the authorization of the school, that is, since the opening of the school;
5) is an ideal platform for the development of programs for primary schools in accordance with the philosophy of the International Baccalaureate in the future.

IPC is used in ***more than 1600 schools of 87 countries worldwide.***

IPC feature is that it is focused on personal development, skills development, formation of global thinking, study of interdisciplinary themes, global themes, local people, and is based on studies of neuroscience.

Training on IPC allows students to think about the following questions - "who are we?", "where are we in time and space?", "how does the world work?", "how do we co-exist on the planet?". The kids are looking for answers for these questions, conducting research on various interesting topics that are studied in the framework of interdisciplinary modules reflecting the relationship of objects in the real world. This program takes into account the gradual creation of multilingual learning environment. IPC program has been introduced in the 1st grades of the ISA.

Plan for 2014

- Elaborating a plan to authorize the International Baccalaureate program for elementary school on the basis of IPC.
- Elaborating the course content for each grade.
- Determining the structure of the school day and school year.
- Creating extra-curricular programs.
- Creating a support system for students and educational process.
- Implementing the lessons monitoring program for evaluation and development of a high standard of quality of educational process.
- Opening kindergarten on the basis of ISA.

1.2 Trilingual education

Implementation of trilingual education in the Intellectual Schools is one of the most important activities of the AEO. The following work has been done:

- Development of a package of documents for Trilingual education;
- Training of teachers of linguistic and nonlinguistic disciplines with participation of international experts;
- Organization of summer language courses;
- Implementation of the methodology of early language immersion.

Development of documents for Trilingual education

For successful implementation of trilingual education a number of documents and policies have been developed:

- trilingual education policy in the Intellectual Schools ;
- recommendations for schools on implementing trilingual education;
- a teacher's guide on the application of the approach "Content and language integrated learning» (CLIL);
- review of international researches in the field of bilingual and trilingual education;
- review of team teaching.

To discuss and analyze documents on Trilingual education there was organized work with leading international experts in the field of bilingual and trilingual education:

1. Fred Genesee, Professor of Psychology Department at McGill University, Canada;
2. Hugo Baetens-Berardsmore, emeritus Professor of English and bilingualism at Brussels University, Belgium;

Model of trilingual education of the Intellectual Schools has been ***highly evaluated by the international experts***

3. Peeter Mehisto consultant on development and management of bilingual education, Estonia, University of London, Institute of Education, UK;
4. Alan Neal Crawford, emeritus professor at California State University, USA.

In the course of this work there was discussed the implementation of trilingual education in the Intellectual Schools , according to the results of which the model implemented in the Intellectual Schools was praised by international experts.

Training of teachers to implement the trilingual education

In order to prepare newly hired teachers an international consultant Alan Crawford hold four seminars for 150 teachers of the Intellectual Schools of Aktobe, Uralsk, Shymkent, Taraz, Kyzylorda, Astana, Karaganda and Pavlodar.

To support teachers in the teaching of subjects in a second language international consultant Rosie Tanner trained 10 teachers on the subjects "History of Kazakhstan", "World History" and "Geography" and 12 employees of CEP on approach "Content and language integrated learning» (CLIL).

Organization of summer language courses

For the development of language and communication skills of students through the design, creative and gaming activities a summer school for 3-11 grades students, including those who passed the competitive selection in the 7th grade, was organized on the basis of 10 Intellectual Schools.

Work of summer school is organized in the following directions:
1) academic activities - aimed at developing language skills and academic knowledge in core subjects;
2) practical activities - aimed at developing research skills: search, processing and presentation of information;
3) language interactive - aims at language practice through sport, art, drama clubs, social and cultural activities.

4927 students have been trained.

Introduction of early language immersion methodology

Introduction of language immersion methodology was started on the basis of the kindergarten of the Intellectual School of Taldykorgan in 2012-2013 school year. Introduction was accompanied by the support in the form of advices and guidance. Monitoring of the introduction of language immersion method showed that the level of the Kazakh language knowledge had increased in terms of: understanding, vocabulary, grammatical structure of language, correct pronunciation of sounds.

Integrated educational program with usage of language immersion methodology has been introduced in the 1st grades of the Intellectual Schools in Taldykorgan and Kokchetau.

An integrated textbook "Menin ortam" has been designed

Together with experts from Estonia seven training seminars for teachers of kindergarten, primary school teachers, administration and staff of the Intellectual Schools and CEP staff were organized in 2013. Seminars have been hold in order to prepare teachers-trainers of language immersion methodology, designing integrated textbook, getting the experience of immersion in Estonian schools, the successful implementation of this methodology. By the results of these seminars there have been designed a guidance to introduce language immersion methodology, posters for de-

velopment of students' speaking and 25 teaching materials. Moreover, an integrated textbook "Menin ortam" and workbook to this tutorial have been designed to support teachers of the Intellectual Schools teaching by the methodology of language immersion.

Plan for 2014

- Further improvement of existing documents on Trilingual education with participation of international consultants.
- Development of manuals, guidelines for teachers to support the implementation of the policy of trilingual education.
- Development of recommendations to improve the skills of teachers in the implementation of trilingual education.
- Organization of training seminars with participation of international consultants for teachers of the Intellectual Schools for realization of trilingual education .
- Elaboration of thematic posters for the development of communication skills of students.
- Elaboration of an integrated textbook for the 2nd grade and workbook for total immersion in Kazakh language involving consultants from Estonia.
- Elaboration of teaching materials for language immersion.
- Organization of practical seminars on learning, methodological preparation and support of primary school teachers in language immersion program.
- Conducting research on the study of the implementation of trilingual education, including methods of immersion in the Kazakh language in the Intellectual Schools.

1.3 Educational work

Educational work is focused on the civil-patriotic education of students and organization of networking activities among students of the Intellectual Schools .

The following documents have been developed and implemented:

1. Politics of education of the Intellectual Schools' students with Applications:
   1.1 "Disciplinary Code";
   1.2 "The system of school rewards";
   1.3 "Regulations of the program " Bonus.nis ";
   1.4 "Regulations of additional education institute";
2. Standard provision on social practices and projects in branches of the autonomous educational organization "Nazarbayev Intellectual Schools ";
3. Standard rules of activity of the students self-administration bodies of the branches of the autonomous organization of education "Nazarbayev Intellectual Schools ";
4. Rules for preparation, organization and conducting of intra-school, regional, network Spartakiada Games of team sports in the branches of the autonomous educational organization "Nazarbayev Intellectual Schools ";
5. Rules of conducting Art Festival among students of the Intellectual Schools.

The integrity of the educational process is implemented by the value-oriented approach to education through teaching students the values, knowledge and skills for personal and civic responsibility in the classroom and outside the classroom.

With this patriotic education is the core of the whole educational process and captures all its aspects developing thinking, feelings, actions and experience of a student.

Together with the research center "Sanj" a study has been conducted in the field of civil and patriotic education of students of the Intellectual Schools and secondary schools . Results of the study have identified the main principles determining the attitude of students to citizenship and patriotism:

- personal well-being, growth of economic well-being of the country, which is impossible without the development of science;
- spiritual, moral and national values;
- justice and equality, which implies development of the economy, which will promote the well-being of the population in their hometown / village of each child and will not harm the ecology of their native land;
- independence and security of the country.

The results of these studies have been transferred to the Ministry of Education and Science of the Republic of Kazakhstan for use at work.

A new approach has been introduced to the organization of educational work - social projects and practices in which students conducted researches, discussions and actions.

Students self-administration is implemented through two models: work of school parliament and communities "Shanyrak" that act for communication between students of senior and junior classes, forming respect for elders and friendly attitude towards younger. Number of school communities "Shanyrak" has increased to 180.

528 children have participated in the regional research expedition ***"Tugan elge tagzym"***

According to the results of work the best student community "Shanyrak" - 528 children - have participated *in the regional research expedition "Tugan elge tagzym."*

The features of expedition are routes exchange between branches, training in the format "work on a common theme" that allowed teachers and students to conduct interesting research of the edge that they had visited. Initiated research continues throughout the school year. According to the results of regional expedition the collection of essays, student projects, programs and reports on the routes, photos and videos collected are posted on the site and of the AEO and Intellectual Schools. Intellectual Schools students develop skills for research and interviews, selection of materials for use in practice, communication, interaction in groups, improve physical and psychological endurance, enhance the experience to make independent decisions and actions.

In order to support trilingual education, learning history, native culture and teaching tolerance for other cultures through reading literature in Kazakh, Russian and English there has been designed a draft project "100 books that must be read by a student of the Intellectual Schools". A list of books has been created (60% - Kazakh literature, 40% - Russian and world literature).

To strengthen the ties between generations, understanding and identity formation of Kazakhstan a social practice has been introduced - "2 weeks in aul", which was attended by 556 students from 11 Intellectual Schools.

556 children have participated in the social practice ***"2 weeks in aul"***

483 children have participated in the social practice ***'10 days on the parent's job'***

For instilling diligence, respect for work and a better understanding of a particular work when choosing a profession for their own future, a social practice "10 days on the parent's job" has been introduced, it was attended by 483 students from 11 Intellectual Schools.

There are created

«TEDx NIS» and «Wikipedia» clubs have been created in the Intellectual Schools

- 10 clubs «TEDx NIS» in the Intellectual Schools to develop skills in research, partnerships and teamwork skills, oratory, forming respect for diverse views and opinions.
- 11 clubs «Wikipedia» for the development of children's writing, editing articles, engaging them in creative work and research in accordance with the principles of academic honesty and responsibility. On the draft were written about 5000 thousand articles in the online encyclopedia Wikipedia in Kazakh, Russian and English languages.

Students have wrote about ***5 000 thousands of articles in the online encyclopedia Wikipedia*** In Kazakh, Russian and English languages

Within the frames of the project «Wikipedia» 33 students and 12 teachers of the Intellectual Schools participated in the annual international conference «Wikimania-2013" in Hong Kong, where the meeting was held of Kazakh children and teachers with Jimmy Wales, founder of Wikipedia and inspirator of Wiki-world.

In addition, an intellectual game "Kasipkerlik" and interactive game "Reports from the scene" have been elaborated for students. Networking forums of students become traditional: "Fair School," "I am a part of Kazakhstan," "I'm studying in the Intellectual School" as well as social events «Bookcrossing from Nazarbayev Intellectual Schools " for rural schools.

For the first time network sport and creative activities have been organized among 15 Intellectual Schools.

There was held the first regional contests in team sports: futsal, volleyball, chess, which was attended by 1620 students. Spartakiada has contributed to strengthening the friendly relations between the students of the Intellectual Schools and promotion of healthy lifestyle.

network sport and creative activities have been organized among 15 Intellectual Schools

To develop the creative abilities of students the first network Art Festival has been conducted. The students have demonstrated knowledge of the history of Kazakhstan through drama, musicals, paintings, graphics, national crafts, photography, social videos. The festival has been attended by 638 students and 100 teachers.

To clarify the policy of educational work the following seminars have been hold:
Seminar on development of governing documents;
Seminar on student self-administration and curaxtorial service with participation of international experts from Estonia;
Seminar on drama and movement to develop metacognitive skills of students through feelings and thinking with participation of the international expert from York University of Canada, Jane Deluzio;
Seminar on formation of financial literacy of students through value-oriented education with the participation of the international expert from Singapore, Keng Koh;
Seminar on establishment of the Club TEDx NIS in the Intellectual Schools ;
Seminar on the use in the classroom of Wikipedia tools and creation of Wikipedia clubs.

Plan for 2014

- Network competition on writing articles in 3 languages in Wikipedia;
- Festival of Science and innovative ideas;
- Network TED Conference;
- Participation of the Intellectual Schools' students in the Week of international dialogue of culture and art (Aachen);
- Participation of the Intellectual Schools' students, active members of the club TEDx NIS, network TED conference winners in the international conference TED Conferences «TED: Ideas worth spreading" (Canada);
- Participation of the Intellectual Schools' students , winners of "Altyn Kalam» Wikipedia in «Wikimania-2014" (London);
- Organization of WIKIPEDIA and TEDx camp.

Seminars:

- Overview of approaches and practices of educational work in the school system of South Korea, Japan, USA, Europe;
- Organization of debate clubs.

1.4 Educational Resources

Educational resources that meet the modern requirements of the school, have become the basis for the modernization of educational practice in the network of the Intellectual Schools

On May 2013 the AEO ***created a*** specialized private institution ***«Educational Resource Center»***

On May 3, 2013 a specialized private institution "Educational Resource Center" was created

The main strategic focus of the ERC is development, adaptation and acquisition of educational resources, establishment of an information space of the network of the Intellectual Schools and development of IT infrastructure of the AEO.

The work has been done in the following directions:

- Analysis of existing educational resources;
- Elaboration of teaching materials (hereinafter - TM) for primary schools;
- Preparatory work on the development of TM for primary school;
- Elaboration of digital educational resources.

Analysis of existing educational resources

There has been analyzed a number of textbooks and TM for Kazakh, Russian, English, profile, nonlinguistic subjects used in the country's education system and teaching textbooks in.

The main objectives of the analysis were:

- Identifying current trends in methods of presentation of educational material;
- Consideration of methods of illustration and design;
- Learning of international experience of multilingual education.

Also there have been analyzed teaching materials of the international publishers: Nelson Thornes (United Kingdom), Marshall Cavendish Education (Singapore), Collins (United Kingdom), BinaryLogic (Greece), Star Publishing (Singapore).

Elaboration of TM for primary schools

For development of elaboration of TM for primary school, teaching authors and editors among the teachers of the Intellectual Schools an agreement has been signed with Cambridge University Press (hereinafter - CUP) for provision of educational services in this direction.

An agreement has been signed with Cambridge University Press on designing of textbooks for primary school

In cooperation with the CUP there have been held seven workshops for writers and editors on elaboration of TM for the 1-2 grades. The main objective of these workshops - to teach writers and editors developing and finalizing the components of TM (textbook, teacher's guide and working book) using active learning strategies.

1768 first versions of two-page openings in "Mathematics", "Introduction to science", "Knowledge of the world", "ICT", "Art" for the 1st grade

As a result of join work of teachers of the Intellectual Schools and consultants- coaches of the CUP 1768 first version of two-page openings have been developed on the subjects "Mathematics", "Introduction to the Science", "Knowledge of the world", "ICT", "Art" for the 1st grade in Kazakh and Russian languages.

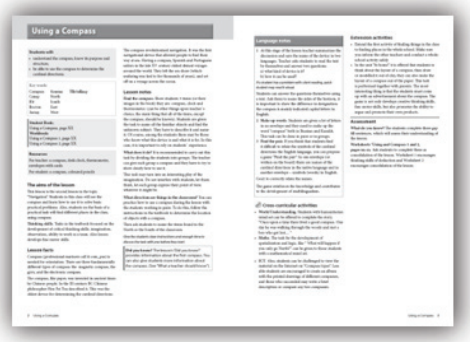


Figure 1. Teacher's guide

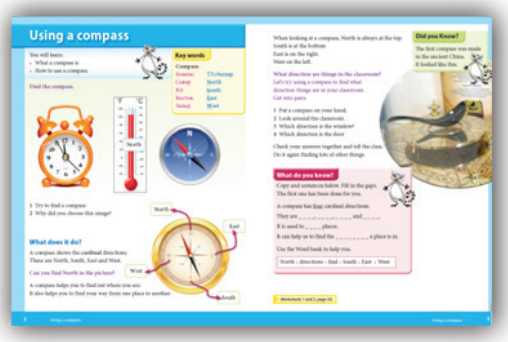


Figure 2. Two-page opening of the textbook "Knowledge of the world"

To organize quality translations there is created translation department, formed a glossary of terms used in the designing of textbooks.

5374 pages of text have been translated.

A guide for editors have been developed.

Since the beginning of work editors have edited 3792 page of educational materials developed by the authors.

Development of TM for primary school

There has been carried out the preparatory work for the development of TM for 6-10 grades of basic school for the subjects: "Mathematics", "Chemistry", "Physics", "Biology", "Geography", "Computer science", "Art", "World History" (textbook and teacher's guide) in Kazakh and Russian languages.

There has been signed a memorandum on cooperation of the AEO with the Institute of Education of the University of London (hereinafter - the IE) (United Kingdom) for the development and publication of these TM.

There has been signed a memorandum on cooperation with the ***Institute of Education of the University of London*** for the development of the textbooks for the middle school

IE will provide services for teams of authors, editors, proofreaders, designers and illustrators of the Intellectual Schools in the development of the TM for primary schools, appropriate to the Educational program of the AEO, through seminars and trainings.

There has been carried a selection of authors to develop TM for 6-7 grades. The data bank according to the results of competitive selection contains total number of authors-developers - 165 teachers.

Development of Digital Educational Resources

The main objectives of ERC in this direction are the creation of domestic digital educational resources (DER), development, implementation and adaptation of DER together with leading international companies specialized in this field.

ERC has developed 33 digital educational resource - based on a collection of exercises "Geometry of Astana" for primary and basic schools for the subjects "Mathematics", "Introduction to Science" and "English". All resources have been developed in three languages: Kazakh, Russian and English, alone and in conjunction with the partners. The resources have been created at different modern mobile platforms such as iOS, Android, Windows, and for Web and personal computers (PC).

ERC studied international experience in the area of eLearning. The experience have been learnt and analyzed, as well as 20 companies in 10 leading countries in this field have been contacted with. The contracts, agreements and memoranda of understanding have been signed with five companies.

Pilot projects have been introduced to develop digital content.

Projects for the development of digital resources:
- "Pyramida";
- "Geometry of Astana";
- "Astana-Baiterek";
- "DERs for elementary school."

The project "Pyramida" is a collection of integrated interdisciplinary exercises of various levels.

The project of creation a digital educational resource "Geometry of Astana" based on the textbook having the same name, a collection of exercises, which is a digital interactive textbook with multimedia content.

The project "Astana-Baiterek" is also based on the collection of exercises "Geometry of Astana". In frames of this project an electronic textbook, educational mobile application, training simulator have been developed.

The project "DER for elementary school" includes resources for the subjects "Mathematics", "Introduction into Science" and "English", which are implemented on different platforms, including iOS, Android, Windows, Web.

Plan for 2014
- Enhancement of design and production of TM for 1-2 grades in 5 subjects;
- Approbation in the Intellectual Schools - TM for grades 1-2 in 5 subjects;
- The review process for compliance with the IEP together with CIE and CEP;
- Elaboration of TM for the 3-4 grades for 5 subjects ("Mathematics", "Introduction into Science", "Knowledge of the world", "ICT" and "Art");
- Development of the first draft versions of TM for the 1-2 grades for the subjects: "Kazakh language" (the first language), "Kazakh language" (the second language), "Russian language" (the first language), "Russian Language" (the second language), " English language. "
- Signing a contract between the AEO and IE;
- Development of the first draft versions of TM for 8 subjects for the 6-7 grades: "Mathematics", "Chemistry", "Physics", "Biology", "Computer science", "Art", "World History", "Geography" in Kazakh and Russian languages;
- Training workshops for authors and editors.

SECTION 2.
SYSTEM OF EVALUATION OF STUDENTS AND ACCREDITATION OF SCHOOLS

AEO together with strategic partners Institute of pedagogical measurement educational measurements (Cito, The Netherlands) and the Center of Talented Youth at Johns Hopkins University (CTY, USA), Cambridge International Examinations Board (CIEB, UK) have continued working on improving the evaluation system, which includes the competitive selection, criteria-based assessment, monitoring of educational achievements and final assessment of students.

2.1 Elaboration and introduction of competitive selection of students in the 7th grades of the Intellectual Schools

There has been developed and implemented a new system of competitive selection of students in the 7th grades of the Intellectual Schools It is focused on enrollment of students good in studying Mathematical and Natural Sciences and having good results throughout the entire period of training in the Intellectual school.

There is introduced a ***new system of competitive selection*** *of the 7th grade students*

New tests have been developed covering subjects: "Mathematics", "Kazakh language (native and second)," Russian language (native and second) and "English language". Test exercises in mathematics are aimed at assessing functional literacy, and include a description of different situations, involves working with charts, diagrams, drawings. Language exercises are aimed at assessing reading literacy and language skills through work with the text but not by checking rules.

To assess the ability of students to study Natural and Mathematical sciences CTY developed exercises focused on identifying students' ability to operate figures on the basis of logical thinking, and tasks to assess visual memory and spatial thinking, which is important in the study of Natural and Mathematical sciences.

In order to ensure legislative environment of the new system of competitive selection there have been amended:

- Decision of the Government of the Republic of Kazakhstan dated March 14, 2009 No317 "On approval of the award and sizes of educational grants of the First President of the Republic of Kazakhstan - the Leader of the Nation "Orken" to pay for education of gifted children in specialized educational institutions "Nazarbayev Intellectual Schools" about the new system of competitive selection for the 7th grades;
- Terms of competitive selection for the award of an educational grant of the First President of the Republic of Kazakhstan - the Leader of the Nation "Orken" to pay for education of gifted children in specialized educational institutions "Nazarbayev Intellectual Schools ";
- Instruction on the organization and conducting competition for the award of an educational grant of the First President of the Republic of Kazakhstan - the Leader of the Nation "Orken" to pay for education of gifted children in specialized educational institutions "Nazarbayev Intellectual Schools";

- Rules of admission to the autonomous organization of education "Nazarbayev Intellectual Schools" and transfer of students.

Training seminars and workshops have been conducted for the successful introduction of the new system :

- On the development of tests for the subjects.
- On the use of the results of ability test for the organization of differentiated teaching based on students' abilities.
- On development of answer sheets, statistical analysis of test results using the software.

Selection by the new system is held over two days: the first day - testing students for "Mathematics", "Kazakh language", "Russian language" and "English language ", the second day - by assessing the ability to study the Natural and Mathematical sciences.

Two competitive selections were held under the new system: in June in eight Intellectual Schools (in Aktobe, Karaganda, Shymkent, Pavlodar, Kyzylorda, Atyrau, Taraz), and in November in the Intellectual School in Almaty.

We have held competitive selection under the new system in ***9 schools***

7454 applicants attended he competitive selection. In the classes with Kazakh language of education 11 persons struggled for one place, with Russian language of education - 4 people. In Almaty school 12 and 6 persons respectively. Among them 3560 (47.8%) of applicants received the results that meet the requirements for participation in the competition for educational grants "Orken", including 1099 (50.5%) of applicants from Almaty School (Table 1).

Table 1. Statistics of competitive selection of students.

N	School	Total participated in testing for two days			Struggling for 1 vacant place			Admitted for consideration of the National Commission	
		Total	Kazakh lang.	Russian lang.	Total	Kazakh lang.	Russian lang.	Total	%
1	Shymkent CBD	1001	858	143	8	14	2	395	39.5
2	Shymkent PMD	861	739	122	11	19	3	387	44.9
3	Atyrau	534	319	215	7	8	5	239	44.8
4	Aktobe	515	359	156	4	6	3	291	56.5
5	Taraz	627	536	91	8	13	2	263	41.9
6	Pavlodar	458	299	159	4	5	3	240	52.4
7	Karaganda	633	396	237	8	10	6	376	59.4
8	Kyzylorda	648	546	102	8	14	3	270	41.7
9	Almaty	2177	1416	761	9	12	6	1099	50.5
Total		**7454**	**5466**	**1988**	**7**	**11**	**4**	**3560**	**47.8**

The results of applicants have showed that the average score of students educated in Kazakh language for subject test was 512.6, for aptitude tests-59.6, educated in Russian language - 553.7 and 70, respectively (Tables 2 and 3).

Table 2. Average scores of applicants tested in Kazakh language

School	Mathematics	Kazakh language	Russian language	English lang.	Total score for a substantive test	Quantitative characteristics	Spatial thinking	Total score for the test to assess the abilities
Max.score	**400**	**200**	**200**	**200**	**1000**	**60**	**74**	**134**
Aktobe	158.0	150.7	151.4	92.7	552.9	28.9	33.9	62.7
Atyrau	145.2	145.8	132.4	79.4	502.8	26.4	31.8	58.2
Karaganda	163.4	144.8	154.9	94.8	557.8	28.3	34.5	62.7
Kyzylorda	145.1	153.8	119.3	68.5	486.7	27.2	28.1	55.3
Pavlodar	153.5	137.0	153.4	87.4	531.2	26.6	33.5	60.2
Taraz	144.5	148.0	130.4	74.8	497.7	27.1	31.0	58.1
Shymkent PMD	149.4	144.5	114.1	71.4	479.4	27.1	31.5	58.6
Shymkent CBD	141.9	146.6	114.1	71.0	473.6	26.2	30.0	56.2
Almaty	152.9	148.4	153.9	89.1	544.5	33.2	38.8	72.0
Total	**149.8**	**147.2**	**135.2**	**80.4**	**512.6**	**27.5**	**32.1**	**59.6**

Table 3. Average scores of applicants tested in Russian language

School	Mathematics	Kazakh lang.	Russian lang.	English lang.	Total score for a substantive test	Quantitative characteristics	Spatial thinking	Total score for the test to assess the abilities
Max.score	**400**	**200**	**200**	**200**	**1000**	**60**	**74**	**134**
Aktobe	185.7	134.7	156.8	116.1	593.3	32.6	40.2	72.7
Atyrau	166.1	152.1	149.6	104.9	572.7	30.3	35.2	65.5
Karaganda	194.4	111.3	162.5	111.7	580.0	35.6	39.7	75.3
Kyzylorda	153.2	141.0	146.0	83.0	523.1	28.6	29.1	57.7
Pavlodar	167.4	100.7	158.2	96.2	522.5	33.2	37.0	70.1
Taraz	165.5	126.5	147.3	87.7	526.9	30.3	33.3	63.7
Shymkent PMD	174.5	142.6	139.7	94.6	551.3	32.4	34.9	67.3
Shymkent CBD	153.1	148.4	143.2	91.8	536.6	30.0	35.1	65.0
Almaty	173.0	101.8	164.9	109.4	549.2	37.4	42.6	80.0
Total	**172.7**	**119.9**	**157.0**	**104.1**	**553.7**	**32.6**	**37.3**	**70.0**

After a competitive selection the highest scores by region scored applicants from the following schools:

- Aktobe - gymnasium N 51, secondary general education school-lyceum N20;
- Atyrau - Zh.Karazhigitov atyndagy N16 orta mektep, secondary school N15 named after Abay;
- Karaganda - OSSHOD "Murager", gymnasium N 17 named after Kurmanov;
- Kyzylorda - N2 ShOD "Murager";
- Pavlodar - Zerde OBBM Ekibastuz, innovative secondary school N39 with gymnasium classes;
- Taraz - gymnasium N 41 named after A.S. Pushkin, school-gymnasium N 45 named after B.Momyshuly;
- Shymkent - gymnasium "Arman", school named after Kenesbayev;
- Almaty - gymnasium N 36, school-lyceum N165.

2.2 Competitive selection of the 8 - 9th grade students

Competitive selection of students to the 8-9th grades of the Intellectual Schools is carried out by selection system developed in 2009.

Since the beginning of 2013 was conducted a competitive selection of students for education in the Intellectual Schools in the following periods:

1. January 6 - 14 (7th, 8th, 9th grades in Atyrau, Shymkent);
2. January 17 - 24 (7th, 8th, 9th grades in Taraz, Kyzylorda);
3. February 24 - March 4 (7th grades in Astana, Kokshetau, Semey, Shymkent, Ust-Kamenogorsk, Uralsk)
4. June 22-23, 2013 (7th grades in Aktobe, Atyrau, Karaganda, Kyzylorda, Pavlodar, Taraz, Shymkent)
5. July 11 - 17, 2013 (2nd, 4th, 5th, 8th, 9th grades, Semey, Kokshetau, Shymkent, Ust-Kamenogorsk, Uralsk, Karaganda, Shymkent, Aktobe, Taraz, Atyrau, Pavlodar, Kyzylorda);
6. August 25-26 (1st grades in Kokshetau).
7. November 23-24 (7th grades in the Intellectual School of PMD in Almaty.
8. December 1-9 (8-9th grades in the Intellectual School of PMD in Almaty.

Every year the number of applicants for studying in the Intellectual Schools increases, so for example, in the competition for the 9th grade with Kazakh language of education to the Intellectual School of PMD in Shymkent 64 people applied for one place. Information on the number of applicants per place with Kazakh and Russian languages of studying is given in the Tables 4 and 5.

Table 4. Information on the number of applicants per place (classes with Kazakh language of studying)

N	School	7th grade			8th grade			9th grade		
		Number of vacancies	Total applications	Per 1 vacancy	Number of vacancies	Total applications	Per 1 vacancy	Number of vacancies	Total applications	Per 1 vacancy
1	Intellectual School of Astana	72	368	5						
2	Astana PMD	72	334	5						
3	Aktobe PMD	40	366	9				7	32	**5**
4	Atyrau CBD	40	324	8	10	94	**9**	13	84	**6**
5	Karaganda CBD	40	398	10	16	125	**8**	25	121	**5**
6	Kokshetau PMD	48	231	5	13	35	**3**	9	38	**4**
7	Kyzylorda CBD	60	558	9	36	301	**8**	5	230	**46**
8	Pavlodar CBD	60	307	5	4	77	**19**			
9	Semey PMD	48	418	9	18	60	**3**	6	22	**4**
10	Taldykorgan PMD	48	193	4	2	23	**12**	8	28	**4**
11	Taraz PMD	40	543	14				7	80	**11**
12	Uralsk PMD	48	370	8						
13	Ust-Kamenogorsk	48	216	5				3	48	**16**
14	Shymkent PMD	40	745	19	3	186	**62**	3	191	**64**
15	Shymkent CBD	60	869	14	9	495	**55**	6	307	**51**
16	Almaty PMD	120	1449	12	120	1209	**10**	96	836	**9**

Table 5. Information on the number of applicants per vacancy (grades with Russian language of education)

N	School	7th grade			8th grade			9th grade		
		Number of vacancies	Total applications	Per 1 vacancy	Number of vacancies	Total applications	Per 1 vacancy	Number of vacancies	Total applications	Per 1 vacancy
1	Intellectual School of Astana	48	174	4						
2	Astana PMD	72	175	2						
3	Aktobe PMD	40	159	4				4	6	2
4	Atyrau CBD	40	222	6				18	58	3
5	Karaganda CBD	40	244	6				18	56	3
6	Kokshetau PMD	48	67	1	16	18	1	9	16	2
7	Kyzylorda CBD	60	105	2	21	48	2	11	42	4
8	Pavlodar CBD	60	166	3				20	38	2
9	Semey PMD	48	126	3	14	23	2	17	18	1
10	Taldykorgan PMD	48	78	2	8	7	1	6	10	2
11	Taraz PMD	40	94	2				12	23	2
12	Uralsk PMD	48	146	3				7	30	4
13	Ust-Kamenogorsk	48	31	0.6	3	15	5	7	11	2
14	Shymkent PMD	40	123	3	16	63	4	17	35	2
15	Shymkent CBD	60	145	2	19	86	5	12	59	5
16	Almaty PMD	120	809	7	120	740	6	96	586	6

During the reporting period the Republican Commission for awarding educational grants of the First President of the Republic of Kazakhstan - Leader of the Nation "Orken" for studying in the 7th, 8th, 9th grades in the Intellectual Schools awarded 4517 grants (Table 6).

Table 6.Information about the number of students who received a grant of the First President of the Republic of Kazakhstan - Leader of the Nation "Orken"

N	School	Number of children enrolled after the competition held in 2013			Total
		1-3 grades	4-6 grades	7-9 gtades	
1	Astana PMD			192	192
2	Astana IB			120	120
3	Aktobe PMD			111	111
4	Atyrau CBD			697	697
5	Karaganda CBD			165	165
6	Kokshetau PMD	60	36	121	217
7	Kyzylorda CBD			552	552
8	Pavlodar CBD			161	161
9	Semey PMD		10	147	157
10	Taldykorgan PMD	4	13	117	134
11	Taraz PMD			571	571
12	Ust-Kamenogorsk CBD		25	122	147
13	Uralsk PMD			106	106
14	Shymkent PMD			661	661
15	Shymkent CBD			526	526
Total		**64**	**84**	**4369**	**4517**

Competitive selections in the regions have been organized with the assistance of regional and municipal education departments, leading universities.

Plans for 2014

- Conducting competitive selection to the 7th, 8th and 9th grades of 15 existing schools and 5 newly opened Intellectual Schools.
- Conducting trainings and seminars for staff of the AEO on the development of tests to assess abilities, statistical processing of test results.

2.3 Introduction of the criterion assessment

Together with the experts of CIE the system of criterion assessment has been improved and implemented in accordance with the expected results of the Integrated educational program. Evaluation criteria have been enhanced, educational objectives have been standardized for assessment in the context of subjects in the 7th, 8th, 11th and 12th grades. The system of putting the final grades of students has been changed, taking into account a certain percentage of the results of formative and summative assessment. The form of electronic journal has been changed for recording the results of education.

Integrated model of criteria-based evaluation has been elaborated and introduced

In September ***we got ISBN*** (International Standard Book Number) for the integrated model of criteria-based evaluation of the Intellectual Schools' student's achievements

By the decision of the AEO's Board of Directors the following regulations have been prepared and approved:

- Integrated model of the criteria-based assessment of achievements of Nazarbayev Intellectual Schools' students' ;
- The concept of the introduction of criteria-based assessment of achievements of Nazarbayev Intellectual Schools' students;
- Policy of evaluation of achievements of Nazarbayev Intellectual Schools' students;
- Rules of criteria-based assessment of achievements of the students studying in the autonomous educational organization "Nazarbayev Intellectual Schools".

For the successful implementation of the improved assessment system the trainings and seminars have been held:

- in order to present the main features of the improved approach to the evaluation for 70 deputy directors of the Intellectual Schools, teaching unions leaders and staff of the Centre for pedagogical measurements (hereinafter - CPM);
- on developing a formative assessment for participants of August conference of the Intellectual Schools' teachers;
- to exchange experiences on the application of the IMCO for 146 teachers of the Intellectual Schools;
- to provide guidance to teachers on IMCO in the beginning of the school year in the newly opened schools.

As a result of the seminars and trainings the teachers have received recommendations for the use of the Integrated model of criteria-based assessment, for developing tasks and descriptors for assessment the achievement of learning objectives in accordance with subjects programs.

There have been conducted online and video conferencing with teachers and school administrators about organization of criteria-based assessment of students' achievements.

For guidance to teachers of the Intellectual Schools there have been elaborated:

- Collection of exercises for formative evaluation;
- Collection of exercises for summative evaluation;
- Collection of exercises on an Integrated Model of the criterion assessment.

Plan for 2014

- Standardization in conjunction with CIE of levels of achievement of learning objectives and developing guidelines for evaluation in the context of subjects for the 1st, 2nd, 7th, 8th, 9th, 11th and 12th grades.
- Elaboration and standardization of exercises for formative and internal summative assessment in the context of the IEP educational objectives.
- Conducting educational trainings for the professional community of teachers of the Intellectual Schools for the development and standardization of assessment tools.

2.4 Elaboration and implementation of the monitoring system of individual progress of students.

To ensure the timely adjustment of the educational process the monitoring studies are necessary as they ensure assessment of the progress of individual students' achievements.

Procedures and tools are designed for the following purposes:
1. Monitoring of proficiency of pre-school children
2. Initial monitoring of students' achievements in the newly opened schools
3. Monitoring of students' achievements in Mathematics and language subjects

Monitoring of proficiency of pre-school children

A pilot testing of abilities monitoring system among30 children of preschool age 6 - 7 years have been conducted together with the Centre for assessment and monitoring of the University of Durham (UK) based on a kindergarten school of the Intellectual School in Taldykorgan. Monitoring of proficiency is usually held twice a year, at the beginning and at the end of the year, showing the progress of young children's abilities.

The purpose of the pilot testing is defining if the test complies as a tool for measuring the ability of students in the selected age group of kindergarten for further adaptation and widespread use by the Intellectual Schools.

For testing there was used the adaptive test which includes progressively becoming more complicated questions in the following sections: "Reading", "Mathematics" and "Phonology."

Pilot testing has showed that the test is designed for the selected age group. The test's sections Reading and Mathematics differentiated children into groups according to their learning abilities.

Plan for 2014
- adaptation of the monitoring system in the Intellectual Schools involving more children.

Initial monitoring of students' achievements in the Intellectual Schools opened in 2013

In order to diagnose the level of knowledge and skills of students to meet the expected results by sections and topics of the curricula of the Intellectual School the initial monitoring has been conducted in the newly opened schools in Karaganda, Aktobe, Shymkent, Atyrau, Taraz, Pavlodar, Kyzylorda.

Monitoring has been conducted:
- In the 7th and 8th grades in Mathematics and English language;
- In the 9th and 11th grades in Mathematics, Physics, Chemistry, Biology and English.

In total 4430 students have participated in the initial monitoring of students' achievements in 8 schools, including 2616 students with Kazakh language of study and 1728 - with Russian language.

Initial monitoring of students' achievements have been held in ***8 schools***

Students performance after the monitoring in "Mathematics" averaged 56.13%, quality of knowledge 10.65% (Table 7).

Table 7. The quality of knowledge and students achievement in Mathematics by the results after monitoring in the context of schools, %

School	Results after monitoring							
	Performance, %				Quality of knowledge, %			
	7th gr.	8th gr.	9th gr.	11th gr.	7th gr.	8th gr.	9th gr.	11th gr.
PMD in Aktobe	59.1	44.3	29.5	-	9.8	1.5	2	-
CBD in Karaganda	72	58.6	37.7	-	16.1	7.1	6.6	-
PMD in Shymkent	66.7	58.8	29.8	-	8.7	5.3	5.7	-
CBD in Shymkent	43.2	36	18	-	4.5	1.6	0	-
CBD in Atyrau	100	70.8	70.5	48.5	57	12.5	8.1	1.5
PMD in Taraz	96.3	73.3	26.9	50.5	46.9	13.9	0.5	6.7
CBD in Kyzylorda	94.7	74.5	56.8	57.8	44.7	8.3	2.5	5.9
CBD in Pavlodar	97.7	78	41.4	35.4	55.6	19.5	7.5	3.9
Total	**75.5**	**62.2**	**40.3**	**46.5**	**25.6**	**8.8**	**4.2**	**4.0**
The average value	**56.13%**				**10.65%**			

Academic performance and the quality of the 7th grade students' knowledge are much better than those of the students from other grades. Especially high results have been shown by the students from the four schools in Atyrau, Taraz, Kyzylorda and Pavlodar, these students passed the competitive selection to the Intellectual School under the new system.

Analysis of the distribution of students by 5 point scale showed that among 4359 students who participated for the test got:

- "5" - a total of 30 students, or 0.7%;
- "4" - 450 students, or 10.3%;
- "3" - 2001 students, or 45.9%
- "2" - 1878 students, or 43.1%.

Analysis of students performance in "English" showed that their performance after the monitoring was 49.7%, the quality of knowledge 10.4% (Table 8).

Table 8. The quality of knowledge and performance of students in English language after the monitoring in the context of schools, %

School	Results after monitoring							
	Performance, %				Quality of knowledge, %			
	7th gr.	8th gr.	9th gr.	11th gr.	7th gr.	8th gr.	9th gr.	11th gr.
PMD in Aktobe	68.4	42.4	32.2	-	22.8	9.9	0.7	-
CBD in Karaganda	79.3	55.6	41	-	42	16	3.3	-
PMD in Shymkent	49.2	38.3	11.3	-	8.7	5.3	0.7	-
CBD in Shymkent	56.8	43.2	20.1	-	13.6	5.6	0.7	-
CBD in Atyrau	87.7	65.3	37.3	60.3	37	15.8	3.3	9.8
PMD in Taraz	69.1	21.5	28	35.6	13.6	0	3.8	0.0
CBD in Kyzylorda	57	30.8	25.6	55.4	3.5	0.6	0	12.9
CBD in Pavlodar	87.2	47.3	64.7	58.5	27.1	10.7	13.5	9.1
Total	**68.5**	**43.1**	**32.6**	**54.4**	**21.8**	**8.1**	**3.2**	**8.3**
The average value	**49.7%**				**10.4%**			

The highest rate of quality of knowledge is among the 7th grade students.

Among 3658 students who participated in the monitoring for the test got:
- "5" - a total of 52 students, or 1.4%;
- "4" - 323 students, or 8.8%;
- "3" - 1485 students, or 40.6%
- "2" - 1798 students, or 49.2%.

Analysis of the results for "Physics" showed that students performance after the monitoring was only 19.2%, and the quality of knowledge 0.45% (Table 9). There were no students who got 4 or 5 for the test in the 9th grades .

Table 9. The quality of knowledge and performance of students in Physics after the monitoring in the context of schools, %

School	Results after monitoring			
	Performance, %		Quality of knowledge, %	
	9th gr.	11th gr.	9th gr.	11th gr.
PMD in Aktobe	13.3	-	0	-
CBD in Karaganda	10.9	-	0	-
PMD in Shymkent	11.3	-	0	-
CBD in Shymkent	6.5	-	0	-
CBD in Atyrau	1.9	17.9	0	0.5
PMD in Taraz	11.4	36.2	0	1.0
CBD in Kyzylorda	1.9	37.3	0	0.0
CBD in Pavlodar	6.2	37.1	0	1.7
Total	7.8	30.5	0	0.9
The average value	19.2%		0.45%	

Among 1878 students who participated, for the test got:

- "5" - 0 students;
- "4" - 5 students, or 0.3%;
- "3" - 273 students, or 14.5%
- "2" - 1600 students, or 85.2%.

Analysis of the results in "Chemistry" showed that students performance after the monitoring was only 33.8% and the quality of knowledge 1.8% (Table 10). Among the 9th grade students of the schools in Taraz and Kyzylorda, and the 11th grade students of the school Taraz there were no students who got 4 or 5 for the test.

Table 10. The quality of knowledge and performance of students in Chemistry after the monitoring in the context of schools,%

School	Results after monitoring			
	Performance,%		Quality of knowledge,%	
	9th gr.	11th gr.	9th gr.	11th gr.
PMD in Aktobe	57.7	-	2.7	-
CBD in Karaganda	60.7	-	5.5	-
PMD in Shymkent	44.7	-	4.3	-
CBD in Shymkent	51.8	-	2.2	-
CBD in Atyrau	13.8	46.9	0.5	1.6
PMD in Taraz	10.3	21.9	0	0.0
CBD in Kyzylorda	34.8	23.3	0	4.9
CBD in Pavlodar	37.5	21.2	1.5	0.6
Total	**37.4**	**30.2**	**2.0**	**1.6**
The average value	**33.8**		**1.8**	

Among 1882 students who participated, for the test got:

- "5" - 1 student 0.1%;
- "4" - 34 students, or 1.8%;
- "3" - 627 students, or 33.3%
- "2" - 1220 students, or 64.8%.

Monitoring for "Biology" has been conducted only in four schools, as there are several training programs for this subject, schools use different programs. All this makes equal treatment impossible to monitor students' performance, analyse and compare the results.

Analysis of the results of monitoring in Biology conducted in four schools showed that students' performance after the monitoring was only 40.5%, the quality of knowledge - 0.2% (Table 11).

Table 11. The 9th grade students' quality of knowledge and performance in Biology according to the results of monitoring in the context of schools, %

School	Results after monitoring	
	Performance, %	Quality of knowledge, %
PMD in Aktobe	49.0	0.0
CBD in Karaganda	33.9	0.0
PMD in Shymkent	37.6	0.0
CBD in Shymkent	43.2	0.7
Total	**40.5**	**0.2**

Among 612 students who participated, for the test got:
- "5" - 0 students;
- "4" - 1 student or 0.2%;
- "3" - 247 students, or 40.4%;
- "2" - 364 students, or 59.5%.

Comparison of the results of monitoring per subjects by grades have shown that students have low academic performance and quality of knowledge in all grades and in all subjects.

However, after the competitive selection the Intellectual Schools were entered by students from secondary schools who had high academic performance. Low results of the initial monitoring shows a large gap in the quality of teaching students studied according to the State Compulsory Standard of Education, in comparison with the expected results of the Intellectual Schools' curriculum.

According to the results of the initial monitoring in all schools were conducted seminars for teaching staff to review the results of the initial monitoring, their use by subject teachers, methodical associations, school administration to improve the quality of the educational process, organize individual work with students and inform parents.

The results of the initial monitoring have been considered at meetings of the teachers' council and teaching unions. There was made a plan of activities for the organization of private lessons and consultations to provide educational support for students to address gaps in education. Awareness-rising work was done with parents.

Plan for 2014
- initial monitoring of students' achievements in 5 newly opened schools.

Monitoring of students in primary and high schools in Mathematics and language subjects

Within the project with CITO on establishing a system for monitoring students' achievements the development of exercises is continued for the subject "Mathematics" for the 7th and 11th grades and started for the 8th and 12th grades. The developers of the test exercises are 30 teachers of the Intellectual Schools, for whom four training seminars were held with Cito experts . Quality of the elaborated exercises has been defined by the Cito experts. During the year the bank of testing exercises was created (Table 12).

Table 12. Information on the bank of testing exercises in Mathematics

	7th grade	8th grade	11th grade	12th grade	Total
Elaborated	900	283	891	279	2353
Were examined	900	283	891	279	2353
Total excersises in the bank	900	283	891	279	2353

To determine the quality of test tasks there the practical approval within 7th and 11th grades was taken place in January and April in Intellectual Schools of Astana, Kokshetau, Taldykorgan, Semei, Ust-Kamenogorsk cities. 616 students of 7th grades and 404 students of 11th grades were involved in the practical approval.

In September the first monitoring study on evaluation of academic achievements on mathematics among students of 7th and 11th grades in 10 Intellectual Schools was taken place.

1133 students of 7th grades and 1266 of 11th grades took part in it. The testing was carried out on 5 sections of mathematics: Numbers, Algebra, Geometry, Statistics and Mathematic simulation. As regards to achievement level the students were distributed ambiguously (Table 13).

Table 13. Distribution of Intellectual Schools students on achievement levels (%)

Year	Beginning	Basic	*Advanced*	*High*
7th grade	8,0	22,0	49,0	21,0
11th grade	29,5	20,5	37,4	12,7

Students' achievement levels developed by the teachers of Intellectual Schools in cooperation with international consultants:

1. **Beginning level –** a student has a common notion of mathematical terminology. Practical skills are mastered by him insufficiently.
2. **Basic level –** a student is able to give the definitions to the terms, notions; able to use mathematical language, laws and regularities, terms and concepts; able to choose and apply the appropriate mathematical knowledge, skills and abilities; able to make coherent conclusions.
3. **Advanced level –** a student knows the theoretical material; is able to apply the knowledge, abilities and skills while solution the tasks in nonstandard and non complicated situation; able to prove noncomplicated statements. The student is at home with mathematical language and mathematical tools; able to interpret and convert the nonstandard task into more understandable and comprehensible level; establish links between the sections.
4. **High level –** a student is at home with mathematical language and mathematical tools; is able to interpret and convert the nonstandard task into more understandable and comprehensible level; establish links between the sections.

According to the results of CPM monitoring the reports for each student, reports at grades' level and parallels, for the teachers and methodic associations with the indication of sections, education program subjects and examined skills that caused the difficulties for the students were prepared.

According to the results of the reports the schools have prepared «Information cards for parents» with indication of date and time of additional training with the purpose of shortage elimination.

Individual progress of the students will be evaluated during the next monitoring in January 2014.

Plan for 2014

- Conduction of students' academic achievements monitoring on «Mathematics» in 7, 8, 11 and 12 grades.

The development of monitoring system for the following subjects «Kazakh as a second language», «Russian as a second language» and «English» for 7th grade has started. With the purpose of determination of general approaches in the development of language subjects monitoring system, development of test tasks based on Common European Framework of Reference for Languages (CEFR) a training workshop for 30 subject teachers and AEO employees was held.

Total there were developed 763 test tasks on three language subjects for evaluation of four language skills "Reading", "Audition", "Writing", "Speaking" 358 of which were examined by the Cito experts. (Table 14).

Table 14. Information of bank of language subjects test tasks

	Kazakh		Russian		English	
	developed	Undergone an examination	developed	Undergone an examination	developed	Undergone an examination
Audition	122	60	102	41	84	41
Reading	168	43	94	93	118	41
Writing	19	15	18	7	9	5
Speaking	14	5	6	3	9	4
Total	**323**	**123**	**220**	**144**	**220**	**91**

Plan for 2014

- Practical approval of developed test tasks and testing procedure in 7th grades, development of test tasks for 8th grades of Intellectual Schools on language subjects;
- Holding of seminars and trainings on the issues of development and examination of test tasks and training of teachers on evaluation of " Speaking" skill.

2.5 Development of external summary independent system for graduates' evaluation

Cooperation work with Cambridge University International Examinations Council on the preparation for organization and holding of external summary evaluation of Intellectual Schools graduates was carried out: the technology was developed and practical approval was conducted.

To realize the project Cambridge University International Examinations Council has developed the examination materials, normative and instructional documents, in cooperation with CPM the training workshops for the specialists and teachers of Intellectual Schools on the standardization of students' examination works evaluation were conducted.

Within the pilot project in April 2013 Cambridge University International Examinations Council has carried out the independent examination of academic achievements among 12th grades students on the following subjects: Mathematics, Biology, Physics, and Chemistry in five Intellectual Schools in such cities as Astana, Kokshetau, Taldykorgan, Semei and Ust-Kamenogorsk.

Independent evaluation was held with the purpose of new format exams testing in accordance with international requirements for examinations in conditions of Intellectual Schools.

Checking of works and scoring was held in Center of Pedagogical Measurements with the participation of the international experts. Within the independent evaluation the consultant of Cambridge University International Examinations Council has carried out the inspection for the compliance of examinations conduction in Intellectual Schools of Astana, Kokshetau, and Ust Kamenogorsk cities with the international requirements and as a result of which the availability of all necessary conditions for examinations was confirmed.

Results of independent evaluation showed that on all mentioned subjects the students easily performed the tasks of closed type where they were offered to choose the true choice out of the five given.

However, they experienced some definite difficulties while performing the tasks of open type that required from the graduates the demonstration of skills for argumentative explanation, interpretation of offered charts, pictures, graphics, diagrams .

Especially troubled thing for the students was the solution of the problems on intersubject communications such as physics-mathematics, biology-chemistry. The obtained results have shown that the students have well-grounded knowledge, but their skills in application of knowledge in the definite conditions and new situations, information analysis and synthesis, critical thinking are not sufficiently developed.

For the preparation for the external evaluation of academic achievements of graduates in 2014 five training workshops for employees and teachers were held in cooperation with experts of Cambridge University International Examinations Council:

- Development of examination questions and checking of students' works (17 teachers).
- Assessment of a student's oral speech skill of English (28 teachers).
- Allocation of points and evaluation of students' examination works (48 teachers).
- Operating processes of external evaluation (10 AEO and CPM employees).
- Development of efficient skills of students in English language (30 teachers).

For conduction of students' academic achievements external evaluation in 2013-2014 academic year the necessary documents are prepared:

- Examination materials for 5 subjects (18 examination booklets);
- Instructions for performance of course work as a component of external evaluation (3 instructions);
- Recommendations on the conducting of oral examination and practical parts of exams;
- Documents of examinations administrations (28 documents);
- Test specifications for 5 subjects in 11th grade and for 9 subjects in 12th grade.

Plan for 2014

- Organization and conduction of external independent summary evaluation of academic achievements of 12th grade graduates in 5 Intellectual Schools (Astana, Kokshetau, Semei, Taldykorgan, Ust-Kamenogorsk cities) and 11th grade graduates in 10 Intellectual Schools (Astana, Kokshetau, Semei, Taldykorgan, Ust-Kamenogorsk, Karaganda, Shymkent, Uralsk, Aktobe cities) in collaboration with Cambridge University International Examinations Council.
- Participation of CPM employees in activity of Committee on evaluation and approval of examination questionary in Cambridge.
- Preparation of testing specifications for 6 subjects in 5th grade and for 12 subjects in 10th grade.
- Development of examination materials for external independent summary evaluation of 10th grade students in 2015-16 academic year and 5th grade students in 2017-18 academic year.
- Holding of training workshops for the Intellectual Schools teachers on the development of examination materials, carrying out of evaluation and checking of examination works.

2.6 Preparation for accreditation of Intellectual Schools

In accordance with Agreement between AEO and Cambridge University International Examinations Council the realization of project on the preparation of Intellectual schools for the international accreditation was started.

4 Intellectual Schools are ready international accreditation

For realization of the project two training workshops for administration team in 6 Intellectual Schools (Astana, Kokshetau, Semei, Taldykorgan, Ust-Kamenogorsk and Uralsk cities) on coordination of 9 standards for schools self evaluation and working out of approaches to quality assurance provision including self evaluation, external assessment and school development planning were held.

In the period from March to September the Intellectual Schools have conducted self activity evaluation process in accordance with 9 standards. According to self evaluation results Cambridge University International Examinations Council experts in cooperation with CPM employees have held the external assessment.

In the course of external assessment and visits:

- The review of self evaluation forms prepared by the schools, and evidence collected in support of academic achievements in accordance with the standards;
- Meeting with the school administration, members of each working group on the standards as well as with the teachers and students, and in some schools with the parents;
- Attendance of definite quantity of lessons were conducted.

The conclusions testify that all schools have strong points in activity organization as well as the aspects to be improved.

Strong points:

- School staff headed by the director and administration have shown the firm commitment for the process of self activity evaluation
- The Schools have applied the approaches for self evaluation holding in compliance with the recommendations.
- For consideration of each standard the appropriate teams were formed. Team leaders have shown well and detail understanding of their standards' content.
- In some schools the parents and employees are equally represented in the teams of separate standards evaluation.
- Each school was well prepared for the visit and had an abundant and detailed set of evidence in a kind of documents.
- Some schools have developed special questionnaires and held an opinion poll to collect the evidence in support of self evaluation.
- AEO has a well defined and coherent policy for the each management of each school.
- AEO policy is distinctly conceived and authenticated in evidence.
- School values are evident in all schools.
- Work organization chart and documentation on lessons' planning, supervision reports give the necessary information for the confirmation of evidence base on the standards concerning education programs, resources, teaching and education.
- The students are the dignified representatives of their schools from their language skills and intelligence point of view.

- Analysis of evaluation procedures provided by AEO is the valuable source for self evaluation of activity results.
- Clever, hard working students to the full extent participate in all directions of school program and strive to use all possibilities provided by the schools. Students especially like active and research forms of education. The students have highly estimated the global prospects and project works.
- Focus on trilingualism is appreciated by the students as well as their parents. The employees at all levels are working hard to improve their language skills, English language in particular.
- In the schools there is favorable education environment with good relationship is established : teacher-student», «student-student». One student described the school as a "second home".
- There is a constant aspiration to the professional development and innovations when the employees improve their qualification in the school as well as beyond; and also contribute in preparation and distribution of materials online. .
- Teams of international teachers are highly appreciated for their essential contribution in school development, for the development and advancement of best practice.
- In each school there present a strong support of the parents who repose trust in the school and their children attend the school with pleasure. The parents appreciate the possibilities provided by the school and they were not able to identify the areas for improvement of school activity. As the evidence of compliance with the international standards the schools have a considerable quantity of useful data (sometimes too many).

Aspects which can be improved:

- Provision of analysis of activity results in a greater degree, accentuation of strong and weak points, and respectively the key priorities for development, but not the descriptive information.
- Insufficient attention to the basic grade of education in two schools which have the primary school.

Readiness of Intellectual Schools to the International Accreditation

According to the opinion of the international experts:

The schools are well provided with local and international teachers working in cooperation for realization of Integrated education program.

The students like the developed and implemented policy of trilingualism, and they succeed in language learning area.

Students' academic results are very high, sufficient for enrollment in the universities in Kazakhstan as well as abroad.

Vision and values of the intellectual schools are at the adequate level, the examples of excellent communication with local community were made.

Administration approaches as regards to the support and development of the staff are very strong including the significant activity for professional development of the teachers.

In accordance with the recommendation of international experts to the process of accreditation the following schools are ready:

- Intellectual School of Astana city (in case of availability of school own building);

- Intellectual School of Semei city;
- Intellectual School of Taldykorgan city;
- Intellectual School of Ust-Kamenogorsk.

The following schools may pretend for international recognition:

- Intellectual School of Kokshetau city provided that all grades of primary school would be completed with school enrolment as it is the requirement of some international agencies.
- Intellectual School of Uralsk city will be able to submit an application for the participation in the international accreditation when it complies with its requirements connected with duration of activity (not less than three years).

Plan for 2014

- The selection of accreditation agency and submission of the application for the accreditation of four schools.
- Organization of self assessment of Intellectual Schools in Pavlodar, Taraz, Kyzylorda, Atyrau, Aktobe, Karaganda, Shymkent, (PMD andChBD).

SECTION 3.
STUDENTS OF INTELLECTUAL SCHOOLS

3.1 School enrolment

In 2013-2014 academic year as of December31, 2013 the quantity of the students in fifteen Intellectual Schools consists of 9700 students, 5682 out of them with Kazakh language of education and 4018 – with Russian language (Table 15).

Number of Intellectual Schools students consists of ***9700 students***

Table 15. Number of Intellectual Schools students

School	Total students.	Kazakh medium of teaching	Russian medium of teaching
PMD, Astana city	973	503	470
Intellectual School of Astana city	435	229	206
PMD, Aktobe city	651	392	259
ChBD, Atyrau city	666	351	315
ChBD, Karaganda city	688	347	341
PMD, Kokshetau city	757	437	320
ChBD, Kyzylorda city	537	382	155
ChBD, Pavlodar city	601	320	281
PMD, Semei city	704	416	288
PMD, Taldykorgan city	710	383	327
PMD, Taraz city	560	374	186
ChBD, Ust-Kamenogorsk city	673	469	204
PMD, Uralsk city	581	343	238
PMD, Shymkent city	649	407	242
ChBD, Shymkent city	515	329	186
TOTAL	**9700**	**5682**	**4018**

3.2 Virtual and vacation schools

With the purpose of training of general education organization of Republic of Kazakhstan for the competitive selection in the Intellectual Schools and revelation of student capable to study the natural mathematical sciences the projects named «Virtual school» and «Vacation school» are being realized .

With the help of «Virtual School» web site the applicants may be registered for the education in the regional Intellectual School, obtain the tasks and recommendations for the execution; get the individual consultation of the teacher. The number of users registered on the site in 2013 consisted of 5649 persons, and it is for 2724 persons more than in 2012.

Table 16 shows the information of the number of «Virtual School» participants in 2013 who performed the tasks and submitted their works for the checking by «network teachers» of Intellectual Schools.

Table 16. Information of Virtual School participants

№	School	Number of Virtual Scholl participants, pers.		
		total	Kazakh medium of teaching	Russian medium of teaching
1	PMD, Astana city	343	218	125
2	PMD, Kokshetau city	101	46	55
3	ChBD, Ust-Kamenogorsk city	128	106	22
4	PMD, Semei city	46	28	18
5	PMD, Taldykorgan city	71	53	18
6	PMD, Uralsk city	180	125	55
7	PMD, Aktobe city	95	58	37
8	ChBD, Karaganda city	73	30	43
9	PMD, Shymkent city	362	299	63
10	ChBD, Shymkent city	50	33	17
TOTAL		**1449**	**996**	**453**

Number of Virtual School participants is *1449*

The students who successfully performed the tasks of Virtual School are invited to participate in the project of «Vacation school» for the full-time attendance on the main subjects and the consultation on the subjects of competitive selection. In 2013 52% of «Virtual School » participants successfully managed the tasks and were invited to the education in «Vacation School» (Table 17).

Table 17. Information of Vacation School participants

№	School	Number of Vacation School participants, pers.		
		total	Kazakh medium of teaching	Russian medium of teaching
1	PMD, Astana city	251	156	95
2	PMD, Kokshetau city	60	28	32
3	ChBD, Ust-Kamenogorsk city	49	43	6
4	PMD, Semei city	21	16	5
5	PMD, Taldykorgan city	38	29	9
6	PMD, Uralsk city	144	100	44
7	PMD, Aktobe city	62	34	28
8	ChBD, Karaganda city	29	8	21
9	PMD, Shymkent city	83	58	25
10	ChBD, Shymkent city	13	6	7
TOTAL		**750**	**478**	**272**

The number of «Vacation School» participants in 2013 was for 537 persons more than in the previous year.

Number of «Vacation School» participants is *750*

The realization of «Virtual School» and «Vacation School» projects was held in cooperation with the regional and municipal education administration. As a result of this work 16,3% of «Virtual School» project participants and 39,5% «Vacation School » project participants enrolled in the Intellectual Schools. With the purpose of general administration improvement and addition of new options the site of Virtual School was advanced.

Plan for 2014

- Continue the cooperation with regional and municipal education administrations within the realization of «Virtual School», «Vacation School» projects
- Advance the system of «Virtual School» work efficiency monitoring
- Involve into the project the Intellectual Schools of Pavlodar, Atyrau, Taraz and Kyzylorda cities.
- Coverage of students of Republic of Kazakhstan regions where the Intellectual Schools are not available.

3.3 Elective course

Intellectual Schools students who have the achievements in the Academic Olympics, competitions of scientific projects and demonstrating the positive dynamics in knowledge quality had the opportunity of in-depth study of the subjects in foreign and national educational institutions during elective courses on physics, mathematics, chemistry, biology, informatics, cosmonautics as well as English language (language courses).

When selecting the elective courses AEO followed the degree of actuality and novelty of the course. Programs' content promoted the intellectual, creative, emotional development of the students, supposed the wide application of active education methods, orientation for modern education technologies.

Quantity of students completed the elective courses consisted of ***5508***

According to the results of elective courses conducted in the previous years the most quality ones were revealed. In 2013 in comparison with 2012 the number of participants increased for 5015. The quantity of courses extended for 7.

Table 18. Information of elective courses

№	Course name	Place	Number of students
1	Training on biology, chemistry and informatics in SARC named after Kolmogorov	SARC named after Kolmogorov, Moscow city, RF	20
2	Practical courses in experimental laboratory for young people XLAB	Gottingen city, Germany	12
3	Nauryz meetings	Taldykorgan city, Kazakhstan	65
4	Course on biology, chemistry in «IRPH « Phytochemistry»JSC	Karaganda city, Kazakhstan	25
5	Summer schools on the base of Intellectual Schools of Astana, Aktobe, Karaganda, Kokshetau, Semei, Uralsk, Ust-Kamenogorsk, Shymkent, Taldykorgan cities with participation of Bell Educational Services Ltd.	Astana, Aktobe, Karaganda, Kokshetau, Semei, Uralsk, Ust-Kamenogorsk, Shymkent, Taldykorgan	3046
6	Courses on cosmonautics in State budget educational institution– lyceum «International cosmic school named after V.N. Chelomey»	Baikonur city, Kazakhstan	55
7	Summer camp of Talanted Youth Center University Johns Hopkins University (CTY) with the selection of academic disciplines (Economics, cryptology, physics and etc.)	Carlisle city, Pennsylvania state, USA	6
8	Elective course on «Chemistry», «Biology», «Physics» and «English» subjects in FIF Technologies LLP, Singapore	Singapore city	40
9	Elective course on «Physics» and «English» in The Bell Educational Services Ltd., Great Britain	Saint Albans city, great Britain	15
10	Elective course on chemistry, biology, physics, physics and informatics in SARC named after Kolmogorova, Russia, Moscow	Moscow city, RF	40
11	Laboratory works for the students on physics and chemistry in XLAB, Germany	Gottingen city, Germany	30
12	Language courses in Bell Educational Services Ltd., Great Britain	Saint Albans city, Great Britain	44
13	FIF Technologies LLP (international partnership project)	Singapore city	90
14	Language courses in St. Johnsbury Academy, USA	Jay city, Vermont, USA	45
15	Language courses in South Kent School, USA	South Kent city, Connecticut, USA	22
16	Language courses in Shattuck St. Mary School, USA	Faribault, Minneapolis, USA	25
17	Language courses in Les Elfes, Switzerland	Verbier city, Switzerland	24
18	Royal Institute of Great Britain (Christmass meetings). Lectures on natural sciences, practical works in laboratories of Royal Institute	London city , Great Britain	23
Total			**3627**

Plan for 2014

- Search of new partners developing research and practical skills of the students;
- Elaboration of elective courses selection system ;
- Working out of courses quality evaluation;
- Advancement of group heads and partners reporting;
- Strengthening of work for children' safety provision;
- Search of national organization and increasing of courses on their base.

3.4 Participation of the students in the international and republican academic olympics , scientific competitions, conferences

968 students of Intellectual Schools have participated in 50 events of international and republican level and won 411 medals and about 100 diplomas (Table 19).

411 winners of Academic olympics and competitions of international and republican importance

Table 19. Information of winners' quantity

№	School	International academic olympics and competitions	Republican academic olympics and competitions	Total
1	PMD, Astana city	13	51	64
2	Intellectual School of Astana city	14	44	58
3	PMD, Kokshetau city	10	15	25
4	PMD, Semei city	10	46	56
5	PMD, Taldykorgan city	30	28	58
6	ChBD, Ust-Kamenogorsk city	46	24	70
7	PMD, Uralsk city	16	17	33
8	PMD, Aktobe city	6	7	13
9	ChBD, Karagnda city	9	14	23
10	PMD, Shymkent city	4	1	5
11	ChBD, Shymkent city	1	5	6
	Total	**159**	**252**	**411**

In November the students of Intellectual Schools have participated in worldwide olympiad on robotechnics (WRO, Republic of Indonesia) where represented our country for the first time and gained the status of National organizer WRO in Republic of Kazakhstan. This status allows for Kazakhstan teams to participate in international final WRO which is held annually in different countries all over the world.

Plan for 2014

- Organization and training of teams on subjects of natural mathematics cycle.
- Conduction of subject educational meetings.
- Organization and holding of championship on robotechnics for the students of Intellectual Schools and secondary education organizations of Republic of Kazakhstan.

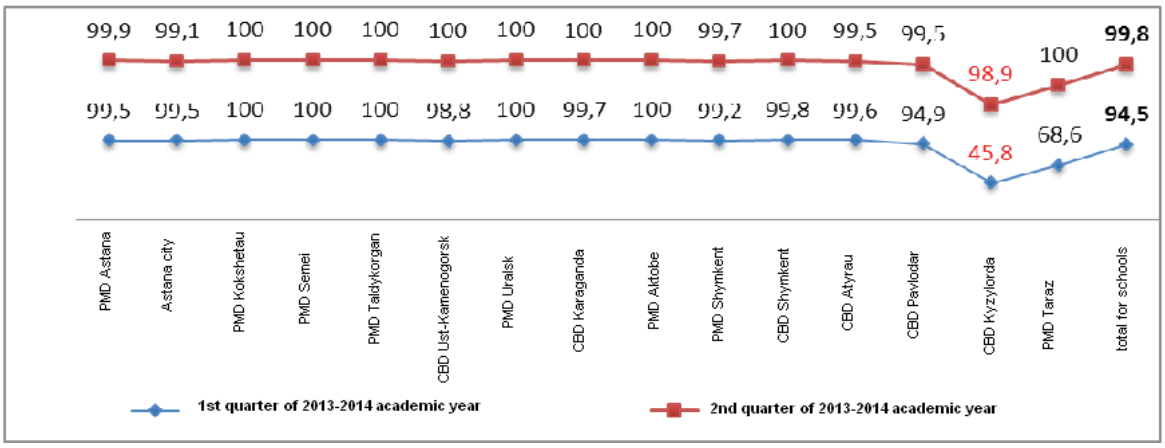
3.5 Progress and students' knowledge quality

By the end of second quarter of 2013-2014 academic year in 15 Intellectual Schools there 9637 students studied, among them 5642(58,5%) with Kazakh medium of teaching, 3995 (41,5%) with Russian medium of teaching.

Students' progress consists of 99,8%.

Students of 9 Intellectual Schools in cities of Kokshetau, Semei, Taldykorgan, Ust-Kamenogorsk, Uralsk, Karaganda, Aktobe, ChBD Shymkent, Taraz have finished the quarter without unsatisfactory marks with 100% of progress. The lowest results in Kyzylorda city - 98,9% (picture 3).

Picture 3. Progress of the students for 1 and 2 quarters of 2013-2014 academic year, %

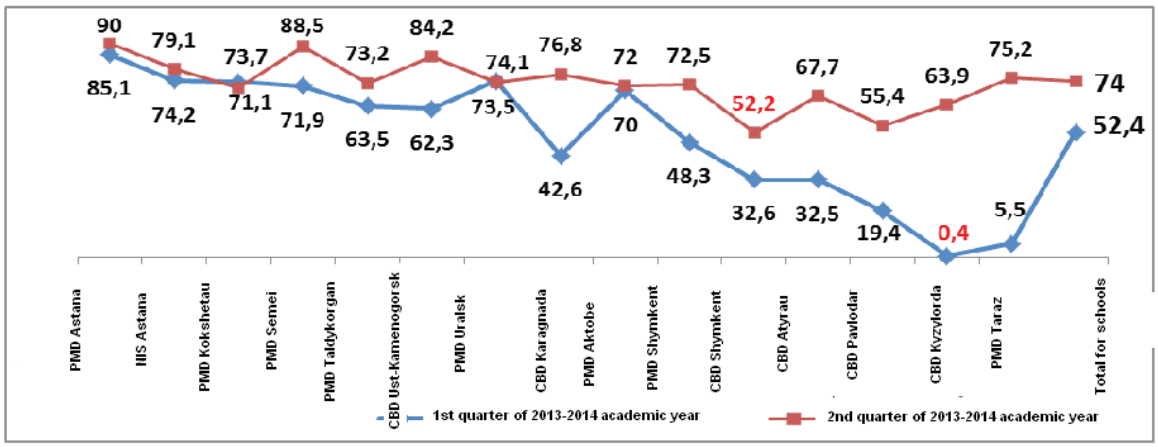


According to the results of second quarter the index of progress is higher than in the first quarter in all schools, hence the average meaning of this index is higher for 5,3%. The lower index in the first quarter is connected with the diffuculties of adaptation period that is strongly expressed in newly opened schools in Kyzylorda and Taraz cities where the students' progress was 45,8% and 68,6%.

According to the results of the second quarter of 2013-2014 academic year the quality of knowledge composed of 74,0%. Knowledge quality index in the grades with Kazakh medium of teaching is for 4,3% higher than with Russian medium of teaching. Index value is increased for 21, 6% in comparison with the first quarter.

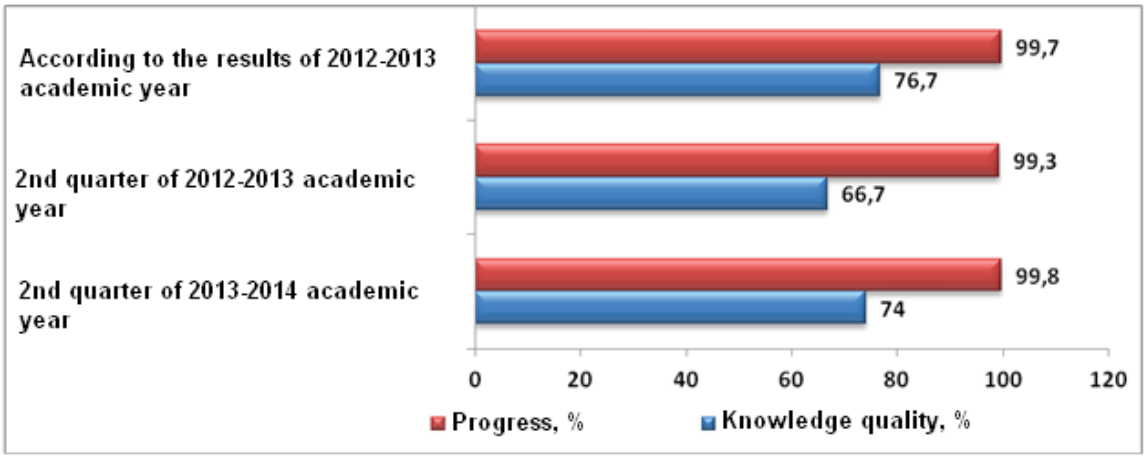
According to results of second quarter the highest progress were obtained by the students of Physics and Mathematics Direction School of Astana city (90,0%), and the lowest progress were in Chemistry and Biology Direction School of Shymkent city (52,2%). The students and teachers of new schools in Atyrau, Pavlodar, Kyzylorda and Taraz cities have successfully passed the adaptation. The quality of knowledge has increased for 35-70% in these schools. The students of the school in Taraz have significantly improved their results, the index increased from 5, 5% to 75,2% (picture 4).

Picture 4. Results of students' knowledge quality for 1, 2 quarters of 2013-2014 academic year, %



The analysis of data has shown that there is a positive dynamics of knowledge quality and progress in comparison with the second quarter of the last year. (picture 5). So, the average progress index is higher for 0,5%, knowledge quality - for 7,3%.

Picture 5. Results of knowledge quality and progress, %



The analysis of knowledge quality results has revealed that within the assessment system the index value in the grades with criterion assessment system is for 2,0% higher than in in the grades with traditional assessment system (Table 20).

Such a tendency is occurred for the first time during the implementation of criterion assessment system. The higher knowledge quality index in the grades with criterion assessment is concerned with the higher motivation of the students to achieve education goals in the conditions of objective and trustworthy assessment.

Table 20. Students' knowledge quality according to the results of II quarter of 2013-2014 academic year within assessment system %

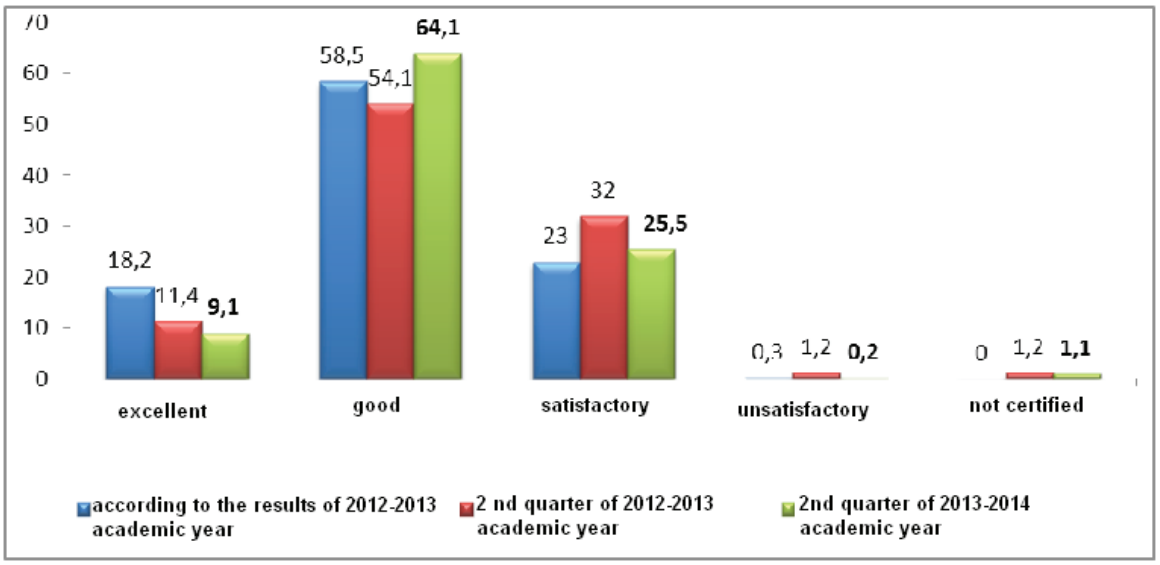
№	School	Knowledge quality, %		
		Traditional Assessment System	Criterion assessment system	Quality of school knowledge
1	PMD Astana city	-	90,0	90,0
2	Astana city	-	79,1	79,1
3	PMD Kokshetau city	81,3	67,6	71,1
4	PMD Semei city	-	88,5	88,5
5	PMD Taldykorgan city	-	73,2	73,2
6	ChBD Ust-Kamenogorsk	-	84,2	84,2
7	PMD Uralsk city	79,0	69,4	73,5
8	ChBD Karaganda city	77,0	76,7	76,8
9	PMD Aktobe city	81,4	67,7	72,0
10	PMD Shymkent city	91,0	64,0	72,5
11	ChBD Shymkent city	75,4	43,4	52,2
12	ChBD Atyrau city	74,5	57,6	67,7
13	ChBD Pavlodar city	45,5	65,9	55,4
14	ChBD Kyzylorda city	66,7	61,2	63,9
15	PMD Taraz city	69,5	81,3	75,2
Total:		**72,5**	**74,5**	**74,0**

The quantity of the students who have finished the second quarter of 2013-2014 academic year with «excellent» results composed of 880 (9,1%) students, with «good» results - 6175 (64,1%), with «satisfactory» - 2459 (25,5%) students, with «unsatisfactory» - 19 (0,2%) and 104 (1,1%) students were not certified.

Major of students finishing the second quarter with: «excellent» - in PMD schools of Astana city (21,2%) and Ust-Kamenogorsk (20,0%); «good» - in the schools of Semei city (77,8%) and Astana city (72,6%); «satisfactory» - in ChBD school of Shymkent city (47,8%); «unsatisfactory» - in the school of Kyzylorda city (1,1%). Timely and productive work with pure progress students reflected on the students' knowledge quality increasing.

Monitoring of students' progress according to the results of 2012-2013 academic year, second quarter of the last and current year showed that the highest percent of the students who got a «good» mark (64,1%), and the minimal percent of unsatisfactory mark (0,2%) was registered in 2-nd quarter of the current year. However, the quantity of the students with «excellent» mark is for 2,3% lower than the indexes of 2-nd quarter of the last year and for 9,1% lower than the results of 2012-2013 academic year (picture 6).

Picture 6. Results of the students according to the results of 2012-2013 academic year and 2 quarter of the last and current academic year, %



Final certification of the graduates

The graduates of 9, 11 and 12 grades of the Intellectual Schools have participated in the final certification in 2012-2013 academic year.

Examination materials are developed by the experts of CPM with the consultation support of Cambridge University International Examinations Council and directed to the evaluation of knowledge and knowledge application skills, search and processing of information with the help of analysis and synthesis, critical thinking, language skills.

The tasks are prepared in accordance with the expected education results of experimental Integrated education program (2010) for 9th, 12th grades students and experimental Integrated education program (2011) for 11th grade.

Final certification of 9th grade graduates.

In 2012 – 2013 academic year 1279 students have finished the 9th grade of Intellectual School including 769 students with Kazakh medium of teaching and 510 – with Russian medium of teaching.

In the 9th grades exams have been conducted: for 4 compulsory subjects: mother tongue, the second language, English, Mathematics and 2 subjects in choice from four: Physics, Chemistry, Biology and Computer science.

Analysis of the results showed that the 9th grade students' achievement after the examinations was 99.5% and quality of knowledge - 55.2%.

The highest quality of knowledge after the examinations among existing schools showed students of the 9th grades in Astana, PMD - 88.9%; Kokshetau - 80.4%; Taldykorgan - 74.3%; Ust-Kamenogorsk - 56.3% and the lowest result Semey - 33.3%.

Among the newly opened schools the highest quality of knowledge of students in Uralsk - 92%; Karaganda - 74.2%, Shymkent CBD -37.4%, Aktobe - 19.1%, and the lowest result Shymkent CBD - 12.6%.

Among 1279 students 79 got "5" for the exam, 627 - "4" and "5", 567 - "3" and 6 - "2". With one "4" 103 students passed the exam, with one "3" -306.

180 students of the 9th grade claimed for certificate with distinction, but according to the results of examination only 73 students confirmed the knowledge of subjects.

Table 21. Number and percentage of students who received a certificate of basic secondary education with distinction at the end of 2012-13 school year

N	School	Total students, pers.	Number of applicants	Number of owners, pers.	Share, % of the total number
1	PMD in Astana	72	14	14	19.4
2	Astana	48	3	2	4.2
3	PMD in Kokshetau	102	22	11	10.8
4	PMD in Semey	114	18	0	0.0
5	PMD in Taldykorgan	114	12	10	8.8
6	CBD in Ust-Kamenogorsk	88	21	9	10.2
7	PMD in Uralsk	138	22	16	11.6
8	CBD in Karaganda	183	21	7	3.8
9	PMD in Aktobe	142	8	1	0.7
10	PMD in Shymkent	143	8	2	1.4
11	CBD in Shymkent	139	31	1	0.7
Total		**1283**	**180**	**73**	**5.7**

The largest share of students who confirmed certificate with distinction is in the Intellectual School PMD in Astana - 19.4%. Low share is in the schools in Aktobe and CBD in Shymkent - 0.7%. There are no students who received a certificate of basic secondary education with distinction in Semey, their number significantly reduced in the schools of Kokshetau, Ust-Kamenogorsk and all newly opened schools.

Final assessment of the 11th grades students.

Among those who had chosen the following subjects 178 students passed exam in native language in the 11th grades, 161 students - in the second language in 5 schools of Astana, Kokshetau, Semey, Taldykorgan , Ust-Kamenogorsk..

The quality of knowledge on the results of the two exams in native and the second language was 99.3%. Three students from Ust-Kamenogorsk school got "3" for native language.

Among 178 students in the native language 82 students or 46% got "5", 93 or 52.2% got "4", 3 students or 1.7% got "3".

Among the students who passed their native language, 26 are candidates for the sign "Altyn Belgi" and 19 - for the certificate with distinction. Following the results of the examination 7 persons have not confirmed the sign "Altyn Belgi" and 5 people - certificate with distinction.

Thus the most part of applicants received the minimum scores required for "5" grade.

Among 161 students who passed the second language, 96 students or 59.6% got "5", 65 students or 40.4% - "4".

Exam was passed by 27 applicants for the sign "Altyn Belgi" and 4 applicants for the certificate with distinction, who confirmed their knowledge.

But 9 students among the applicants received the minimum score required for "5" grade.

Final assessment of the 12th grades graduates.

451 students graduated the 12th grade in 2012 - 2013 academic year from the Intellectual Schools in 5 cities of Astana, Kokshetau, Semey, Taldykorgan, Ust-Kamenogorsk, among them 262 students with Kazakh language of studying and 189 - with Russian.

Final assessment was held for 6 compulsory subjects and 1 elective subject. Students who selected for the UNT optional subject, additionally passed one more test.

For English graduates passed the International IELTS.

Analysis of the results showed that student performance on the basis of examinations was 100%, the quality of knowledge 99.6%.

Average IELTS score was 5.6, the students from the PMD school of Astana had the highest rate - 6.2, and graduates of Kokshetau had the lowest one - 5.4.

Following the results of assessment 66.5% or 300 students received a certificate with the highest score - 125, 19.5% or 88 students received certificates with 121 score.

79 students claimed for the certificate with distinction and the sign "Altyn Belgi", 78 students confirmed it (a girl from the Intellectual School of Ust-Kamenogorsk left this number), 46 students claimed for the certificate with distinction, 44 - confirmed (2 graduates from Ust-Kamenogorsk could not confirm).

78 students have received certificate with distinction and the sign "Altyn Belgi"»

44 students have received certificate with distinction

Among excellent students 78 students of each the 6th received certificate with distinction and a sign "Altyn Belgi", 44 students or each the 10th - certificate with distinction.

Average IELTS score among the applicants for the sign "Altyn Belgi" was 6.2 points, among applicants for a certificate with distinction - 6.0. 89 students scored 6.5 and higher, 22 students -7, 0, 2 students -7, 5 and 1 student - 8.0. Three students who had received the highest scores graduated from the PMD school of Astana;

Table 22. Percentage of graduates who have received a certificate of secondary education with distinction and a sign "Altyn Belgi" following the results of the academic year 2012-13

N	School	Total students	Number of holders of certificate with distinction	Number of holders of «Altyn Belgi»	Share of the holders of certificate with distinction	Share of the holders of «Altyn Belgi»
1	PMD in Astana	86	12	18	14.0	20.9
2	PMD in Kokshetau	82	7	8	8.5	9.8
3	PMD in Semey	80	8	5	10.0	6.3
4	PMD in Taldykorgan	79	5	9	6.3	11.4
5	CBD in Ust-Kamenogorsk	124	12	38	9.7	30.6
Total		**451**	**44**	**78**	**9.8**	**17.3**

Share of the holders of certificate with distinction amounted 9.8% of the total number of students who had graduated from the Intellectual Schools. The highest score in the PMD school in Astana (14%) and Semey (10%). The share of holders of "Altyn Belgi" was 17.3% of the total number of students who had graduated from the Intellectual Schools. Strong performance was seen in CBD schools in Ust-Kamenogorsk (30.6%) and PMD in Astana (20.9%).

The results of international exams

Intellectual Schools graduates annually pass an international exam IELTS, the results of which are recognized by the leading international universities worldwide. Some graduates according to their plans for entering universities also pass international exams SAT 1 or SAT 2.

In 2012-2013 academic year, 451 graduates of 5 Intellectual Schools passed the exam IELTS. average score was 5.6 with a maximum of 9.0. It should be noted that the average score of graduates from Astana was 6.1, which is a good result.

Table 23. IELTS test results for 2012-2013 academic year

School	Number of students	Listening (av.score)	Reading (av.score)	Writing (av.score)	Speaking (av.score)	Total (av.score)
PMD in Astana	84	6.2	6.2	5.6	6.2	6.1
PMD in Kokshetau	80	5.4	5.4	5.4	4.9	5.4
PMD in Semey	80	5.7	5.8	5.4	5.3	5.6
PMD in Taldykorgan	79	5.6	5.8	5.0	5.4	5.5
CBD in Ust-Kamenogorsk	124	5.5	5.5	4.9	5.1	5.3
Total / Average	**451**	**5.7**	**5.7**	**5.3**	**5.4**	**5.6**

Among all students the highest scores were received by: one student from the Intellectual School of Physics and Mathematics direction in Astana - 8 scores, 2 students from the Intellectual School of Physics and Mathematics direction in Astana - 7.5 scores, 22 students - 7 scores and 64 student s - 6.5 scores. 7 students received the lowest score - 3.5.

In the international examination SAT-1, students passed Mathematics, critical thinking and writing. For successful entering the universities of the United States it is enough to score at least 500 points in each subject at the maximum score-2400.(9 students from Astana and Ust-Kamenogorsk passed the exam, their results are respectively 1709 and 1441 scores, the average score for the two schools - 1575.

SAT-2 - an international exam in two core subjects (Mathematics and Physics, Mathematics and Chemistry) was passed by 19 students from Astana, Kokshetau and Semey. Their results were 2217, 1400 and 1973 scores, the average score for the three schools - 1863.

Table 24. The results of international exams

Exam	Number of participants	The maximum score	Result of the Intellectual Schools
SAT-1	Astana-8	2400	1709
	Kokshetau-1		1441
SAT-2	Astana-3	2400	2217
	Kokshetau -1		1400
	Semey-15		1973
IELTS	451, of which Astana-84	9.0	5.6 6.1

According to the results there was prepared a brochure "Information on the results of international examinations of the Intellectual Schools' students in 2012 -2013 academic year."

Plan for 2014

- In accordance with the order of the Chairman of the Board of the AEO, all graduates of the Intellectual Schools must pass IELTS.

SECTION 4.
TEACHING STAFF

Work with teaching staff is aimed at the further professional development of teachers of acting schools, recruitment of newly opened schools with Kazakhstani and international teachers and their pre-training on the leveled courses and orientation days sessions.

4.1 Competitive selection of teachers

Competitive selection of Kazakhstani teachers

To arrange a competitive selection and to improve the quality of testing, the bank of test exercises includes open-ended questions designed to assess creative erudition, knowledge application in unusual situations.

Competition was 5 persons per one ***place***

Total 2423 applicants took part in the competition, among them 502 persons have been recommended for work in the Intellectual Schools. There has been formed a reserve of 217 teachers for the timely filling the vacancies.

In order to organize advanced training of teachers from newly opened schools in Almaty, Aktau, Petropavlovsk and Kostanay the teachers recommended for employment have been directed to the training courses in the program of the third (base) level, developed by the Centre of excellence in conjunction with the University of Cambridge. Advanced training reached 318 people.

Educating of teachers in this program helps to change the pedagogical thinking, introduces the innovative approaches of teaching, helps to better understand the specifics of work in the Intellectual Schools.

Hiring foreign teachers

In order to introduce international experience of teaching specialized disciplines, integrating local and foreign educational programs based on the best experiences of the world pedagogical practices the employment of foreign teachers in the Intellectual Schools has been continued.

Due to the increasing needs of the Intellectual Schools in foreign teachers, caused by introduction of an integrated educational program there have been attracted additional strategic partners for hiring foreign teachers:

- Teach Away - an international company, founded in 2003, specializes in the recruitment of teachers and management in education field. The Company works for hiring staff in more than 15 countries. A database has more than 160,000 candidates.
- Capita Education Resourcing - recruitment agency for teachers and administrative staff of schools from the UK.

Competition among foreign teachers was ***12 competitors per one place***

According to current statistics in 2013 the AEO considered about three thousand profiles of foreign teachers applying for vacant positions. The necessary documents have been audited: three letters of recommendation from previous employers, certificate of no criminal conviction of a

candidate, medical certification of ability to work. Each candidate passed two interviews: with the AEO representatives and School staff. Substantial assistance in the recruitment of foreigners has been provided by the foreign teachers working in the Intellectual Schools over 2 years.

Among 3000 applicants 260 foreign teachers have been hired.

Plan for 2014

- Continued work on recruiting of qualified Kazakhstani and foreign personnel to the newly opened schools;
- Improving the competitive process through the inclusion of a psychological test.

4.2 Qualitative composition of pedagogical staff

Kazakhstani pedagogical personnel

As of December 31, 2013, 1517 teachers, 260 foreign teachers, 28 - part-time, total - 1805 teachers work in the Intellectual Schools (Table 25).

Table 25. Total number of teachers in the Intellectual Schools

School	TEACHERS			Total teachers	Total teachers and persons equated to them	Total
	Teachers	Foreign teachers	Part-time teachers			
International School		4	4	8	1	9
Astana PMD	147	19	1	167	26	193
Astana IB	101	26	4	131	32	163
Aktobe PMD	108	17	2	127	28	155
Atyrau CBD	74	11	4	89	26	115
Karaganda CBD	92	17	-	109	28	137
Kokshetau PMD	125	23	0	148	33	181
Kyzylorda CBD	78	6	2	86	25	111
Pavlodar CBD	86	5	-	91	24	115
Semey PMD	113	22	0	135	26	161
Taldykorgan PMD	124	22	0	146	30	176
Taraz PMD	77	6	3	86	22	108
Ust-Kamenogorsk CBD	113	24	6	143	29	172
Uralsk PMD	108	21	1	130	26	156
Shymkent CBD	76	18	1	95	24	119
Shymkent PMD	95	19	-	114	23	137
Total	**1517**	**260**	**28**	**1805**	**403**	**2208**

1513 (99%) of teachers have higher education, 222 teachers have master's degree and 11 people are candidates of science, 49 teachers - graduates of the program "Bolashak" (Table 26).

Table 26. Information about education and scientific degree of the Intellectual Schools' teachers.

SCHOOL	TOTAL	EDUCATION		BOLASHAK	PDP	SCIENCE DEGREE	
		Higher	Secondary specialized	incl. graduates of the program «Bolashak»	incl. graduates of one-year course based on NU	Master	PhD
Astana PMD	147	147	-	9	19	18	1
Astana IB	101	101	-	7	14	19	1
Aktobe PMD	108	108	-	2	7	11	1
Atyrau CBD	74	74	-	2	3	9	0
Karaganda CBD	92	92	-	3	6	10	2
Kokshetau PMD	125	124	1	0	3	23	0
Kyzylorda CBD	78	78	-	-	-	9	0
Pavlodar CBD	86	86	-	-	4	17	0
Semey PMD	113	113	-	4	5	13	2
Taldykorgan PMD	124	121	3	7	3	10	1
Taraz PMD	77	77	0	3	6	8	1
Ust-Kamenogorsk CBD	113	113	-	8	2	23	0
Uralsk PMD	108	108	-	1	13	11	2
Shymkent CBD	76	76	-	3	-	21	0
Shymkent PMD	95	95	-	-	-	20	0
Total	**1517**	**1513**	**4**	**49**	**85**	**222**	**11**

Analysis of the experience of the teachers reveals that there is preserved the balance between young professionals (category "no experience" and "experience up to 10 years") - 46% from the general staff and experienced teachers (category" experience of 11-20 years", " 21-30", "31-40", "41 and above") - 54% in the Intellectual Schools (Table 27).

Table 27. Information on the experience of the Intellectual Schools' teachers

School	No experience	Up to 10 years	11-20 years	21-30 years	31-40 years	41 and more	Total
Astana PMD	3	62	39	30	11	2	147
Astana IB	11	47	29	10	4	-	101
Aktobe PMD	13	38	28	21	6	2	108
Atyrau CBD	7	34	17	13	3	-	74
Karaganda CBD	6	32	29	16	8	1	92
Kokshetau PMD	3	40	42	28	11	1	125
Kyzylorda CBD	5	28	28	13	4	-	78
Pavlodar CBD	8	34	27	14	3	-	86
Semey PMD	4	41	28	27	13	0	113
Taldykorgan PMD	6	42	39	26	8	3	124
Taraz PMD	0	25	22	18	10	2	77
Ust-Kamenogorsk CBD	9	46	20	26	12	-	113
Uralsk PMD	4	54	23	24	3	-	108
Shymkent CBD	11	36	18	10		1	76
Shymkent PMD	7	49	21	16	2	-	95
Total	**97 (6%)**	**608 (40%)**	**410 (27%)**	**292 (19%)**	**98 (7%)**	**12 (1%)**	**1517**

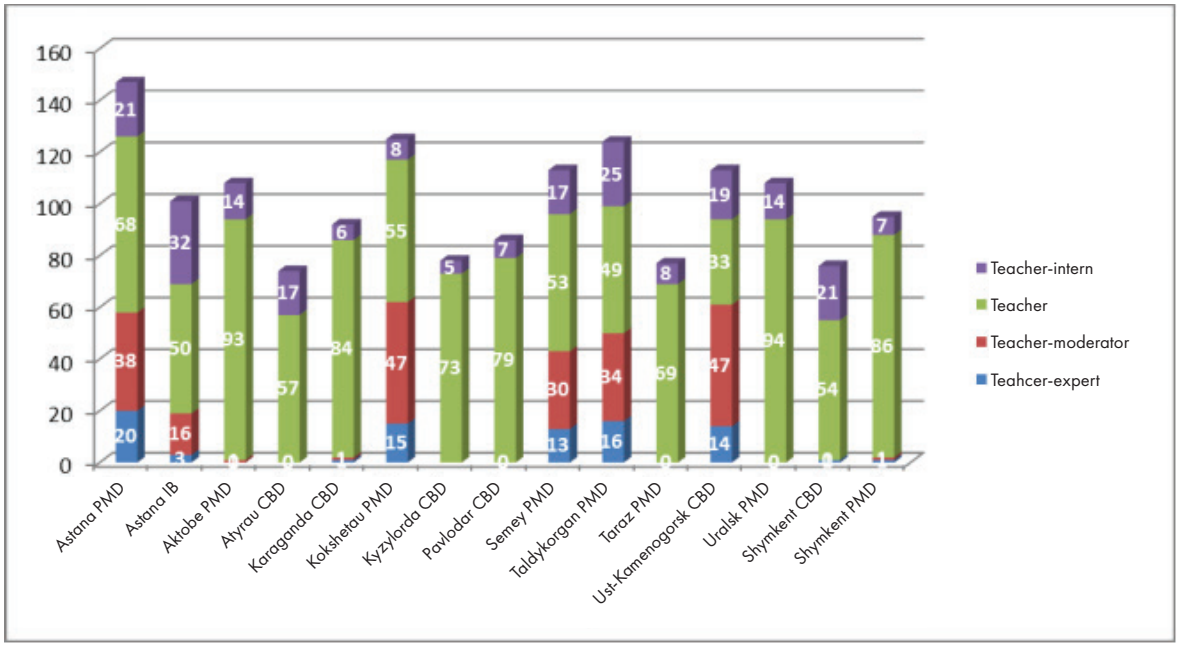
Analysis of the qualitative composition of teachers by age showed that 65% of the total number of teachers of the Intellectual Schools are in the age group up to 40 years. The largest share of young professionals under 30 is found in the Intellectual School of Astana and accounts 54% of the total number of the teachers of this school.(Table 28).

Table 28. Age composition of the Intellectual Schools' teachers

School	under 30	31-40 years	41-50 years	51-58 years	59 and older	Total
Astana PMD	47	37	37	23	3	147
Astana IB	55	28	12	6	-	101
Aktobe PMD	42	27	28	10	1	108
Atyrau CBD	41	10	13	10	-	74
Karaganda CBD	26	33	27	4	2	92
Kokshetau PMD	44	32	33	12	4	125
Kyzylorda CBD	30	19	21	8	-	78
Pavlodar CBD	30	35	13	7	1	86
Semey PMD	35	25	26	26	1	113
Taldykorgan PMD	42	29	34	14	5	124
Taraz PMD	20	22	24	11	0	77
Ust-Kamenogorsk CBD	46	27	19	21	-	113
Uralsk PMD	44	29	27	7	1	108
Shymkent CBD	26	27	17	4	2	76
Shymkent PMD	49	23	19	3	1	95
Total	**577 (38%)**	**403 (27%)**	**350 (23%)**	**166 (11%)**	**21 (1%)**	**1517**

Following the results of certification in the network of Intellectual Schools 5% of teachers-experts, 14% of teachers-moderators, 65% of teachers and 14% of teachers-in-training (Diagram 1).

Diagram 1. Information about the level of pedagogical skills of the Intellectual Schools' teachers.



It should be noted that a significant number of teachers leaders of the Intellectual Schools have moved to the Centre of excellence, Center for pedagogical measurements, Center for educational programs and Educational Resource Center for the development of educational programs and educational resources, assessment tools, expert and coaching work. That confirms the high level of professionalism of the teachers.

Foreign pedagogical personnel

Since the beginning of the project the total number of foreign teachers in the Intellectual Schools have increased from 35 people in 2011-2012 school year to 260 in 2013-2014. Table 29 shows the number of foreign teachers in the context of schools and subjects.

Table 29.Number of foreign teachers in the context of schools and subjects

Foreign teachers	Intern. school	Astana PMD	Astana	Aktobe	Atyrau	Karaganda CBD	Kokshetau PMD	Kyzylorda CBD	Pavlodar CBD	Semey PMD	Taldykorgan PMD	Taraz	Oskemen	Uralsk	Shymkent CBD	Shymkent PMD	TOTAL
Group leader	0	1	1	1	0	1	1	0	0	1	1	0	1	1	1	1	11
Deputy director	0	1	1	1	0	1	1	0	0	1	1	0	1	1	1	1	11
English	0	4	4	3	2	3	3	1	1	4	4	1	4	4	3	5	46
Mathematics	0	4	2	4	2	3	4	1	1	5	4	1	4	3	3	3	44
Biology	0	2	1	1	3	2	2	1	1	2	1	1	2	2	2	2	25
Informatics	0	3	2	1	1	1	3	1	1	1	3	1	2	2	1	1	24
Art	0	1	1	1	1	1	1	1	0	1	1	1	1	1	2	1	15
Chemistry	0	2	2	1	1	1	2	1	0	1	1	0	3	1	1	1	18
Physics	0	2	1	2	1	1	1	0	1	2	2	1	2	2	1	1	20
Global Perspectives	0	3	0	1	0	2	3	0	0	3	3	0	3	3	3	2	26
Economy	0	2	0	1	0	1	1	0	0	1	1	0	1	1	0	1	10
Librarian	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
History	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Theory of knowledge	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Primary school	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Physical culture	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	**4**	**26**	**19**	**17**	**11**	**17**	**23**	**6**	**5**	**22**	**22**	**6**	**24**	**21**	**18**	**19**	**260**

Foreign experts from 21 countries have been invited to work in the Intellectual Schools. Most teachers have come from such countries as: UK, USA, RSA, New Zealand, Australia and Canada (Table 30).

Table 30. Countries from which foreign teachers have been invited

N	School	United Kingdom	USA	RSA	New Zealand	Australia	Canada	Ireland	Malaysia	India	Other countries *	TOTAL
1	IS	2	2	0	0	0	0	0	0	0	0	**4**
2	IB	8	5	0	0	1	0	0	0	1	4	**19**
3	Astana PMD	6	6	5	2	1	2	0	0	0	4	**26**
4	Aktobe	4	8	1	2	1	0	0	0	0	1	**17**
5	Atyrau	3	3	1	1	0	1	0	0	0	2	**11**
6	Karaganda	3	4	1	2	3	1	1	0	0	2	**17**
7	Kokshetau	3	8	4	0	0	3	2	0	0	3	**23**
8	Kyzylorda	2	2	1	0	0	0	0	0	0	1	**6**
9	Pavlodar	1	1	0	1	1	0	0	0	1	0	**5**
10	Semey	8	7	0	1	1	1	0	0	0	4	**22**
11	Taldykorgan	11	5	2	0	1	1	0	1	0	1	**22**
12	Taraz	1	3	0	0	1	0	0	0	0	1	**6**
13	Oskemen	8	3	1	4	3	4	0	0	0	1	**24**
14	Uralsk	8	5	3	0	1	1	0	0	0	3	**21**
15	Shymkent PMD	6	2	2	4	0	0	1	0	1	3	**19**
16	Shymkent CBD	4	5	2	1	2	0	0	1	0	3	**18**
TOTAL		**78**	**69**	**23**	**18**	**16**	**14**	**4**	**2**	**3**	**33**	**260**

** Spain, Germany, Romania, Portugal, Malta, etc.*

4.3 Professional development of teachers at Intellectual Schools

Professional development of teachers

Differentiation of teachers training in new and existing Intellectual Schools is reflected in the topics, number of courses, advanced training after a competitive selection. An important aspect is the use of resources of Kazakhstan certified trainers' cluster, foreign teachers for intraschool courses, seminars, coach-sessions.

The schools uses opportunities for professional interchange, mentoring and coaching, methodological resources of the projects "Action Research", "Lesson study", "Team-teaching".

In accordance with the model of cascade training of the system of training the courses participants necessarily transmit the lessons learned in the pedagogical community, in various forms (methodical developments, programs, at a meeting of the teachers' council, teaching unions, trainings, coaching sessions, conferences, articles and speeches in the media).

34 further trainings courses have been held ***10434 persons trained***

There have been conducted 34 training courses, including:

- courses within schools by modules: "Kazakh language", "English", "ICT", "Pedagogical Knowledge" - for 2416 teachers;
- 22 courses within the country with the assistance of national and international experts for 7,832 teachers;
- 8 courses abroad at leading educational organizations for 186 teachers.

Total number of teachers trained was 10 434 people.

According to the content the courses can be grouped into the following thematic blocks:

- Specificity of educational processes of the Intellectual Schools and the use of ICT;
- Leadership and management;
- Development of language skills of teachers;
- Psychological support of the educational process;
- Support of international projects.

The following courses have been conducted on the study of modern approaches to integrated education, the use of information and communication technologies in the educational process, effective use of the material-technical base of the schools

N	Theme of the course	Target Audience	In cooperation with
1	«The conceptual approach to teaching Chemistry, Biology, Physics with use of laboratories»	teacher of Physics, Chemistry, Biology	Pasco Scientific (USA, California)
2	«New forms of media and pedagogical design»	teachers of the Intellectual Schools	VEEV Pte ltd, Singapore
3	«Effective use of ICT in learning and teaching»	teachers of the Intellectual Schools	Expert of the Teachers College, University JAMK, Finland
4	«3d graphics and multimedia»	IT teachers	ETS - Educational Testing Service (United States, Pennsylvania)
5	«Application of information-educational environment in the Intellectual Schools»	teaching staff and employees	Ai Line NS, LLP
6	«New Media in Education»	subject teachers	Public Foundation «WikiBilim»
7	«Promising digital applications for libraries of educational institutions»	school librarians	National State Library of Kazakhstan
8	«Managing Libraries in the 21st century. Development of libraries in higher education, planning and project development for school library space and collection of libraries of the 21st century «	school librarians	University of Pennsylvania, USA
9	«Deciding Olympiad problems»	teachers of Physics, Mathematics	Specialized academic center named after Kolmogorov MSU, Moscow
10	«In-depth study of Mathematics and Physics and preparing students for Olympiads (Online learning) «	teachers of Physics, Mathematics	Online learning center, Moscow
11	«Modern approaches of work organization and managing boarding school»	heads of boarding schools	David Spencer, a foreign teacher, Semey
12	«Pedagogical approaches to teaching and learning in the 1st and 2nd grades of primary school»	Primary school teachers	University of Helsinki, Finland
13	«Introduction into the competence-based pedagogy»	teachers of the Intellectual Schools	Center of modern pedagogy «Education without borders», Canada

During training students expanded their knowledge in the application of educational multimedia, usage of opportunities of web technologies, created training exercises, electronic educational resources. Developed materials have been posted on: http://biologiakz.wordpress.com/ and http://zhasnaturalist.wordpress.com/

Training in strategic planning, learning theories of effective management of educational activities have been carried out under the following courses:

N	Theme of the course	Target Audience	Performer
1	«Leadership in Education»	directors and deputy directors of the Intellectual Schools	University of Pennsylvania, USA
2	«Organizational, technical and psychological innovative methods in work of the heads of secondary schools by the example of South Korea»	deputy directors of the Intellectual Schools	University of Seoul, South Korea.
3	«Leadership and management of the school»	deputy directors of the Intellectual Schools	University of Sussex, Brighton, United Kingdom.

Author program for ***leadership development***

Materials of these courses have been reflected in many areas of the AEO's activity. Ideas of effective leadership and management have been taken into account when developing policy and regulatory documents. A group of teachers of Intellectual School in Taldykorgan has elaborated an author's program of developing leadership of students, teachers and parents:

- "First Steps to Leadership" (for children from kindergarten and pre-school);
- "The skills of the young leader" (for the 6-7th grades students);
- "7 skills of highly effective adolescents" (for the 8-9th grades students);
- "Path to Leadership" (for the 11-12th grades students);
- "The course of effective family" (for parents)
- "The course of effective leader" (for leaders of methodical associations and teachers).

The leaders of newly opened Intellectual Schools and 35 basic schools in the country have been trained under this program.

For the development of language skills of Kazakhstani teachers who teach English, the following courses have been organized:

N	Theme of the course	Target Audience	Performer
1	«Course of English language for subject teachers»	subject teachers	International Language School «Bell», UK
2	"Level language training in the context of CEFR (Common European Framework for Languages)"	subject teachers	Almaty branch of the Goethe Institute
3	"Remote English course English Discovery Online"	subject teachers	Edusoft, ltd
4	«Teaching subjects by the procedure of CLIL»	teachers of specialized subjects	International Language School «Bell», UK

The result of purposeful work for the development of language skills is the prepared contingent of teachers capable of teaching the subject in English. To date, the number of such teachers in the Intellectual Schools is 93 people, which represents 25% of the total demand of the Intellectual Schools for this category of teachers.

For the development of teachers' abilities to solve contemporary educational objectives, acquire the skills of pedagogical reflection, on this basis in a timely manner modify and update the content of their professional activities, transmit innovative pedagogical experience, the following courses have been conducted:

N	Theme of the course	Target Audience	Performer
1	«Psychological and educational support of students evolution in conditions of innovation school»	psychologists	«Center of psychological support of education «Tochka PSI», Moscow
2	«Technology of pedagogical reflection»	vice-principals, heads of teaching unions, teachers	Academy of higher degree, St. Petersburg
3	«Value-targeted unity of teaching staff: diagnosis and design»	Intellectual Schools' teaching staff	«Center of psychological support of education «Tochka PSI», Moscow
4	«Oratory»	teachers of the Intellectual Schools	«Center of oratory « Nika»

Within the training has been conducted diagnostics of teaching staff on the definition of sociological features of teams, level of adaptation of teachers, value-oriented unity and management of the Intellectual Schools. The results of diagnostics have been considered at a meeting of the Board of Directors of the Intellectual Schools, the necessary management decisions have been taken.

The work on international projects with strategic partners CITO and CTY has been continued:

N	Theme of the course	Target Audience	Performer
1	«Training of Trainers on technology of development of test exercises»	subject teachers	Cito International, The Netherlands
2	Assessing the implementation of the program «Development of children's gifts»	the AEO's staff, teachers	Center for Talented Youth at Johns Hopkins University, USA

Upon completion of the full cycle of training in 2014 there will be prepared 45 certified trainers for elaborating test exercises and 17 experts on the evaluation of introduction of the program "development of children's gifts". During CTY project there have been designed column-forms and forms of observation of work of coaches aimed to monitor intraschool courses of the Intellectual Schools.

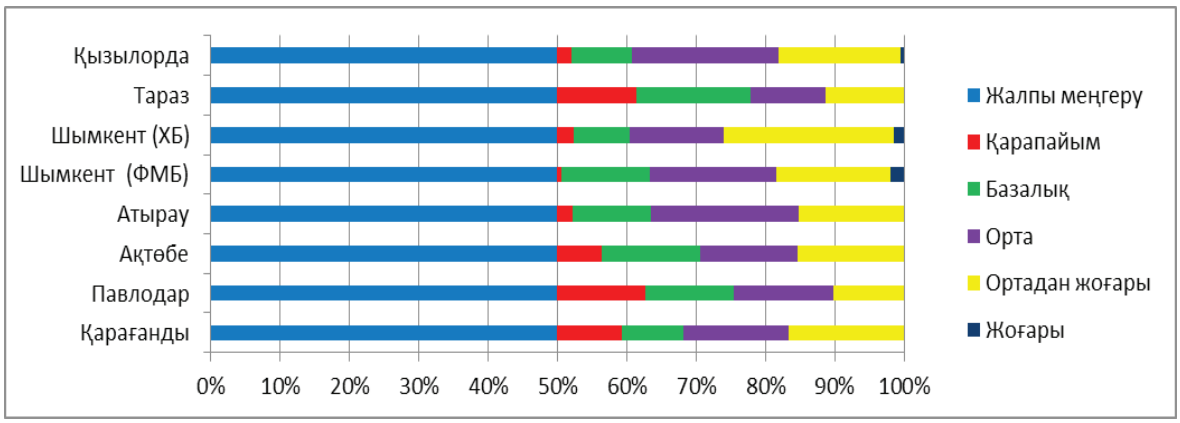
As part of the start-up and ongoing monitoring of language and ICT competencies of teachers there has been organized testing by the following blocks:

N	Topic	Target Audience	Performer
1	Kaztest	Intellectual Schools' employees	GCNTO
2	Test to determine the level of knowledge of English	the Intellectual Schools' employees	British Council
3	ICT test	the Intellectual Schools' employees	Center «Perspectiva»

1736 people have been tested, this number represents 97% of the total number of teaching staff and persons equated to them. The most stable results have been shown by teachers of the Intellectual Schools in Uralsk PMD and Shymkent PMD, 44% of teachers in Uralsk and 40% of teachers in Taldykorgana who received certificates have a high level of knowledge of Kazakh language.

The Intellectual Schools' teachers in Aktobe, Atyrau, Karaganda, Kyzylorda, Pavlodar, Taraz and Shymkent, for the first time have participated in testing of Kazakh language, the highest result have been showed by the teachers of schools in Aktobe, Kyzylorda and Shymkent (Diagram 2).

Diagram 2. The results of Kaztest in the context of schools



Statistics shows that the general level of knowledge of Kazakh language has increased, in particular, the number of teachers with level "Karapajym" has reduced and the number of teachers with high knowledge of Kazakh language "Zhogary" has increased.

Comparative analysis of Kaztest's results conducted in 2012 and 2013 showed that the percentage of teachers who had attained a high level of knowledge of Kazakh language, increased compared to 2011, from 20% to 45%.

Following the test Aptis, developed by the British Council, intended to determine the level of English proficiency, there is a qualitative improvement of language skills among teachers of the Intellectual Schools.

Thus, the proportion of teachers with intermediate and advanced levels of English is 26.2% of the overall number of the test takers, which is more than 3 times higher than the last year's figure.If in 2012 the number of teachers with level "C" - the most advanced and professional language skills, was 9, in 2013 this figure increased to 162. The highest number of teachers having showed "C" level works in the Intellectual Schools in Astana IB (24 pers.), Shymkent PM (24 pers.), Semey (17 pers.).

A large number of teachers with primary and elementary level of English proficiency works in the newly opened schools. A distant course English Discovery online has been organized for them.

Table 31.English proficiency level (APTIS)

City	Number of persons.	English proficiency level (APTIS)					
		A0	A1	A2	B1	B2	S
Semey	128	31	46	26	5	3	17
Pavlodar	117	51	33	12	11	6	4
Aktobe	136	44	41	20	8	6	17
Taldykorgan	96	17	47	24	5	2	1
Shymkent PM	127	32	23	17	19	12	24
Kokshetau	121	35	58	21	5	2	
Karaganda	126	33	54	13	3	7	16
Ust-Kamenogorsk	77	25	14	16	9	5	8
Astana PMD	126	23	48	11	15	14	15
Taraz	114	50	34	8	5	8	9
Kyzylorda	86	28	30	9	8	8	3
Uralsk	123	13	40	18	29	14	9
Shymkent CB	107	14	26	19	23	15	10
Atyrau	115	5	26	39	35	5	5
Astana IB	118	19	32	16	16	11	24

In testing of the level of ICT competence 1602 people participated, that was 95% of the total number of teachers and administrative staff.

Analysis of test results showed that the best results were reached by 268 teachers, representing 17% of all tested, 556 (35%) teachers showed average results, 615 (38%) - low and 165 (10%) - critical.

In general, in all schools the average level of ICT on the testing with basic level of complexity was shown by 366 (23%) teachers, low - 432 (27%), critical - 123 (8%).

Following the results of test with high level of complexity the highest rates have been achieved by the teachers in Astana PMD and Ust-Kamenogorsk. Currently the teachers from the newly opened schools in Kyzylorda, Taraz and Shymkent show the lowest results in the testing with high level of complexity.

Work with foreign teachers

In order to identify key benchmarks and prepare for the new 2013-2014 school year there have been organized and conducted sessions of orientation days for foreign teachers of the Intellectual Schools.

Round tables for school administrators, sections on teaching programs and criteria-based assessment, workshops on subjects. have been held as part of the orientation days program.

During the orientation days foreign teachers working more than two years received honorary certificates for the contribution to the development of the Intellectual Schools.

Foreign teachers conducted workshops for teachers of newly opened schools on methodology of team teaching, pedagogical leadership, active forms of teaching. Training under intraschool courses is held on an ongoing basis on the following topics: work with equipment PASCO, applying on the lessons of equipment PHYWE and SPARK, integrative teaching of subjects "Economy" and "Global Perspectives"; strategic planning and management of the school.

Due to the work of the foreign teacher Pragasen Naidu on preparing students of the Intellectual School of Uralsk in robotics the AEO has received a Certificate of National Organizer of robotics competition for Kazakhstan (RoboFest).

Within the broadcast of experience of the Intellectual Schools foreign experts have conducted a series of master classes at the city and regional levels.

Topics of the students' clubs has been extended:

- for the development of language skills - Chat Café, «Laboratory of English", "Artist" oratory club;
- for the formation of research skills - young naturalist club, environmental club, club of scientific puzzles;
- for development of ICT competences - QR-coding, Lego-modeling, robotics, rocket science.
- to ensure measures for health protection - chess club, riding club, archery.

Targeted training

In accordance with the Development Strategy professional growth of the best trained teachers of acting schools is aimed at the formation from their number of reserve for managing personnel and substitution of foreign teachers. For this purpose there is provided targeted training program of two-year Master's program in "Education Management" on the basis of the Nazarbayev University for 25 employees of the AEO. The training program has been developed with account of specific of the educational process in the Intellectual Schools. The studies relevant to the secondary education system of Kazakhstan will be conducted during training: in team teaching, transmitting of experience of the Intellectual Schools, assessment, trilingualism.

Three programs of scientific and pedagogical training have been implemented within the program "Bolashak".

The first internship program has been developed in conjunction with the Faculty of Education, University of Cambridge for the directors of the school. The Director of the Intellectual School PMD in Astana Zhakenov M.A. has been trained under this program since April. The internship program is designed for 12 months, during which the trainee will take special courses in school management, distributed leadership, as well as some modules of Master's program of the Faculty of Education. The program also envisages 6-month language course.

The second program. 13 subject teachers of the Intellectual Schools in Astana, Semey, Taldykorgan and Kokshetau have begun training on the basis of the University of Applied Sciences in the cities Haamelina and Yuvaskula, Finland (HAMK, JAMK Universities of Applied sciences). The training program consists of two phases - language courses (6 months) and internship (3 months) on the basis of the schools.

The third program. There is designed a program of training for subject teachers at the University of Sussex, UK.

Plan for 2014

- Continued work on the organization of courses within the school, within the country and abroad in the framework of advanced training project;
- Expansion of the cluster of certified trainers;
- Elaboration and introduction of annual review for permanent intraschool assessment of teachers' practice;
- Elaboration of methodical complex on ongoing international projects: "Practices in Action", "Guidelines for evaluating the implementation of the program "Development of gifted children", "Technology of lesson study."

Organization of trainings in the framework of the Basic Agreement with CIE:

- on curriculum for teachers;
- for trainers of IEP;
- for employees of CEP;
- for the project "Practices in Action";
- for external assessment;
- for the Integrated model of criteria-based assessment (IMCO);
- on assessment of schools.

Organization of trainings:

- for subject teachers to form skills of teaching using CLIL technologies;
- for school administrators by the model «job shadowing».

4.4 Certification of teachers and persons equaled to them

Taking into account the comments of the teachers about certification in 2012, and the recommendations of the administration of Intellectual Schools the procedure of estimation has been improved in collaboration with CPM estimating experts. There has been developed:

- evaluation descriptors for 6 accreditation exercises on six-scores scale;
- recommendations on the implementation of assessment exercises;

- pattern of observation and evaluation of a lesson;
- improved scale of scores rating (appeared proportion for each stage of assessment);
- a form of feedback following the implementation of assessment exercises.

The task "Video lesson" has become an innovation , and a part of the third assessment exercise "Planning of lessons / series of lessons. "Certified teachers represented in their portfolio a video record of a lesson. According to the elaborated template for monitoring and evaluation form video tutorials of certified teachers have been evaluated by colleagues from other Intellectual Schools. Such interassessment has facilitated the exchange of the skills of teaching and learning among the Intellectual Schools' teachers.

115 people took part in the procedure of attestation. Among them 113 are subject teachers and 2 - persons equated to teaching staff (psychologist, methodologist). Assessment results are shown below (Table 32).

Table 32. Results of assessment of 2013year in the context of the Intellectual Schools

School	Number of assessed, total	Level of pedagogical skills		
		Teacher	Teacher-moderator	Teacher-expert
Astana PMD	8	6	2	-
Astana IB	18	11	7	-
Kokshetau FMN	35	15	17	3
Semey PMD	18	6	9	3
Taldykorgan PMD	14	5	8	1
Ust-Kamenogorsk CBD	17	5	9	3
Shymkent CBD	1			1
Total	**111 ***	**48**	**52**	**11**

** 2 pedagogical workers have not been certified as plagiarism had been detected in their portfolio.*

Survey of teachers of the Intellectual Schools has shown that renewal in the procedure of assessment provided a greater degree of transparency in the procedures of assessment of certification exercises. Each appraise besides scores for assessment exercises have received recommendations to improve their practices from certified experts in evaluation.

Plan for 2014

- Elaboration of general guidance for certification of teachers and persons equated to them, as well as school administrators.

4.5 Achievements of teachers

The regular contest "The Best Teacher of the Year" has been attended by 11 winners of school tours.

The main objectives of the contest - development of creative activity of teachers, increase the prestige of the teaching profession, growth of professional skills of teachers.

Exercise of the competition: video, solo exhibition "My pedagogical credo", lesson, oratory skills, deciding of pedagogical situations - focused on the identification of important pedagogical competencies.

The jury has assessed the activities of candidates based on several criteria: professional skills and personal qualities, personal style, effectiveness of teaching.

During the competition teachers demonstrated their achievements - developed training manuals for various disciplines, programs, collections of exercises with descriptors, digital educational resources (electronic books, educational films in 3D format and clips).

The results of the contest:
The 1st place - Shagimoldina Meruert, teacher of Biology in the Intellectual School of Astana and Kopbosynov Bekzhan, teacher of Kazakh language and literature in the Intellectual School of Physics and Mathematics direction in Shymkent.
The 2nd place - Nurgaliyev Nurym, teacher of Biology in the Intellectual School of Physics and Mathematics direction in Uralsk.
The 3rd place - Zakeriya Kairat, teacher of Kazakh language and literature in the Intellectual School of Physics and Mathematics direction in Kokshetau.

Activities of a number of leading teachers of Intellectual Schools in transmitting of experience to the system of the country's secondary education has been awarded by the Ministry of Education and Science (Table 33).

Table 33.Awards of the Ministry of Education and Science of the Republic of Kazakhstan

Name position	Award	School
Akhmetova Saule Ramazanovna - history teacher, pedagogical skill level - expert	Award pin «Y. Altynsarin «	Intellectual School of Astana
Zhampeisova Gulborchen Dairbekovna - teacher of Mathematics, pedagogical skill level - expert	Award pin «Y. Altynsarin «	Intellectual School of PMD of Astana;
Kashkeyeva Zhanna Borisovna - teacher of Physics, pedagogical skill level - expert	Award pin «Y. Altynsarin «	Intellectual School of PMD of Astana;
Uysinbekova Gulnara Nasipovna - head of the kindergarten, pedagogical skills level - moderator	Honored Worker of Education of the Republic of Kazakhstan	Intellectual school of PMD of Taldykorgan
Belyavskaya Lyubov Ivanovna - English language teacher, pedagogical skill level - moderator	Honored Worker of Education of the Republic of Kazakhstan	Intellectual school of PMD of Kokshetau
Vasyuk Galina Vasilievna - Russian language teacher, pedagogical skill level - moderator	Award pin «Y. Altynsarin «	Intellectual school of PMD in Semey «
Bayshagirova Amankul Primzharovna, expert teacher, teacher of Kazakh language and literature	«The Best Teacher» medal	Intellectual School of Astana

SECTION 5. TRANSFER OF THE INTELLECTUAL SCHOOLS' EXPERIENCE

Transfer of the Intellectual Schools' experience is one of the main strategic directions of the AEO's activity. A key component of this trend was the professional development of teachers of secondary schools and heads of educational institutions.

Transfer of experience has been carried out in the following areas:

- Further training
- Online lessons and online seminars
- International conferences and seminars
- Working with basic schools
- Updating the content of secondary education

5.1 Professional Development

Leveled courses

The work on the implementation of leveled training courses has been continued. 247 certified trainers have been additionally trained in conjunction with the Faculty of Education, University of Cambridge.

247 trainers have been trained ***and 4964 teachers have been prepared*** under the leveled programs

Table 34. Quantitative composition of the coaches training courses participants by the leveled programs in the context of educational institutions and languages of study

Name of the program's level	Name of educational organization	Total	including:	
			with Kazakh lang. of study	with Rus. lang. of study
The third (basic)	Universities preparing teachers	10	5	5
	AEO «Nazarbayev Intellectual Schools»	10	7	3
	Center of Excellence and its branches	21	13	8
	NCPK «Orleu», JSC and its branches	109	69	40
Total		**150**	**94**	**56**
The second (primary)	Universities preparing teachers	5	1	4
	AEO «Nazarbayev Intellectual Schools»	14	8	6
	Center of Excellence and its branches	22	14	8
	Center for pedagogical measurements	3	-	3
	NCPK «Orleu», JSC	6	5	1
Total		**50**	**28**	**22**
The first (Advanced)	Universities preparing teachers	1	1	-
	AEO «Nazarbayev Intellectual Schools»	2	1	1
	Center of Excellence and its branches	32	21	11
	Center for pedagogical measurements	12	7	5
Total		**47**	**30**	**17**
Total for the leveled programs:		**247**	**152**	**95**

5,237 teachers were trained on the basis of the CPM and its branches for the year

Table 35.Quantitative indicators following the results of the teachers training by the leveled programs

Name of the program's level	Number of listeners trained	Recommended for granting a certificate	%	Not recommended for granting a certificate	%
The third (basic)	1147	1094	95.38	53	4.62
The second (primary)	997	944	94.68	53	5.32
The first (Advanced)	3093	2970	96.02	123	3.98
Total	**5237**	**5008**	**95.63**	**229**	**4.37**

CPM has trained 50 teachers of Physics, Chemistry and Biology by the third (basic) level with the participation of experts of the company PASCO Scientific (USA).

Development and monitoring of programs to improve training of teachers of RK

During the reporting period the CPM updated teaching materials of the training programs for RK teachers.

According to the results of the monitoring there have been published the guidelines (the V-VII books) and brochures:

Book V. Monitoring of further training courses of teachers of Kazakhstan by the leveled programs developed by the Center of Excellence of the AEO "Nazarbayev Intellectual Schools" together with the Faculty of Education, University of Cambridge (training of trainers). Guidelines.

Book VI. Monitoring of the further training courses of teachers of Kazakhstan by the Program of the third (basic) level, developed by the Centre of Excellence of the AEO "Nazarbayev Intellectual Schools" in cooperation with the Faculty of Education, University of Cambridge (training of teachers). Guidelines.

Book VII. Monitoring of the further training courses of teachers of Kazakhstan by the Program of the second (basic) level developed by the Centre of Excellence of the AEO "Nazarbayev Intellectual Schools" together with the Faculty of Education, University of Cambridge (training of teachers). Guidelines.

Brochure "Monitoring studies to assess the quality of the content and effectiveness of the programs developed by the Centre of Excellence of the AEO" Nazarbayev Intellectual Schools "in cooperation with the Faculty of Education, University of Cambridge."

Brochure "Monitoring studies in the frameworks of the Republican seminar "Management of education in terms of updating the content of secondary education of the Republic of Kazakhstan."

Studies have been conducted in the form of questioning, which respondents have been teachers, principals - listeners of the further training courses for these programs, as well as the members of the Republican seminar "Management of education in terms of updating the content of general secondary education of Kazakhstan."

Further training of heads of educational institutions of Kazakhstan

As part of the agreement with CIE dated April 30, 2013 CoE has developed the Program of further training of management of educational organizations of Kazakhstan.

There have been prepared and approved by resolution of the Board of the AEO educational-methodical complexes for training trainers and directors, including training programs, pre-course exercises, exercises for school practice (for a trainer), the head guides, a guide for coach and handouts.

30 trainers and experts in assessment have been prepared and 250 chiefs have been teached

In order to obtain feedback and sound making additions to training complex of the Program for managers of the CoE there have been carried internal monitoring studies to assess the quality of the content and effectiveness of the leveled programs.

30 trainers and experts on assessment, prepared by the experts of Cambridge University, have begun training of 250 heads of educational institutions of the Republic of Kazakhstan in Astana

CIE experts have implemented a mentoring program for coaches of CoE and "National Centre of Excellence" Orleu ", JSC:

- counseling trainers of CoE
- conduct ing surveillance of their work,
- providing feedback.

Under this program 24 experts of the Faculty of Education, University of Cambridge for two weeks visited branches of CoE and "National Center of Excellence" Orleu", JSC in Astana, Almaty, Aktau, Atyrau, Aktobe, Karaganda, Pavlodar, Ust-Kamenogorsk, Shymkent and prepared reports on the work of the coaches.

Evaluation of activities of teachers and trainers of the Project's leveled courses

CPM assessed activities of trainers and training of teachers and heads of secondary schools of Kazakhstan to meet the qualification requirements during and after the leveled training courses and courses for heads of secondary schools.

70 experts in assessment have been prepared and 24 Qualification exams have been carried out

64 certified experts assessed 23 streams of leveled training courses, held on the basis of the CoE and its branches, as well as of "National Centre of Excellence" Orleu", JSC and its branches in the regions.

Table 36. Information on experts as of 2013

Contingent of experts	Q-ty	Intellectual Schools	Branches of CoE	NCPK Orleu	Universities	Colleges	Secondary schools
Prepared	70	25	3	23	11	2	6
Certified	63	23	3	20	10	2	5
Uncertified	7	2	-	3	1	-	1
In the state	34	14	-	13	5	1	2
Out of state	28	9	3	7	5	1	3

With a purpose of final assessment of teachers there have been held summative assessment of 14531 portfolios and presentations of teachers as well as 23 Qualifying Exams.

12703 teachers have been recommended for certification, among them 7815 teachers for the 3 level, 1918 for the 2 level, 2970 teachers for the 1 level. Following a re-qualification exam for teachers of the 3 and 2 levels 1456 teachers have been recommended for certification, among them 1269 teachers for the 3 level, 201 teachers in Level 2.

For the purpose of estimation of trainers of the leveled courses 207 portfolios have been formatively and summatively assessed. By decision of CIE 186 coaches have been recommended for certification, including 131 trainers for the 3 level and 55 trainers for the 2 level (44 trainers have been certified for two levels).

16 candidates for experts have been trained and assessed, among them 14 experts have been recommended for certification by CIE.

Support of the network community

To support the network community of refresher courses participants the official information website of CoE www.cpm.kz continues operating, information and methodical journal "Pedagogical dialogue" is published.

Website of CoE

The site's structure consists of eight sections, three of which (forum, portal, online community) are closed and are separate for trainers and teachers. Access to the site's materials is provided by mandatory registration. The site contains all the information required for the course participants (lesson plans, charts, programs, handouts, exercises, etc.), facilitating the successful learning of course materials. The site contains information in three languages: Kazakh, Russian and English.

A work is being done to modernize and upgrade the portal of the leveled programs. Additionally, to help trainees an ICT module has been established, which contains step by step and video instructions on the use of various software tools, as well as "Video catalogue" containing auxiliary video for better learning of level programs. Information storage has been created which contains the methodical developments of lesson plans / extracurricular activities and other materials of the education community.

During 2013 the total number of registered users is 21,643, there was registered 212,780 visits and 1,652,600 viewings.

Electronic database of information about the teachers has been supplemented with the information bout trainees - the heads of schools.

Number of registered users is
212 780
Number of viewings is
1 652 600

Information-methodical journal "Pedagogical dialogue"

Publishing of methodical journal "Pedagogical dialogue" in Kazakh, Russian and English languages has been started in cooperation with the Faculty of Education, University of Cambridge.

Magazine "Pedagogikalyқ dialogue" ("Pedagogical dialogue") on June 28 2013 was registered at the International Centre for Registration of Serials ISSN (UNESCO, Paris, France) with assigning to it an international number (ISSN 2308 - 7668).

As an Appendix to the magazine there is published "Methodical Library of the Center of Excellence."

As part of this Appendix the Centre issued methodical editions:
"Guidance for teachers on the implementation of the approach Lesson study";
"Guidelines for writing reflective reports and preparing presentations";
«Lesson study: Theory and Practice";
"Research in Action";
collections of master classes of the teachers of the AEO "Nazarbayev Intellectual Schools";
glossary to the programs developed by CoE in conjunction with the Faculty of Education, University of Cambridge.

In accordance with the media plan the CoE's branches during the year published 244 articles in regional and national media.

Plan for 2014

- Education of 5100 school teachers by leveled programs: the third (basic) level-1000, the second (primary) level -1000, the first (advanced) level - 3100.
- Teaching of trainers within the leveled program: the third (basic) level-180, the second (primary) level -150, the first (advanced) level - 70.
- Teaching of 735 trainers under the program of short courses in the framework of the introduction of the updated content of secondary education.
- Education of 1000 managers under the Program of further training of educational organizations.
- Training of 20 trainers under the Program of further training of the heads of educational organizations.
- assessment of the leveled courses and courses for heads of secondary schools, preparation and further training of experts for assessment.
- Automation of the procedures for assessment of the level courses.
- Providing methodological and normative legal support of the leveled courses assessing procedures.

5.2 Online lessons, online seminars

Online lessons

Content of lessons is aimed at broadening and deepening the knowledge and skills of students in Mathematics, Physics, Chemistry, Biology, English and Computer science.

There have been conducted 494 online tutorials. Lessons have been conducted with mini researches, using educational laboratory and demonstration equipment rooms.

Online seminars

Seminars are conducted by the teachers of the Intellectual Schools 1 time per a week in Mathematics, Physics, Computer science, Chemistry, Biology, Kazakh language, Russian language, English language, Kazakhstan in the modern world, Geography and art.

Content of the seminars is aimed at training secondary school teachers in criteria-based evaluation system.

48 online seminars have been conducted.

1780 sets of disks with materials have been given to the provincial Department of Education.

494 online lessons and ***48*** online seminars have been carried out

All materials of lessons and seminars (movies, experiments, presentations) are available on the portal at http://moodle.nis.edu.kz/, where school teachers send their suggestions and questions.

Conducting online lessons and seminars going through the portal of the Ministry of Education and Science of the Republic of Kazakhstan ELP (elp.kz) based on the software Eluminate Live. Online lessons are broadcasted in real time on the site (1. sabak.kz). For those who could not participate in the lesson online, there is possibility of watching the lesson on the portal ELP (elp.kz) any time.

The site of the AEO has a column "For teachers» http://www.nis.edu.kz/ru/thematics/ in Mathematics, Physics, Chemistry, Biology and English (lesson plans, teaching designs, video tutorials, Olympiad exercises, etc.)

Plan for 2014

- 494 online tutorials
- 48 online seminars.

5.3 International conferences and seminars

International Conference

In order to establish an effective dialogue between teachers, researchers, the public and experts to further improve the content of secondary education, the assessment system and professional development of teaching personnel An international scientific-practical conference "High quality and leadership in education - 2013" was held in Astana on November 13-15.

The conference was attended by over 500 representatives of Kazakh pedagogical community, 57 experts from 14 neighboring countries and beyond (UK, USA, Canada, Japan, Singapore, Spain, Italy, Belgium, Netherlands, France, Russia and others). 6 plenary and 48 breakout sessions have been held at the conference.

The theme of the first day - "Updating the content of secondary education":
- Value-oriented education in the era of science and technology;
- Experimental Primary School educational program Ecommi Pronto, aimed at developing the skills of independent learning;
- Montessori methodology: training the mind, hands and heart for real work in the real world;
- Emotional and social development of the students through the drama;
- Harmony of trilingual education: managing linguistic orchestra;

The theme of the second day - "Major trends in the evaluation of learning outcomes":
- Assessing children at school entry and monitoring of their progress;
- Test and non-test criteria for determining gifted and talented students;
- Combining computerized adaptive experience and monitoring: the possibility of self-organizing adaptive learning tools;
- Monitoring of students' achievements in "Mathematics";

The theme of the third day - "Professional Development of a teacher: Traditions and Changes":
- Study of a teacher in action;
- Lesson study in pedagogical practice;
- Coaching and mentoring in the school;
- Professional community of teachers - new opportunities;
- School-University Partnership.

The following handouts have been prepared for the conference participants:
- Collection of papers in three volumes in three areas of the conference;
- Collection "Evaluation of civil and patriotic education of children in the Republic of Kazakhstan";
- Collection of exercises for formative assessment;
- Collection of exercises for summative assessment;
- Guidelines under the section "Statistics and probability theory" in Mathematics;
- Guidelines on the Content language integrated learning (CLIL);
- 2 releases of information and methodological magazine of the CoE "Pedagogical dialogue."

All conference materials, including presentations and speakers' speeches are posted and available for use at the conference site of the AEO http://conference.nis.edu.kz/november2013ru/.

Seminars

Within the I Republican seminar "Kazakhstan trainer: experience, cooperation and prospects" the trainers t of CoE, foreign coaches-consultants conducted 10 workshops attended by 300 trainers. Following the results of the seminar there have been prepared a report of the participants; developed recommendations.

In the framework of the II Republican seminar "Kazakhstan trainer: experience, cooperation and prospects" for the 250 trainers of the country, there was discussed the importance of research in teaching and learning, with participation of the leading researcher of the National Institute for Policy Studies in Education of Japan Toshiya Chichibu. The seminars have been broadcasted online in the regions of the country.

Regional seminars "Study of the problems of the learning process in terms of implementation of the leveled further training programs" have been conducted for secondary school teachers.

Branches of CoE have conducted 159 master classes in the following areas "Criteria-based assessment system" - 39, "Critical Thinking" - 43, "Working with gifted and talented children" - 14, "Usage of various technologies in education" - 63.

5.4 Working with basic schools

The work has been carried out In accordance with the Action Plan for the transfer of experience to basic education organization by:

- organizing seminars;
- partnership with basic schools;
- probation of managing staff

Organization of seminars

Five national seminars for basic schools and the Republican Forum have been held:
On educational work for deputy directors and homeroom teachers on the basis of the School in Taldykorgan;
"Innovative Library" for 60 school librarians and vice principals, supervisors on the basis of the school in Uralsk;
On criteria based assessment for 135 teachers of Mathematics and Physics on the basis of the schools in Semey and Karaganda;
On the use of information and communication technologies in education with participation of the representatives of Microsoft of Kazakhstan for Computer science teachers - on the basis of the school in Kokshetau;
Republican Forum "Innovative approaches in teaching Kazakh language: experience of Nazarbayev Intellectual Schools" for 300 secondary school teachers on the basis of the School in Astana

Partnership with basic schools

Each Intellectual School has worked in partnership with 3 - 7 basic schools on a joint plan of action.

For teachers of basic schools the teachers of Intellectual Schools have conducted round tables, trainings, master classes, extracurricular activities, briefings, open days, practice for the administration of basic schools (Job Shadowing), coaching and consulting, seminars, subject weeks.

Probation of administrative officers

Special probation program has been elaborated for administrative officers of 35 basic schools, the objectives of this program are:

- strategic vision of school development;
- formation of strategic planning skills to cultivate the capacity of the school;
- training in advanced pedagogical practices and methodologies of teaching and training;
- creating a community of school managers.

The probation program consisted of five stages:

The first (orientational) stage - introductory interactive training sessions on the subject of probation, objectives and goals of each participant.

Second (training) stage - familiarization with the system of leadership in practice, determining the characteristics and methods of teaching the strategic development programs. Education has been conducted by a team of recognized experts in the field of school leadership of the University of Sussex, UK.

Third (remote) stage - consolidation of acquired knowledge in practice through performing tasks in their schools with online support of curators of the Intellectual Schools.

The fourth (practical) stage - familiarization with the mission and activities of schools under the model "job shadowing" on the basis of seven Intellectual Schools in Astana, Kokshetau, Semey, Taldykorgan, Ust - Kamenogorsk and Shymkent.

The fifth (final) stage - protection of the program of school strategic development as a result of observations, pedagogical reflection of the probation program.

5.5 Work on the implementation of the updated content of secondary education

To develop common approaches and mechanisms of transfer of a working group has been formed in the organization of secondary education of the republic.

A memorandum of cooperation has been concluded between the AEO and the National Academy of Education named after I.Altynsarin on updating the content of secondary education.

Two main areas of updating the content of secondary education have been determined:

- introduction of new standard and programs of elementary school since September 1, 2015;
- introduction of leveled programs in Kazakh, Russian and English languages, subjects "Project work" and "ICT" in the 11-year school.

To work in this direction an Action Plan has been developed for transferring experience of the AEO "Nazarbayev Intellectual Schools" within updating of the secondary education content. This Plan was approved at a meeting of the Board of Trustees on December 27.

Republican seminar "Management of education in terms of updating the content of secondary education of the Republic of Kazakhstan" has been held for the administrative officers of regional, cities Almaty, Astana education departments, district and municipal education departments.

Plan for 2014:

- Provision for the Ministry of Education and Science a Project of the State Compulsory Standard of Education and educational programs, curricula of primary schools, subjects "Project work" and "ICT";
- Organization of outreach in the country;
- Development of 20 programs of short courses;
- Preparing more than 700 trainers for short courses;
- Conducting pilot short courses for subject teachers;
- Organization of work with teacher training universities;
- Implementation of the Action Plan for transferring experience of the AEO "Nazarbayev Intellectual Schools" as part of updating the content of secondary education.

SECTION 6.
NETWORK OF THE INTELLECTUAL SCHOOLS AND RESOURCES

6.1 Development of the networks of Intellectual Schools

At the beginning of 2013 7 Intellectual Schools worked in six buildings in Astana, Kokshetau, Semey, Taldykorgan, Ust-Kamenogorsk and Uralsk.

8 Intellectual Schools in Aktobe, Atyrau, Taraz, Kyzylorda, Shymkent (two schools), Pavlodar, Karaganda has been commissioned.

Monitoring of the design and construction of the Intellectual Schools has been exercised by the private foundations "Directorate of Nazarbayev Intellectual Schools under construction" (hereinafter - the Directorate).

Pre-work

Acts of akimats have been received on provision of land for the design and construction of Intellectual Schools and boarding schools in Kokshetau, Ust-Kamenogorsk, Semey, Taldykorgan and of the International School for 900 students with kindergarten for 120 places in Astana. State acts on the ground have been received for all land sites under design and construction.

178 summer cottages located in Astana within the boundaries of the allocated land plot with an area of 10.0003 hectares, near the intersection of the prospects Kabanbai Batyr, Turan and the 31 street for the designing and construction of two Intellectual Schools of physics and Mathematics, chemical and biological directions. 157 suburban areas have been redeemed and demolished . 21 plots owned by the state are under the procedure of lease registration. For the expansion of the territory for organization of alleys, park, recreation areas and parking areas additionally has been set a land plot with an area of 3,982 hectares.

The initial data have been collected (drainage of the area, technical conditions for connection to utility networks and communications, architectural planning assignment) for the design of Intellectual Schools in Ust-Kamenogorsk, Semey, boarding schools for existing schools in Kokshetau and Taldykorgan and the International School in Astana, technical conditions for other cities have been updated (extended).

In order to improve the quality characteristics of project indicators there have been developed special design specifications for designing of the Intellectual Schools CBD in Ust-Kamenogorsk, PMD in Semey FMN and the International School in Astana.

Designing

In connection with the inclusion in the draft of modular independent boiler, and a number of additional and missed volumes of construction works adjustment of design and construction documents for two objects (two Intellectual Schools in Almaty) was completed in 2013. Working projects of construction of the Intellectual Schools also have been completed in Petropavlovsk. Designing of the Intellectual Schools in Astana, Semey and dormitory (boarding school) in Kokshetau has also been started.

To accelerate the design and construction period of the Intellectual Schools by region we have made and concluded contracts to perform the construction with development (tying) of design estimates. With regard to the adjustment of working projects we have already signed additional agreements with contractors.

Plan for 2014

- Getting a positive conclusion of the RSE "Gosexpertiza" on construction of the Intellectual Schools in Semey, Ust-Kamenogorsk and Astana (international with kindergarten) as well as design work for the construction of auxiliary facilities (boarding schools).

Construction

In 201315 objects were built simultaneously - Aktau, Aktobe, Atyrau, Taraz, Shymkent (PMD and CBD), Petropavlovsk, Almaty (PMD and CBD), Astana, Kyzylorda, Pavlodar, Karaganda, Kostanay, Taldykorgan. 8 Intellectual Schools have been commissioned of the 15 previously planned for comissioning facilities in connection with the extension of the period of construction (due to necessary adjustments of DED).

Technical supervision of construction and maintenance of construction is carried out by the Directorate of Intellectual Schools.

Technical supervision of construction of the Intellectual Schools in Uralsk, Aktobe, Atyrau, Taraz, Shymkent (PMD) have been carried out by engineering companies having a license.

Directorate implemented information system of project management Oracle Primavera. This software allows you to combine all projects, works of structural units of the Directorate and contractors by creating a portal for information on completing the construction process, as well as automate the workflow between the parties, to coordinate the work of the project participants, to monitor the progress of construction work and generate the necessary management reporting.

Plan for 2014

- Completion of construction of 6 Intellectual Schools and 2 auxiliary facilities (boarding schools).

6.2 Resources

Informatization

In order to improve the quality of teaching and learning in accordance with the Strategy of Intellectual Schools we are engaged in systematic activities on informatization of educational activities of the Intellectual Schools through:

- development of information - educational systems and information - communication management system;
- improving information literacy level of effectiveness of educational and research activities through the use of new information technologies in the educational process;
- implementation of training programs with continuous use of information technology in the educational process;
- forming information culture by all participants of the educational process;
- continuous introduction of modern innovative information and communication technologies, equipment and software;

This year we have continued work on the development of the Uniform informative educational environment (hereinafter - UIEE) through enhancements of the existing systems:

- We modified functions in the subsystem of selection of candidates for rising effectiveness of organization of competitive selection of students:
  a. Statistics Reporting;
  b. registration of the bidders by barcode scanners;
  c. transfer of the Subsystem from SilverLight technology to ASP.NET, which allows you to work with data on the selection on all types of devices;
  d. adding features to the testing program, simultaneously testing in multiple lines, monitoring without printing of paper versions of the questionnaires.

Innovation of registration of applicants have been tested in competitive selection in Shymkent and Almaty.

- The Subsystem of human resource management have been supplemented with the functions: detailing of personal cards of employees, formation of contracts and time sheet of working time, vacation entitlement, sheet of employees' term of service and generating reports according to the requirements of the legal framework in the area of staffing.
- There have been in the Subsystem of informative educational environment:
  – included features that enable distance learning, representing of monitoring data in the form of reports, screen forms and schedules;
  – redesigned module "Calendar of academic days", optimized "Register for grading" (now it takes 2-3 seconds to assess)
  – modified form of the "Journal of criteria-based assessment" with automated quarter assessing in the form of 30% of formative classes and 70% summative classes;
  – created a new module automating a workplace of the Intellectual Schools' health works.
- The possibilities that have been improved in the Subsystem Virtual school:
  – automatic summary of grades according to evaluation criteria;
  – formation of the final result with notion of information on the passage of members of the Virtual School to the next stage of the Recessional school
  – automatically sending notifications by e-mail and personal account of the members.

The systems developed that have been introduced within the project "Automation of the AEO':

- Automation system of the management processes - intended for automation of work with structured and unstructured data, including creation, storage, transmission, publication, collaboration and destruction of information resources, as well as the organization of electronic document management and other data processing.
- Procurement system - designed for the automation of the AEO, its affiliates and subsidiaries' procurement processes.
- Accounting and control system of material and technical means - intended to account for goods and materials (GM). The feature of the system is a view of goods and materials moved, accounting of logistical decision-makers, with a calendar on the depreciation and writing-off of material and technical resources and automation of bids for the purchase and renewal of GM.
- Automated system of evaluation of teachers - intended to ensure the collection and storage of specialized information, training and supervision of the activities of experts, monitoring the implementation of the Program by certified teachers at the local level, conducting qualification examination.

In order to determine the way of development and of the AEO's information space we have analyzed the current system, carried out work on the description of business processes of the AEO to determine the processes subject to automation.

We have identified a number of shortcomings of the current system affecting its effective application by the course participants in practice and the AEO's workers:

- inability to use a single pass-through login and password (need to remember multiple usernames and passwords for each system);
- lack of opportunity to transmit information between systems;
- duplication between systems;
- overloaded interface;
- little functional for a student and parent.

These shortcomings will be removed in the further modernization of the AEO's information space.

We carry out further work to build software infrastructure:

- Online directories (itwiki.nis.edu.kz).
- The project and tasks management system (including bugs tracking (redmine.nis.edu.kz).
- Budgeting system 1C.
- Introduction of unified standard administration tools and support of the software and hardware (RedMine).

We have carried out extra work for implementation of the program Live @ Edu, provided for educational institutions from Microsoft. This program is available for educational institutions free of charge and allows AEO to implement rich functionality without incurring any additional material or time costs. With this program the email accounts of employees / students of the Intellectual Schools have been transferred to the cloud service Live @ Edu, using a subdomain for each Intellectual school vida@shkola.nis.edu.kz that minimizes costs of the AEO on ICT and ensures the current level of provision of tools for comprehensive work on a daily basis.

As part of information security of the AEO we work on creation of VPN (Virtual Private Network) networks between branches. VPN is a virtual private network created to secure network or tunnel inside unprotected Internet. Inside this tunnel the cryptography tools protect data encryption. VPN will make available an access to the networks of branches and centers, implement a technology Active Directory with all its advantages (shared folders, file sharing), Intranet sites - automated systems "GM accounting and control system", "SEPUD", work in the system 1C " will be "inside" the network without access from the outside, inside the building (i.e., inside the network, without providing access to it from the Internet) to protect the information.

At this stage we use a hybrid solution with the help of the operating system FreeBSD, which will act as a gateway for VPN connections with branches until moving to a new office building.

We work to expand the single server 1C, with terminal access.

We have migrated within the modernization program for the program Live @ Edu to Office 365.

In the newly opened schools we have increased access to the Internet for the Intellectual Schools at a rate of at least 40 Mbit / s.

Since the beginning of this year, newly opened and operating Intellectual Schools have been additionally equipped with computer, interactive, peripheral equipment and licensed software.

In frames of the projects of educational work for the development of creativity, memories, involvement in the learning process we have been studied advances in interactive information and communication equipment and ability of their use in school activities. According to the results of this work:

- We have opened mini-TV studio in Uralsk, Karaganda, Astana, Taraz, Kyzylorda, Atyrau, Pavlodar, Shymkent. Mini TV studios allow students to engage in practical design work on

creation of video reports on school activities, shooting experiences, installation and placement at the school site. Other Intellectual Schools will be equipped with such mini-TV studios.

- Interactive floors have been installed in Astana, Pavlodar, Atyrau, Taldykorgan, Kyzylorda and Uralsk. They can project images on any surface, and some three-dimensional images responds to movement. Preset programs allow students learning in a playful manner.
- Robotics classrooms have been equipped with the last generation robots Bioloid Premum Kit, Aldebaran Nao, which contribute to improving the skills of the initial programming, increasing interests of students in the natural sciences, Mathematics and engineering sciences.
- According to the instruction of the Prime - Minister of the Republic of Kazakhstan dated June 19, 2013 N17-50/3178 we have launched a pilot project on the basis of Intellectual Schools by introducing the elective course "Graphics and Design". Our schools are an experimental platform for the use of 3D technology. 3D printers will be used for the design, modeling and creating of 3D objects for real, virtual and abstract systems in the study sections "Modeling" and "Graphics" in the subjects "Science" and "Art." Students will learn the basics and features of 3D technology in "Physics", "Biology", "Chemistry" and "Geography". 3D-printer is a device that uses the method of layer by layer creation of a physical object after a digital 3D-model. Using 3D printer students can design objects, all that can be drawn on the computer in a 3D program can be put into practice. Using 3D printing provides a quick way to iterative modeling. Students can develop 3D parts, print, test and evaluate them. Application of 3D technology leads to an increase of the share of innovations in the school projects.

Plan for 2014

Within the project "Automation of the AEO" support of 9 information systems (subsystems) - human resources management, training and selection of bidders, budgeting, accounting and control of the material and technical means, electronic document management and information-educational environment, procurement system, a single online directory, portal for CPM experts.

- Development of the "Bank issues" system with strategic partners CITO, the Netherlands.
- Upgrading old computers.
- Equipping of the Intellectual Schools with mini-TV studio, multiple copying complex, sets of advanced robots: Robots Bioloid Comprehensive Kit, Robot Aldebaran Robotics Nao H25 Humanoid Robot Academic Edition, interactive floors, 3d printers, equipment for mini-printers, tablets, interactive and educational complexes KINEKT .
- Organization of trainings for IT professionals of the Intellectual Schools.
- Organization of training and education for teachers of computer science and robotics for specialized robotics programs.
- Organization of trainings for the AEO's staff on the use of existing information systems.
- Uniting under a single controller of the domain Active Directory of all branches. - Active Directory synchronization with Offce365.Binding of account Active Directory with the Exchange in the Office365 (Outlook, Calendar, Tasks).
- Equipping with additional computer, interactive and peripheral equipment of the International School in Astana and kindergarten after their commissioning.
- Maximizing Web server of videoconferencing Adobe Connect.
- Conclusion of a new memorandum of cooperation with Microsoft.
- Also, after the commissioning of the administrative building of the AEO we plan:
  - To work on the integration of all telecommunication lines of the AEO, its branches into a network (a single number to dial, free internal telephony).
  - Integration of information systems deployed.
  - Enhancing of a unified system of electronic NPA and documents storage.

Project "Transformation of the educational environment"

One of the most important aspects of the organization of the educational process in schools is an educational learning environment. To implement the project to transform the educational environment in the Intellectual Schools and backyards we have attracted international experts - the Finnish company Finpeda Ltd.

On the basis of international research and practice, studies by experts (CEO of the Company Pasi Mattila , architect Sanna Pakkonen and specialist in IT technologies Willie Vilzhanmanem) of the educational environment in the schools of Kokshetau and Taldykorgan there have been developed approaches to transform the educational environment. The key idea is to transform the school facilities and learning environments such as classrooms, corridors and lobby areas for more efficient use of space, which will meet training and educational needs and goals.

According to the results of the project experts have prepared a report with recommendations for the development of schools in Kokshetau and Taldykorgan. The report results are used in the preparation of projects for the construction of the international school in Astana

Plan for 2014

- The use of the project materials in awareness-rising work in the frames of renovation of the content of secondary education.

Availability of textbooks and literature

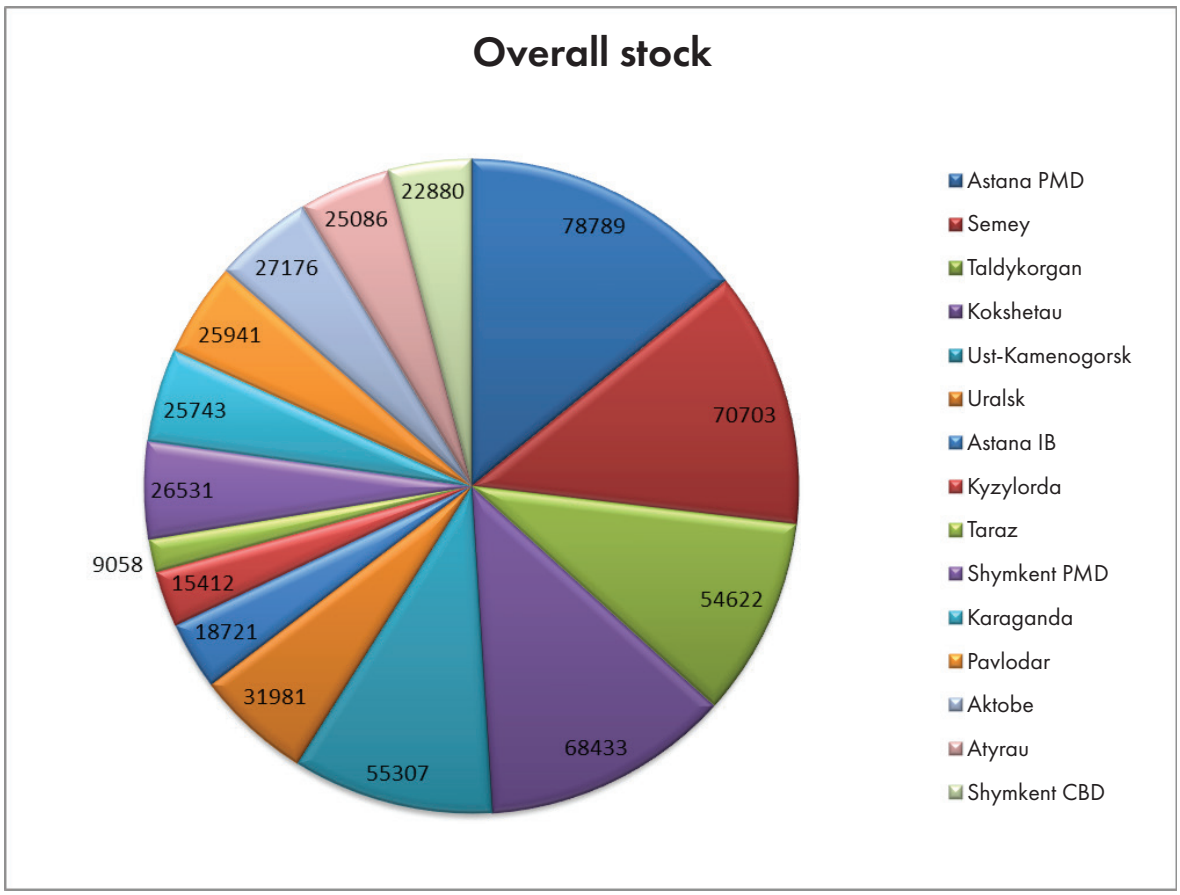
Book stock of the libraries of the Intellectual Schools has been replenished with diverse literature in various languages, which corresponds not only to the educational programs of the Intellectual Schools, but also design and research activities, can be used for further education through universal and thematic reference books to learn English at different levels, for the development of a culture of reading among students.

We continue cooperation with the Kazakhstani, Russian and foreign publishing houses:

- Oxford University Press, United Kingdom,
- Cambridge University Press, United Kingdom,
- Macmillan, UK
- Pearson - Longman, United Kingdom
- Barron's, USA
- Marshall Cavendish, Singapore
- DK, USA
- Scholastic, U.S. and others.

As of December overall book stock of the Intellectual Schools totaled 553,503 copies of teaching materials, artistic, scientific, educational, electronic literature.

Diagram 3. Overall book stock of the libraries of the functioning Intellectual Schools.



In order to support the design and research activities of students and teachers the Intellectual Schools have purchased license to use collection of online resources EBSCOhost, which combines the user-friendly interface with high-quality full-text resources of educational and popular magazines, newspapers, news, transcripts, pamphlets, reports, documents, biographies, almanacs, dictionaries, encyclopedias and other reference sources, electronic books valuable for modern school.

As part of the equipment of the book stock of the Intellectual Schools and implementation of the system "One online catalog" we have chosen automated library system Follet Destiny, which is widely used in the international practice. This system not only allows you effectively systematizing the work of librarians in accounting and distribution of the books, but also creates an educational environment in terms of independent work, search and reservation by students of both electronic and print media. Thus, Destiny extends functionally important role of the school library in the digital world to support active learning of students.

As a result of studying of this product the Intellectual Schools' specialists have identified the following advantages:

- centralized solution, the ability to exchange electronic database of schools, ensure accessibility and accountability of all resources;
- access to rich electronic database of books, as well as tools to help students, teachers and librarians to find, share, and use printed and digital resources.

Libraries of functioning Intellectual Schools in Astana, Semey, Kokshetau, Ust-Kamenogorsk, Taldykorgan, Uralsk, Taraz, Shymkent, Karaganda, Pavlodar, Atyrau, Aktobe are equipped with electromagnetic antitheft system serving as a protection against unauthorized removal of library stock.

Libraries of the Intellectual Schools have held a series of activities: social action «Book-crossing», competitions and clubs in reading: "Throw everything and read», «Reading times», «Today a Reader - Tomorrow a Leader». We have conducted lessons on library, computer and information literacy, development of research and use of electronic resources of the Internet skills.

The site of the libraries provides information about new books received, useful links for research projects and important events of school life.

Plan for 2014

- Providing book fund for the newly opened schools;
- Development of book fund of the existing schools;
- Further training of librarians.

SECTION 7.
STRENGTHENING OF IMAGE

The AEO carried out the following activities in this direction:

- Moderation and content support of the AEO's corporate site
- Working with the media

Moderation and content support of the AEO's corporate site

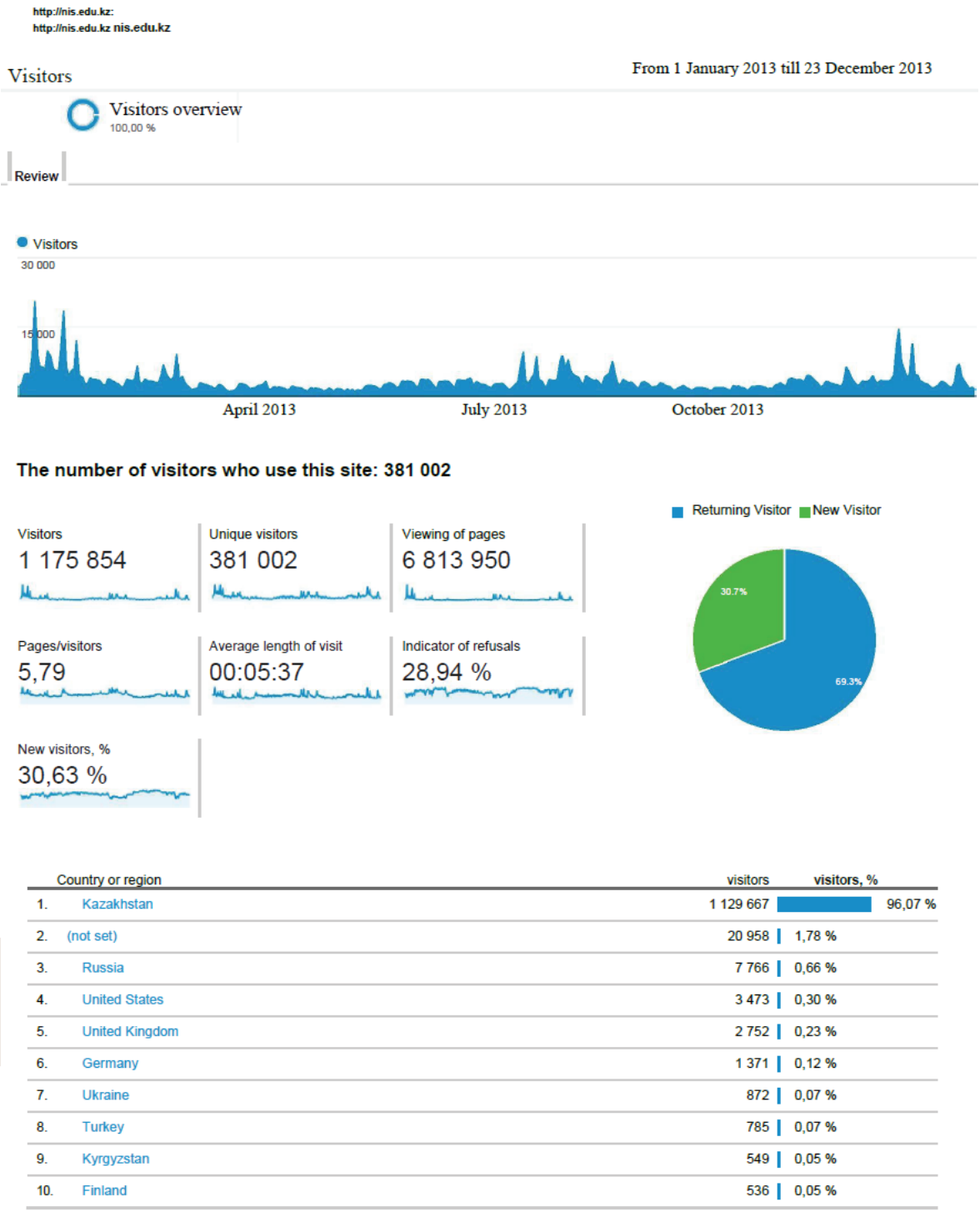
We worked actively on modernization of the corporate site of the AEO www.nis.edu.kz .Information portal is made in accordance with the new symbols of the organization. We have taken into account recent trends of site creation while designing it.

The feature of the new site is that it now plays a role not only of a source of information, but also extensive educational portal for teachers and students. Site work is integrated with such projects as "Virtual School", "Online Lessons", "Online Seminars", section "For teachers", the site of international conferences of the AEO, unified information educational environment, final assessment of the Intellectual Schools' students.

New version of the site has been improved in accordance with the needs of Internet users. The power and speed of the site have been increased. We have developed a mobile version for smartphones, tablets and other modern gadgets. A special version for the visually impaired persons is under development.

Since the start of improved resource the number of visits has almost tripled. Since the beginning of 2013 web resource has been visited by 1,146,394 people. So-called "unique users", visitors who come to the site every day are 371,787 people (Figure 7).

Figure 7. Site visiting statistics



	Country or region	visitors	visitors, %
1.	Kazakhstan	1 129 667	96,07 %
2.	(not set)	20 958	1,78 %
3.	Russia	7 766	0,66 %
4.	United States	3 473	0,30 %
5.	United Kingdom	2 752	0,23 %
6.	Germany	1 371	0,12 %
7.	Ukraine	872	0,07 %
8.	Turkey	785	0,07 %
9.	Kyrgyzstan	549	0,05 %
10.	Finland	536	0,05 %

Peak of the site visiting is achieved when publishing the results of competitive selection of students to the newly opened Intellectual Schools. The results of each of the tours of competitive selection to the Intellectual Schools, lists of grant "Orken" holders, reserve lists are published on the site. This factor is notable for the fact that people living in remote areas need not go to school but know their scores by downloading files from the site.

Along with the work of the main site of the AEO www.nis.edu.kz resources of CEP, CoE, CPM work successfully, as well as the Intellectual Schools' portals.

Working with the media

Strengthening the positive image, good will of the organization, working closely with media is an important part of the AEO's work. Media has been actively connected to informing the information about current events and projects of the company.

The AEO has developed a special schedule of performances in the media for its employees.

It has been agreed to cooperate with the channel Kazakh TV (Caspionet) - information and cognitive channel of the "Agency" Khabar", JSC broadcasting 24 hours in Kazakh, Russian and English languages.

A series of television magazines has been prepared with participation of the Intellectual Schools foreign teachers, which takes up the professional skills of teachers through the prism of their work in the Intellectual Schools. The feature of television magazine is that they are repeated on air every 30 minutes.

We have started joint projects with the TV channel "Bilim".Laureates and winners of competitions, young scientists and authors of innovative projects of Intellectual Schools have become the heroes of the program "Tarlan". The guys were talking about the secrets of success, preparation for competitions, training intelligence. In general, more than 15 students of the Intellectual Schools have become participants of the programs . One of the latest programs in 2013 was devoted to Asiya Utzhanova, who had wrote a unique book "Mathematics and Chess" published in Germany.

Opening of the Intellectual Schools got comprehensive and widely covering in the media of the regional and republican level. Students, teachers and parents have been interviewed as part of the launch of new education objects. Through the media the audience has known about the specifics of the Intellectual Schools, what problems they face, what innovative approaches and equipment is used in the educational process. Single informative messages about different projects of each school have been posted out during the year: rowing in Pavlodar, Shymkent Olympics, the project "100 questions for adult" in Aktobe, pottery in Uralsk and others.

The AEO has carried out a seminar in PR management for press secretaries of the Intellectual Schools and specialists on public relations of the centers and private institutions . The leading media coach Olga Groznaya, who used to work in the presidential pool, in the TV channel "Khabar", has trained in crisis management, ability to respond quickly to negative information in the media, given master classes in holding press conferences, technology interviews, writing press releases, positioning in social networks. All participants have received a certificate of participation in the seminar.

Poole of regional journalists has increased to 50 people.

We have continued operation with non-governmental sector. Press-secretaries of the branches have worked together with community organizations, councils, charities, sponsors, benefactors. The Intellectual Schools' students and teachers have been involved into holding of general activities. The main goal of the partnership is serving to the community, fostering a sense of social responsibility and patriotism to the students. The most successful campaign have been highlighted in regional and national media.

II The II Republican contest has been held among the media for the best information on the activities of the AEO. The main objectives of the competition has been the formation of public opinion loyal to the Intellectual Schools, maintaining a strong reputation of the organization. The material

of the channel "Khabar 24" on the start of the competitive selection to the Intellectual School of Almaty has become the winner in the category "Best TV story". The newspaper "Egemen Kazakhstan" has published an article on the International Conference "High quality and leadership in education." The competitive race also has been joined by the channel "Kazkahstan" , The 7th Channel, an information portal BNews.kz , radio Astana, the newspaper "Express K" and others.

The magazine KAZENERGY has published the results of the trips of the research expeditions "Tugan elge tagzym". Scientific works developed after the visits ahve been reflected on the pages of a popular magazine.

Comments of Internet users have been monitored. The results showed that the general public lacks comprehensive information on the procedures for competitive selection to the Intellectual Schools, selection of teachers, organization of education process. In particular, many questions have aroused about the transparency of the competitive selection of students and starting of education in the newly opened schools.

All published in the press materials have been collected and stored in the archive.

Plan for 2014

- Conducting The First Astana Media Forum for Young Correspondents of the Intellectual Schools.
- Issuing of the kids journal for the students in the network of the Intellectual Schools "Intellectual" (working title).
- Comprehensive coverage of all activities of the Intellectual Schools.
- Shooting videos on the activities of the Intellectual Schools.
- Holding a press conference reporting on the activities of the AEO.

SECTION 8.
ADMINISTRATION AND MANAGEMENT

Level of management in the AEO is an important component of achieving the strategic objectives. One of the key steps in creating a quality management system in the AEO has become improving the organizational structure, improving transparency and the adoption of legal instruments within a diagnostic control system.

Among the positive developments in the management of the AEO we can mark: enhancing cooperation of the AEO with affiliated organizations, governing bodies interaction, empowerment the subsidiaries.

In accordance with the Law of the Republic of Kazakhstan dated January 19, 2011 "On the status of" Nazarbayev University "," Nazarbayev Intellectual Schools "and "Nazarbayev Fund" **the governing bodies of the AEO are:**

1) The supreme governing body - the Higher Board of Trustees of "Nazarbayev University", "Nazarbayev Intellectual Schools" and "Nazarbayev Fund" (hereinafter - the Higher Board of Trustees);
2) The governing body - the Board of Trustees;
3) The executive body - the Board of Directors.

A meeting of the Higher Board of Trustees was held in April 2013 with the participation of the Head of the State Nursultan Nazarbayev. The Development Strategy of the AEO till 2020 was approved on this meeting and also the composition of the Board of Trustees was increased to15 people. 3 full-time, 5 part-time meetings of the Board of Trustees was held during the reporting period .

As of December 2013 the Board of Directors of the AEO consists of 9 members. The Board of Directors of the AEO held 69 meeting during the reporting period. Just during the reporting period, the Board of Directors of the AEO considered 310 issues relating to various aspects of the AEO and affiliated organizations' activity.

Regulatory Support

The AEO's legal service activity is aimed to registering of the intellectual property rights for the material developed in all fields of its activity. The work with the Committee on Intellectual Property Rights of the Ministry of Justice of the Republic of Kazakhstan, the Book Chamber, the International Standard Serial Number ISSN is organized for this purpose.

The First. The AEO's copyrights were registered and it received certificate of state registration of the following objects:

- Within the framework of the project "Development of pedagogical skills of teachers of secondary schools in the Republic of Kazakhstan", "Handouts. 1-4 week. The first (Advanced),the second (middle) levels. The first edition", "Program of Professional Development of teachers. The third level. Principles of assessment of teachers", "Guide to assessment", "Program of training courses of teachers RK. The first, the second, the third levels"," Guide for teachers. Guide for trainers. Exercises to perform during school practice. Instructions for performing precourse exercise. Guidelines for assessment, Principles of assessment of teachers."

- The AEO's logo.
- School uniforms of the Intellectual Schools' students: school sweater, vest, classical school suit for young, middle-aged and older boys and girls, 2 options of sport suits. Industrial designs have been received for this school uniform.

The second. The International Standard Serial Number ISSN (UNESCO, Paris, France) has registered the journal "Pedagogikalyk dialogue" ("Pedagogical dialogue") on June 28, 2013 having awarded it with an international number (ISSN 2308 - 7668).

The third. Book Chamber of the Republic of Kazakhstan has been assigned International Standard Book Number ISBN:

1. Integrated model of criteria-based assessment;
2. Model of external summative assessment.

Constituent documents were developed during the reporting period and the following organizations was registered in the institutions of justice:

- 6 branches of the AEO in Astana, Shymkent (physic-mathematical and chemical and biological directions), Taraz, Kyzylorda, Pavlodar;
- Private institution "Educational Resource Center."

8 representative offices have been de-registered in Aktobe, Atyrau, Karaganda, Pavlodar, Shymkent (physics-mathematical and chemical and biological direction), Taraz, Kyzylorda.

The Decree of the Government of the Republic of Kazakhstan dated 14 March 2009 N317 "On approval of the award procedure and sizes of educational grant " Orken " of the First President of the Republic of Kazakhstan - the Leader of the Nation have been amended to pay for education of gifted children in specialized educational institutions "Nazarbayev Intellectual Schools " about changing procedures of competitive selection to the 7th grade ..

32 legal acts of the AEO which govern various aspects of its activity have been approved.

Partners of the AEO "Nazarbayev Intellectual Schools"

The AEO acts in close partnership with recognized domestic and foreign organizations - providers of education.

Table 36 shows the partners of the AEO and direction of working with them.

Table 37. Information about the partners of the AEO

N	Name of a company	Areas of Cooperation
	since 2010	
1.	**AEO «Nazarbayev University», Kazakhstan**	• Teacher training in the field of critical thinking • PDP teachers training • In educational content • On research in secondary education • On research in the field of innovation in education
2.	**Royal Institution of Great Britain, Royal Institution (RI)**	• Organization of elective courses for the 9 - 12th grades students of the Intellectual Schools
3.	**University College London (UCL)**	• Teacher training (PDP) on the basis of Nazarbayev University • English teachers training
4.	**Kazakh National University. named after Al-Farabi, Kazakhstan**	• Joint development of elective courses to prepare students for university studies • Introduction of new methods, trends and technology of teaching students with account of age and psychological characteristics • Joint training for the Olympics • Joint scientific-practical conferences
5.	**Cambridge International Examination Board, (CIE) UK**	• Developing a model of integrated educational programs and criteria-based assessment system • Development and implementation of training programs for subjects • Curriculum development • Training and support of teachers in subjects • The project "Practices in Action" • Recognition of the Integrated curriculum and assessment • Accreditation of the Intellectual Schools' activities
	since 2011	
6.	**University of Pennsylvania, USA**	• Intellectual Schools management training on management and leadership in school
7.	**Center for Talented Youth at Johns Hopkins University, (CTY), USA**	• Development of tools and procedures to assess students' abilities to study natural and mathematical sciences at competitive selection for the 7th garde of the Intellectual Schools • Training of teachers in teaching methods for gifted children • Education for gifted children in summer camps
8.	**Institute of Education measurement, (Cito) the Netherlands**	• Monitoring of the 7th, 8th, 11th and 12th grade students' achievements in Mathematics, Kazakh and Russian languages (as second languages), English • Development of tests in Mathematics, Kazakh, Russian and English languages for the system of competitive selection of the 7th grade students to the Intellectual Schools • Teacher- testers training
9.	**International Baccalaureate, Geneva, Switzerland**	• Development of a training programs for primary and high schools • Assessment of students achievements • Astana Intellectual School's teachers training • Authorization of the Intellectual School of Astana and evaluating of their activity
	since 2012	
10.	**Company PASCO, United States**	• On the implementation of the subject component of the program of training courses developed in conjunction with the experts from the University of Cambridge for the Intellectual Schools' teachers training

11.	**Teachanywhere, London, UK**	• Services on the search and recruitment of foreign teachers and trainers - consultants
12.	**Search Associates, Dallas, Texas, United States**	• Services on the search and recruitment of foreign teachers and group leaders (Team leader) • Development of the Platform of the AEO on the official site Search Associates • Organization of international job fairs for foreign teachers • Continuous support for teachers employed in the AEO
13.	**TiC, Cardiff, United Kingdom**	• Services on the search and hiring of teachers and group leaders (Team leader)
14.	**International House (IH), Belfast, Ireland**	• Consulting services in the field of education, refresher courses for teachers
15.	**«High Vill Kazakhstan».LLP**	• Services in the field of architecture, urban planning and construction
16.	**Center for Continuing Education Palmenia Sentre, Helsinki, Finland**	• Professional development of primary school teachers
17.	**Microsoft**	• Providing software to implement projects «Innovative Schools», «Creating the Future», «IT Academy» • Training teachers in information and communication technologies • Teaching students the information and communication technologies • Teaching of IT-managers
18.	**NCPK «Orleu» Kazakhstan**	• Implementation of the project to improve the skills of teachers of secondary schools under the programs developed by the AEO • Carrying out activities aimed at improving the educational programs of additional education in the training of teachers • Provision of mutual assistance in the preparation and formation of professional staff • Promoting international cooperation with foreign partners
19.	**Temasek Polytechnic, Singapore**	• Training of subject teachers
20.	**Specialized academic center of MSU named after Kolmogorov, Russia**	• Teachers training • Distant teaching of students and teachers • Holding joint events (competitions, contests) • Preparing students for international Olympiads • Organization of elective courses for the 9 - 12th grade students of the Intellectual Schools • Direction of specialized subject teachers for holding review lectures
21.	**Cambridge University Press (CUP) United Kingdom**	• Development of textbooks and educational resources for primary schools • Teaching of Kazakhstani authors, developers and editors for primary schools under the Integrated education program
	since 2013	
22.	**Teach Away Inc.**	• Services on the search and recruitment of foreign teachers
23.	**Capital Education Resourcing: International School Services**	• Services on the search and recruitment of foreign teachers
24.	**Center for International Programs «Bolashak» Kazakhstan**	• Organization of scientific probations of the Intellectual Schools' teachers • Search of graduates for employment in the Intellectual Schools • Organization of job fairs and conducting master classes
25.	**Finpeda, Finland**	• Transformation of the educational environment of the Intellectual Schools
26.	**JAMK University of Applied sciences, Yuvaskula, Finland**	• Refresher courses for subject teachers

Теруге 4.02.2014 берілді. Басуға 6.02.2014 қол қойылды.
Пішімі А4. Қағаз 115 гр. Сандық басылыс.
Шартты б. т. 9,87. Таралымы 5 дана. Тапсырыс № 24

«Педагогикалық шеберлік орталығы» ЖМ типографиясында басылды.
010000, Астана қ., Түркістан көшесі, 2
e-mail: info@cpm.kz, тел.: +7 (7172)-79-96-11

Сдано в набор 4.02.2014. Подписано в печать 6.02.2014.
Формат А4. Бумага 115 гр. Печать цифровая.
Усл. печ. л. 9,87. Тираж 5 экз. Заказ № 24

Отпечатано в типографии ЧУ «Центр педагогического мастерства»
010000. г. Астана, ул. Туркестан, 2,
e-mail: info@cpm.kz тел.: +7 (7172) 79-96-11