

ANNUAL REPORT

OF AUTONOMOUS EDUCATIONAL ORGANIZATION "NAZARBAYEV INTELLECTUAL SCHOOLS"

FOR YEAR 2014





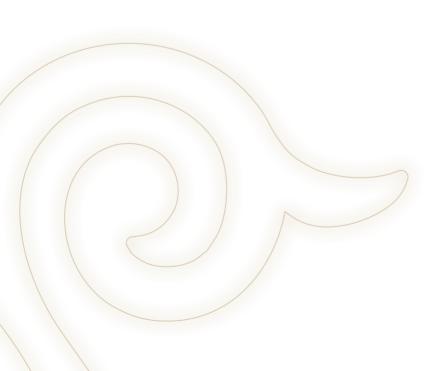
"Our path to the future is related to creating new opportunities to unleash the potential of our citizens. A developed country in the 21st century has active, educated, enterprising and healthy citizens. What do we need to achieve this?

First, all developed countries have a unique high-quality education system. We have a great deal of work to do to improve the quality of all parts of national education.

In the secondary education, it is necessary to improve the standard of teaching in all schools to the level of Nazarbayev Intellectual Schools.

High school graduates should speak Kazakh, Russian and English. The result of teaching should be mastery of critical thinking skills, independent research and in-depth analysis of information."

Address of the President of the Republic of Kazakhstan N.Nazarbayev to the nation. January 17, 2014 "Kazakhstan's way – 2050: common aim, common interests, common future"



CONTENT

| N | TROI | DUCTION | 4 |
|------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Ξ۷ | 'ENT | S AND FACTS | 5 |
| 1. | | CATIONAL PROCESS Education content 1.1.1 Integrated education program 1.1.2 International baccalaureate program 1.1.3 Trilingual eductaion 1.1.4 Textbooks and digital educational resources | 7 7 11 13 |
| | 1.2 | Student enrollment 1.2.1 Competitive selection 1.2.2 Virtual and vacation schools | 20 |
| | 1.3 | Pedagogical staff 1.3.1 Competitive recruitment of teachers 1.3.2 International teacher recruitment 1.3.3 Professional development of teaching staff 1.3.4 Certification of teachers 1.3.5 Teaching staff: certification data | 26 26 28 33 |
| | 1.4 | Holistic and character education | 37 |
| | 1.5 | Elective courses and summer schools | 42 |
| | 1.6 | Educational resources | 45 |
| | 1.7 | Accreditation of intellectual schools | 47 |
| | 1.8 | Education quality assessment 1.8.1 Monitoring of students' academic achievements 1.8.2 Criteria-based assessment system 1.8.3 Final attestation | 48 54 |
| | 1.9 | Results of students' education achievements 1.9.1 Progress and quality of students' knowledge 1.9.2 Results of students' participation in international and republic olympiads, scientific competitions, conferences 1.9.3 Results of international exams 1.9.4 Admission to universities | 62 63 65 |
| 2. | | NSLATIONOF EXPERIENCE | |
| | 2.2 | Exchange of best teaching experiences | 77 |
| | 2.3 | Updating the content of secondary education | 83 |
| 3. | MAI | NAGEMENT AND GOVERNANCE | 86 |
| 4. | IMA | GE STRENGTHENING | 87 |
| <u>5</u> . | COO | PERATION DEVELOPMENT | 92 |
| 3 | CON | ISTRUCTION OF NAZARRAYEV INTELLECTUAL SCHOOLS | a3 |

INTRODUCTION

According to the Development Strategy of the autonomous educational organization "Nazarbayev Intellectual Schools" until 2020 (hereinafter - Development Strategy of AEO), approved by the Supreme Board of Trustees dated April 18, 2013, the mission of AEO is to promote the intellectual potential of Kazakhstan through the development and implementation of innovative models, the polylingual school system of natural and mathematical sciences, combining the best traditions of Kazakhstan, international experience and practice.

The Development Strategy of AEO provides **Purpose:** Creation and implementation of an innovative educational model that integrates the best local and international experience and practice.

http://www.nis.edu.kz/ru/ about/str-doc/

To achieve the purpose, 9 tasks from 7 areas have been chosen:

- 1) Administration and management:
- 2) Teaching and learning;
- 3) Assessment of the quality of education;
- 4) Professional development:
- 5) Formation of students contingent;
- 6) Creation and development of a network of Intellectual schools;
- 7) Transfer of learned experiences.

The execution of tasks is determined by the achievement of 55 indicators for 2014.

Achieving identified indicators and targets primarily aimed at improving the quality of education and the high academic achievement of students of Nazarbayev Intellectual Schools.

47 of the 55 indicators have been reached (85.5%), 2 (3.6%) achieved due to the fact that some indicators were replaced, 50% of 5 indicators were achieved (9.1%), while 1 (1.8%). was not achieved due to the editing of educational content being postponed.

Unfinished work (> 50%) and indicators yet to be achieved, will be continued and completed in full.

Despite the progress made in 2014, work in all areas will be continued in 2015 according to the indicators.

The present report for 2014 considers the work done during the year; compares the results with the previous reporting period; marks problematic indicators of Development Strategy of AEO; indicates the problem points, means of solution, achievements and plans for 2015^{1} .

Nazarbayev Intellectual Schools, during the time of operation as an autonomous organization, has experienced both some difficulties and success in its formation and development.

Results of the 2014 and five-year plan testify that the development of the education system of Nazarbayev Intellectual Schools substantively achieving in all areas.

¹ The electronic version of the report is available at the site of AEO "Nazarbayev Intellectual Schools" http://www.nis.edu.kz/ru/about/reports/ This is the first time the links to videos and certifying materials have been included in the annual report.

EVENTS AND FACTS OF 2014

➤ The visit of the Head of the State, N.Nazarbayev, to the Intellectual School in Atyrau;

https://www.youtube.com/watch?v=k30sOUYsH5Y

➤ Launching new Intellectual schools: Physics and Mathematics in Almaty and Chemistry and Biology School in Kostanav.

http://www.nis.edu.kz/ru/ press-center/news/?id=3663

http://www.nis.edu.kz/ru/press-center/news/?id=3338

https://www.youtube.com/watch?v=mTzU DnwLwo

Signing a memorandum with the National Scientific-practical, educational and health center "Bobek", the Republican Specialized Physics and Mathematics School named after O.A.Zhautykov, Microsoft corporation.

http://www.nis.edu.kz/ru/press-center/news/?id=3474

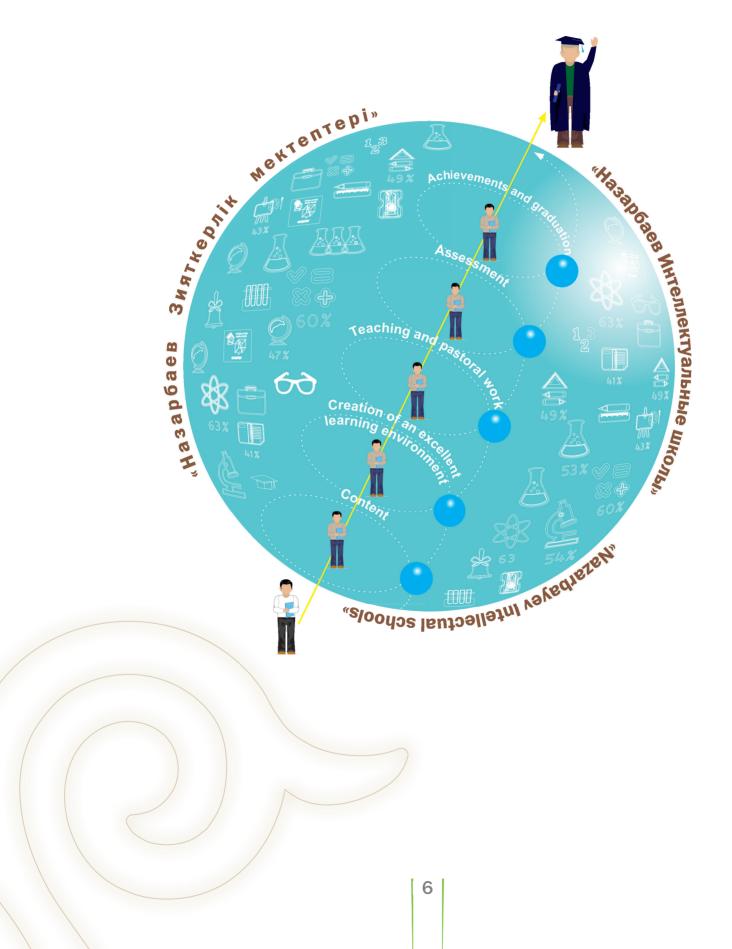
➤ The first participation of students of Intellectual Schools in the International Olympiad on Robotics and winning 3rd place.

http://www.nis.edu.kz/ru/press-center/news/?id=3646

http://edurobotics.ru/archives/1612

- ➤ There are 2 367 teaching staff in Intellectual schools (1 959 Kazakhstan teachers, 351 foreign teachers, 57 part-time).
- > There are 11 446 students.
- ➤ High results of students of Intellectual school of Physics and Mathematics in Semey in the international exam SAT 2 800, 760 and 710 out of a possible 800 and obtaining the title of best young mathematicians.
- ➤ The introduction of external summative assessment of students of 11th and 12th grades of Intellectual schools conducted by the Center for Educational Measurement and **experts** from Cambridge International Examinations.
- 90% of applicants achieved the certification "Altyn Belgi"
- > 100% of applicants achieved certification with honors.
- > 94% of graduates gained scholarships.
- ➤ 100% of graduates entered the universities.

1. EDUCATIONAL PROCESS



1.1 Education content

In response to the realities of the modern world and the challenges of the future, an innovative education model was created in Intellectual schools. The main aspect of this model is the content of education aimed at developing values, as well as the system of knowledge and the development of educational, practical and life skills of a wide spectrum.

In line with the Development Strategy of the AEO, two educational models have been implemented:

- Integrated Educational Program;
- > International Baccalaureate Program.

1.1.1 Integrated education program

In 2014, AEO staff (jointly with the strategic partner - Cambridge University and teachers from Intellectual Schools) worked on the following directions:

- development and revision of subject programs and course plans;
- preparation for and implementation of Integrated Educational Program (hereinafter the educational program);
- > monitoring of implementation of the Integrated Educational Program.

Development and revision of subject programs and course plans

In order to improve subject programs and course plans during the school year, feedback from teachers, students and administration of Intellectual schools was collected. Following this, specialists from the Center of Educational Programs (hereinafter - CEP) carried out a qualitative analysis. In order to discuss and make changes to the subject programs and course plans, more than 20 workshops with teachers-developers of of Intellectual schools were held.



Decisions related to the scope of subject programs content, the learning objectives and their logical sequence were made as a result of workshops. All decisions were externally reviewed by the Cambridge International Examinations (hereinafter - CIE).



As a result of this work:

- 40 subject programs for primary, secondary and high schools in all subjects have been revised and updated;
- 117 course plans for primary, secondary and high schools in all subjects have been revised and updated;
- ➤ 4 subject programs (1 on the subject of "Law" for Secondary school, 3 on the subject of "Physical Education" for primary, secondary and high schools) have been developed;
- > 8 course plans (1 on the subject of "Law" for 9th grade, 7 on the subject of "Physical Education" for 1, 2, 7, 8, 9, 11 and 12th grades) have been developed.

Subject programs for all subjects from 1 to 12 grades, except for the subject «Physical Education», were developed. The Development Strategy of AEO in relation to the development of the educational program, subject programs and course plans has been reached being equivalent to 210 documents.

Educational program was developed taking into account the relationship with everyday life, providing practical laboratory and research activities, emphasizing interdisciplinary integration which is aimed at a holistic knowledge and perception of the world.

This educational program became the basis for the development of a new project of the state standard for primary education and subject programs for secondary schools.

Implementation of the Integrated Educational Program

Due to the fact that the Educational program places high demands on the level of training for both students and teachers of the Intellectual Schools, its implementation is carried out in stages in accordance with the approved schedule.

In 2012 the implementation commenced in grades 7 and 11, in 2013 – it was commenced in grades 1, 8 and 12. In the 2014-2015 school year, the implementation of the Educational program was launched in grades 2, 9, and included the subject of "Physical Education" grades 1 and 7.

In 2014, the coverage of the Educational program was **87% of students** (more than 9300 people) in **15** Intellectual schools. In 2013, there were **58% of students** (more than 5 300 people.) in **14** Intellectual schools.

The features of the Educational program are the implementation of trilingual education, using modern pedagogical approaches (methods of active learning, team teaching, content and language integrated learning) by teachers, practical orientation of lessons, teaching new subjects, including the integrated ones.

To support the Intellectual schools in implementing the educational program teachers are trained annually. During summer, 32 training sessions were conducted by international consultants from CIE for 688 teachers of Intellectual Schools who were trained:

- in all subjects of grades 2 and 9;
- "Global Perspectives and project work" grades 11-12;
- "Physical Education" grades 1 and 7.



Subject specialists of CEP have the potential to develop manuals and to train teachers on the implementation of programs. During the reporting period, CEP held **36 trainings,** where **710 NIS teachers** of grades 7, 8, 11 and 12 were trained.

In August, there was a workshop for school administration and teachers of newly opened Intellectual School in Almaty, which was conducted to explain the peculiarities and implementation of Educational program.

As a result of the Successful implementation of the Educational program during the reporting period was due to:

- ▶ 68 subject-specific trainings were delivered for 1,398 NIS;
- Intellectual Schools teachers were provided with 15 methodological and didactic aids in subjects within the reporting period.

The approbation of educational programs, training programs and plans in the context of language (216 documents) was carried out. This indicator is listed in the development strategy of AEO and has been achieved.

Monitoring of the implementation of the Integrated Educational Program

An integral part of the implementation of Educational program, training programs and plans is monitoring its implementation. With the support of CIEB, some aspects have been revised.

At the end of the 2013-2014 school year, the process of monitoring the implementation of Educational program, subject programs and plans for the grades 1, 8 and 12 was finished. In the 2014-2015 school year the monitoring of the implementation for grades 2 and 9 was commenced.



http://cep-forum.nis.edu.kz/

The process of monitoring the implementation of the Educational program was carried out by collecting data from the school administration, heads of departments, coordinators of subjects including both local and foreign teachers, school psychologists, curators, students, and parents of students through:

- school visits;
- interviews with teachers, students and school administrators, parents,
- lesson observations;
- online surveys;
- > online forum teachers' support.



According to the results of lesson observations, surveys and interviews, it was revealed, that active learning methods and new teaching methods:

- increase the motivation of students:
- develop the skills of communication and cooperation of students;
- make lessons more interesting and varied.

During the interview with the students, many of them indicated progress in mastering the second and third languages. The students thought that the pedagogical approaches used by teachers in the language subjects, studying some non-language subjects in the second and third languages (for example, the subject of "History of Kazakhstan" and "Geography" in the Kazakh language, the subject of "World History" in Russian, profile subjects in high school in English) had a contribution to this progress.



According to the results of the online survey, 94% of students said that teachers who teach in their second or third language, provide the necessary language support to students.

Lesson observations proved that the majority of teachers effectively use the techniques of content and language integrated learning (CLIL), which they were trained to apply in 2013.

It should be noted that teachers effectively use active learning methods. Therefore, students in the classroom are actively involved in the lesson; they pose questions to the teacher and to one another; they think and look for answers to questions; come to their own conclusions and make discoveries.

However, there are some difficulties in the implementation of Educational program.

Firstly, this is due to the lack of language proficiency of both students and teachers.

Secondly, a new approach to learning requires teachers to have subject, psychological and pedagogical knowledge and skills. As part of the professional development, most teachers still need to improve skills in areas such as: effective lesson planning; using student-centered and differentiated approaches in teaching to achieve the learning objectives and lesson objectives; activating prior knowledge; using assessment methods in learning; reflection and giving a feedback etc.

Analysis of NIS teachers' needs in professional development was conducted as a results of monitoring.

Plans for 2015:

- Development of Physical Education course plans for grades 3, 4, 5, 6 and 10.
- Monitoring the introduction of Educational program in the Intellectual Schools.
- Review and revision of educational programs for primary, secondary and high schools, course plans in all subjects of grades 2 and 9, as well as Global Perspectives and Project work grades 11 and 12, Physical Education grades 1 and 7 and Law grade 9.
- Preparation for the implementation of Educational program for all subjects of grades 3 and 10, as well as Physical Education grades 2, 3, 8-12 (with CIE consultants and CEP specialists).

1.1.2 International baccalaureate program

In accordance with AEO 2020 Development Strategy, the International Baccalaureate Program (hereinafter - IB) is implemented in the **Intellectual School of Astana**.

The International Diploma Programme (IDP) has been started teaching in 11th grade since the 2013-2014 academic year. The core program includes six subject groups:

Group 1 - Native language (Kazakh, Russian); Group 2 - Language acquisition (Kazakh, Russian and English languages);

Group 3 - Individuals and Societies (World History, Information technology in the global community):

Group 4 - Sciences (Biology, Chemistry, Physics);

Group 5 - Mathematics;

Group 6 - Art.



The program also includes three main components ("Creativity, Action and Social Service", "Extended Essay" and "Theory of Knowledge"), which develop students' research skills, critical thinking, and teaches students to take care of the environment. The main aim of the program is to prepare high school students for university study.

The school is also organizes the work towards the **authorization of the MYP.** The aims of the Middle school program include:

- All-round development;
- Intercultural communication;
- > Informational.

Under this program the school offers the following subjects:

- Native language (Kazakh, Russian and English);
- Language acquisition (Kazakh, Russian and English);
- Mathematics;
- Humanities (History of Kazakhstan, Geography, World History, Social Sciences, Economics):
- Sciences (Integrated Sciences, Biology, Physics and Chemistry);
- > Design (Design, Computer Science and Technology);
- Art (Art and Drama);
- Physical Education.





One of the main requirements of the program is to provide a connection between the processes to gain in-depth understanding and knowledge mastery.

Experience in implementing the IB diploma program shows that it is necessary to revise approaches to learning, used in primary school, in order to develop students' research skills and to make interdisciplinary links. In addition, significant attention needs to be paid to the development of independent work skills and time management, as these are some of the key factors affecting the education success in diploma program.

It should be noted that IELTS results of students in IB diploma program are significantly higher than the results of graduates of previous years, which demonstrates the positive development of language skills.



In addition, teacher trainings were also organized. Over 80% of school teachers have 1, 2 and 3 level in teaching the IB program.

The IB program (PYP) was also introduced in primary school at the International School of Astana, which was opened in September 2013.

During the reporting period, the school carried out the work to authorize the primary IB school program (PYP). In September 2014, the International School of Astana has received the status of "candidate school" for Primary Years Program (PYP) which precedes full authorization of PYP.

Selection International Baccalaureate program for the primary school was based on the fact that it:

- 1) provides students with excellent academic opportunities;
- 2) meets the most stringent academic standards;
- 3) makes it possible to integrate content with the national standard of any country;
- 4) is based on research and practical education for children;
- 5) aims at the harmonious development of mental, physical, spiritual and aesthetic abilities of student.

PYP training is implemented in six subject areas:

- > mathematics;
- languages;
- social studies;
- > art:
- natural sciences;
- personal, social and physical education.

Six transdisciplinary themes are provided for effective learning and the formation of holistic understanding via inter-subject relationship: "Who we are", "Where we are in time and space", "How we express ourselves", "How the world works", "How we organize ourselves", "The planet is our shared home."



The program is focused to make a child enjoy the process of learning, take an interest in the new information and ideas and constantly develop his natural curiosity. *It promotes free quick thinking and develops an ability to think in an organised and logical manner.*

In order to familiarize themselves with the philosophy and standards of IB, administration and teachers of the school attended formal workshops. In addition, a workshop involving an international trainer of PYP was organized in the school.

Primary school teachers developed a research and subject programs the approbation of which were conducted in September 2014. On the basis of the results it is planned to make additions and changes.

Plans for 2015:

- Preparation for authorization of IB programs for primary and secondary schools.
- Making changes and additions on the basis of the results of the approbation for educational programs in primary school.
- Visiting seminars, conferences, IB schools by teachers for professional development.
- Continuing the cooperation with international experts and IB schools.

1.1.3 Trilingual education

The introduction of trilingual education in Intellectual Schools in order to create a multicultural personality is one of the priorities of the AEO.

Trilingual education is implemented in accordance with the Policy of Trilingual Education and guidance for its implementation, as well as guidance on the application of team teaching and content and language integrated learning (CLIL).

The Kazakh, Russian and English languages are taught not only as separate disciplines, but are also used to study other subjects. In the 2014-2015 academic year, the subjects of primary and high schools are being taught in three languages:

- ➤ 4 subjects in the Kazakh language: "Geography", "History of Kazakhstan", "Kazakhstan in the modern world" and "Basics of Law";
- 2 subjects in the Russian language: "World History" and "Informatics";
- > 7 subjects in the English language: "Mathematics"; "Chemistry", "Physics", "Biology", "Informatics"; "Economy", "Global Perspectives and project work."

In addition, trilingualism is an integral part of extra-curricular activities - drama groups, debate clubs, television studios are held in three languages. A number of extra-curricular projects, such as "100 books recommended for reading by students of Nazarbayev Intellectual Schools", clubs «Wikipedia» and «TEDNIS», «Discover Kazakhstan», «Tugan elge tagzym" and etc. promote the use and development of acquired language skills.

Training courses for teachers on teaching methods and techniques necessary for effective implementation of the trilingual education are held annually. In order to prepare teachers of Intellectual Schools to implement trilingual teaching, an international consultant conducted 4 seminars for 210 teachers of Intellectual Schools of Kyzylorda, Atyrau, Shymkent, Almaty.



A meeting with international experts in the field of bilingual education was organized - who prepared a review of the process of implementation of the trilingual education in Intellectual schools. According to the review, the trilingual education model would lead to a high level of mastery in three languages if the system of work that is currently carried out is continued.

Implementation of the methodology of early immersion in the Kazakh language

Implementation of the methodology of language immersion was commenced in the 2012-2013 academic year on the basis of a kindergarten in Taldykorgan; in the 2013-2014 academic year in grade 1 of the Intellectual Schools in Taldykorgan and Kokshetau.

Analysis of observations in the kindergarten has shown positive dynamics in the emotional state of children.

Children of younger groups of partial immersion have shown a satisfactory level of the Kazakh language acquisition; the middle group of partial immersion and senior group of full immersion have demonstrated a good level of basic knowledge as well as of the Kazakh language. There was a positive trend in pronunciation of specific sounds of the Kazakh language and enrichment of the vocabulary. Children read poems, sing songs, and try to engage in conversation with interest.

Students ofgrade 1 have shown a good level of the Kazakh language: they understand Kazakhspeech; react and respond correctly in simple sentences; pronounce specific sounds of the Kazakh language; use the vocabulary on the covered topics; keep the correct grammatical structure of the sentences.

In relation to the successful implementation of the methodology of early immersion in the Kazakh language, the following work was carried out:

- a workshop on the development of an integrated textbook based on the principles of language immersion for grade 2 and the revision of a textbook for grade 1:
- > a study visit to Estonia to familiarize with the experience of implementing the language immersion programme;
- > a workshop with international consultants to prepare trainers on language immersion;
- > monitoring workshop on analysis of the implementation of immersion programme to provide methodological and professional support to teachers.

As a result of the work:

- an integrated student book "Menin ortam" (My environment) with workbook for grade 2 was developed;
- > an integrated student book "Menin ortam" (My environment) with a workbook for grade 1 was revised in the light in the suggestions made;
- > training manuals and reading books were developed to support teachers in implementing the methodology of language immersion.



Plans for 2015:

- Further work on the strategic plan of the development of trilingual education in the country;
- Monitoring the implementation of the trilingual education policy in Intellectual Schools;
- Review of existing documents on trilingual education;
- Continuing the experiment on the programme of early language immersion program in the Kazakh language in grade 3 of Intellectual schools in Kokshetau and Taldykorgan;
- Training language teachers and subjects teachers on the use of techniques necessary for the implementation of the trilingual education;
- Organisation of seminars on language immersion programme;
- Revision of an integrated student book "Menin ortam" (My environment).

1.1.4 Educational and methodological materials and digital educational resources

The development of educational programs is accompanied by the provision of teaching materials and digital learning resources.

Development of primary education textbooks

PET is developed jointly with strategic partners - Cambridge University and the Institute of Education in London.

During 2014, the work on the development of two components of PET has been conducted: the student book and teacher's handbook.

http://erc-nis.kz/kk/

Competitive selection was held and a team of authors-developers was formed from practicing teachers, linguists, scientists, psychologists for the 7th grade and six authors for each subject: "Mathematics", "Chemistry", "Physics", "Biology", "Informatics", "Art", "World History", "History of Kazakhstan", "Geography".

Capacity building.

Training seminars for authors-developers have been conducted during the year. Authors and editors developed, discussed, modified, and performed an internal examination of PET on subjects of elementary and primary schools in conjunction with the training seminars.

106 authors-developers of PET on the subjects of primary and secondary school teachers from the intellectual and secondary schools and colleges have been trained.



To maintain the quality of translation, a **translation and editing department (hereinafter referred as TED)** operates at the Educational Resource Center (hereinafter - ERC), consisting of 6 translators and 6 editors.

Over the entire reporting period, **12 713 pages of text** have been translated: 2 356 pages from Kazakh into Russian, 5 674 - from Kazakh into English, 8030 - from English into Russian. EEO's i development strategy's indicator was achieved.



In addition to translation, the translators carried out consecutive interpreting at workshops and training sessions. During the reporting period, translators participated in 13 workshops.

Work on developing a single trilingual glossary for all centers and AEO, which presents terms and definitions in the Kazakh, Russian and English languages for a common understanding of the value and the correct translation of materials has commenced. It is planned that a draft version of the glossary with public access will be posted on the electronic platform.

In addition, **editors and proofreaders have processed 3 464 pages** of training materials developed by the authors in the Kazakh and Russian languages. The design of teaching materials for the first grade in 5 subjects was prepared, proofreading the second version of the PET for the second grade was performed.

Regulatory and other necessary documents have been developed and the following documents are in the process of developing: manuals, instructions, practical recommendation and other documents on creating PET and DER.

As a result of the reporting period the following have been developed:

- > 30 layouts of trial versions of PET in 5 subjects in the Kazakh and Russian languages for 1st grade in accordance with the integrated educational program;
- ➤ 30 final versions of PET in 5 subjects in the Kazakh and Russian languages for 2nd grade in accordance with the subject's educational programs (in the context of updating the content of secondary education);
- > trial versions of PET for 7th grade on 8 subjects: "Mathematics", "Chemistry", "Physics", "Biology", "Informatics", "Art", "World History", "History of Kazakhstan", "Geography".

PET for 1st grade on language subjects has been developed: "The Kazakh language and literature" (as a first language - L1), "Russian language and literature" (as a first language - L1), "The Kazakh language" (as a second language - L2), "Russian language" (as a second language - L2); PET in the 5 subjects for grade 3;

trial versions of PET (textbooks, workbooks and teacher's handbook) on the following subjects have been submitted for approval in Intellectual schools in Kokshetau and Taldykorgan: "World Understanding", "Introduction to the science", "ICT", "Mathematics", "Art" for 1st grade.

Plans for 2015:

- Further development, design and publication of trial versions of PET for 2nd grade on following subjects: "World Understanding", "Introduction to the science", "ICT", "Mathematics", "Art";
- Further development, design and publication of trial versions of PET for 1st grade on following subjects: "Kazakh language" (first language), "Kazakh language" (second language), "Russian language" (first language), "Russian Language" (second language), "English."
- Approbation of PET for 1-2nd grades on 5 subjects:
- Testing of PET for the 3rd grade on the subjects of primary school;
- Development of PET for 4th grade on 5 subjects ("Mathematics", "Introduction to the science", "World Understanding", "ICT" and "Art");
- Further development of the first draft versions of PET on 9 subjects for 7th grade: "Mathematics", "Chemistry", "Physics", "Biology", "Informatics", "Art", "History of Kazakhstan", "World History", "Geography" in Kazakh and Russian languages;
- Training seminars for authors and editors.

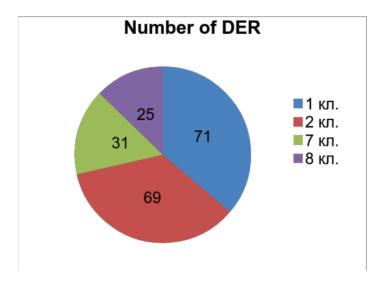
Development of digital educational resources (DER)

In relation to the development of DER, the main focus has been given to comprehensive training and educational games; interactive training simulators; and virtual laboratories.

There are some further requirements for certain types of DER, such as interactive virtual tours, applications of augmented and virtual reality, and 3D technology and animations.

196 DER is being developed in three languages (Kazakh, Russian, English) for elementary and primary schools in accordance with the integrated educational program.

http://erc-nis.kz/



Using DER in the process of teaching and learning will allow the following tasks to be achieved:

- providing a wide range of additional and supplementary information to deepen the knowledge of the topic being studied;
- providing students with knowledge and allowing students to give their feedback;
- assisting in the evaluation of students' knowledge acquisition;
- > familiarizing teachers with modern information technologies; the facilitation of the needs of ICT in learning.
- > increasing student interest in subject content through a new form of presentation;

- providing opportunities to study topics at an individual pace according to the individual's level of mastery of the material;
- increasing access to knowledge through modern technology in the teaching process if appropriate;
- development of the creative potential of the student.

Digital resources are created with reference to the modern cross-platform technology using HTML5 / Javascript, i.e making it possible to work with more than one hardware platform and / or operating system. Digital resources will facilitate the more convenient use of applications on tablet devices in the absence of a network connection. As well as the use of specific properties of tablet devices, DER in the form of "native" (developed specifically for certain platforms) applications were created, for the following operating systems: iOS, Android, Windows.

In addition, one of the main requirements, made to develop digital educational resources, was the compliance with the requirements of modern specifications, in the field of e-learning, such as the Experience API (Tin Can API). This would provide an opportunity for a more qualitative and in-depth analysis of student performance.

After the completion of the platform for the dissemination of DER, which will become part of Learning Record Store, all the resources (which have been designed) will be integrated into a single system, and educational resources will be available anywhere at any time for teachers and students.

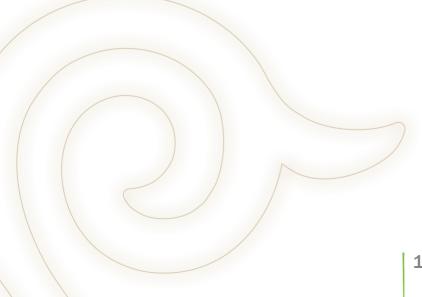
At the same time, work on state registration of intellectual property rights to the pertinent items of copyright is being obtained.

In addition, a pedagogical knowledge base has been developed, which contains materials to support teachers preparing for the lessons.

http://sk.nis.edu.kz/

Plans for 2015:

- Development of 200 digital educational resources for primary and primary schools with localization:
- Development of 50 DER without localization;
- Development of a system of virtual reality and 3D animations:
- Development of virtual laboratories for basic schools in major subjects.



1.2 Student enrollment

At the end of 2014, there were 11,451 students in 17 Intellectual Schools.

Table. Number of students in Intellectual schools by class (January 1, 2015)

| radic. Namber of stadents in interioritati schools by class (sandary 1, 2010 | | | | | | | | , , | | | | | |
|------------------------------------------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|--------|
| Schools | 1st grade | 2nd grade | 3rd grade | 4th grade | 5th grade | 6th grade | 7th grade | 8th grade | 9th grade | 10th grade | 11th grade | 12th grade | TOTAL |
| Astana PMD | | | | | 151 | 113 | 141 | 210 | 174 | | 128 | 91 | 1 008 |
| Astana IB | | | | | | | 161 | 135 | 124 | 107 | | 41 | 568 |
| Aktobe | | | | | | | 97 | 93 | 197 | | 186 | 136 | 709 |
| Almaty PMD | | | | | | | 96 | 265 | 234 | | 167 | | 762 |
| Atyrau | | | | | | | 79 | 78 | 183 | | 186 | 180 | 706 |
| Karaganda | | | | | | | 80 | 93 | 201 | | 175 | 166 | 715 |
| Kokshetau | 60 | 57 | | | 71 | 74 | 80 | 109 | 112 | | 118 | 95 | 776 |
| Kostanay | | | | | | | | | 123 | | 33 | | 156 |
| Kyzylorda | | | | | | | 119 | 177 | 151 | | 151 | 101 | 699 |
| Pavlodar | | | | | | | 133 | 132 | 153 | | 79 | 163 | 660 |
| Semey | | | | | 66 | 49 | 80 | 137 | 164 | | 111 | 83 | 690 |
| Taldykorgan | 68 | 38 | 41 | 36 | 58 | 44 | 80 | 89 | 80 | | 90 | 97 | 721 |
| Taraz | | | | | | | 139 | 119 | 183 | | 153 | 104 | 698 |
| Uralsk | | | | | | | 80 | 94 | 97 | | 175 | 133 | 579 |
| Oskemen | | | | | 80 | 59 | 138 | 103 | 88 | | 107 | 67 | 642 |
| Shymkent PMD | | | | | | | 139 | 95 | 188 | | 135 | 128 | 685 |
| Shymkent CBD | | | | | | | 104 | 195 | 114 | | 129 | 130 | 672 |
| Total | 128 | 95 | 41 | 36 | 426 | 339 | 1 746 | 2 124 | 2 566 | 107 | 2 123 | 1 715 | 11 446 |

Social and economic status of students' families of Intellectual schools is represented in a table.

Table. Social and economic status of students' families

| Sample Groups | Number of students |
|--------------------------------------|--------------------|
| Children from single-parent families | 1 451 |
| Children from large families | 2 074 |
| Parents are pensioners | 330 |
| Both parents are unemployed | 146 |
| Parents are disabled | 141 |
| Children under guardianship | 29 |
| Disabled children | 16 |

To select the students for Intellectual Schools a competitive screening was held.

1.2.1 Competitive selection of students

In 2014, 19 438 applicants participated in a competitive selection exercise for 10th and 11th grades. 4 549 of them were enrolled in Intellectual Schools.

On average, four students competed for one place, the same ratio as in 2013.

For the admission of students, studying natural and mathematical sciences in the 7th grade of Intellectual schools, a system of competitive selection was developed in conjunction with strategic partners Cito (Institute of Educational Measurement, The Netherlands) and CTY (Center for Talented Youth at Johns Hopkins University, USA).

The ability of students to study natural and mathematical sciences allows them to:

- effectively absorb the content of the educational programs of Intellectual Schools and develop a wide range of skills and be successful throughout the whole period of schooling:
- solve everyday problems in many areas of academic education and professional fields such as Mathematics, Physics, Chemistry, Biology, Medicine, Engineering, Architecture, Computer Graphics, etc.

The selection system for 7th grade includes two tests:

- 1. Subject Test in Mathematics, Kazakh, Russian and English. The tests which are intended to assess the student's knowledge, application, functional literacy, mathematical thinking and reading literacy. Different life situations, charts, graphs and drawings are included in the texts used in the tests.
- 2. Testing the abilities to the study of natural and mathematical sciences, is aimed at assessing students' abilities to:
 - work with figures on the basis of logical and mathematical thinking,
 - understand and memorize the spatial relationship between objects,
 - mentally rotate three-dimensional objects in space,
 - mentally fold three-dimensional shapes.

Software is used in accordance with international approaches for the statistical processing of results. This allows the final score to: be calculated based on the complexity of each issue; exclude low-quality issues; and provide an objective evaluation of the results. The results of the tests are, therefore, beyond appeal. Such standardized processing of the results allows students who perform more complex tasks in the test to achieve a higher score.

The work is checked electronically. Identification of work is made after verification by barcode that matches with the IN of each applicant assigned to the candidate at the time of registration.

The results of the competitive selection of students of 7th grade in 2014-15 academic year.

 $14\ 458$ students of sixth grade of secondary schools attended the competition for the grant of the President of the Republic of Kazakhstan to study on the 7th grades of 17 Nazarbayev Intellectual Schools .

The number of people wishing to enter the Intellectual Schools is increasing with every year. In 2011, 2.1 people competed for one place , in 2014, 5.8 people competed for a single place.

Table. The number of applicants for the selection of 7th grade of Nazarbayev Intellectual Schools in the dynamics by years

| Competitive selection | Number of applicants | The number of vacant places | Competition for each place |
|-----------------------|----------------------|-----------------------------|----------------------------|
| 2011 | 1 496 | 720 | 2.1 |
| 2012 | 5 022 | 1 495 | 3.4 |
| 2013 | 12 436 | 2 464 | 5.0 |
| 2014 | 14 458 | 2 476 | 5.8 |

The results of the subject test:

The average score for the subject test was 521,4 points out of a maximum 1000 points.

The **highest average score** for subject tests was achieved by applicants from the school in Astana (613.9). The lowest average score for subject tests was recorded by the applicants frrom the school in Kyzylorda (453,5). The maximum score (973) was reached by applicants from Almaty (PhM).

The results of students with Kazakh language of study - Kazakh are lower in all subjects than the results of students with Russian as the language of study, with the exception of the results of the Kazakh language test. Thus, the average score in mathematics among students with the Kazakh language of instruction was 152.6, with Russian language -174.7, in the English language test-82.0 and 103.6 points respectively.

Results of abilities testing:

Average score for the academic ability test was 64.3 out of a maximum 134 points.

The **highest average score** was recorded by applicants from Almaty (77.6) and Astana (77.6). The lowest average score (55) - Kyzylorda. The maximum score (129) was acheived by applicant from Almaty.

The results of students on the subject and ability tests in 2014 are higher than in 2013.

1000 900 800 700 600 521.4 512,6 2013 500 **2014** 400 300 200 64,3 59,6 100 0 Ability testing Subject test

Diagram. The results of the subject and abilities tests for 2013, 2014

Participation in the competition:

Students who receive following points are allowed to participate in grant competition:

- > 35% of the maximum possible score in mathematics (140 points out of 400);
- ➤ 40% of the maximum possible score on the ability testing on the section of assessing arithmetic (24 points out of 60).

According to the results of the two tests, 50% of applicants (5161 pers.) obtained the minimum number of points required for participation in the **competition for scholarship**, 73% in Almaty and only 33% in Kyzylorda.

Grouping of students according to their abilities

The results of ability tests showed that the level of ability of students to study natural and mathematical sciences differs, and, therefore, students can be divided into 4 groups according to the requirements of CTY: very high, high, medium and satisfactory.

Table. Characteristics of students' abilities

| Level of ability to study natural and mathematical sciences | Characteristic |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Very high | Students' ability is equitable with the abilities of the best 1% of students of 9th grade of secondary school. Students have the ability to take in information and educational material of an advanced level of complexity, similar to university programs, faster than their peers. |
| High | Students' ability is equitable with the abilities of the best 25% of students of 9th grade of secondary school. Students have the ability to take in high level information and educational material in high school learning programs faster than their peers. |
| Medium | Students' ability is not equitable (lower) than the abilities of the best 25% of students of 9th grade of secondary school. Students have the ability to take in information and educational material on the same level as their peers. Students are capable of excellent study at school with the proper organization of the educational process. |
| Satisfactory | Students in this category correspond to the characteristics of the level of "medium", but they have more limited spatial reasoning ability. Students are capable of excellent study at school with the proper organization of the educational process but they may have difficulties with performing tasks that require abstract logical thinking, for example, in chemistry. |

Students with sufficient and middle abilities are form the 'at risk group'.

Students who received scholarships in 2014 were divided into groups according to their abilities as follows:

- > very high level 23% of students;
- ▶ high 47%;
- > medium 27%;
- satisfactory 3%.

The percentage of students with a very high level of skills in Astana was 59%, and in Shymkent CBD school there were only 10%. The highest percentage of students with satisfactory skills were in Kyzylorda and Taraz (8%).

The system of competitive selection of students in 7th grade, through evaluation of subject knowledge, skills and abilities proved to be effective. The success of the system was demonstrated by the results of a sociological survey conducted at the end of the 2013-2014 academic year.

Students selected on the basis of an assessment of abilities, showed greater competency in all subjects, compared with students selected on the basis of an assessment of subject knowledge.

A sociological survey of teachers showed that children enrolled in Intellectual schools based on an assessment of abilities have original, innovative thinking. These students are very active, hungry for new knowledge and they love to work independently. Teachers working with these students, have had to change their methodology as well as the structure and content of their lessons, as children have a high rate of assimilation of information. Furthermore, the students are able to independently derive a theoretical understanding based on practical tasks.

During the reporting period:

- competitive selection tasks have been developed to test the functional literacy of students, and to identify students' abilities to handle quantitative characteristics;
- testing and approbation of examination tasks developed for competitive selection have been conducted;
- 9 rounds of competitive selection has been held for students of grades 1-10 in the Intellectual Schools;
- > statistical processing of 11,847 work of applicants for the 7th grade and 3,609 works of the 1st round of applicants of 8, 9, 10th grades have been performed;
- > an analytical report on the results of the competitive selection has been prepared;
- competitive selection of students of 7th grade, who are capable of studying the natural and mathematical sciences, is used in all schools
- legal documents governing the conduct of competitive selection (rules, instructions) have been improved.

Plans for 2015:

- Seminars and training will be conducted for developers of competitive selection tasks in order to broaden the base of test tasks;
- Development of the subject test tasks and test capabilities for the annual update of the task base to 20%;
- Testing of newly developed tasks for competitive selection;
- Preparation of options and design of tests for competitive selection, reproduction of materials;
- Conducting competitive selection in 20 Intellectual Schools;
- Statistical processing of test results;
- · Analysis of the results of selection;
- Preparation of materials for the Republican Commission on award of grant.

1.2.2 Virtual and vacation schools

Virtual and vacation schools continue their work in order to prepare, identify and select children, who are capable of studying natural and mathematical sciences in 2014.

http:/vs.nis.edu.kz

VIRTUAL SCHOOL

During the reporting period, 2 750 students of secondary education institutions throughout the country took part in the virtual school, indicating a growth compared to the 1 301 students taking part in 2013.

Table. Number of participants of Virtual School in 2014

| No. | Intellectual school | VS participants (5th grade) | VS participants (6th grade) | Total |
|-----|-----------------------------------------------------------|--------------------------------|--------------------------------|-------|
| 1 | Astana Intellectual School of Physics and Mathematics | 140 | 369 | 509 |
| 2 | PMD of Kokshetau city | 94 | 133 | 227 |
| 3 | CBD Ust Kamenogorsk city | 74 | 81 | 155 |
| 4 | PMD of Semei city | 45 | 66 | 111 |
| 5 | PMD Taldykorgan city | 16 | 152 | 168 |
| 6 | PMD of Uralsk city | 43 | 101 | 144 |
| 7 | PMD of Aktobe city | 106 | 106 | 212 |
| 8 | Karaganda Intellectual school of Chemistry and Biology | 28 | 52 | 80 |
| 9 | PMD of Shymkent city | 220 | 141 | 361 |
| 10 | CBD of Shymkent city | 48 | 72 | 120 |
| 11 | CBD of Pavlodar city | 29 | 68 | 97 |
| 12 | Kyzylorda Intellectual school of Chemistry and Biology | 111 | 84 | 195 |
| 13 | Taraz Intellectual School of Physics and Mathematics | 68 | 155 | 223 |
| 14 | Atyrau Intellectual school of Chemistry and Biology | 69 | 79 | 148 |
| | TOTAL | 1 091 | 1 659 | 2 750 |

VACATION SCHOOL

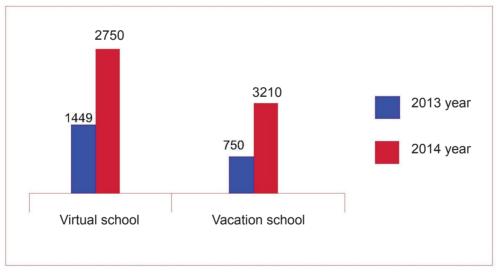
Students who have successfully participated in the Virtual School are invited to a regional Intellectual school for full-time study in vacation schools on the following subjects: Mathematics, Kazakh, Russian and English languages.

606 students of 5th grade and 2 604 students of 6th grade attended vacation schools, which is more to 2 460 students comparing with 2013.

Table. Number of participants of the vacation school

| # | Intellectual school | Total | | | | | |
|----|-----------------------------------------------------------|-------|-----------|-----------|--|--|--|
| # | intellectual school | Total | 5th grade | 6th grade | | | |
| 1 | Astana Intellectual School of Physics and Mathematics | 320 | 113 | 207 | | | |
| 2 | PMD of Aktobe city | 267 | 67 | 200 | | | |
| 3 | Atyrau Intellectual school of Chemistry and Biology | 244 | 43 | 201 | | | |
| 4 | Karaganda Intellectual school of Chemistry and Biology | 265 | 12 | 253 | | | |
| 5 | PMD Kokshetau city | 173 | 66 | 107 | | | |
| 6 | Kyzylorda Intellectual school of Chemistry and Biology | 144 | 30 | 114 | | | |
| 7 | CBD of Pavlodar city | 216 | 8 | 208 | | | |
| 8 | PMD of Semei city | 224 | 24 | 200 | | | |
| 9 | PMD Taldykorgan city | 88 | 8 | 80 | | | |
| 10 | Taraz Intellectual School of Physics and Mathematics | 316 | 46 | 270 | | | |
| 11 | PMD of Uralsk city | 291 | 41 | 250 | | | |
| 12 | CBD Ust Kamenogorsk city | 279 | 47 | 232 | | | |
| 13 | PMD of Shymkent city | 254 | 88 | 166 | | | |
| 14 | CBD of Shymkent city | 129 | 13 | 116 | | | |
| | TOTAL | 3 210 | 606 | 2 604 | | | |

Diagram. The number of participants of virtual and vacation schools in 2013 and 2014.



As a result of this work:

- ➤ Coverage of children in "Virtual School" 2 750 children;
- > 339 of the participants of "Virtual School" entered Intellectual Schools;
- > 321 of the participants of "Vacation School" entered Intellectual Schools;

Plans for 2015:

• To continue the realization of the project "Virtual School", "Vacation School" and cooperation with regional and city boards of education, public schools.

1.3 Pedagogical staff

As of January 1, 2015 there are 2 367 teachers in Intellectual schools: Kazakhstan – 1 959, foreign - 351, 57 - part-time.

1.3.1 Competitive selection of teachers

The main focus is given to the academic achievement of candidate. The selection of teachers in the AEO "Nazarbayev Intellectual Schools" focuses on testing the knowledge of subject, pedagogical, methodological and general cultural competence, communicative skills in applicants.

Competitive selection is governed by legal documents of AEO.

Applicants are tested on their subject knowledge by writing a creative task (essay) and job interview.

http://www.nis.edu.kz/ru/ teachers/teachers-select-rules/

In 2014, 6648 applicants participated in the competitive selection, 899 were recommended for work in Intellectual Schools: 126 - teachers of English, 93 - teachers of Mathematics, 43 - teachers of Informatics, 47 - teachers of Physics, Chemistry, 44 - teachers of Biology, 27 -teachers of History and "Global Perspective and project work", 14 - of Economy and others.

147 of newly hired teachers are certified to teach level programs.

A reserve, numbering 101 teaching staff, has been formed for the timely filling of vacancies. Results of competitive selection have indicated:

- every 2nd candidate achieves the level of threshold on the subject test;
- candidates have weak linguistic competence;
- > candidates have a low level mastery of information and communication technologies;
- poor level of teachers of schools in the country regarding psychology and age characteristics of children;
- > lack of knowledge on assessment, methods of students

In this regard, special attention is given to advanced training of teachers to work in the Intellectual schools; the training program was based on the 3rd basic level. Systematic work was conducted with graduates of regional pedagogical universities.

1.3.2 International teacher recruitment

International teacher recruitment is carried out for teaching core subjects such as English, physics, mathematics, chemistry, biology, global perspectives, economics and computer science in English. Foreign teachers partcipate in the creation of an artificial English-speaking environment and share best practices of teaching.

International teacher recruitment is carried out in collaboration with strategic partners in recruitment (Teach Away Inc. (Canada), Teachanywhere - Ranstad Education Itd. (United Kingdom), Search Associates (David Cope Limited) (United Kingdom), Teacher International Consultancy Ltd. (UK), Edvectus Ltd. (United Kingdom).

Profiles of Intellectual Schools were created on the official websites of international universities (online). Advertisements were posted on social networks and educational associations. Teachers are attracted with the help of foreign workers in the schools.

In 2014, more than 2000 profiles of international teachers applying for vacant positions were reviewed. Documents were thoroughly checked, including three letters of recommendation from previous employers, confirmation of a clean criminal record of the candidate, a medical examination indicating suitability for work. In addition, a skype interview was held with each candidate. Foreign teachers are employed on probation. Teachers, who do not pass probation, return to their country. One of the strategic partners provides substitute teachers.

In 2014, 351 foreign teachers from UK, USA, Canada, New Zealand, Ireland, South Africa, Australia were employed in the Intellectual Schools including, 9 employees with PhDs, 129 employees with undergraduate qualifications, 116 are PGCE graduates, 121 teachers are holding of international certificates of teaching (CELTA, IBDP, TESOL, ESL, TEFL).

The qualitative composition of international teachers is improving with every year. There is an increase in the number of PhD, Masters, and PGCE graduates and teachers with international certificates.

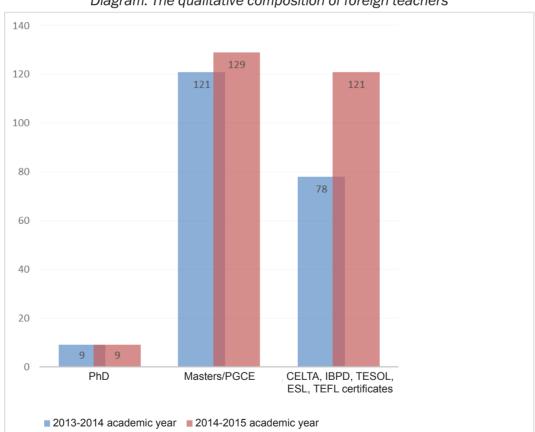


Diagram. The qualitative composition of foreign teachers

Teams of foreign teachers who teach subjects, also hold training seminars on the methodology of team teaching, teacher leadership, critical thinking, active learning, working with equipment (eg PASCO, using instruments PHYWE SPARK). The lessons are sent to each Intellectual school. Elective courses and clubs are organized for students:

- For the development of language skills Chat Cafe, «Laboratory of English", "Artist", the club of public speaking skills;
- For the formation of research skills the young naturalist club, environmental club, club of scientific puzzles;
- For the development of ICT competencies QR-coding, Lego-modeling, robotics, rocketry;
- > To provide students with measures for healthy lifestyles chess club, riding club and archery.

International teachers offer preparation courses for international exams such as APTIS, IELTS / TOEFL, SAT, SET are organized.

In addition, language courses are organized for teachers and children.

The very good work of foreign teacher, Pragasen Naidu, AEO "Nazarbayev Intellectual Schools" is recognised through the achievement as the national organiser of the competition in robotics for Kazakhstan (RoboFest).

Within the framework of transferring shared experience of Intellectual schools, foreign experts conduct a series of master classes at the local and regional levels.

Within the framework of transferring their experience, foreign experts conduct a series of master classes at the local and regional levels, actively sharing their experience in teaching and learning.

Work on replacing international teachers with Kazakh specialists is in progress.

Teaching staff reserve lists, consisting of subject teachers with a level of IELTS 5.0 and above and 93 subject teachers were prepared.

1.3.3 Professional development of teaching staff

ADVANCED AND TARGETED TRAINING OF TEACHERS

The competitive selection of teachers is carried out before the opening of the school in order to ensure their training on 3 (basic) level program.

During the reporting period, 539 teachers were trained in Intellectual schools on the 3 (basic) level program.

To prepare the reserve personnel, training is provided for teachers:

- in the framework of President's international program "Bolashak";
- in Nazarbayev University.

According to the **program "Bolashak"** AEO "Nazarbayev Intellectual Schools" develops and approves a training program in collaboration with foreign universities, where the applicant will undergo training. A tripartite agreement (CIP, AEO, the applicant) regarding working in the Intellectual Schools is signed by the applicant.

The following programs have been developed:

- Internship program in collaboration with the Faculty of Education, University of Cambridge for school principals.
- Program at the University of Applied Sciences in Haamelina and in Yuvaskula, Finland (HAMK, JAMK Universities of Applied sciences) for subject teachers.
- Internship program for subject teachers at the University of Sussex, UK.

13 teachers attended in program trainings in Finland, 10 are studying in the program of the University of Sussex.

The staff of AEO and the teachers of Intellectual schools are enrolled in the three projects at **Nazarbayev University.**

Since August 2013, 24 staff are studying in the 2 year Masters' program on "Education Management".

During the 2014-2015 academic year, 24 employees of AEO were enrolled for training in the specialty "School Leadership". They will complete their training in August 2016.

CAREER DEVELOPMENT SYSTEM (CDS)

System of teachers' training in Intellectual schools is based on the best practices and traditions of Kazakh and international educational systems.

www.nis.edu.kz

CDS presents education taking into account individual patch of development for teachers through training programs in the following educational modules:

- > mandatory training modules (Kazakh, English, ICT, Pedagogical knowledge), "peer to peer" method teaching colleagues.
- within the country, involving national and international experts;
- abroad at the best educational organizations with the involvement of international experts.

The main thematic blocks of training courses:

Development of subject specific competences of teachers of core subjects for the implementation of the Integrated Educational Program and the model of criteria based assessment:

- Leadership and Management in Education;
- Holistic and character education:
- Development of language skills;
- Information and communication technologies in education;
- Development the giftedness of children;
- Psychological support of the educational process.

During the reporting period, 4 185 people were trained in 4 modules at the school level,nationally -6549 people were trained in 31 courses, abroad -5 training courses were attended by 124 teachers.

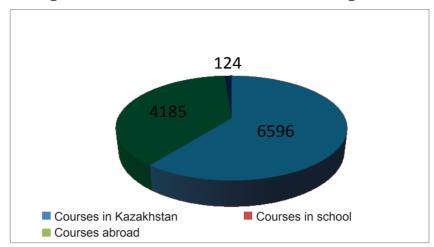


Diagram. Number of teachers who received training courses

Also, 1 500 people continued to be trained on the development and implementation of the Integrated Educational Program and criteria based assessment.

During 2014, as part of the CDS, 12 358 people were trained. Teachers who have undergone training, organize master classes and seminars for their colleagues. Teachers who have received training, participate in the development of educational, training programs, exam materials, training materials and guidelines, operate as experts.

As a result of training, there are 367 certified trainers. Including, 30 - trainers on the program development of children's giftedness, 17 - experts on the evaluation program for the development of children's natural potential, 78 - on a level program, 22 - experts in assessment, 6 - on the course on the fundamentals of robotics, 48 - on the course "critical thinking" 20 - TKT trainers, 8 - on the course on delegated leadership, 45 - on the development of tests, 17 - coaches in preparation for PISA and others.

In 2014, work on the framework of **Action Research** was continued.

In this academic year, 545 teachers and staff were involved in the study of teaching practice, which is an increase of 361 people in comparison with the previous academic year. The number of research papers has been increased from 31 to 151.

Statistics show that, according to the outcomes of the STT, the general level of knowledge of the Kazakh language has been increased significantly. The number of teachers with "basic level" of knowledge and skills has been reduced and the number of teachers with a high level of the Kazakh language has been increased ".

Comparative analysis of Kaztest showed that the percentage of teachers who have attained a high level of knowledge of the Kazakh language has been increased from 20% to 45%, compared to the year 2011.

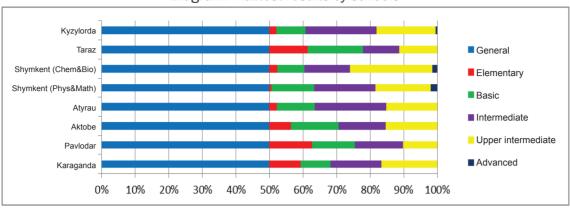


Diagram. Kaztest results by schools

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

The percentage of teachers with secondary and advanced levels of English is 26.2% of the total number of test participants. Newly opened schools are staffed by a large number of teachers with primary and elementary levels of English proficiency. Distance learning courses are made available to support these teachers in improving their language skills.

Table. English language level (APTIS)

| Table. Eligibil language level (AF | | | | | | | | | |
|------------------------------------|------------------|--------------------------------|----|----|----|----|----|--|--|
| City | Number of people | English language level (APTIS) | | | | | | | |
| | | AO | A1 | A2 | B1 | B2 | С | | |
| 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 | 127 | 32 | 23 | 17 | 19 | 12 | 24 | | |
| Kokshetau | 121 | 35 | 58 | 21 | 5 | 2 | | | |
| Karaganda | 126 | 33 | 54 | 13 | 3 | 7 | 16 | | |
| Oskemen | 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 CBD | 107 | 14 | 26 | 19 | 23 | 15 | 10 | | |
| Atyrau | 115 | 5 | 26 | 39 | 35 | 5 | 5 | | |
| Astana IB | 118 | 19 | 32 | 16 | 16 | 11 | 24 | | |

Monitoring data of language modules is testament to the positive development of competencies of teachers of the Intellectual Schools. To date, the Intellectual schools have 168 trilingual teachers, who are capable of thinking in the context of three cultures and able to expose the students to a new way of thinking. As part of the trilingual education, students are taught language proficency, and they also learn to see the world through the eyes of "native speaker".

212 teachers conduct classes in English in Intellectual schools on the following subjects: "Global Perspectives and project activity", "Economy", "Physics", "Chemistry", "Biology", "Informatics".

93 subject teachers' English language proficiency is on a scale of IELTS 5.0 and above.

An online community of educators was created to provide guidance to newly opened schools through activation of a networking forum for educators cep-forum.nis.edu.kz, through the work of teaching network communities.

Learning outcomes in refresher courses are the result of educational/pastoral activities and indicators of quality of education throughout the whole network of the Nazarbayev Intellectual Schools. The learning outcomes measure students' achievements in the context of subjects that are reflected in the "Results of the students", as well as teachers' participation in the transfer of experience gained in the secondary education system as experts and trainers.

Plans for 2015:

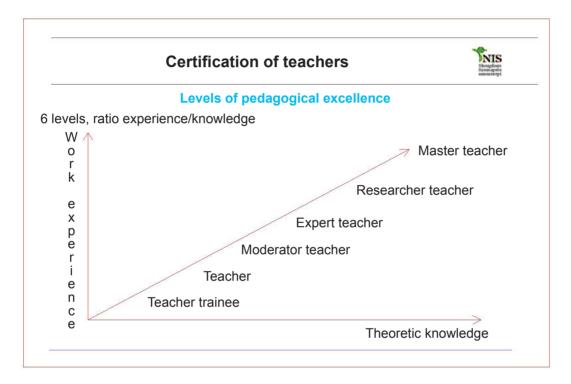
- Further development of the training systems of AEO, development of the comprehensive program in the following areas:
 - 1. Sharing knowledge through the free of charge intraschool "peer to peer" training courses, with the assistance of certified trainers from among the teachers of the Intellectual Schools.
 - Thequalified teachers of AEO "Nazarbayev Intellectual Schools" will develop their research skills; they will be trained by teachers, who have undergone training on the following courses: Action Research & Lesson Study, "Critical Thinking". The potential of the Intellectual Schools teachers with academic degrees will be developed.
 - Intraschool compartmentalized training courses will be conducted using the "peer to peer" method The courses will be organised for assistant teachers, school administrators, inspectors of career-oriented work, psychologists of Intellectual Schools and others.
 - 4. Continuing the work on the organization of the competitive selection of teachers for schools
 - 5. Continuing the training and development of teachers of Intellectual schools through organizing participation in master degree programs in foreign universities and "Nazarbayev University" and internships within the framework of the program "Bolashak".
 - 6. Continuing the internship of teaching staff to implement the policy of substitution of foreign teachers by local teachers, as well as for the development of a wide range of networking with foreign schools.
 - 7. Work on the formation of a reserve manager team in Intellectual schools will be continued.

1.3.4 Certification of teachers

A system of auxiliary evaluation of teachers was created in 2012. It is based on the experience of foreign countries and encourages purposeful, continuous upgrading of skills of teachers, their methodological culture, personal professional growth andthe use of modern teaching technologies.

Teachers are certified by a 6-level model of pedagogical skills in the three fields of competence: "Professional Knowledge", "Professional Practice", "Professional Development".

http://www.nis.edu.kz/ru/ teachers/profes-develo/ validation/



Every teacher in Intellectuals School can build an "individual route" of professional growth from teacher-trainee to master teacher. Professional activity and changes in the level of professional competence, effectiveness of the work are evaluated during the certification process.

118 teachers were certified during the last reporting period. 112 teachers have demonstrated the agreed level of pedagogical skills, representing 95% of the total number of applications, including: "teacher" - 22 people. (19,6%), "moderator" - 73 people (65,2%), "expert" - 17 people (15,2%). 6 teachers (5,1%) were not certified because of plagiarism.

Taking into account all certifications held in Intellectual Schools, there are 107 (5.2%) teachers-experts, 267 (13%) teachers-moderators, 1 270 (61.7%) teachers, 416 (20.1%) teachers-trainees.

It should be noted that the skill level of teachers increases every year, which is the result of organized training courses. In comparison with 2013 year the number of teachers with the level of pedagogical skills "teacher-moderator" has increased to 52 persons, "teacher-expert" - to 23.

It can be said with confidence that the pedagogical skills of every teacher are confirmed in practice in everyday school life.

Also it should be noted that the professional community of teachers is successfully operating in AEO, where teachers from 17 Intellectual schools interact with each other and exchange their experiences.

http://www.cpm.kz

In order to improve the qualification procedures, new rules have been developed regarding the certification of teachers during the reporting period. New norms and concepts were included in these rules: criteria for evaluating teaching activities, the scale score to determine the compliance level of pedagogical skills was updated. There are two levels of skills for groups of teachers and persons. Teachers in the Intellectual Schools were involved in the development process of the criteria for defining the levels in 2014,

Plan for 2015:

- Improving the Attestation rules for pedagogical employees and equated persons.
- Maintain the attestation process.

1.3.5 Qualitative composition of teaching staff

1956 (99.8% of the total number of teachers) teachers have higher education qualifications. 351 (17.9%) teachers have a Master's degree, which 4% higher compared with 2013, 15 (0.8%) teachers are candidates of sciences, 35 (1.8%) teachers are graduates of the program "Bolashak".

Seniority of teachers: "without experience" -117 (6%), with experience "of 10 years or less" - 807 (41.2%), with experience of "11 to 20 years" - 525 (26.8%), with experience "20 up to 30 years "- 373 (19%), with experience" from 31-40 "- 127 (6.5%), with experience of "41 years and more" - 10 (0.5%). These indicators remain unchanged from last year.

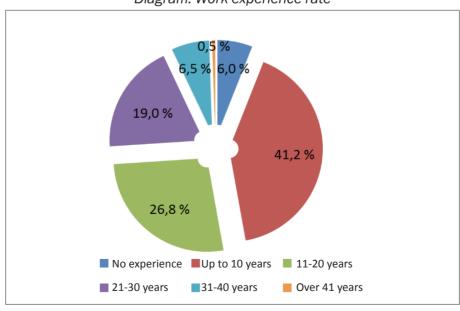
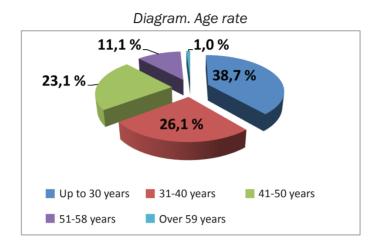


Diagram. Work experience rate

At the same time, the largest share of teachers that have approximately 20 years experience. In Kokshetau it was 31%, in Shymkent PMD - 30%, and in Astana PMD - 28%.

The analysis of the composition of teachers by age showed the following results: teachers under the age of 30 years - 38.7%, from 31 to 40 - 26.1%, from 41 to 50 - 23.1%, from 51 to 58 - 11.1%, and over 59 - 1%.



In the reporting period, many teachers of Nazarbayev Intellectual Schools achieved qualitative results in training, educational and scientific works.

15 teachers of the Intellectual Schools have been awarded by the Ministry of Education and Science of the Republic of Kazakhstan. Including:

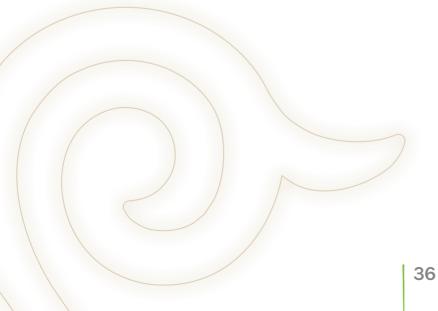
- ➤ The badge "Y.Altynsarin" was awarded to 4 teachers;
- ➤ The badge "Bilim beru isinin kurmetti kyzmetkeri (Distinguished worker of teaching activity") was awarded to 1 person;
- The medal "Enbek ardageri (Labour Veteran)" was awarded to 3 people;
- > The Diploma of the Minister of Education and Science of RK was awarded to 7 teachers

11 teachers of Intellectual Schools of Aktobe, Semey, Astana, Taldykorgan, Uralsk, Oskemen, Kokshetau have been awarded with Diplomas of AEO "Nazarbayev Intellectual Schools" on Teacher's Day in 2014.

Several school teachers have won the Republican competitions on physics, biology, and English. Teaching staff have achieved good results in research activities; the director of the school of Taldykorgan Bayzhikenova G.K. has been awarded the title of a professor at the Academy of Natural Sciences.

Table. Achievements of teachers of Intellectual Schools

| Competition, conference | Teacher name, Intellectual school | Location | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------|--|--|--|--|
| The Republican competition of teachers of physics | Bizhanov E.K teacher of Taldykorgan Intellectual school (3rd place) | Almaty (Kazakhstan) | | | | |
| Winner of the competition «The best Teacher of Biology» | Asabayeva A.K teacher of Aktobe Intellectual school (diploma of 3 degree) | remote participation format, Moscow (Russia) | | | | |
| «The best modern lesson» | Uspanova G.B teacher of Aktobe Intellectual school (third degree diploma) | remote participation format, Tula, Russia | | | | |
| International Competition of achievements in education «Innovation Path» | Bazayeva G.Zh teacher of Aktobe Intellectual school (1st place) | Taganrog, Russi | | | | |
| The second International Conference on the Development of Education in Eurasia. | Omarova B.I teacher of Karaganda Intellectual school | Vienna, Austria | | | | |
| International scientific conference «The 2nd International Conference on Innovation Challenges in Multidisciplinary Research & Practice» (ICMRP -2014) | Ni V.V - teacher of Karaganda Intellectual school, a certificate for the best presentation | Kuala Lumpur, Malaysia | | | | |
| Creative tour among teachers of physics | Bisekov K.Kh teacher of Uralsk Intellectual school (3rd place) | Moscow, Russia | | | | |



1.4 Holistic and character education

The activities of the teaching staff of the Intellectual Schools is aimed at shaping the personality of a student and graduate as a future citizen of the country, who shows:

- active patriotism;
- responsibility, honesty and excellence;
- diligence and commitment to lifelong learning;
- critical and creative thinking;
- respect for the diversity of cultures and opinions, communicativeness;
- openness to new ideas;
- high business and social reputation.

9 trainings for 214 supervisors and other teaching staff on the following topics with the participation of international consultants were organized to implement the policy of holistic and character education, including the following topics:

- "Some approaches to planning the holistic and character education process in the Intellectual Schools";
- ➤ "Drama in the development of valuable relationships among students" with the participation of the international expert of York University from Canada, Jane Deluzio;
- ➤ "Modern approaches in career guidance with students" with the participation of international experts from South Korea;
- "Organization of curatorial services at school" with the participation of international experts from South Korea;
- "Formation of a common policy for the sport competitions in team sports";
- "Formation of a common approach in organization of clubs within the subject" Art";
- Clarification of the policy of holistic and character education of Intellectual Schools students:
- Discussion of the implementation of the program "Bonus KZ";
- > Transferring practices in holistic and character education field of Intellectual schools and others:

The existing policies of pastoral work were improved and new ones were developed, including:

- > Regulations on the curatorial services in Nazarbayev Intellectual Schools;
- The list of songs in the framework of the project "Kazakh national songs";
- Model Generic regulations about debate clubs in Nazarbayev Intellectual Schools;
- > Regulations regarding a network of competition of innovative ideas;
- Regulations on career guidance in the Nazarbayev Intellectual Schools;
- > A program on developing career-oriented work in the Nazarbayev Intellectual Schools;
- ➤ Changes were made to the Mission of Nazarbayev Intellectual Schools in order to implement the national idea "Mangilik El" (Eternal Country).

Accordingly, values were revised, which are considered as common goals in teaching and holistic and character education processes in educational environment of Intellectual schools.

Pastoral workHolistic and character education is realized through social projects and practices.



Students' self-management is implemented through the work of the school parliament and students communities "Shanyrak". There are 3075 students in a school parliament, and 11,324 students are involved in the students Community "Shanyrak".

Shanyrak unites together children of different ages who support each other in studying, in the implementation of project activities and the solution of any problems. Individual interviews as well as surveys of students show that older students enjoy taking care of younger students, whereas younger students are glad to sense caring and unity within the school community.

According to the results of the work, the best students community was "Shanyrak", 872 students and 201

teachers took part at the regional research expedition "Tugan elge tagzym."

In 2014, the educational and research goals of the expedition "Tugan elge tagzym" have been refined and separated into two directions.

nis.edu.kz/ru/projects/ tugan-elge-tagzym/



The purpose of the update: preparing projects in the field of economy, agriculture, industry of regions of the country that contribute to the development of direction of ideas "Eternall Country" in expeditions.

Members of the expedition visited 322 cultural, historical, geographical, industrial objects, including 50 museums, 153 historical sites,

15 cultural monuments of Kazakhstan, which are listed in the state program "Cultural Heritage", 3 historical and cultural monuments of Kazakhstan, which are in the UNESCO list, 10 universities, 28 research laboratories, 20 industrial facilities, 15 libraries, and 10 archives.

Within the framework of the project "100 books recommended for reading to NIS students," students prepared audio records of anthologies in cooperation with the Kazakh National University named after Al-Farabi, which were then given to public schools in Almaty and Kostanay. Students also created e-books using the program "iBooks Author" and prepared drawings and illustrations of the works they read. 20 minutes of reading during the school day is a tradition of all Intellectual schools. All students and school staff are involved in reading books.

https://www.youtube.com/ watch?v=Yawy140f9CU



In order to develop agricultural and industrial labor skills, preserve national traditions, and improve knowledge, social practices "2 weeks in villages" and "10 days in the enterprise of a parent" have been continued. More than 5,000 children were involved.

These projects empower students to conduct experiments on the basis of the application of industrial facilities and agricultural production.

https://www.google.com/ ?gws_rd=ssl#q

As part of the operation of Within the "Wikipedia" club students create their own personal page on Wikipedia, and write articles that can be edited in the Kazakh segment of the site. Students published about 16 231 articles in the online encyclopedia Wikipedia in Kazakh, Russian and English. There are 2 NIS students among the 8 holders of award "Altyn Kalam".

18 students and 4 teachers of the Intellectual Schools, who wrote more than 100 articles with the use of 200 complex words and successfully passed moderation, took part in the annual international conference "Wikimania-2014" in London.

The numbers of "TEDx NIS" clubs increased from 10 to 15 with the participation of 450 students.

The clubs "Wikipedia" and "TEDx NIS" help students to show active citizenship.

Organizing sport competitions also became a tradition in which 435 people took part.

(https://www.google.com/ ?gws_rd=ssl#q





Surveys, interviews, observations were carried out at the end of the year to review the effectiveness of the holistic and character education.

There was a noticeable rise among students of a sense of patriotism and pride for their country and for their Intellectual school, as well as a desire to be educated and acquire multiple languages.

In 2014, new social projects and practices have been implemented.

https://www.youtube.com/ watch?v=YjUSfwQqorM

A One-day project "Take a child to work" was organized for students of grades 7-8.

Many students in their reflective journals wrote that they were proud of their family and relatives when they saw the respect that they held in the eyes of their colleagues. The project involved more than 3,000 students.

https://www.youtube.com/watch?v=BZfG5KOB5Hw

With the aim of educating through the example of the best active people of society, and to prevent the involvement of young people in a destructive religious sects and other unwanted youth movements, the project "Leadership Lessons" was implemented. Leadership Lessons were carried out by deputies of Parliament of the Republic of Kazakhstan, the young businessmen, prominent Kazakh athletes, journalists and others. The project covered 1,950 students.

Also, a new project "Kazakh National Songs", aimed at developing respect for Kazakh history, culture, language and traditions was launched.

Children present Kazakh folklore and national traditions on various projects and elective courses abroad with dignity and pride.

The leaders of the school parliament and student presidents of the Intellectual Schools who were sent for elective courses in West Nottingham Academy (in the US) narrated stories about Kazakhstan in English in a very interesting way. Subsequently, students from the Academy organized thematic activities throughout the school, dedicated to the Independence Day of Kazakhstan, with reference to the information sources.

The following workshops were organized: "Creating Debate Clubs" and "About the effective using of blogging in social projects, Creating a bloggers' club", Debate clubs function successfully which promote the development of public speaking and leadership skills.

For the development of creative writing in English among students in grades 9-12, the contest "Discover Kazakhstan" is organized annually. This year's theme is "Expo 2017: energy of the future and opportunities provided by the green economy."

The competition was attended by over 700 students of NIS schools and other state schools.

Children were told about the unique culture, traditions, and identity of the natural landscape, the dynamic development of the economy, and the welfare of Kazakhstan. The results of the competition were published on the website www.nis.edu.kz. The winners were awarded with diplomas and prizes. The best essay was published in the collection "Discover Kazakhstan".

Plans for 2015:

- To improve the implementation of the national idea "Mangilik el (Eternal country)" and values through the strengthening the content of social projects and practices and all the pastoral process;
- To develop the holistic and character education process by involving all participants of the educational process;
- To apply lessons learned about holistic and character education into 30 pilot schools;
- To conduct an art festival;
- To introduce options for elective courses in the places of significant battles, and the graves of the dead compatriots during the Great Patriotic War;
- To further develop students' project work and research on topics such as "green energy" and the effective use and conservation of biological resources of our country and of the world.
- To improve and update regulations, in particular the concept of holistic and character education in the framework of the national idea "Mangilik el (Eternall country)", House Rules, the program on the development of the community in the boarding school, and others.
- To organize training seminars, and invite experts and professionals working in the boarding schools of Intellectual Schools;
- To improve the format of the competition "Discover Kazakhstan": writing essays on the Kazakh language, attracting students to the competition of the Kazakh diaspora living abroad.
- To conduct activities in 2015 which will be devoted to 550th anniversary of the Kazakh people, the 20th anniversary of Kazakhstan's Constitution, the 70th anniversary of Victory in the Great Patriotic War, and the preparation for the international exhibition EXPO-2017.



1.5 Elective courses and summer schools

Elective courses and summer schools are organized with the aim of deepening subject knowledge, developing the ability to use them in real life and developing research skills.

ELECTIVE COURSES

Elective courses are divided into two types: internal and external.

Each school is free to determine the list of elective courses and programs for them, but the mandatory elective course in secondary school is "Robotics" and for 11-12 classes it's "Preparation for international exams."



During the courses on robotics, students prepare to participate in online contests. The first national contest in robotics was held this year.

For the first time our students took part in international competitions on robotics and took 3rd place among 47 countries.



As a result of preparing students for international exams in the elective courses they have successfully passed the SAT and IELTS.

External elective courses are conducted on the basis of recognized and leading educational and research organizations. Course subjects are associated with the development of language skills of children and important skills.

In Kazakhstan, these courses are held in Al-Farabi Kazakh National University, JSC "Phytochemistry" in Karaganda, and the International Space School named after V.N.Chelomey (Baikonur).

The following table provides a list of foreign courses held in 2014.

Table. List of foreign courses

| No. | External courses | Number of participants |
|-----|--------------------------------------------------------------------------------------------------------------------|------------------------|
| 1 | Out-of-school courses in South Kent School, Connecticut (USA) | 50 |
| 2 | Summer Camp at Center for Talented Youth at Johns Hopkins University (CTY), Carlisle and Lancaster (United States) | 31 |
| 3 | Out-of-school courses at Thornton Academy, Maine (USA) | 30 |
| 4 | Out-of-school courses in FIF Technologies LLP, Singapore | 30 |
| 5 | Out-of-school courses in St. Albans (St. Albans), United Kingdom of Great Britain and Northern Ireland | 28 |
| 6 | Out-of-school courses in St Johnsbury Academy for students of 8-9th grades, Vermont (USA) | 20 |
| 7 | Out-of-school courses in the International Baccalaureate program, Boston, Cambridge dge | 16 |
| 8 | XXXIV St. Petersburg Summer Mathematical School | 8 |

Students are selected for training according to the following criteria:

- > Academic or creative passion of the student;
- Having a positive academic history;
- Having achievements in contests or competitions of scientific projects.

The decision about sending the student to the external courses is made by the pedagogical committee staff of the school.

During 2014, 383 students of Intellectual Schools participated in extracurricular courses in the country and abroad.

Elective courses usually serve as the basis of research work.

For example, in the elective course on "Phytochemistry" in Karaganda, students learn how to maintain endemic biotechnology and medicinal plant species, listen to lectures of practising scientists on the themes "Fitosteroids", and "Alkaloids of plants and their chemical study" in the laboratory of Experimental and Clinical Pharmacology. Later, some students conducted research on the development of food products and detergents without any chemical additives, preserving maximum plant component.

In the International Space School, named after V.N. Chelomei (Baikonur), students constructed models of rockets using the skills that they had acquired.

Smaller models of the solar system were built in extracurricular courses in Thornton Academy, Maine (USA) by students.

Plans for 2015:

- Organizing courses to attract students to a deeper study based on valuable materials of large national museums of natural-scientific orientation and on the basis of the best laboratories of educational institutions in Kazakhstan and abroad.
- Further improvement of the content of elective courses.

SUMMER SCHOOLS

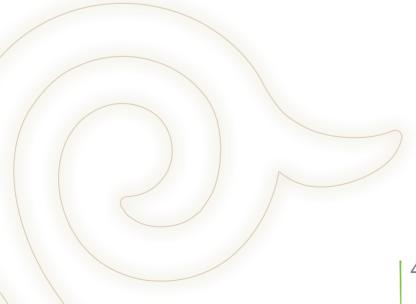
Summer schools are organized on the basis of Intellectual Schools every year to support the intellectual and creative activity of students on the following areas:

- 1. developing language skills and academic knowledge in core subjects;
- 2. developing research skills: search, processing and presentation of information;
- 3. developing language skills through sports, art, drama groups, social and cultural events.

245 students of Intellectual Schools attended summer school. In 2014, 880 students of 7-8 classes of state schools attended for the first time. Sessions on developing language skills and research skills in chemistry, physics and biology were organized for them.

Plans for 2015:

- Improving the content of the summer school.
- Holding events dedicated to important dates: 550th anniversary of the Kazakh khanate, the 20th anniversary of Kazakhstan's Constitution, the 70th anniversary of Victory in the Great Patriotic War, preparing for the international exhibition EXPO-2017.



1.6 Educational resources

Schools are equipped with the latest computer systems, multimedia rooms, high speed internet, innovative software.

Libraries

Library acquisition is carried out in accordance with the rules of the library organization.

Cooperation with Kazakhstan, Russian and foreign publishers has continued (Oxford University Press - United Kingdom, Cambridge University Press - United Kingdom, Pearson - Longman - UK, Barron's - the United States, Kingfisher - USA, Imperial College Press - Singapore, ACT - Russia, EKSMO - Russia, Penguin - UK, DK - USA, Scholastic - United States and others) and this allows for quick familiarization with the latest publications.

Literature is acquired in accordance with the Integrated Educational Program for indepth knowledge and the development of a wide range of skills, supporting the design and research activities of students, studying Kazakh, Russian and English languages at different levels and the development of a culture of reading among students.

The total number of books for the reporting period totals 619,424 including educational, methodological, fictional, scientific literature in Kazakh, Russian, English, German and Korean languages, presented in paper and electronic forms.

Table. The book fund

| Book Category | Book Number |
|------------------------|-------------|
| Educational fund | 326 843 |
| Textbooks | 169 987 |
| Encyclopedias | 4 067 |
| Fiction | 50 733 |
| Dictionaries | 1 798 |
| Additional literature | 56 874 |
| Electronic publication | 5 225 |
| Periodicals | 3 897 |

Book exchange is organized between Intellectual Schools.

In addition, students and teachers use domestic and foreign resources such as "TWIG-BILIM" and "EBSCOhost", which correspond to the needs and interests of students and content of school subjects.

Libraries continue to use the software KABIS, or the "Kazakh Automated Library and Information System" developed by "Kazakh Soft". The system is intended for automation of library processes and the creation of electronic catalogs, as well as full-text databases. For reasons of secuirty, electromagnetic protection system has been installed.

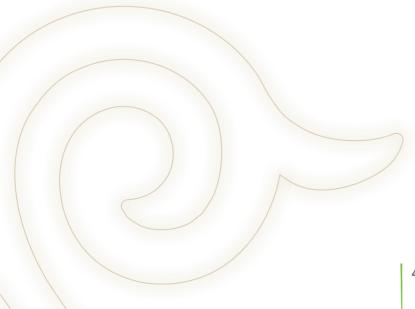
Training courses are organized for librarians. In 2014, they participated in training seminars and were members of the 80th General Conference and visited the IFLA Assembly on the theme "Libraries, citizens and society: the merger of knowledge." Librarians also participated in the 43rd Annual International Conference IASL-2014 in Moscow.

This acquired knowledge and information are used in the organization of the library. Therefore, "Book-crossing" social events, competitions and reading clubs were organized in 2014. "Drop everything and read", "Reading times", "Today a Reader - Tomorrow a Leader", "123" and other projects were implemented.

Each intellectual school holds regional seminars for school librarians. One Republican seminar-meeting was held in 2014.

Plans for 2015:

- To provide newly opened Intellectual Schools with textbooks, PET and additional resources;
- To continue cooperation with international school libraries;
- To study and analyze books of domestic and foreign production;
- To provide methodological support to library branches in their daily work;
- To organize training workshops for librarians of newly opened Intellectual Schools;
- To transfer gained experience on characteristics of the organization of library work in 30 pilot schools.



1.7 Accreditation of intellectual schools

With the purpose to obtain an official confirmation of compliance of educational services quality to specific set of international standards, Intellectual schools are completing the stages of international accreditation process.

The main advantages of the international accreditation are:

- achievement of high quality educational services at schools;
- > an increase of trust among children, parents and the public towards the school;
- obtaining the official status of an "international school";
- providing the Board of Trustees with the confirmation of the high quality educational services at Intellectual schools:
- obtaining recommendations by schools in order to define the priorities for further development according to international approaches.

In April 2014 at the meeting of the Board of Trustees, the international accreditation agency Council of International Schools, Inc. was approved as the strategic partner of Autonomous Educational Organization "Nazarbayev Intellectual Schools" (AEO) in the field of the international accreditation of Intellectual Schools. The Council of International Schools (CIS) heads the list of the accreditation agencies, has the international and recognized status, and also cooperates with other international organizations such as, for example, International Baccalaureate.

AEO and the Council of International Schools signed Memorandum of mutual understanding concerning the international accreditation of Intellectual schools was concluded.

The organizations working in the sphere of international accreditation of educational institutions have standards and requirements imposed on candidates for international accreditation. The main requirement of CIS is receiving membership in the organization prior to accreditation.

After receiving the membership, the Intellectual Schools will be able to submit applications for the international accreditation and to undergo established procedures.

The accreditation process can last on average up to 2 years.

In 2014, 7 Intellectual schools (Astana (2), Kokshetau, Ust Kamenogorsk, Semey, Taldykorgan, Uralsk) applied for the CIS membership.

The Intellectual School of Astana has already become a CIS member.

In order to prepare for accreditation, 8 schools (Aktobe, Karaganda, Taraz, Kyzylorda, Pavlodar, Shymkent (2) and Atyrau) carried out the self-study of school activities and submitted reports, which were considered by CPM experts according to CIE requirements. CPM experts developed recommendations for schools on their development plans based on the self-study results.

Plan for 2015

- Entering CIS membership by Intellectual schools of Astana, Kokshetau, Semey, Taldykorgan, Ust Kamenogorsk and Uralsk;
- Applying for CIS accreditation by Intellectual schools of Astana (2), Kokshetau, Semey, Taldykorgan, Ust Kamenogorsk and Uralsk;
- Submitting membership applications by Intellectual Schools in Shymkent (2), Karaganda, Aktobe, Taraz, Kyzylorda, Pavlodar and. Atyrau as well as completing further stages of accreditation process.

1.8 Education quality assessment

In AEO, A complex system of quality assessment of education providing objective information on progress and achievement of each student for the purposes of monitoring from entrance to graduation in Intellectual school was created in AEO.

The system of quality assessment of education includes the following procedures:

- > selection test,
- monitoring of students' academic achievements,
- criteria-based assessment of learning objectives,
- > and final attestation of graduates.

In a previous subsection, the selection test system was descibed in full giving details on development and an introduction . In this subsection, provides information on three assessment procedures.

- Monitoring of students 'academic achievements;
- Criteria-based assessment of learning objectives achievement;
- > Final Attestation.

1.8.1 Monitoring of students' educational achievements

To ensure the timely pedagogical support of students, their progress in education, and making the required adjustments to the organisation of education progress, 4 types of monitoring were carried out in 2014, including:

- 1. Commencing the Starting monitoring of students' academic achievements at newly opened Intellectual schools;
- 2. Monitoring mathematics of secondary and high school students;
- 3. Monitoring of languages of secondary and high school students;
- 4. Monitoring of academic achievements of Grade 6 students;

COMMENCING STARTING MONITORING OF STUDENTS' ACADEMIC ACHIEVEMENTS AT NEWLY OPENED INTELLECTUAL SCHOOLS

Aiming to identify gaps in knowledge and skills of students, determine level of their readiness for study at Intellectual school, starting monitoring was carried out at the newly opened Nazarbayev Intellectual School of Physics and Mathematics in Almaty.

Monitoring was carried out on following subjects:

- > English in Grades 7, 8, 9 and 11;
- Mathematics and Physics in Grades 7, 8, 9 and 11;
- Chemistry in Grades 9 and 11.

English. Monitoring is aimed on checking four types of speech activity: listening, reading, writing and speaking. Results showed that in all grades speaking skills of students are poor.

In Grade 7 the percentage of the students who coped with tasks on all four types of speech activity totalled 79%, in Grade 8 - 71%, in Grades 9 and 11 less than 70%.

Mathematics. Assessment of students' academic achievements of was carried out in the form of test containing 30 tasks on 3 assessment criteria: "Knowledge and understanding", "Application of knowledge" and "Integration of knowledge". Results showed that 60-75% of students performed tasks correctly.

Therefore, in Grade 7 the indicator of knowledge quality made up 62.2%, in Grade 8 - 71%, 9-75%, 11-71%.

Physics. The percentage of students of Grades 8 and 9 which performed tasks correctly made up 54% and 63% respectively. Results of students of Grade 11 are lower at 48%.

Chemistry. Knowledge quality of grade 9 students was 53%, and for year 11 students, it was 42%.

Results of starting monitoring by subject showed that students who entered Intellectual school from comprehensive schools have gaps in knowledge of all subjects.

Results of starting monitoring are used to inform students and parents, organizations of individual lessons and providing pedagogical support; professional planning of lessons taking into account gaps of students; improvement of the quality of education on the basis of results.

For givingIn order to provide pedagogical support to students, individual training was organized, taking into account existing gaps during lessons, individual lessons and consultations.

As a result of teacher's systematic work with leraners and elimination of gaps in the assimilation of separate subjects of subject program, the quality of knowledge of students increased to 100% by the end of the second term.

Results of students of Grade 7

| Subject | Knowledge quality before entering Intellectual school, % | GPA Avarage score of selection test on mathematics (maximum point 400) | Knowledge quality following the results of starting monitoring, % | Knowledge quality following the results of 2-nd term of 2014-15 academic year, | Difference in indexes of knowledge quality, % |
|-------------|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Mathematics | 97.2 | 184.5 (46%) | 62.2 | 100 | 37.8 |
| English | 94.5 | 119.7 (59.9%) | 61.5 | 100 | 38.5 |

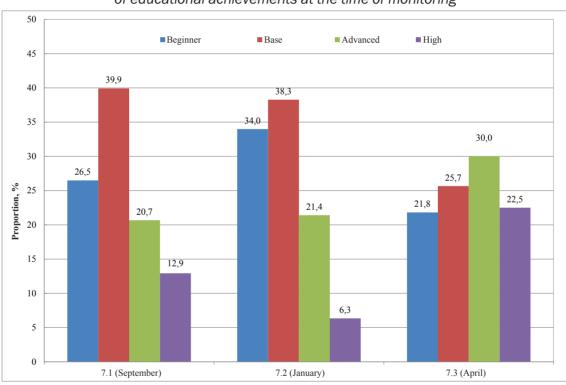
MONITORING MATHEMATICS OF SECONDARY AND HIGH SCHOOL STUDENTS

For assessment of individual progress of students and giving pedagogical support to them for the achievement of learning objectives in mathematics, 3 monitoring processes of educational achievements of students in Grades 7 and 11 of 15 Intellectual schools were conducted in collaboration with strategic partner Cito.Following the results of monitoring, individual reports were prepared for each student; in addition, reports at grade level and for teachers and departments were also prepared. These reports reflect subjects, topics, skills which were causing difficulties for students.

These reports were prepared and sent to schools. They included 1595 individual reports for students of Grade 7 and 2093 for students of Grade 11.

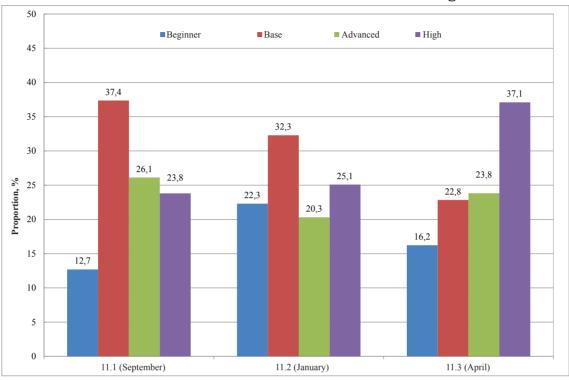
According to results of the monitoring, students were divided into levels of achievements (beginner, base, advanced, high) requirements to which were developed by teachers of Intellectual schools jointly with Cito experts. Detailed description of these levels is presented in the Annual report for 2013.

Results of the monitorings for 2013-14 academic year showed that by the end of academic year the proportion of students of Grade 7 who successfully performed tasks at Advanced and High levels (pictured) increased. Respectively, the proportion of the children who performed activities at the Basic level decreased. Thus, students in groups by the end of academic year were distributed more or less equally. The analysis of results demonstrates students' progress in the achievement of learning objectives in Mathematics within the academic year.



Picture: Proportions of students of Grades 7 on levels of educational achievements at the time of monitoring

The same tendency can be made observed when the results of monitoring of Grade 11 students on mathematics are analysed.



Picture: The proportion of students of Grades 11 on levels of educational achievements at the time of monitoring

AcctordingAccording to the presented results of monitoring meeting of departments were held at schools. On these meetings plans for improvement in teaching and learning where students experienced the most difficultieswere developed. Plans for individual work with students and special cards to inform parents with date and time of individual work were introduced.

During the reporting period, 3 training seminars on technology were conducted with participation of Cito experts for the improvement of the monitoring system and expansion of the test item bank:

- Seminar Workshop for 28 teachers, who involved in developing (from AEO branches in Astana, Kokshetau, Semey, Ust Kamenogorsk, Taldykorgan, Karaganda, Shymkent, Uralsk, Aktobe) test items in Mathematics for monitoring in Grades 7,8,11 and 12. During this workshop, the results of expertise and piloting of test items of monitoring in Grades 8 and 12 has been discussed. Test items were improved according to assessment objectives.
- 2. Who involved in the developing test items on Mathematics, where the results of third monitoring (April) for Grades 7 and 11were discussed. .Test items were improved taking into account the results of statistical analysis. Also, norms of assessment were established.
- 3. Workshop for 28 teachers, who involved in the developing test items. The results of statistical analysis of the first monitoring in Grades 7 and 11 and the expertise of the developed test items in the second monitoring which took place in January. The matrixes of tests has been reviewed taking into consideration assessment objectives.

Aiming to determine the quality of test items and improving monitoring processes of students' academic achievements, piloting of test items was carried out in Intellectual schools of Astana, Kokshetau, Semey, Ust Kamenogorsk, Taldykorgan. 616 students of Grade 8 and 404 students of Grade 12 took part in the piloting.

Based on the results of piloting statistical analysis was carried out by Cito in collaboration with CPM employees and changes were made to the test items and general approaches to monitoring system were specified:

- scale of measurement of student's achievement in the learning process;
- characteristics of student's academic success;
- > reporting form for all stakeholders.

Following the results of piloting a workshop was conducted with teachers-developers where final versions of tests and threshold points were defined.

Based on the work conducted the "Item bank" contains more than 9000 items for monitoring of students' academic achievements in Mathematics.

MONITORING OF SECONDARY AND HIGH SCHOOL STUDENTS' ACHIEVEMENTS IN LANGUAGE SUBJECTS

Development of monitoring system of individual progress of students in achievement of learning objectives in language subjects began.

During the reporting period jointly with Cito experts:

- there were 4 training workshops conducted for 15 teachers of Intellectual schools and AEO staff in the development and expertize of the produced items, assessment of oral speech skills and analysis of piloting results;
- > expertize and piloting of the developed test items for Grade 7 was conducted;
- > there were items developed for Grade 8 and their expertize was conducted.

More than 1800 students took part in the piloting of test items in Kazakh, Russian and English languages at 15 Intellectual schools and more than 500 test items (Table) were piloted.

Table. Number of test items which were piloted

| Skills | Russian language, as a second language | Kazakh language, as a second language | English language | Total |
|---------------------|-------------------------------------------|------------------------------------------|---------------------|-------|
| Reading | 75 | 75 | 90 | 240 |
| Listening | 75 | 75 | 90 | 240 |
| Speaking | 9 | 7 | 10 | 26 |
| Writing | 9 | 7 | 9 | 25 |
| Altogether Total | 168 | 164 | 199 | 531 |

There was additional piloting of test items for assessment of skills "Reading" and "Listening" carried out and more than 1800 students of 15 Intellectual schools took part. More than 900 items were piloted.

Table. Quantity of test items which got additional piloting

| Skills | Russian language as a second language | Kazakh language, as a second language | English language | Total |
|---------------------|---------------------------------------|------------------------------------------|---------------------|-------|
| Reading | 150 | 150 | 180 | 480 |
| Listening | 150 | 150 | 180 | 480 |
| Altogether Total | 300 | 300 | 360 | 960 |

During June - July, 2014 a training workshop was conducted for teachers of Intellectual schools on the development of test items for Grade 8. 487 items were developed in Kazakh, Russian and English languages (table). Test versions were generated for test items piloting for Grade 8 in 2015.

Table. Quantity of developed items for Grade 8.

| Skills | Kazakh Ianguage | Russian Ianguage | English language | Altogether Total |
|-----------|--------------------|---------------------|---------------------|---------------------|
| Listening | 60 | 78 | 70 | 208 |
| Reading | 66 | 100 | 63 | 229 |
| Writing | 10 | 10 | 9 | 29 |
| Speaking | 8 | 4 | 9 | 21 |
| Total | 144 | 192 | 151 | 487 |

MONITORING OF ACADEMIC ACHIEVEMENTS OF GRADE 6 STUDENTS

Monitoring of academic achievements focusing on the assessment of Grade 6 students' readiness for selection process for the President's Scholarship and providing pedagogical support to them was carried out in five Intellectual schools in Astana, Kokshetau, Taldykorgan, Semey and Ust Kamenogorsk in Mathematics, Kazakh language, Russian language and English.

Mathematics. The quality of knowledge equalled 76%. The greatest difficulties were caused by items which focussed on analysis and synthesis; these were successfully tackled by 68% of students.

Kazakh language. The quality of knowledge equalled 42%. Students coped more successfully with items on checking skills in "Listening" and "Reading and work with the text" (70%). The indicator for the skill of "Writing" was lower – 67%.

Russian language. The quality of knowledge equalled 73%. Oral Reading was the most difficult with the average percentage being recorded at 68%.

English. The proportion of students who performed activities correctly averaged 73%. Most of the children (98%) successfully performed items in Listening. Writing was the most difficult – 69%.

After the monitoring, students received individual reports indicating areas of study focus.

On the basis of reports, teachers in each school prepared schedules of individual lessons to eliminate the gaps in learning.

Following the results during the reporting period, the AEO indicator relating to Strategic development in piloting and improvement of monitoring system of students' individual progress was achieved.

Plans for 2015

- Conducting initial monitoring of students' academic achievements in newly opened Intellectual Schools for the purpose of the identification of gaps in knowledge and skills according to the expected outcomes of the Integrated Educational Program with a focus on organization of individual pedagogical support.
- Conducting monitoring of students' academic achievementsin Grade 4 for the purpose of level determination of students' knowledge formation and learning skills in subjects at the completion of primary school.
- Conducting monitoring of students' academic achievements of in Grade 6 for the organization of educational processes and individual lessons for students who have poor knowledge and skills in some subject areas.
- Conducting monitoring of students' academic achievements of in Mathematics in Grades 7, 8, 11 and 12 to assess progress in order to improve create individual learning paths for each student.
- Development of test items for monitoring of students' academic achievements in Mathematics in Grades 9 and 10.
- Conducting items piloting items for monitoring of students' academic achievements in Mathematics in Grade 9.
- Conducting monitoring of students' academic achievements in language subjects in Grade 7:
- Conducting items piloting for monitoring of students' academic achievements in language subjects in Grade 8.
- Development of test items for monitoring o students' academic achievements in language subjects in Grade 9.

1.8.2 Criteria-based assessment system

In 15 Intellectual schools there was implemented and functions students' academic achievements criteria-based assessment system developed by AEO "Nazarbayev Intellectual Schools".

The indicator of AEO Development Strategy in this matter was reached.

In 2014 employees of CPM jointly with CIE experts developed "Recommendations on assessment" for Grades 1, 2, 7, 8, 9, 11, 12 focusing on united understanding, application and standardization of formative assessment by teachers of Intellectual schools. Recommendations include selected learning objectives, recommended activities for the teacher, approaches to assessment, teacher actions when making decision on the achievement of learning objectives, assessment methods for group work, assessment of projects and success criteria with step-by-step algorithm for learning objective achievement.

In total there were 160 recommendations developed on assessment: 68 in Kazakh, 65 in Russian and 27 in English.

124 test specifications were developed in Kazakh, Russian and English languages including detailed description of activity types to carry out Internal

http://cep-forum.nis.edu.kz/

Summative Assessment. Test specifications are an effective tool to produce activities for Internal Summative Assessment (ISA), developed according to the approaches of External Summative Assessment. This academic year the format of test specification has been improved and now it contains a mark scheme correlated to activities, learning skills according to the course plans and activity samples.

Training workshops were held with the purpose of **capacity-building** in the use of criteria-based assessment:

- 1. for the Professional Teachers Network (PTN) focusing on an effective exchange of experience in the criteria-based assessment application 30 teachers and CPM staff were trained. The purpose of this workshop was training of teachers in producing a template of test specification and activities for Internal Summative Assessment (ISA);
- 2. 172 teachers were equipped with the skills for producing success criteria for the achievement of learning objectives in a range of topics, subjects and grades. This workshop helped teachers to develop success criteria to carry out formative assessment in the classroom:
- 172 teachers of Intellectual schools took part in a workshop on the process of moderating the results of formative assessment. The purpose of this workshop was to explane the basic principles for the delivery of moderation process. After this workshop teachers shared experience in moderation of formative assessment with their colleagues;
- 4. 135 teachers of Intellectual schools took part in a workshop focusing on the exchange of experience in criteria-based assessment use. During the workshop teachers shared their experience, thus training their colleagues on the new approaches to assessment. Carrying out open door lessons served as an effective method of progress judgment and provided an opportunity to determine the difficulties in implementing criteria-based assessment;
- 5. 116 teachers from the newly opened Intellectual school in Almaty took part in a workshop focusing on rendering methodical support. Teachers of Intellectual schools organized open door lessons where formative assessment use was demonstrated in practice. Also school teachers had an opportunity to prepare for a lesson including formative assessment application together with experienced colleagues. The outcome of the workshop was the creation of video lessons where teachers teach their subjects using formative assessment; the videos serve as methodological support for Intellectual schools teachers. Skype conferences were arranged to discussfeedback received on the workshop and issues in criteria-based assessment application.
- 6. A workshop was held for teachers of Intellectual schools to provide consultation and support in criteria-based assessment within the workshops on IEP, organized by CEP. One of the workshop sessions covered assessment and a lot of attention was paid to the revision of success criteria.

Plans for 2015

- development of "Recommendations on assessment" and test specifications for Grades 3 and 10;
- improvement review of "Recommendations on assessment" for Grades 1, 2, 7, 8, 9, 11, 12:
- development of "Collection of formative assessment activities" in a range of subjects and grades;
- development of "Handbook on moderation of Formative Assessment and standardization of Internal Summative Assessment" to facilitate an effective moderation process;
- training of the pedagogical staff of Intellectual schools focusing on the improvement of success criteria application and moderation of formative assessment;
- the organization of training workshops focusing on rendering methodological support to newly opened Intellectual schools in Kostanay and Almaty;
- the organization of workshops on sharing experience in criteria-based assessment application among Intellectual schools.

1.8.3 Final attestation

In 2014 the final attestation of Grade 11 and 12 students was carried out at 12 Intellectual schools:

- Final attestation of high school graduates of PM Uralsk was carried out according to the expected outcomes of Educational programme 2010 without the participation of strategic partners;
- Final attestation of high school graduates of Nazarbayev Intellectual school in Astana was carried out according to the expected outcomes of the IB programme;
- External Summative Assessment of Grades 11 and 12 students of Intellectual schools in Astana (PM), Kokshetau, Semey, Taldykorgan and Ust-Kamenogorsk was carried out according to the expected outcomes of IEP with participation of CIE.

FINAL ATTESTATION OF HIGH SCHOOL GRADUATES OF PM URALSK

2013-2014 academic year there were 46 graduates in Grade 12 of PM Uralsk. Language of instruction of 32 students was Kazakh, and 14 students – Russian. Final Attestation took place in the form of tests and taskswith short or expanded answers. The following subjects were tested: First language, Second language, History of Kazakhstan, Mathematics, Physics, Chemistry and Biology.

The graduates showed a high level of knowledge, the quality of the students' knowledge in all the subjects made up 100%.

Table. Results of final attestation of Intellectual school graduates of Uralsk by subjects

| | | | Number of learners who have grades: | | | | | | | | | |
|-----|----------------------------|----|-------------------------------------|------|----|------|-----------------------|---|---|---|---|--|
| | Subject Number of learners | | Total | | | | | | | | | |
| No. | | | 5 | % | 4 | % | Quality of knowledge, | 3 | % | 2 | % | |
| 1 | First language | 46 | 46 | 100 | 0 | 0.0 | 100 | 0 | 0 | 0 | 0 | |
| 2 | Second language | 46 | 44 | 95.7 | 2 | 4.3 | 100 | 0 | 0 | 0 | 0 | |
| 3 | History of Kazakhstan | 46 | 46 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | |
| 4 | Mathematics | 46 | 40 | 87 | 6 | 13 | 100 | 0 | 0 | 0 | 0 | |
| 5 | Physics | 46 | 28 | 60.9 | 18 | 39.1 | 100 | 0 | 0 | 0 | 0 | |

FINAL ATTESTATION OF HIGH SCHOOL GRADUATES OF NAZARBAYEV INTELLECTUAL SCHOOL IN ASTANA

In the 2013-2014 academic year 44 students graduated from Grade 12 of Nazarbayev Intellectual school in Astana.

The Final Attestation was carried outin the following compulsory subjects: First language, Second language, History of Kazakhstan, Mathematics, and also on one of the following elective subjects: Physics, Chemistry, Biology. 23 students selected Biology, 15 students selected Physics and 6– Chemistry.

Graduates of the Nazarbayev Intellectual school in Astana demonstrated excellent knowledge and understanding of their subjects, reflected in the final overall score of 95.9%.

Table. Results of final attestation of Intellectual school graduates of Astana by subjects

| | | | Number of students who have grades: | | | | | | | | |
|-----|----------------------------|--------|-------------------------------------|------|----|------|-----------------------|---|------|---|---|
| | Subject Number of students | Number | Total | | | | | | | | |
| No. | | | 5 | % | 4 | % | Quality of knowledge, | 3 | % | 2 | % |
| 1 | First language | 44 | 30 | 68.2 | 14 | 31.8 | 100 | 0 | 0 | 0 | 0 |
| 2 | Second language | 44 | 44 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 0 |
| 3 | History of Kazakhstan | 44 | 44 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 0 |
| 4 | Mathematics | 44 | 19 | 43 | 17 | 38.6 | 81.8 | 8 | 18.2 | 0 | 0 |
| 5 | Physics | 15 | 10 | 66.7 | 5 | 33.3 | 100 | 0 | 0 | 0 | 0 |
| 6 | Chemistry | 6 | 4 | 66.7 | 2 | 33.3 | 100 | 0 | 0 | 0 | 0 |
| 7 | Biology | 23 | 22 | 95.7 | 0 | 0 | 95.7 | 1 | 4.3 | 0 | 0 |

EXTERNAL SUMMATIVE ASSESSMENT of GRADE 11 STUDENTS of the Intellectual schools in Astana (PM), Kokshetau, Semey, Taldykorgan, Ust- Kamenogorsk, Aktobe, Karaganda, Shymkent (PM and CB), Uralsk and GRADES 12 of Intellectual schools in Astana (PM), Kokshetau, Semey, Taldykorgan and Ust Kamenogorsk.

In the 2013-2014 academic year CPM and CIEA jointly first conducted external summative assessment for Grades 11 and 12 students of Intellectual schools, taught according to the Integrated program of development.

The graduates took examinations in 9 subjects selected for studying at high school. Unlike the UNT, the external summative assessment examinations contain from 1 to 4 components and include: multiple choice questions, questions with short or extended answers, courseworks and essays, presentations and experimental tasks. First and Second languages assessed four types of speech activity (reading, listening, writing and speaking).

Such structure of examination materials and forms of assessment are directed to check: the functional literacy of students, critical thinking, creative application of knowledge, language and communication skills and also the students' skills of independent work organization.

Grade 11

1159 students Grade 11 took part in external summative assessment.

All the students took one compulsory subject at higher level – "Global Perspectives and Project Work" (GPPW) - in English, and also optional at a standard level: "Kazakh language (first language)" - 287 students, "Kazakh language (second language)" - 195 students, "Russian language (first language)" - 172 students, "Russian language(second language)" - 179 students.

The quality of knowledge based on results of the examinations consisted 74.8%.

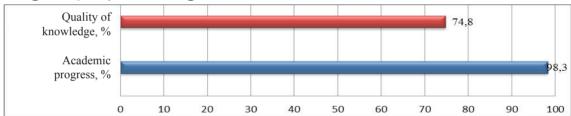


Diagram. Quality of knowledge of Grades 11 based on the results of all examinations, %

The results of the examination in GPPW showed that Grade 11 students' have good explanatory skills and ability to justify their point of view. However it is still necessary to develop the students' skills of functional reading, comparison and analysis.

Students showed good results in Kazakh and Russian language based on all 4 types of speech activity.

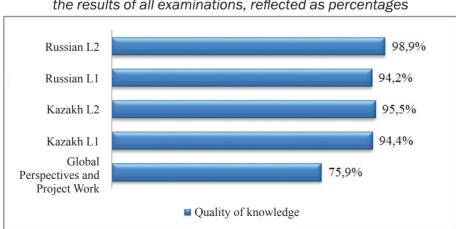


Diagram. Knowledge quality of Grades 11 following the results of all examinations, reflected as percentages

Grades 12

In total 393 students from Grade 12 took part in external summative assessment.

Students took examinations in the following subjects:

- 2 compulsory subjects at an advanced level (Mathematics and Global Perspectives and Project Work);
- 2 compulsory subjects at a standard level (Literature and Kazakhstan in the Modern World);
- 2 elective subjects from a choice of 4, studied at an advanced level (Physics 318 students, Chemistry 136 students, Biology 115 students, Computer science 217 students);
- ➤ 2 optional subjects from a choice of 4, studied at standard level (Economy 312 students, Geography 140 students).

All students took examinations in English on the following subjects: Mathematics, Physics, Chemistry, Biology, Global Perspectives and Economics, Geography and Kazakhstan in the Modern World in Kazakh language. Literature in Kazakh and Russian languages depending on exam components.

All graduates of Intellectual Schools took an international examination IELTS to assess thelevel of proficiency in English.

The results of the examination in Mathematics indicated that students demonstrated good knowledge application and understanding of basic mathematical concepts, formulas and methods. These students demonstrated an ability to synthesize knowledge from different Units of the subject program in the context of mathematical tasks.

Literature, examination results showed that students have good knowledge and understanding of literary texts, skills of critical analysis, ability to use the corresponding terminology for interpretation of texts and an ability to express thoughts and ideas effectively.

The results of "Kazakhstan in the Modern World" showed that the majority of examined students showed good understanding of the subject matter, and an ability to develop and analyze material.

Students showed fairly developed skills in carrying out research, the ability to express their own point of view and the ability to objectively interpret events occurring in real life through project work in "Global Perspectives and Project Work".

The quality of students' knowledge in compulsory subjects is presented in the following diagram.

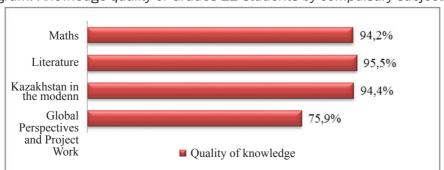


Diagram. Knowledge quality of Grades 12 students by compulsary subjects, %

The results of Geography examination showed that students are able to express their opinion, give examples from various sources of information and make appropriate conclusions. In the practical part of the examination, the students demonstrated good skills in handling devices and in carrying out experiments.

The results of "Physics", "Chemistry", and "Biology" examinations showed that students are able to apply knowledge in new situations and have skills of systematization and presentation of information from various sources.

During experiments, students observed the safety procedures.

The Economics results showed that students can interpret textual, numerical and graphic information.

The results of Computer science examination showed that students coped well with tasks based on projecting and design. The students also coped well with activities relating to the unit "Information Technologies in Society".

The knowledge quality of students in optional subjects presented in the following diagram.

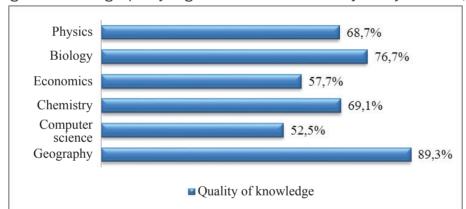


Diagram. Knowledge quality of grades 12 students of subjects by selection, %

It should be noted that based on the results of examinations, students from those schools which met to the CIE international requirements received CIE certificates.

In order to issue the certificate with Cambridge logo, CIE carried out a procedures of accreditation. The procedure covered quality assessment of examination materials development and administration of examinations. During the conducting examinations and the marking process, the experts of CIE were visiting at Intellectual schools, inspecting the procedure of examinations. Audits were carried out during the work, with database. The certificates with the logo of Cambridge correspond to the international examinations of A and AS level which are accepted in all the leading universities around world.

Plan for 2015

- Organization and conducting of external summative assessment of students' educational achievements of Grade 12 at 10 Intellectual schools (Astana, Kokshetau, Semey, Taldykorgan, UstKamenogorsk, Aktobe, Karaganda, Shymkent (PM, CB), Uralsk);
- The organization and conducting of external summative assessment of students' educational achievements of Grade 11 at 14 Intellectual schools (Astana, Kokshetau, Semey, Taldykorgan, Ust-Kamenogorsk, Karaganda, Shymkent (PM, CB), Uralsk, Aktobe, Atyrau, Pavlodar, Kyzylorda, Taraz).
- The development of examination materials for external summative assessment of students of Grades 11 and 12 for the 2015-16 academic year.
- Beginning of the development of examination materials for external summative assessment of students of Grades 11 and 12 for the 2016-17 academic year.
- The completion of the development of examination materials for Grade 10 for the 2015-2016 academic year.
- The development of setter guidelines for Grade 10.
- Obtaining of Intellectual schools an IELTS certificate by all graduates.



1.9 Outcomes of students' academic achievements

1.9.1 Academic progress and the students knowledge quality

By the end of the 2013-2014 academic year 9877 students studied at 15 Intellectual schools.

The qualitative breakdown of students who completed the academic year were as follows:

- «excellent» 1357 (13.74%);
- «good» 6016 (60.91%);
- «satisfactory» 2504 (25.35%);

The highest proportion of students completed the academic year with:

- «excellent» at schools Astana PM (31.7%), Kokshetau (27.8%), Ust-Kamenogorsk (22.2%);
- «good» at schoolsin Aktobe (73.6%), of Shymkent CB (67.8%) and Astana IB (67.1%).

The quality of knowledge based on the results of the academic year made up 74.7%, and the best results were achieved by the students of Astana PM (94.7%).

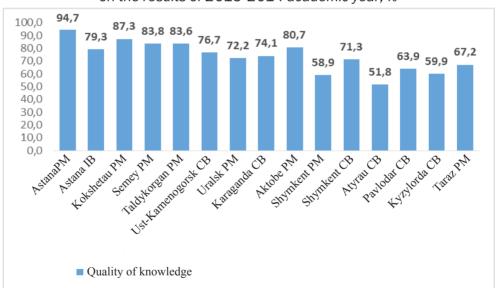


Diagram. The quality of knowledge and progress of students of Intellectual schools based on the results of 2013-2014 academic year, %

In the 2013-2014 academic year, 22 graduates applied for a certificate with honors, and all of them successfully proved their knowledge. The percentage of students with the honors certificate was 4.6% of the total students who graduated from Intellectual schools. The highest rate was at Astana PM (11.6%).

77 students claimed thecertificate with distinction and "Altyn belgi" certificate, 69 (or 90%) of students confirmed their knowledge and received the certificates. 30% of the students fron state schools received the certificates.

The number of students received "Altyn Belgi" certificate is 14.3% of the total of students who left Intellectual schools. The highest rates are at Astana PM (20.9%), Uralsk (19.6%) and Kokshetau (19.2%).

Table. Share of the graduates who received the certificate of general and secondary education with honors and "Altyn Belgi" certificate based on the results of the 2013-2014 academic year

| No. | Intellectual school | Total students | Quantity of owners with certificate with honors. | Quantity of owners with sign "Altyn belgi" | The share of owners with certificate with honors from general number of students | The share of owners with sign "Altyn Belgi" from general number of students |
|-----|---------------------|----------------|--------------------------------------------------|--------------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 1 | Astana PM | 86 | 10 | 18 | 11.6 | 20.9 |
| 2 | Uralsk PM | 46 | 2 | 9 | 4.3 | 19.6 |
| 3 | Kokshetau PM | 78 | 3 | 15 | 3.8 | 19.2 |
| 4 | Ust-Kamenogorsk CB | 90 | 1 | 13 | 1.1 | 14.4 |
| 5 | Astana IB | 44 | 3 | 4 | 6.8 | 9.1 |
| 6 | Semey PM | 64 | 2 | 5 | 3.1 | 7.8 |
| 7 | Taldykorgan PM | 75 | 1 | 5 | 1.3 | 6.7 |
| | Total | 483 | 22 | 69 | 4.6 | 14.3 |

1.9.2 Results of students' participation in the international and national olympiads, scientific competitions, conferences

During 2014 over 1600 students of Intellectual schools took part in more than 40 national and international Olympiads and scientific projects. 854 students became the prizewinners.

Table. Number of prize-winners of the national and international olympiads and scientific projects

| No. | Intellectual schools | International olympiads and competitions | National olympiads and competitions | Total |
|-----|----------------------|------------------------------------------|-------------------------------------|-------|
| 1 | Astana PM | 2 | 8 | 10 |
| 2 | Astana IB | 8 | 5 | 13 |
| 3 | Almaty PM | 1 | 1 | 2 |
| 4 | Aktobe PM | 4 | 18 | 22 |
| 5 | Kokshetau PM | 3 | 18 | 21 |
| 6 | Karagandy CB | 78 | 18 | 96 |
| 7 | Kyzylorda CB | 134 | 6 | 140 |
| 8 | Pavlodar CB | 5 | 115 | 120 |
| 9 | Semey PM | 6 | 6 | 12 |
| 10 | Taldykorgan PM | 7 | 13 | 20 |
| 11 | Taraz PM | 10 | 9 | 19 |
| 12 | Uralsk PM | 11 | 43 | 54 |
| 13 | Ust-Kamenogorsk CB | 221 | 28 | 249 |
| 14 | Shymkent PM | 20 | 30 | 50 |
| 15 | Shymkent CB | 22 | 4 | 26 |
| | Total | 532 | 322 | 854 |

Included the selection stages and final stages of the National Subject Olympiads, Presidential Olympiads in science subjects, the International Olympiads, and scientific projects.

At the International Olympiads and scientific projects in science subjects, computer science and electronics, the medal places were taken by the students of Intellectual schools of Taldykorgan - Yugay Yannis, Semey - Tulegenov Nurislam, Kokshetau - Seyilbekova Aygerim, Ust Kamenogorsk - Alimkhanov Zharas, Astana - Kerimbayev Ilyas.



Additional achievement of the Intellectual schools was the holding of the first "Republican Robotics Olympiad – 2014" based on the rules of the World Robotics Olympiad on WRO robotics (http://www.wroboto.org). In competitive disciplines of the Olympiads, students of the Intellectual schools of Uralsk Bulganbayev Muratbek, Granitsa Dmitry, Saginov Zhandos,

Beketov Adilet, Zakarina Raykhan, Tnaliyev Shymbolat, Zhumagulova Camila, Baymurat Kuanysh took the first places. Team of the Republic of Kazakhstan was created, consisting of winners of the Republican Olympiad as the result of the Olympiads. At the Olympiad of WRO-2014 in Sochi the team was divided into pairs and competed in various disciplines. The Students of the Intellectual schools in Taldykorgan - Talgat Bek and Sartbayev Ratmir took the 3rd place in open category.

The expected outcome of AEO Development Strategy related to students participation from Intellectual schools in the international competitions and the Olympiad in science subjects and humanities and achievements of good results by them in quantitative data was reached.

1.9.3 Outcomes of international examinations

Graduates of Intellectual schools annually take the international examination of IELTS; its results are accepted by leading higher institutions worldwide.

During the reporting period, this examination was takenby 483 students of seven Intellectual schools, and average score made up 5.9 out of maximum score9.0 that in comparison with 2012-2013 academic year is 0,3 points higher.

| No. | School | Quantity of students | Listening (average score) | Reading (average score) | Writing (average score) | Speaking (average score) | Total (average score) |
|-----|--------------------|----------------------|------------------------------|----------------------------|----------------------------|-----------------------------|--------------------------|
| 1 | Astana IB | 44 | 6.1 | 5.7 | 5.3 | 5.7 | 5.8 |
| 2 | Astana PM | 86 | 7.2 | 6.7 | 5.7 | 6.1 | 6.5 |
| 3 | Kokshetau PM | 78 | 6.3 | 5.9 | 5.5 | 5.6 | 5.9 |
| 4 | Semey PM | 64 | 6 | 5.9 | 5.6 | 6 | 5.8 |
| 5 | Taldykorgan PM | 75 | 6.2 | 5.9 | 5.5 | 6 | 5.9 |
| 6 | Ust-Kamenogorsk PM | 90 | 6.4 | 5.9 | 5.4 | 5.5 | 5.9 |
| 7 | Uralsk PM | 46 | 5.8 | 5.7 | 5.3 | 5.3 | 5.6 |
| | Total | 483 | 6.2 | 5.9 | 5.4 | 5.7 | 5.9 |

Table. Results of IELTS examination in 2013-2014 academic year

It should be noted that average score among graduates of Nazarbayev Intellectual school in Astana PM was 6.5 points, and that was the highest result.

A comparison of two year results showed that scores in sections of skills and the overal average score are higher in 2013-2014 academic year.

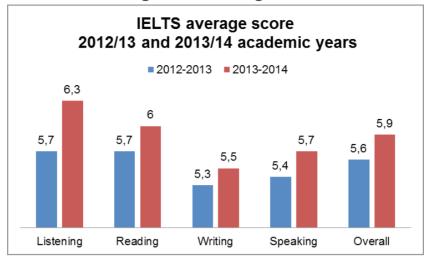


Diagram. IELTS average score

About 11% of graduates achieved 7.0 and above. Among all students the highest scores were achieved by: one student of Intellectual School of Physics and Mathematics in Astana - 8.5, 2 students of Intellectual School of Physics and Mathematics in Astana - 8.0, 16 students -7.5 and 30 students - 7.0.

Some students took **international examinations SAT-1 and SAT-2. SAT-1 includes** mathematics, critical thinking and writing, SAT-2 - two major subjects (mathematics and physics or mathematics and chemistry).

To enter universities in the United States of America SAT-1 and SAT-2 results should be no less than 500 in each subject at the maximum score - 2400.

In 2013-2014 academic year, **SAT-1** was taken by 43 graduates of the PM Intellectual schools in Astana and Semey. Their scores are 1582 and 1125 points respectively. The average score of both schools is 1354.

SAT-2 was taken by 14 graduates of two Intellectual schools (PM in Astana and PM in Semey). The average scores of graduates of PM Intellectual school in Astana is 2110, PM Intellectual school in Semey is 1210. The average score for two schools is 1660.

| Examination | Number of participants | Maximum score | Intellectual schools results |
|-------------|------------------------|---------------|------------------------------|
| SAT-1 | PM in Astana – 27 | 2 400 | 1 582 |
| | PM in Semey – 16 | 2 400 | 1 125 |
| SAT-2 | PM in Astana – 1 | 2.400 | 2 110 |
| | PM in Semey – 13 | 2 400 | 1 210 |

Table. Results of international examinations SAT-1, 2.

It is important to point out the results of three students from the PM Intellectual school in Semey, who achieved the highest scores 800, 760 and 710 out of 800 in SAT 2 Mathematics and got the title of the best young mathematicians.

Based on the results of examinations an "Analysis of results of the international examinations of students of Nazarbayev Intellectual schools for 2011-2014" was prepared.

1.9.4 Entering the universities

In the 2013 – 2014 academic year, 483 students left Nazarbayev Intellectual schools, and all of them entered higher educational institutions.

431 graduates (89.4%), entered the leading universities of the Republic of Kazakhstan. 152 graduates from the total number (31.5%) – entered the Nazarbayev University.

The greatest number of those who entered the Nazarbaev University were graduates of Intellectual school of Physical and Mathematical Direction in Astana (42 graduates) and Intellectual School of Chemical and Biological Direction in Ust Kamenogorsk (36 graduates).

18 graduates (3.7%) study at the universities of CIS countries. 34 graduates (7%) entered the prestigious universities of foreign countries. 14 graduates from Astana PM and 10 graduates – from Astana IB

94% of all graduates (454) got a grant.

From a total of 238 graduates (49,3)% of them chose technical specialities, 39 people (8,1%) chose medicine, 15 people (3%) 3% for pedagogical specialties (mathematics, chemistry, biology, physics) and 83 people (48,4%) chose science specialties.

Thus, for the reporting period the following system effectiveness indicators of network formation of Nazarbayev Intellectual schools were:

- ➤ Students' quality of knowledge made up 74,7%, an indicator of students of high school **94,8%.**
- ➤ **100**% of applicants confirmed the certificate with distinction.
- > 90% of applicants confirmed «Altyn belgi» certificate.
- > 100% of graduates entered the universities.





2. TRANSLATION OF EXPERIENCE

One of the primary strategic aims of AEO's activities is the transmission of the accumulated experience of the Intellectual schools into the wider education system of the country.

The transmission of the expertise of the Intellectual schools is carried out through the organization of the professional development of the pedagogical workers of the country, the training of students of higher education pedagogical institutions, online lessons and workshops for students and teachers of comprehensive schools, organization and the holding of annual international conferences, training workshops on studying and the introduction of innovative approaches and international practice, master classes in interactive and active methods and methods of training in delivering a lesson. A lot of preparatory work was carried out in preparation for the pilot introduction of an updated content for secondary education and the implementation of new SOB NE at 30 comprehensive schools.

In general, the work is focused on three objectives:

- 1) professional development and training of teachers;
- 2) exchange of the leading pedagogical practices;
- 3) updating of the content of secondary education.

2.1 Professional development

Understanding the key role of a teacher and pedagogical workers in updating the content of school education, and large-scale work on professional development of pedagogical workers of the country was carried out during the reporting period.

Professional development was carried out on:

- 1) Multi-level programs of professional development of the pedagogical personnel of the Republic of Kazakhstan, developed by AEO jointly with the Faculty of Education of Cambridge University (further multi-level programs);
- 2) Programs of professional development of the heads of the general education organizations of the Republic of Kazakhstan, developed by AEO jointly with the Faculty of Education of Cambridge University (further development program of heads);
- 3) Programs of professional development of the staff of the Ministry of Education and Science of the Republic of Kazakhstan and its subordinated organizations, while updating the content of secondary education;
- 4) Programs of professional development for teachers in the development of the functional literacy of school students while carrying out International research PISA;
- 5) Programs of additional professional education for students in the final year of pedagogical specialties, and the professional and teaching staff of higher educational institutions;
- 6) Programs of the professional development of the pedagogical personnel of Nazarbayev Intellectual schools "Management of Conflicts and Stresses at School".

In addition, the post-course support of pedagogical workers was carried out, and mentoring of trainers and the monitoring of the quality of the program's implementation was organised.

2.1.1 In-service teacher training courses within multi-level programs

In 2014, 5104 teachers of comprehensive schools were trained within multi-level programs.

40 teachers of the Zhautykov Specialized Physical and Mathematical Secondary Boarding School were trained within Level 3 (basic), 2 (main) and 1 (advanced) programs.

Table. Quantitative structure of the participants in levelled courses

| Courses names | 2012 | 2013 | 2014 | Total for 2012-2014 years |
|------------------------|-------|-------|-------|------------------------------|
| Third (basic) level | 1 053 | 1 147 | 1 004 | 3 204 |
| Second (basic) level | - | 997 | 999 | 1 996 |
| First (advanced) level | - | 3 093 | 3 101 | 6 194 |
| Altogether: | 1 053 | 5 237 | 5 104 | 11 394 |

Also, jointly with the Faculty of Education of Cambridge University, 400 additional trainers were prepared (third basic level - 180, second main level - 149, first advanced level - 71).

Educational and methodological materials for multi-level programs for trainers and participants have been completed.

Electronic versions of the material developed are published on an educational portal of the site of CPM for the free access of course students.

http://www.cpm.kz

2.1.2 Professional development courses for the heads of general education organizations of the Republic of Kazakhstan

According to the data related to this program; during the reporting period, **583** heads of general education organizations were trained. 665 people are continuing their studies.

| Year of | 2013 | 2014 | | | | Total |
|-----------------------|----------|----------|----------|----------|----------------|--------------------------|
| Stream | Stream 1 | Stream 2 | Stream 3 | Stream 4 | Total for 2014 | for 2013 - 2014 years |
| Quantity of listeners | 250 | 333 | 334* | 331* | 998 | 1 248 |

Note: * - continuing studies.

Continuous work on the improvement of the program content and educational and methodological material for these heads was carried out.

20 additional trainers were trained in completing this course.

2.1.3 The courses of in-service training of staff of the Ministry of Education and Science of the Republic of Kazakhstan and its subordinated organizations in updating the content of secondary education

Within the process of updating the content of secondary education, there was a need for the development of the program and training material for the professional development of staff of the Ministry of Education and Science of the Republic of Kazakhstan and its subordinated organizations. The developed program is implemented in association with the heads of the central governing bodies of education of the country, in terms of the adoption of worldwide best practices related to modern education. Therefore, the best, and most experienced practitioners are utilised in the adoption of effective administrative decisions in updating the content of secondary education in Kazakhstan.

In total, **302** employees of the Ministry of Education and Science of the Republic of Kazakhstan and its subordinate organizations were trained within this program.

2.1.4 Courses of the training program for trainers within the program of in-service training of teachers in improving the functional literacy of school students involved in PISA international research

A training program for trainers and the professional development of teachers in improving the functional literacy of school students within the context of carrying out PISA international research was developed jointly with Pearson Education Limited company (Great Britain), and translated into the Kazakh and Russian languages.

In total, 115 trainers were trained from among employees of AEO, CPM, JSC National Centre of Professional development "Orleu" (JSC "NCPD "Orleu") in CPM. Teacher training within the country's secondary schools for the purpose of preparation for participation in the international research program, PISA-2015, was carried out by coaches of JSC "NCPD "Orleu".

2.1.5 Training courses for the final year students of teaching specialties of heis within the program of additional professional education

Within the process of rendering the methodological and consulting help to the higher educational institutions of RK, which are carrying out the preparation of pedagogical personnel, the following programs were developed:

- 1. A program of additional professional education for final year students of higher educational institutions of RK who are carrying out the preparation of pedagogical personnel.
- 2. A program of professional development for the faculty of higher educational institutions (special course) on levelled training programs.

3. A programme of additional professional education for final year students of Pedagogical Higher Educational Institutions based on multileveled in-service training programmes for pedagogical staff of the Republic of Kazakhstan.

During the reporting period, a training consisting of 160 academic hours (classroom training) **for 25 listeners** for graduates of pedagogical specialties of the Korkyt Ata Kyzylorda State University was conducted.

2.1.6 Training of pedagogical personnel of the Republic of Kazakhstan on the subject "Management of the conflicts and stresses under the conditions of pedagogical process of school"

Within courses related to the program of professional development of pedagogical personnel of the Republic of Kazakhstan, **32 pedagogical workers** were trained on the subject "Management of the Conflicts and Stresses at School".

2.1.7 Programs of professional development of teachers in updating the content of secondary education of the Republic of Kazakhstan

The development of programs related to the professional development of pedagogical workers in the process of updating the content of secondary education has started:

- 1. The program of professional development for primary school teachers involving Kazakh and Russian training languages in the process of updating the content of secondary education;
- 2. The program of professional development for primary school subject teachers of secondary education (Visual Arts);
- 3. The program of professional development for subject teachers of primary school (Music);
- 4. The program of professional development for primary school teachers on the introduction of criteria-based assessment at schools;
- 5. The program of professional development for teachers in the subject "Kazakh Language" (L1): Grades 5-11, "Russian" (L1): Grades 5-11;
- 6. The program of professional development for teachers in the subject "Kazakh Language" (L2): Grades 1-11, "Russian language" (L2): Grades 1-11;
- 7. The program of professional development for teachers in the subject "English": Grades 1-11;
- 8. The program of professional development for teachers of language subjects based on introduction of criteria-based assessment at schools;
- 9. The program of professional development for teachers of computer science in the process of updating the content of secondary education of the Republic of Kazakhstan;
- 10. The program of professional development for teachers of the subject "Computer science" and "ICT" in the introduction of criteria-based assessment;
- 11. The program of professional development for teachers of natural and mathematical cycle in the organization of design activity of students (grades 6-9);
- 12. The program of professional development for teachers of natural and mathematical cycle on the subject "Design Activity" on the introduction of criteria-based assessment (grades 6-9);

- 13. The program of professional development for teachers of the subject "Global Perspectives and Design Activity" (grades 10-11);
- 14. The program of professional development for teachers of the subject "Global Perspectives and Design Activity" in the introduction of criteria-based assessment (grades 10-11).
- 15. The program of professional development for deputy directors of schools on educational work involved the process of updating the content of secondary education of the Republic of Kazakhstan.

2.1.8 Post-course support of pedagogical workers

In the course of professional development the post-course support of pedagogical workers plays a great role, which is directed towards the:

- creation of a common information space involving the network interaction of teachers and the staff of educational organizations;
- further improvement of knowledge and skills of teachers and the activation of their activities in the improvement of school practice;
- flexible response to problems of teachers and the new requirements of the Kazakhstan school;
- organization and carrying out of post-course monitoring of the introduction of key ideas of programs related to school practice and the achievement of training success and the competitiveness of Kazakhstan's students.

During the reporting period, the provision of post-course support of the certified pedagogical personnel, and the monitoring of efficient introduction of in-school, levelled training programs of professional development of teachers, as well as the program of professional development for heads of the general education organizations of the Republic of Kazakhstan, was developed.

Post-course support captured all teachers who completed professional development courses by a new format.

For this purpose the CPM methodological library, an educational portal and an electronic methodological bank of CPM, network community, blogs, forums, webinars, workshops, round tables and conferences were used.

Within post-course support 157 thematic workshops were conducted for the teachers who were trained according to levelled training programs. 77 training workshops for heads of schools were conducted. 804 schools were visited. 2210 teachers and 1001 lessons were observed.

For rendering post-course support to the teachers, who finished courses according to levelled training programs, CPM trainers were organized and sent out to all regions of the country. They gave methodological help to teachers and carried out a formative assessment of schools heads after the end of the course.

A workshop and practical training session, focusing on the experience gained in the implementation of post-course support was organized in Karaganda city: "Program focusing on an approach to the management of professional network communities" with participation of employees of CPM and directors of its branches in regions.

2.1.9 Guidance

In January, 2014 a survey workshop for coaches of the professional development course of general education organizations heads of the Republic of Kazakhstan was held.

During the period from February to October, 2014; 13 pairs of mentors rendered services in professional development courses according to levelled training programs in collaboration with our international strategic partner, in the branches of Astana, Almaty, Aktau, Aktobe, Atyrau, Karaganda, Kostanay, Kyzylorda, Pavlodar, Semei, Ust Kamenogorsk, Shymkent cities.

In 2014, mentoring services were rendered to coaches of branches of JSC "SCPD "Orleu" in 10 cities of the country for the first time. In total, mentoring within levelled training programs were rendered to 132 trainers of CPM and JSC "SCPD "Orleu".

Also within professional development courses according to the program for heads, 6 pairs of mentors rendered services to 16 trainers of CPM in Astana and Almaty.

Within a year, there were two republican workshops: "Kazakhstan Trainer: Experience, Cooperation and Perspectives" where a master class for listeners in team teaching (Team-Teaching) was organized using CPM trainers and experts of the Faculty of Education of Cambridge University.

2.1.10 Monitoring of programmes implementation quality

Monitoring research on quality assessment of the content and productivity of professional development programs are conducted on a systematic basis.

In 2014 based on the results of this research, 7 books and 2 brochures and 5 collections of essays were published. They provide a synthesis of experience and an analysis of results of the work of teachers who completed levelled training courses, and is further used for the improvement of the quality of conducted courses and the improvement of work results of the certified teachers.

In 2014, monitoring research examined 3 956 certified teachers, 2 689 colleagues of the certified teachers by work place, 665 directors of schools, 11 015 students, 8 726 parents, 2 231 young specialists, 29 representatives of the faculty of higher educational institutions, and also 25 graduates of the pedagogical specialties of Korkyt Ata Kyzylorda State University.

The research conducted led to the following conclusions:

- 1. The content of levelled training programs and programs of professional development of heads actually, have qualitative differences from the contents of traditional programs of professional development courses for teachers.
- 2. The content and format of course training promotes not only the expansion of the range of methodological tools available to the teacher, but also a change of professional installations, and the transformation of the complete vision of their own pedagogical activity.
- 3. The format of courses differs in the maximum practical directivity of training, a combination of theoretical courses with trainings, joint discussions, discussions, role-playing games, holding master classes on the basis of the best schools, methodological recommendations and other active forms of their practical direction.

- 4. The modules of levelled training programs are actual. Their complex use is especially effective and promotes the successful assimilation of training material by students' formation of skills of critical judgment of the information stream, its analysis and the formulation of valid conclusions by them.
- 5. A large volume of new theoretical material is mastered, and **listeners gain knowledge** in hierarchical system "assimilation approbation consolidation".

Work with CIEC on carrying out joint research on monitoring and assessment of the implementation of in-service training programs of CoE was started in 2014.

Following the results of work done in 2014:

20 certified trainers were trained within the program of in-service training for the heads of education organizations;

400 trainers were trained within multi-level training programs

583 and 665 heads of education organizations were trained;

5 104 teachers were trained within the multi-level programs

The efficiency of professional development courses is confirmed by the knowledge and quality of the teachers who were trained according to levelled training programs, and their active participation in the training of their colleagues.

Table. Statistics of teachers trained according to levelled training programs in 2012-2013 years.

| | | | | | 1 |
|-----|---------------------|--------------------|------------------------------|-----------------------------|-----------------|
| | Regions | Number of teachers | Knowledge qua | Quality | |
| No. | | | before having courses (%) | after having courses (%) | increase (%) |
| 1 | Akmola | 1 456 | 60.7 | 68.9 | 8.2 |
| 2 | Aktobe | 1 376 | 66.9 | 76.8 | 9.9 |
| 3 | Almaty | 2 090 | 59.5 | 67.7 | 8.2 |
| 4 | Atyrau | 889 | 52.3 | 60.2 | 7.9 |
| 5 | Eastern Kazakhstan | 1 747 | 63.7 | 73.0 | 9.3 |
| 6 | Zhambyl | 1 656 | 57.5 | 70.0 | 12.5 |
| 7 | Western Kazakhstan | 1 201 | 64.6 | 72.9 | 8.3 |
| 8 | Karagandy | 1 471 | 59.3 | 65.7 | 6.4 |
| 9 | Kostanai | 1 226 | 52.4 | 54.7 | 2.4 |
| 10 | Kyzylorda | 1 379 | 65.5 | 75.9 | 10.4 |
| 11 | Mangystau | 829 | 53.5 | 67.9 | 12.5 |
| 12 | Pavlodar | 1 202 | 62.9 | 73.5 | 10.6 |
| 13 | Northern Kazakhstan | 1 141 | 62.8 | 72.6 | 9.8 |
| 14 | Southern Kazakhstan | 2 556 | 42.0 | 48.8 | 6.8 |
| 15 | Almaty city | 1 233 | 63.5 | 73.5 | 10.0 |
| 16 | Astana city | 1 181 | 63.6 | 70.4 | 6.8 |
| | TOTAL | | 59.4 | 68.3 | 8.8 |

Improvement of teaching subjects quality: primary school - for 9.2% natural and mathematical cycle - for 7.8% humanitarian cycle - for 9.3%

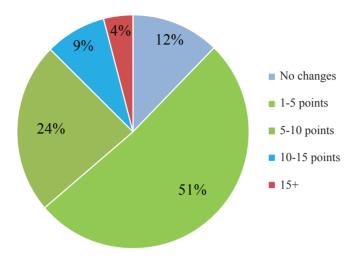
Table. Teachers activity trained according to levelled training programs in 2012-2013 years

| | Region | DIRECTIONS | | | | | |
|-----|---------------------|-------------------------|--------|-----------------------------------------------------------|-------|-------------------------------|--|
| No. | | Conducting open lessons | | Conducting and participating in workshops and conferences | | Participation in competitions | |
| | | 2012 | 2013 | 2012 | 2013 | 2012-2013 | |
| 1 | Akmola | 293 | 830 | 36 | 203 | 97 | |
| 2 | Aktobe | 274 | 652 | 60 | 154 | 101 | |
| 3 | Almaty | 900 | 1140 | 93 | 30 | 24 | |
| 4 | Atyrau | 296 | 486 | 22 | 35 | 51 | |
| 5 | Eastern Kazakhstan | 163 | 599 | 20 | 244 | 92 | |
| 6 | Zhambyl | 216 | 651 | 79 | 303 | 213 | |
| 7 | Western Kazakhstan | 170 | 601 | 140 | 531 | 84 | |
| 8 | Karagandy | 284 | 1402 | 184 | 430 | 227 | |
| 9 | Kostanai | 356 | 615 | 127 | 323 | 630 | |
| 10 | Kyzylorda | 645 | 941 | 113 | 774 | 931 | |
| 11 | Mangystau | 156 | 244 | 18 | 88 | 65 | |
| 12 | Pavlodar | 369 | 505 | 40 | 139 | 111 | |
| 13 | Northern Kazakhstan | 330 | 664 | 74 | 175 | 82 | |
| 14 | Southern Kazakhstan | 1249 | 3,514 | 196 | 321 | 225 | |
| 15 | Almaty city | 210 | 636 | 60 | 185 | 61 | |
| 16 | Astana city | 84 | 240 | 8 | 52 | 20 | |
| | Total | 5,995 | 13,720 | 1,270 | 3,987 | 3,014 | |
| | Altogether | 19,715 | | 5,257 | | 3,014 | |

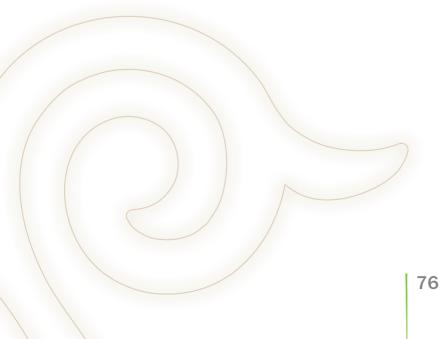
All directors trained within the program for heads exchanged their experience at plenary and section sessions at the meeting of educators held in August.

88% of the studied schools (selection volume - 674 schools) show increase of indicators on UNT

Diagram. Indicators of UNT of schools whose directors were trained within programs for heads (2013-2014)



In 2015, it is necessary to continue work on all above-mentioned directions and to execute "the plan for the MES RK to implement education plans and scientific development for 2014-2016".



2.2 Exchange of leading pedagogical experience

To distribute the best pedagogical experience, work was carried out in the following ways:

- Creation of the informational and methodological magazine "Pedagogical Dialogue";
- Publication of methodological literature;
- > The creation of master classes;
- The creation of an electronic bank of methodologies;
- The creation of video movies about the implementation of professional development plans:
- Interactions with mass media:
- To foster and maintain community support;
- > To conduct online lessons and workshops;
- To conduct an international conference.

THE CREATION OF THE INFORMATIONAL AND METHODOLOGICAL MAGAZINE "PEDAGOGICAL DIALOGUE"

In Center of Excellence with University of Cambridge Faculty of Education publishes informational and pedagogical magazine called "Pedagogical Dialogue" in Kazakh, Russian and English registered on June 28, 2013 at the International Center for Registration of serial editions ISSN (UNESCO, Paris, France) with acquisition of international number (ISSN 2308 – 7668).

In total, in 2014, 4 issues of the magazine were published. These were devoted to topical issues of updating the content of secondary education and general teaching methods:

1st Theme: "Development of critical thinking";

2nd Theme: "Assessment for Learning and Assessment of Learning";

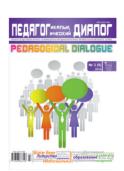
3rd Theme: "Leadership and Management in Education";

4th Theme: This theme was devoted to the results of work of the Sixth International Scientific and Practical conference, titled "Educational Policy, Practice and Research".









| Year | Quantity of numbers | Quantity of copies |
|-------------|---------------------|--------------------|
| 2012 | 2 | 4,000 |
| 2013 | 4 | 8,000 |
| 2014 | 4 | 8,000 |
| Altogether: | 10 | 20,000 |

The best practising teachers and scientists of Kazakhstan and foreign educational organisations, as well as AEO employees and heads were involved in the magazine's publication. In 2014, research articles from Great Britain, the USA, Jamaica, the Republic of South Africa, the Netherlands, New Zealand, Japan and Russia were published. All issues of the magazine are published on the CPM site.

http://www.cpm.kz/

There are methodological resource supports that can be found in the "Methodological Library Centre of Pedagogical skills". **54 methodological visual aids were published** there, on the following topics:

- 1. International experience;
- 2. Theoretical methods for modular training programs;
- 3. Practical guidance for the implementation of professional development training programs;
- 4. Practical guidance for the implementation of professional training in general education organizations;
- 5. Master classes;
- 6. Monitoring researches;
- 7. Essay collections of course participants;
- 8. Materials of in-service training courses.

PUBLICATION OF METHODOLOGICAL LITERATURE

| No. in order | Name | 2012 | 2013 | 2014 | Altogether |
|--------------------|--------------------------------------------------------------------|------|------|------------------------------------------------------------------------------------|------------|
| 1 | Methodological visual aids | 2 | 6 | 37 | 45 |
| 2 | Monitoring research | 4 | 7 | 9 | 20 |
| 3 | Essay collections | 2 | 1 | 5 | 8 |
| 4 | Materials for professional development courses of MES RK employees | | | 3 (collection and distribution of material by weeks for three streams) | 3 |
| Total | | 8 | 14 | 54 | 76 |

MASTER CLASSES

CPM branches on a regular basis hold master classes in order to supplement their training programs. In 2014, more than 200 master classes were conducted. They were conducted about the following topics: "Criteria-based assessment system", "Critical Thinking Development ", "Work with Gifted Students", "New Methods of Teaching", "Application of ICT in Training" and others.

ELECTRONIC METHODOLOGICAL BANK

Electronic and methodological resources are written on the CPM site. They contain the best methods and developments from teachers' lessons. They are by educators from the intellectual schools who have participated in training courses. These resources are regularly updated.

http://www.cpm.kz/

The courses cover humanities subjects (language and literature, history, psychology, art, global perspectives, etc.), as well as mathematics and natural science disciplines (such as chemistry, physics, piology). In total, 194 developments are featured on the CPM site and are accessible to all teachers of the country.

http://www.cpm.kz/

THE CREATION OF VIDEO MOVIES ABOUT THE IMPLEMENTATION OF PROFESSIONAL DEVELOPMENT PLANS In 2014, two videoclips were produced. They were devoted to the events which took place during the implementation of professional development programs for the educators of Kazakhstan. They may be described as follows:

- 1. A video diary of the workshop meeting, titled "Kazakhstani training: experience, cooperation, and perspectives (2 videos);
- 2. Video reels about the professional development programs conducted by the staff of the Kazakhstan Ministry of Education. They also featured its secondary organizations, which deal with in updating the content of secondary education (3 video reels);

INTERACTION WITH MASS MEDIA

A number of articles were published in Kazakh and Russian in regional and national mass media for covering the processes of modernization of in-service training system, as well as efforts at modernization among the educators of the country.

Following the results of media-statistical analysis it was established that **341 articles** including **7** in national mass media and **334** articles in regional mass media were published.

TO FOSTER AND MAINTAIN COMMUNITY SUPPORT:

Systematic work on modernization and updating of the site was carried out. This was meant to support students in professional development courses and help those courses to run more effectively.

In September 2014, a new version of the CPM educational portal was created. The structure of the site and its sections were completely changed and the design and books' presentation were updated.

http://www.cpm.kz/



Picture. Main page of the CPM portal

Forum sections, Network community and Blogs were completed. Each section contains information on popular and new subjects, and the list of popular network communities.

The structure of **the section of Professional Development Program** was completely changed. Course materials and programs for trainers and teachers of levels 1, 2, and 3 were updated.

Materials for each program were placed on one page. This page contains: a PDF version of the course program, teacher guidance materials for the trainer/department head, pre-course activities, practice activities, and materials on assessment, as well as weekly resources.

In addition, in order to assist students, an **electronic glossary** of concepts and categories was created for the leveled training program and the program for heads. The glossary is available in Kazakh, Russian and English.

With the update of the portal, CPM trainers got additional opportunities for conducting courses. Additional opportunities were also made for supporting teachers after the courses have finished. Trainers can independently participate in webinars, competitions, and polls. They also have the opportunity to advise participation online.

In September 2014, CPM held a webinar for trainers to increase IT literacy. It was conducted jointly with Microsoft, and was called "Training with technology."

The total number of the registered users of the portal in 2014 was 39,000, while visits were 331,077.

| Report year | Quantity of registered users | Visits quantity |
|-------------|------------------------------|-----------------|
| 2012 | 7 600 | 112 821 |
| 2013 | 21 643 | 212 780 |
| 2014 | 39 000 | 331 077 |

The following pedagogical experiences were shared:

4 issues were published, consisting of **8,000** copies of the magazine "Pedagogical Dialogue" in Kazakh, Russian and English,

54 methodological visual aids were published as resources for the CPM library, More than **200 master classes** were held. **194 professional development materials** for teachers were uploaded to an electronic methodological resource bank, and **2 videos were produced** (on 5 video reels).

IMPLEMENTATION OF THE ONLINE LESSONS AND PROJECTS FOR STUDENTS OF SCIENCE AND MATH; ALSO, ONLINE WORKSHOPS FOR TEACHERS OF COMPREHENSIVE SCHOOLS

The content of **online lessons** is aimed at expanding and increasing the knowledge and skills of students in Mathematics, Physics, Chemistry, Biology, English and Computer Science, and for those in primary and high school.

Due to the updating of educational content, in 2014 there was continuous transmission of online lessons for primary schools. The subjects transmitted were: math, Kazakh language and literature, Russian language and literature, and English.

In the academic year 2013-2014, 480 online of lessons were conducted. In the course of the online lessons, the educational practices could be clearly seen from 15 Nazarbayev Intellectual Schools, including those in Astana, Taldykorgan, Semei, Kokshetau, Karaganda, Pavlodar, Uralsk, Atyrau, Shymkent, Taraz, Aktobe, Ust Kamenogorsk, and Kyzylorda.

The organisation of online lessons is carried out through the MES RK ELP (elp.kz) portal, using the software of Eluminate Live.

At the same time, online lessons are transmitted in real time to the the site 1.sabak.kz. Materials of online lessons are uploaded onto the website by the AEO "Nazarbayev Intellectual Schools".

www.nis.edu.kz

Educational videos, reels, and movies are created by teachers and placed on youtube.com, on the **NIS for You** channel.

The content of online workshops is intended for the teacher training taking place at comprehensive schools which are using the criteria-based assessment system.

Online workshops are conducted by teachers of intellectual schools once a week on the subjects of Mathematics, Physics, Computer Science, Chemistry, Biology, Introduction to Science, Kazakh language, Russian, English, Global Perspectives and Project Work, and Art.

http://moodle.nis.edu.kz

48 online workshops were held. All materials from lessons and workshops (video fragments, experiences, and presentations) were placed on an online portal.

Teachers of comprehensive schools have the opportunity to view methodological and consulting support from teachers of Intellectual schools online.

INTERNATIONAL CONFERENCES

In October 2014, a research-to-practice conference titled "Educational Policy, Practice, and Research" was held. It focused on extensive discussion of questions on updating secondary education content, implementing trilingual policies into educational practice, teacher cooperation, new visions for 21st century schools, textbook development, international accreditation of schools, and an assessment students' functional literacy with the means of PISA.

The conference program was divided into three main strands: educational content, assessment, and teacher professional development.

More than 500 participants from Kazakhstan, France, Armenia, USA, Great Britain, the Netherlands, Japan and Russia took part in the international conference. Among these were the strategic partners of Nazarbayev Intellectual schools - Nazarbayev University, the University of Cambridge, Cambridge International Examination, the Institute of Pedagogical Measurements of CITO, the Center of Talented Youth of Johns Hopkins University CTY and the International Baccalaureate.

http://conference.nis.edu.kz/october2014ru

Apart from Kazakh speakers, there were foreign representatives from organisations such as the London Institute of Education (Great Britain), the University of Cambridge (Great Britain), the Center of Pedagogical Measurements of CITO (Netherlands), the Organisation of Economic Cooperation and Development (OECD), Lehigh University (USA), Cambridge University Press (Great Britain), the Center for training and assessment of "Pearson" next generation (USA), Council of International Schools (CIS) (Netherlands), Leadership in Education Center, (New Zealand), Wales University, (Great Britain), the Institute of education and Innovations, (South Korea) and others.

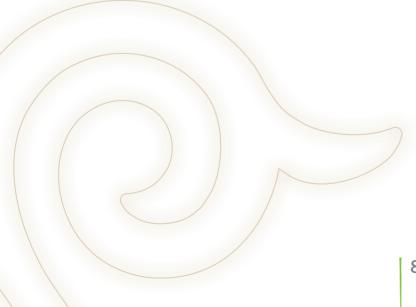
The participants took part in plenary sessions, plenary discussions and round table discussions.

During the conference, one particular unique book was presented, titled "Educational Reform and Internationalisation: school reform in Kazakhstan". It was edited by Professor David Bridges, professorial fellow of Faculty of Education at the University of Cambridge. Professor Bridges is devoted to researching secondary education in Kazakhstan. The book is published by the University of Cambridge with direct participation of experts and researchers of AEO "Nazarbayev Intellectual Schools" and Nazarbayev University. Local and foreign experts were among the writers. The international team carried out a number of interviews, not only with teachers and directors of city schools, specialists of education departments, but also with people from the remote areas, including in small, rural schools of the most remote regions of the country. The book, "Educational Reform and Internationalisation: School Reform in Kazakhstan", allows members of the foreign scientific community to understand the Kazakhstani vision of educational reform. The book is published in English.

Following the results of the conference, a collection of articles from the conference were published on the conference website.

Plan for 2015

- To organize and carrying out the 7th International conference.
- To carry out 48 online workshops.
- To carry out 494 online lessons for students of state schools of the country.



2.3 Secondary education content renewal

2.3.1 New content

In 2014, AEO "Nazarbayev Intellectual Schools" in collaboration with MES RK began a chain of actions in to apply the experience of Intellectual Schools in renewing secondary education content.

Specialist of CEP, NAE after Y.Altynsarin, the teachers of Intellectual schools having experience in the development of subject programmes and course plans, and also 100 teachers of state schools of Astana city were involved in defining secondary education content.

Secondary education content renewal was carried out in two directions:

- 1) the partial renewal of educational content for secondary and high school within the existing standards;
- 2) the definition of the educational content of primary school.

These documents were developed:

The draft of the obligatory state standards for primary education, subject programmes and course plans for Primary School subjects; subject programmes and course plans within partial renewal of the existing standards of secondary and high school.

Both drafts of subject programmes and course plans, as well as the developed subject programmes and course plans were transferred to MES RK.

Basic provisions of the draft of the obligatory state standard for primary education were discussed widely in all regions of the country (teachers, scientists, parents, mass media, NGO, business structures, etc.).

Following the results of the discussion with the public, subject programmes of integrated subjects "First Language and Literature" and "Arts" were divided into 8 subjects.

In this regard, there were newly developed drafts of **16 subject programs and 65 course plans** for the Primary School.

Within the partial updating of the existing blueprint, **32 subject programmes and and 84 course plans** for secondary and high schools were developed.

All developed programs and plans were reviewed by CIE.

Subject programs and course plans for subjects are available on the MES RK website.

Within the project of transmission of Intellectual schools experience, **72 actions** in state schools were put into place, including:

64 workshops on development and the completion of adapted subject programmes and course plans.

- **1 workshop** for the directors of 30 pilot schools.
- 1 workshop for CoE employees according to adapted subject programmes,
- **1 workshop** on the topic "Communicative Approach in learning Second and Third Languages: how to Teach Students to Understand and Speak",

- 4 round tables on the discussion of the standard project in the pedagogical environment.
- **1 forum** for teachers of Kazakh language where over 300 teachers took part.

Work is being continued on the development of drafts of the obligatory state standards for secondary education.

Plan for 2015:

Workshops on the development of subject programmes and course plans for secondary state education with the participation of NIS teachers, state schools of the country and NAE specialists.

2.3.2 AEO works with pilot schools on the introduction of renewed education content in 2014

Since January 2014, there has been an extensive discussion of the Standard and the partial content renewal within the existing standard in the country. The following meetings were held: 78 meetings with teachers, the parental public, business structures, government bodies, and scientists of education with participation of more than 14 000 people.

According to the results of a survey among the pedagogical public:

98% of respondents claimed that the system of school education needs renewal to respond to the requirements of the 21^{st} century.

96% **agreed that** the Kazakhstani students should know three languages: Kazakh, Russian, English.

90% **considered** that primary school should develop skills in information usage and communicative technologies for learning, leisure and communication.

As a consequence of MES RK's directives the list of 30 pilot schools for the approbation of the Standard project was approved.

http://www.nis.edu.kz/ru/ edurenew

An adjusting workshop with the participation of MES RK, NAE, AEO representatives took place.

A three-day workshop on the topic "Curriculum in the Conditions of Renewing the Education Content" took place. Information about the workshops was published in the AEO website.

In order to provide methodological assistance to pilot schools, mentoring groups were created. These were consultants from among specialists of AEO, NIS, and NAO named after Altynsarin, SCPD "Orleu", CEP, CoE, CPM, regional departments of education (coordinators) and, also, methodological offices of regional departments of education (Heads).

There were organised trips to pilot schools to evaluate their current state.

Within a year, directives issued by the Ministry of Education and Science of RK were developed and approved:

- > The plan for MES to make the transition into the renewed educational content;
- > A road map for renewing the educational content;
- ➤ The provision for the approbation and pilot introduction of the renewed content of education.

Plan for 2015:

- To organise training for teachers and heads of pilot schools.
- To organise workshops on the implementation of curriculum monitoring at 30 pilot schools.
- The pilot project for the renewed content of education at 30 schools.
- The commencement of monitoring introduction of the educational program in 30 pilot schools.

2.3.3 Libraries share their experience

Libraries of Intellectual Schools are the resource centres for sharing best practices among colleagues from state schools with whom there is close and effective cooperation.

In Aktobe, Kyzylorda, Ust Kamenogorsk, Pavlodar, and Atyrau, training workshops were conducted by Intellectual school staff for librarians of comprehensive schools in both cities and provinces.

As a result of this **a workshop** on the topic **"The Innovative Areas of Work in Modern School Libraries"** was organised in the Intellectual School of Physics and Mathematics in Kokshetau.

Employees of regional, city libraries and higher education institutions actively participated in workshops.



In these sessions, the participants were involved in master classes in the development of students' research skills, reading culture development and other professional development topics beneficial to librarians.

Plan for 2015:

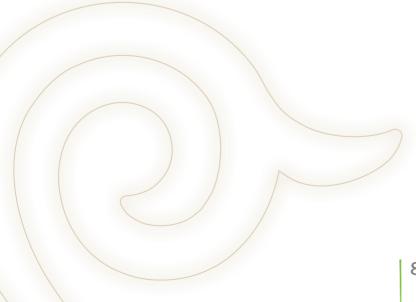
- The sharing of experiences and exchange of work experience of the Intellectual Schools' librarians with secondary schools.
- Workshops for the Physics and Maths Secondary Boarding School, named after
 O. Zhautykov, on the following subject:
 - "Organisation of School Library Activities: Modern Approaches" in the Intellectual School of Kokshetau;
 - "Support of Educational Processes through Information Resources" in the Intellectual School of Almaty, PMD.

3. MANAGEMENT AND GOVERNANCE

In its activity, AEO is guided by the Constitution and laws of the Republic of Kazakhstan, in particular that of January 19, 2011, entitled: "About the Status of "Nazarbayev University", "Nazarbayev Intellectual Schools" and "The Nazarbayev Fund." Furthermore, AEO also follows the Legal Acts of the President and the Government of the Republic of Kazakhstan, other regulations, and the Charter of AEO. During the reporting period, the following took place:

- > The Head of State, N. Nazarbayev visited the Intellectual school of Atyrau.
- The following meetings were held:
 - 8 meetings of the Board of Trustees;
 - A meeting of the Chairman of the Board of Trustees of AEO "Nazarbayev Intellectual Schools" with educators, where questions were discussed regarding the translation of experience of the Intellectual schools, their development, and the use of information technologies in training;
 - 50 meetings of the Board of Directors of AEO, where 240 questions were brought forward;
 - 4 meetings of the Board of Directors of Intellectual Schools where questions regarding educational activity was discussed;
- > The creation of the Board of Trustees at 16 Intellectual schools;
- The adoption of a new structure of AEO;
- ➤ A memorandum was signed by RSGE "National Scientific Education and Health-Improving Centre "Bobek", Zhautykov Physics and Mathematics Boarding School, and Microsoft corporation.
- More than 30 legal Acts of AEO were approved.
- The regulatory legal base was improved.
- ➤ License Contracts with JSC "SCPD" Orleu were prepared, and the author's contracts CoE and ERC were agreed.
- > An external audit of the consolidated financial accountancy of Ernst & Young LLP was conducted.

According to the report of independent auditors, the consolidated financial accountancy authentically reflected the financial state of AEO and its affiliated organisations for December 31, 2013 in all essential aspects, as well as their financial results and the movement of means for the year, which ended on the specified date according to International Financial Reporting Standards.



4. IMAGE CONSOLIDATION OF AEO "NAZARBAYEV INTELLECTUAL SCHOOLS"

The work was carried out in the following directions:

- 1. Content support of AEO corporate site;
- 2. Actions among students;
- 3. Work with mass media.

4.1 Content-support of AEO corporate site

In 2014, the corporate site of AEO "Nazarbayev Intellectual Schools" was operating successfully. Each Intellectual School had its own separate functioning page.

Internet resources demand an increase in social awareness about the AEO activities and can also become a useful online resource for students and teachers in Kazakhstan.

www.nis.edu.kz

In the site, each user can learn about: the document required for acceptance into the Intellectual Schools, the selection process of students and teachers, the results of testing, the total certification of students, the employment of young specialists and, also, other considerable events occurring at schools.

The site provides a convenient transition to the "Virtual School" and "Online Lessons and Workshops." There are successfully functioning sections available to "Subject Teachers" of Maths, Physics, Chemistry, Biology and English. This is a form of virtual laboratory for teachers. Skilled teachers of the Intellectual Schools can share lesson plans, methodological development and show practical lessons. There are actual materials about Criteria-based Assessment, Maths competitions, scientific projects, games and tasks.

In 2014, in the site, a large, new section was included. This was called: "Improving Education" and it consisted of the following subsections:

- > Experience Transmission,
- Professional Development,
- Educational Resources.
- > and Education Content.

In this section, visitors of the site can fully get acquainted with AEO's work concerning sharing experience of the Intellectual schools and the introduction of the updated content of education.

Access to the site is available from modern mobile devices iPhone, iPad, and Android.

In total, in 2014, 6,849,571 visitors to the site (67.3% were repeat visitors, and 32.7% were new visitors) were recorded; while in 2013, the website was visited by 1,146,394 people.

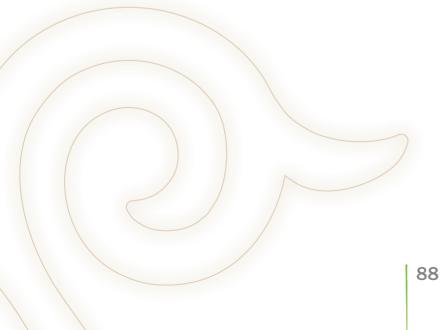
For the association of the target audience of Nazarbayev Intellectual Schools (students, teachers, parents, interested persons), an AEO official page on Facebook was created. The informal platform became an area for the discussion of actual events, the exchange of opinions, photos and various other types of information.



Work in the Facebook social network

Coverage: 10,000 users 'Liked' by over 2,000 users Discussions involved over 500 users

Shared by over 200 users



4.2 Actions among students

The First Astana media-forum "Energy of pen" was organized for young correspondents of Intellectual Schools on the basis of Kazmedia Centre (KMC) and the Nazarbayev Intellectual School of Physics and Mathematics in Astana. 16 pupils took part in the Media-forum.

The purpose of the media-forum was an all-round development for students of Intellectual schools to expand skills in article writing, public speeches, filming school programs and creating educational videos.

In KMC, students visited a unique multifunctional cinema and concert complex, a recording studio, a studio complex for producing television programs, among others. Participants of the media forum visited the studio of Kazakstan television and radio corporation, where programs such as: "Alan", "Tansholpan", "Ayel baqyty", "Tungi Studiya", "Kozqaras", "Biz", "Betpe Bet", "Balapan" were produced. The children had the opportunity to see how television programs are made, how graphics are formed, what "brilliant green" is for, what directors do before airing and how they organise the whole recording process. Moreover, students visited film-making pavillions where modern Kazakhstan TV series is shot.

Students met with leading media people; they saw famous TV reporters and also became acquainted with their studios. Furthermore, the students had the opportunity of asking interesting questions about career and success.

In the newsroom environment where information is managed and programs are analysed, famous journalists provided training for children on the following subjects: "Mass Media Rating", "Mass Media and Globalisation", "Radio Journalism and Communications", "PR and Journalism", "Authors TV program».

Children visited the studios of "Radio Astana" and "Kazakh Radio". They took part in the programs: "Good Evening" and "Night Studio". At the end of the Kazmedia Centre visit, the children went up to 21st Floor of the building where there are 2 panoramic television Sky-studios. There, they experienced a breath-taking view of the Capital which serves as a background setting when filming television programs and television space bridges.

In addition, during the reporting period, the **1st Science Festival** was successfully held at the Physics and Maths Intellectual School in Astana. This took place in preparation for the World Fair EXPO-2017. Students from Nazarbayev Intellectual Schools participated in this festival.

Children from 16 Intellectual schools (i) exhibited their scientific research, (ii) presented their inventions and scientific projects (iii) shared ideas about the optimum use of: natural resources; the creation of the best living conditions on earth; and, the preservation of ecology and nature.

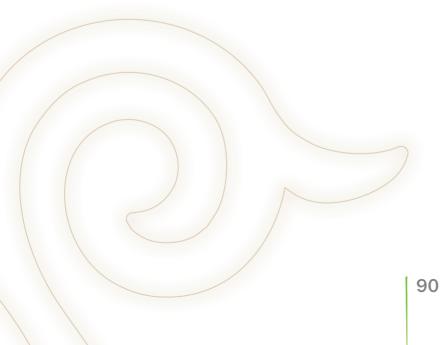
Among the students' research projects, there were: "Unique Opportunities of Ground Deposits (sapropel) of the Cop Lake as a Source of Power and a Fertilizer"; "The Convertion of Aviation Engines for Power Supply Needs"; "Obtaining Geothermal Energy of Earth and its Application"; "Sailing Wind-Powered Engine"; "Extraction of Energy from a Playground" and many other interesting topics.

The jury assessed all the research works and the results were tabulated in four categories: "Alternative Power Engineering and Ecology", "Alternative Power Engineering and Economy", "Alternative Power Engineering and Industry", and "Alternative Power Engineering and Technology".

Winners of the main categories were also awarded valuable prizes. All participants received a Diploma for participation in the festival.

Each scientific work was supplied with video business cards which were published in the Internet site national edition, "Kazakhstan Truth" of kazpravda.kz.

The dedication of the first festival to a World Fair of the EXPO became symbolic as it was seen as anticipation to the opening of a major fair in the territory of Kazakhstan. At this festival, JSC "Astana EXPO 2017 National Company" funded a prize for the best project to a schoolgirl from an Intellectual School in Shymkent.



4.3 Work with mass media

During the reporting period, work continued on the extension of the mass media list, loyal to AEO activities. Moreover, there is ongoing monitoring of Internet users' comments.

In 2014, the mass media actively covered actual events and projects of the company. The main topics were: the draft of State Obligatory Blueprint of Primary Schools, projects on educational AEO work, AEO International Scientific-Practical Conference, August Conference, "The Festival of Scientific Projects completed by students of AEO "Nazarbayev Intellectual Schools". These projects were undertaken in preparation for EXPO-2017" and to showcase students' achievements and other annual school events.

During the reporting period about **Intellectual schools:**

- ➤ 800 publications were issued in newspapers and magazines "Kazakhstanskaya Pravda", "Egemen Kazakhstan", "Liter", "Aykyn", "Vremya", "Alash Aynasy", "Syr boyi", "Kyzylordinskie vesti", "Aqmeshit Zhastary", "Ustazdar uni", "Ziyatker", "Bilimdi el", "Yuzhnyi Kazakhstan", "Ontustik Rabat", "Aygaq" "Saryarqa samaly", "Zvezda Priirtyshya", "Region KZ", "Ustazdar", "Ardager", "Panorama Shymkenta", "Shymkent kelbeti", "Aktyubinskiy vestnik", "Diapazon", "Aqtobe".
- ➤ **430 television segments were aired on broadcasting channels:** "Khabar", "Astana", "24 kz", "1 Eurasia channel", "Knowledge and culture", "Kazakhstan national channel", "Kazakhstan-Kyzylorda", "Society TV", "Otrar TV", "Media TV", TVK, "Irbis", Rica TV.
- > 556 Internet publications were placed on the sites: "Kazakhstan Truth", "Zakon.kz", "Tengrinews.kz", "bnews.kz", "kapital.kz", "NurKz", "El.kz", "Matritsa.Kz", "Kazvesti.kz", "KyzylordaNews". «Otyrar.kz», «Pavlodarnews», «media-tv», «e-shymkent.kz», «NWS. SU CIS News», «Rambler news», «News MAIL.RU», «FORBES.KZ».

Work in field of mass media is an important component in strengthening the image of the organisation. In 2015, the work will be continued in all three directions.



5. COOPERATION DEVELOPMENT

During the reporting period, a list of strategic partners was completed.

- 1. The partner in the International Accreditation of Schools is the **Council of International Schools, Inc.** (Netherlands).
- 2. The partner responsible for (i) training teachers of secondary schools using methods of Functional Literacy development and (ii) carrying out the international research "PISA" is "Pearson" (Great Britain).
- 3. Partners involved in the organisation of the Partnership program for an exchange of teachers and students:
 - SUPER partnership schools, partner schools from the Faculty of Education of Cambridge University (Great Britain);
 - American Councils for International Education (USA);
 - National Patriotic Lyceum (South Korea);
 - Partner Secondary Schools of Science (Super Science High School) (Japan)
 - Future schools (Future Schools) (Singapore)
- 4. Partners dealing with the hiring of foreign teachers:
 - «Oasis Education Ltd» (New Zealand);
 - «Edvectus Ltd» (Great Britain).

In addition, a **Memorandum of mutual cooperation** was signed with "Bobek" "National Scientific Education and Health-Improving Centre" ("Bobek" NSPEHC), O.A. Zhautykov (RSPMSBS) National Physics and Maths Boarding School, and Microsoft Corporation.

In the Memorandum with "Bobek" NSPENC, cooperation regarding the exchange of accumulated experience and knowledge, development of offers in the sphere of secondary education regulations, professional development of teachers of the Republic of Kazakhstan was given.

RSPMSBS is a primary school which transmits the experience of Nazarbayev Intellectual Schools. During the reporting period, teaching staff of RSPMSBS at CPM participated in levelled-training courses jointly developed with Cambridge and, moreover, they implemented IEP, the system of Criteria-Based Assessment, educational work, and the development of libraries.

Through the cooperation of **Microsoft corporation**, DreamSpark software (a package of tools for development and design), free access was given to the resource programs: Windows Server and Visual Studio Professional.

A transition into the usage of Office 365 was implemented; this allowed the significant cutting of costs of licenses within the educational plans. All students and teachers of the Intellectual Schools use this service.

The Intellectual Schools actively participated in the BETT Exhibitions to create a training environment for ICT in 21st Century. Schools were equipped with modern computer stations, interactive whiteboards and tablets.

Innovative training directions were reconsidered in Information Technology through Microsoft Partnerships Program. At the start of this project, the Intellectual School in Karaganda city became an experimental centre, where other schools can be registered as 'innovative' by using advanced technologies, and have the possibility of connecting with a professional network of teachers - innovators of the world, by exchanging information and communicative technologies among students as well as teachers.

6. CONSTRUCTION OF NAZARBAYEV OF INTELLECTUAL SCHOOLS

By the end of 2014, there were 17 Intellectual Schools operating.

Another 3 Intellectual Schools of Chemistry and Biology will open in 2015 in Almaty, Aktau, Petropavl cities.

2 Intellectual Boarding Schools in Kokshetau, Taldykorgan are in the process of construction.

Теруге 29.01.2015 берілді. Басуға __.02.2015 қол қойылды. Пішімі 60х84/8. Қағаз 115 гр/м². Сандық басылым. Шартты б. т. ___. Таралымы ___ дана. Тапсырыс № ___ «Педагогикалық шеберлік орталығы» ЖМ типографиясында басылды. 010000, Астана қ., Түркістан көшесі, 2 e-mail: info@cpm.kz, тел.: +7 (7172)-79-71-61

Сдано в набор 29.01.2015. Подписано в печать __.02.2015. Формат 60х84/8. Маттовая бумага 115 гр/м². Печать цифровая. Усл. печ. л. ___. Тираж ___ экз. Заказ № ___

Отпечатано в типографии ЧУ «Центр педагогического мастерства» 010000. г. Астана, ул. Туркестан 2, e-mail:-info@cpm.kz тел.: +7 (7172)-79-71-61