

Use of research results in building teachers' professional development trajectory

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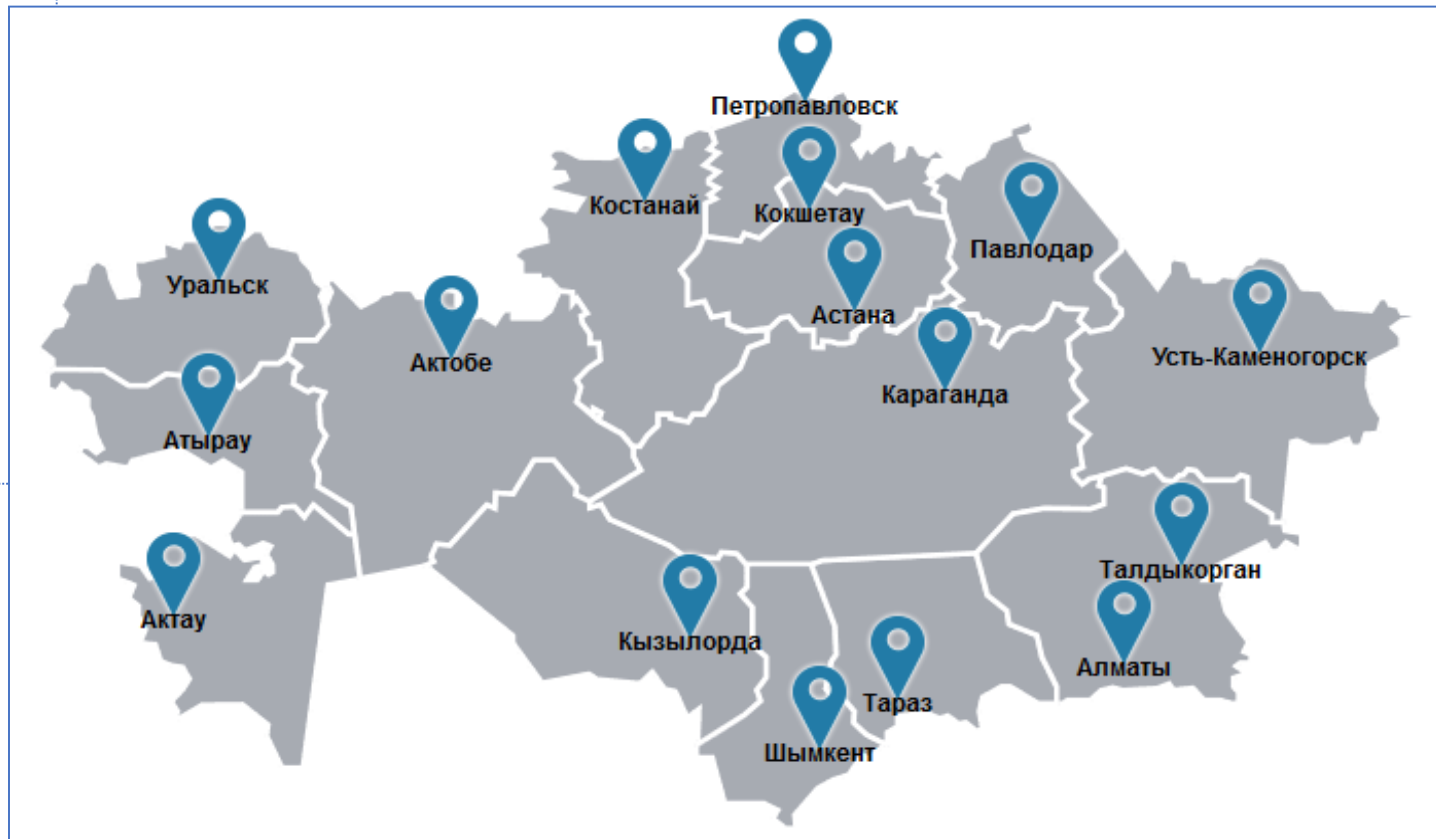
Nur-Sultan
24 October 2019

Center of Excellence

Branches – 15

Employees – 183:

- 79 Masters of Arts;
- 28 Candidates of Science;
- 5 Ph.D
- 7 Center employees studied abroad by “Bolashak” International Scholarship programme



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WALS member since 2015

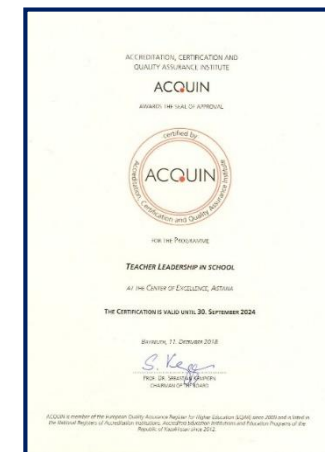
International certification of teachers' in-service training (2018)

.... by their content and organization, programmes are unique not only for Kazakhstan, but also the whole Central Asia, teacher and principal training contributes to the change of the school image and whole education system.

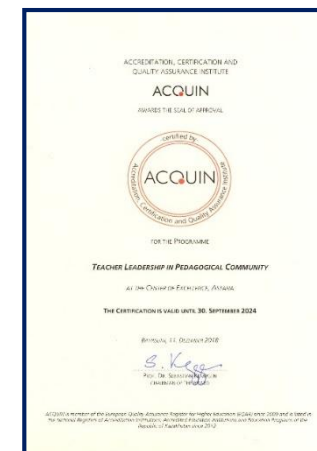
From the report of international experts of the Institute of Accreditation, Certification and Quality Assurance ACQUIN (Germany)



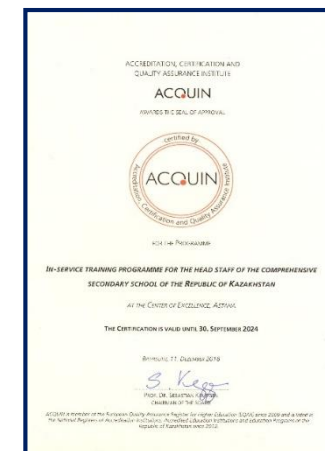
«Effective learning»
programme



«Teacher leadership at school»
programme



«Teacher leadership in pedagogical community»
programme

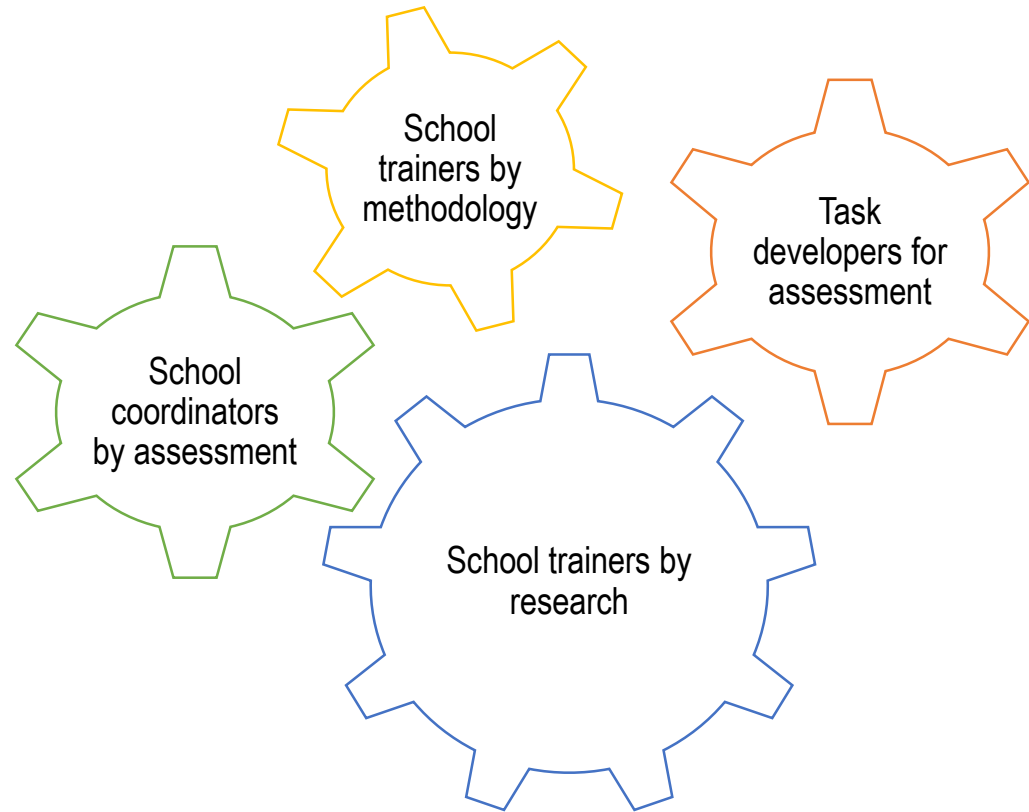
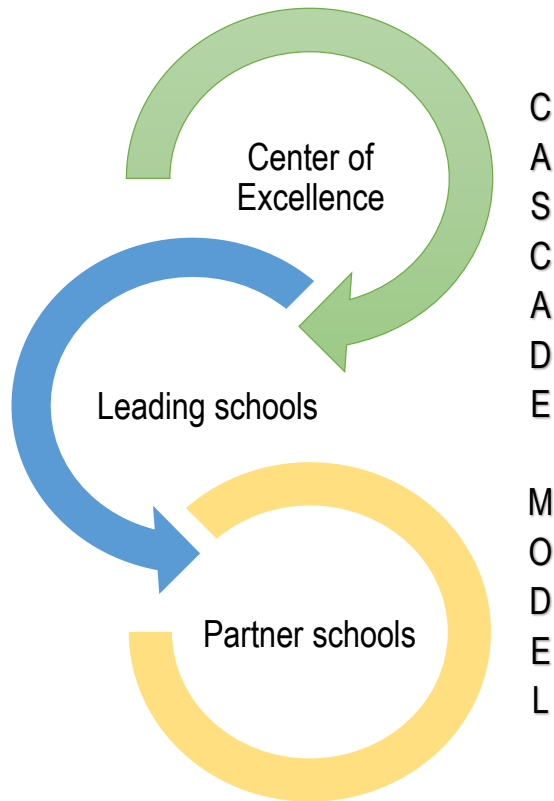


Programme of secondary school principals

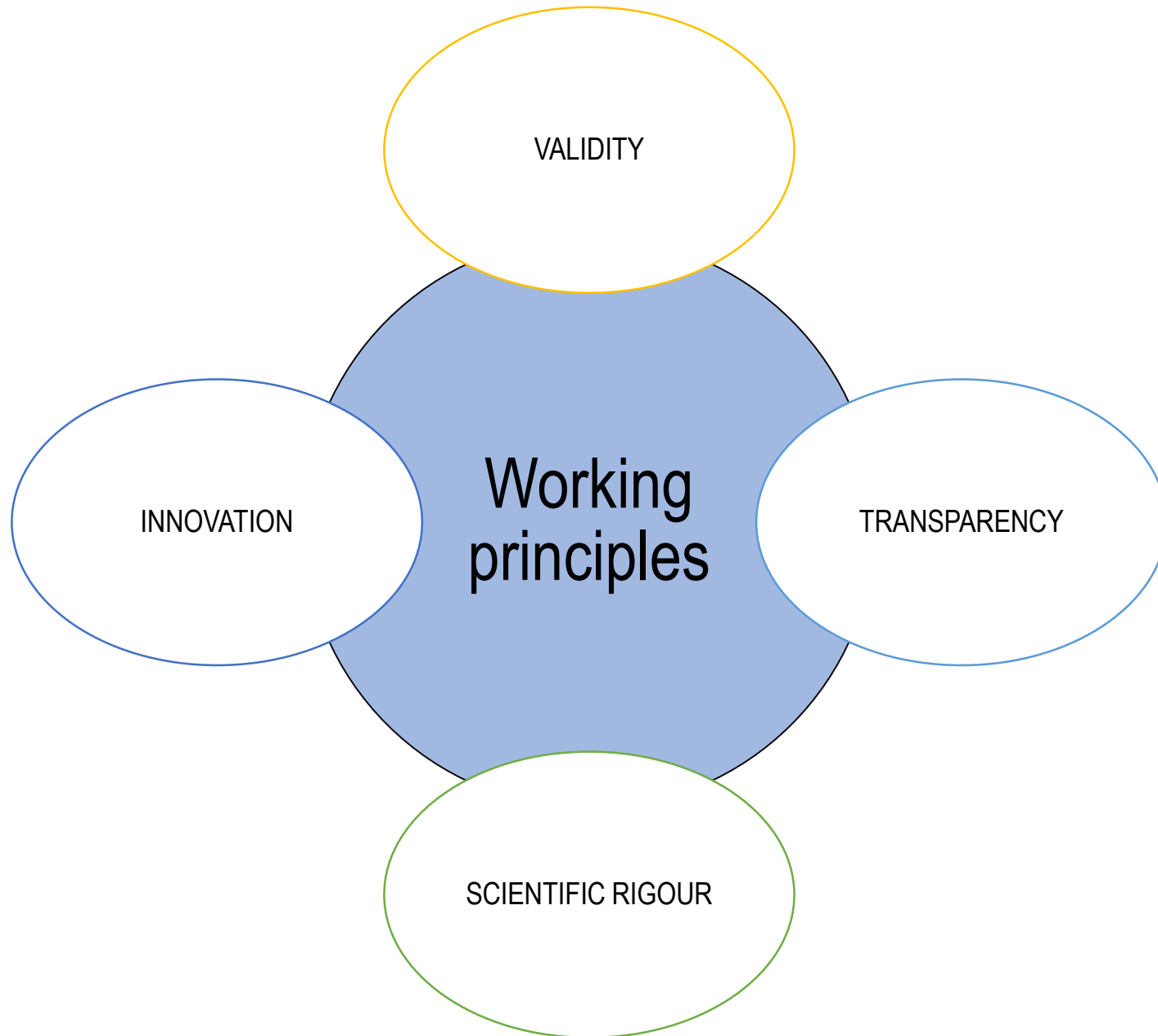
Statistics on trained personnel

Development of teachers' in-service training programmes in different spheres of teaching, learning and school management	153 programmes
Trainers' preparation for the purposes of in-service training programmes (from among employees of various educational organizations). Certification and recertification of trainers	5 575 trainers
Training of teachers of the Republic of Kazakhstan (school teachers and principals, university and college teachers, employees of education departments and administrations, employees of the Ministry of Education and Science of the Republic of Kazakhstan). Independent Final Assessment.	429 932 Kazakhstani teachers
Methodical support for trained participants in the post-course period (via lesson observations with feedback, organization of seminars and master classes, conferences and forums). Establishing of support points for teachers of all schools via leading school system.	40 684 events 1 020 leading schools (each 7 school in Kazakhstan)

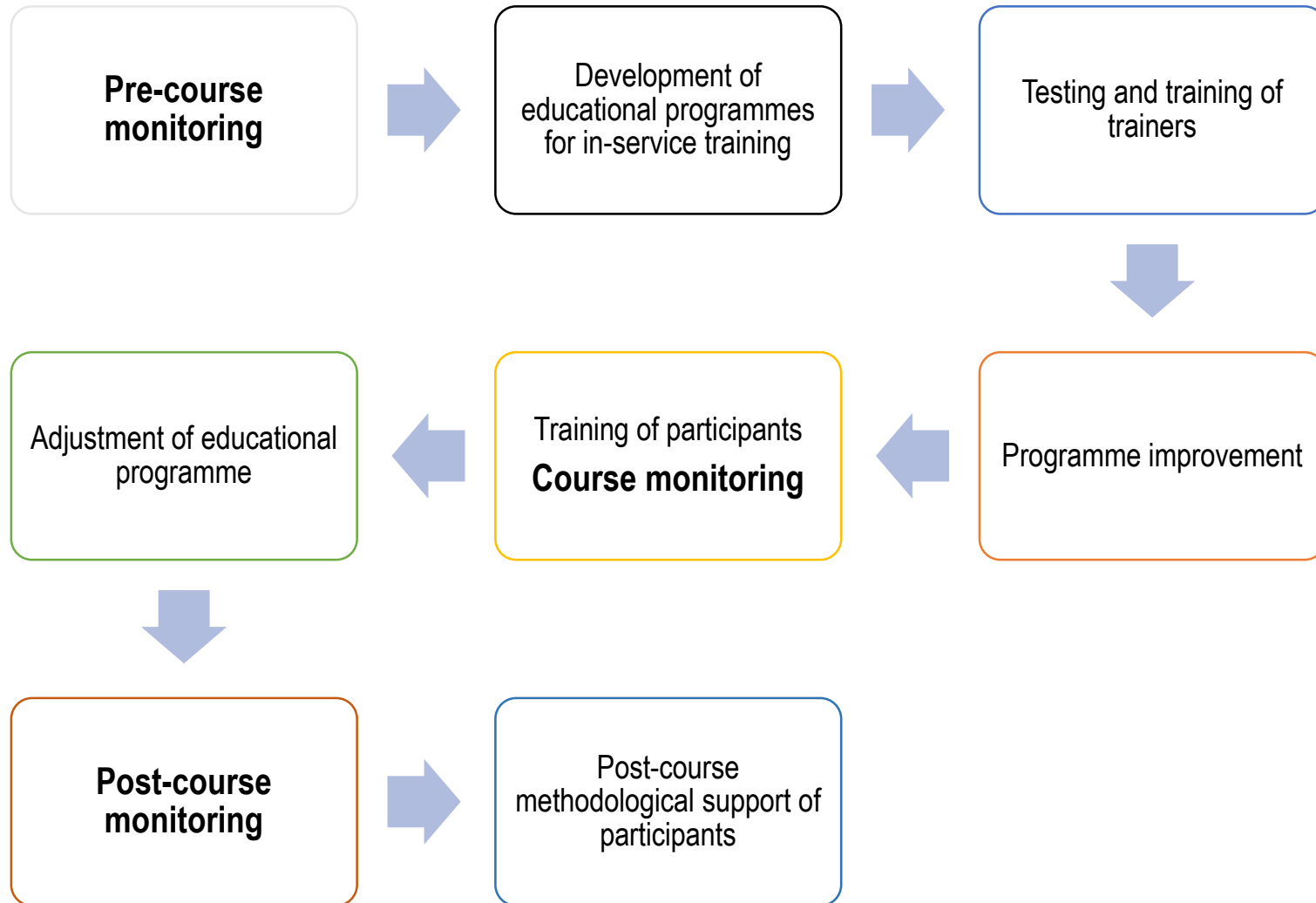
Mechanisms of teachers' in-service training



WITHIN SCHOOL



In-service training system



MONITORING RESEARCH OF CENTER OF EXCELLENCE

Specification

By stage	By time characteristic	By frequency of procedures	By object coverage	By range of tools	Methods
Pre-course	Anticipating/advanced	Periodical	Selective/ local	Standardized	Questionnaire, self-assessment, interview, observation, study of documentation
Course	Current	Systematic	Solid		
Post-course	Retrospective		Selective/ solid		

Monitoring research

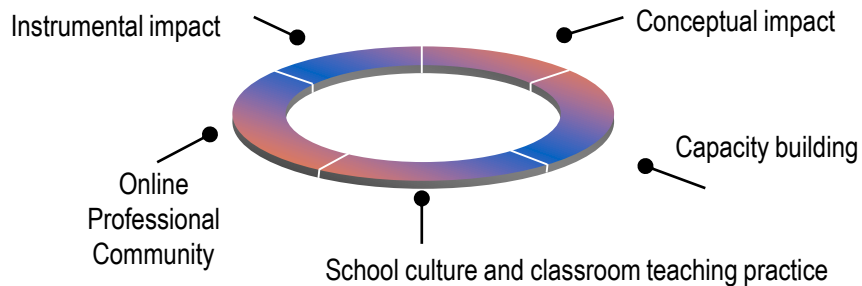
Type	Objective	Use of results
Pre-course	Identification of professional issues and needs of the target audience.	Development of objectives, tasks and anticipated results of in-service training
Course	<p>Relevance and practical importance of educational programmes.</p> <p>Training performance (comparing results of “internal” and “external” questionnaires)</p> <p>Quality of course organization. Work of trainers</p>	<p>Timely adjustment of programmes and AMC.</p> <p>Work on improving the quality of teaching courses.</p> <p>Work on improving the quality of organization of courses.</p>
Post-course	<p>Comparison of the actual state of school practice with success criteria and determination of:</p> <ul style="list-style-type: none"> ▪ professional difficulties of teachers in the post-course period; ▪ the nature of transformations in school practice; ▪ the dynamics of educational achievements and personal development of students; ▪ degree satisfaction of parents’ requests; ▪ the involvement of the teaching staff in the development of schools; ▪ the effectiveness of methodological support for trainers. 	<p>Quality improvement of programmes and AMC.</p> <p>Prevention of potential risks and formal use of programme ideas.</p> <p>Quality management of post-course activities of certified teachers and ongoing transformations in schools.</p> <p>Publication of teaching manuals.</p>

Monitoring research

Parameters and tools of research:

1. Characteristics and dynamics of ongoing transformations

(according to categorical framework of Economic and Social Research Council (ESRC))



2. Teaching and learning success

Cognitive sphere: what teachers and students know and are able to do;

Emotional sphere: how they feel in the role of teacher / student;

Social sphere: how they interact in the process of teaching / learning.

3. Effectiveness of school processes

Professional activity of school principal and teacher: OECD survey for International research of TALIS teaching and training

Statistics of research:

Conducted:

70 – internal monitoring researches

1 – jointly with Cambridge University

458 504 respondents

Categories:

NIS principals and teachers

Kazakhstani school teachers

Kazakhstani school principals

Kazakhstani school students

Parents of students

University lecturers

Students of Faculties of Education

University alumni

Employees of education departments

**INDICATORS FOR KAZAKHSTAN VERSUS AVERAGE
INDICATORS OF OECD COUNTRIES**
General questions

Sl. No	POSITION	INDICATOR FOR KAZAKHSTAN	INDICATOR FOR OECD COUNTRIES
1.	Average age of teachers	41 y.o.	44 y.o.
2.	Average age of school principals	48 y.o.	52 y.o.
3.	Percentage of school principals aged 60 and above	5,0%	20,0%
4.	Percentage of teachers with master degrees	3,5 (final positions: South Africa, Vietnam)	Top ten of countries: 60,6-96,2%
5.	Percentage of principals, who acknowledge regular cases of bullying among students	1,0%	14,0%
6.	Percentage of teachers working in schools with students of migrant background	5,0%	17,0%
7.	Time budget for professional activity (per week)	48,7 (final position among teachers in Japan – 56,0%)	Top ten of countries: 25,3-35,0%
8.	Time budget spent by school principals to administrative work	29,5%	21,6%

INDICATORS FOR KAZAKHSTAN VERSUS AVERAGE INDICATORS OF OECD COUNTRIES

Basic education and professional development

Sl. No	POSITION	INDICATOR FOR KAZAKHSTAN	INDICATOR FOR OECD COUNTRIES
1.	Percentage of teachers who have completed subject-related content, pedagogy and practice at school as part of basic education	85,0%	79,0%
2.	Percentage of teaching staff who completed an introductory orientation programme prior to school work	67,0%	42,0%
3.	Percentage of young teachers with mentors at the place of work	59,0% (in reality 35,0%)	22,0%
4.	Percentage of school principals, who attended school management/principal training programme or courses	25,0%	54,0%
5.	Percentage of teachers who took part in various forms of professional development on the job	98,0%	94,0
6.	Percentage of teachers reporting positive impact and effectiveness of professional development activities	86,0%	82,0%

INDICATORS FOR KAZAKHSTAN VERSUS AVERAGE INDICATORS OF OECD COUNTRIES

Methodology and technologies of teaching and management

Sl. No	POSITION	INDICATOR FOR KAZAKHSTAN	INDICATOR FOR OECD COUNTRIES
1.	Percentage of teachers allowing students to use ICTs for projects or class work	66,0%	53,0%
2.	Percentage of teachers with a high need to improve ICT skills for teaching	30,0%	18,0%
3.	Percentage of school principals reporting a negative impact of digital deficiency or mismatch on the quality of teaching and learning	45,0%	25,0%
4.	Percentage of teachers, who often have to solve discipline problems in the classroom	42,0%	65,0%
5.	Percentage of teachers, who know how to engage students in the independent solution of problematic learning situations	75,0%	45,0%
6.	Percentage of teachers, who attended in-service training courses abroad	6,0%	Top ten of countries: 50,0-90,0%

**INDICATORS FOR KAZAKHSTAN VERSUS AVERAGE
INDICATORS OF OECD COUNTRIES**
Methodology and technologies of teaching

Sl. No	POSITION	INDICATOR FOR KAZAKHSTAN	INDICATOR FOR OECD COUNTRIES
1.	Percentage of teachers, who are in utmost necessity of professional development concerning a comprehension of updated programmes and textbooks	35,0	Up to 10,0%
2.	Percentage of teachers, who are in utmost necessity of professional development concerning a methodology of assessment criteria	30,0%	12,0%
3.	Percentage of teaching time dedicated to actual teaching and learning	79,0%	78,0% (over the past 5-10 years, declined in about half of the countries participating in TALIS)
4.	Percentage of teachers, who regularly evaluate their students based on observations, providing timely feedback	87,0%	79,0%
5.	Percentage of teachers, who use own development of student assessment	51,0%	77,0%
6.	Percentage of teachers involving students in the process of self-assessment of academic achievement	74,0%	41,0%
7.	Percentage of teachers claiming to establish a culture of cooperation and mutual support among colleagues in schools	93,0%	78,0%

PROBLEMATIC ISSUES TAKING PLACE DURING ANNUAL MONITORING RESEARCH

№	ISSUES AND QUESTIONS	DEMAND (%)
1.	ICT to solve educational tasks	97,1
2.	Development of descriptors and criteria for professional development of teachers	89,7
3.	Methodological foundations of distributed leadership	89,3
4.	Organizational and methodological foundations of teacher research activity	86,2
5.	Process quality management	79,4
6.	School development monitoring: organization technology, implementation algorithm	76,3
7.	Modern technologies and teaching methods: authorship, application peculiarities	68,9
8.	Strategic planning and development management of educational organizations	68,1
9.	Analysis, synthesis and adaptation to the specific environment of the best world experience in the management of educational organizations	66,6
10.	Conflict management	62,8
11.	Assessment and examination of school activities	60,6
12.	Deficiency of scientific and pedagogical training among school principals and teachers at the postgraduate level: <i>Postgraduate</i> <i>Doctorate</i>	95,0-98,0% 98,0-99,0%

What we intend to do as the Center of Excellence

- A series of online courses on active teaching methods has been launched including the use of ICT in classroom instruction;
- A new educational programme is being developed for school leaders with a focus on methodological management and human resource management within the school;
- A student electronic accounting system (SEAS) is underway, as well as a tool for constructing the trajectory of teacher professional development.