

PROJECT INFORMATION DOCUMENT (PID) CONCEPT STAGE

Report No.: PIDC23971

Project Name	Education Modernization Project (P153496)
Region	EUROPE AND CENTRAL ASIA
Country	Kazakhstan
Sector(s)	Primary education (50%), Secondary education (50%)
Theme(s)	Education for all (60%), Gender (20%), Education for the knowledge economy (20%)
Lending Instrument	Investment Project Financing
Project ID	P153496
Borrower(s)	Republic of Kazakhstan
Implementing Agency	Ministry of Education and Science
Environmental Category	C-Not Required
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Concept Review Decision	Track II - The review did authorize the preparation to continue

I. Introduction and Context

Country Context

Kazakhstan, an emerging economy in Central Asia has a grand vision to rise to one of the world's top 30 economies by 2050. Over the last 15 years, it has sustained robust economic expansion with a sharp rise of GDP per capita averaging 7 percent per annum and a rapid reduction of poverty from 47 percent to 3 percent. Between 2001 and 2013, Kazakhstan more than doubled its GDP per capita, while economic growth was largely pro-poor. These remarkable economic progress coupled with significant demographic growth make the country young and vibrant.

While the country has made advances in multiple reforms, the economic progress to date does not dwarf the challenges in diversifying the economy for less dependency on natural resources and in addressing disparity. National resources account for 80 percent of its exports and 37 percent of GDP. Furthermore, large social and economic disparities exist amongst rural and expanding urban populations with rapid in-migration from rural villages to urban cities and out of the country.

The recent plunge of world oil prices in 2014 significantly reduced the earnings from oil exports and triggered a contraction of economy and spending. These developments, which caused negative and compounding effects on the economy and public spending, also provide opportunities to pursue long overdue reforms towards a more diversified economy and a highly skilled human capital underpinned by a quality education system for all Kazakhstani citizens.

Sectoral and Institutional Context

Historically education has been a priority in Kazakhstan. Education reforms have evolved since its independence to address legacy, national identity and demands of a modern and competitive economy. To date, there are 7667 schools enrolling 2.5 million students. Approximately 25 percent of schools are located in urban areas of the country and serve 48 percent of the cohort, whereas 75 percent of schools are located in rural locations and only service 52 percent of the student population. In recent years the country has made significant strides towards universal access and enrollment with gender parity. The challenge for Kazakhstan today is providing quality education for all.

The PISA 2012 results show marked improvements and narrowing gaps in achievement compared to 2009. However, the results placed Kazakh students significantly behind their counterparts from countries of similar income level with significant disparity. The results demonstrate high inequality in learning, with 59 percent of students scoring below the basic competency level in math, 58 percent in reading, and 55 percent in the sciences. The results also demonstrate high-level disparity by income level. For instance, the difference in math scores was statistically significant between the highest and lowest socioeconomic quintiles. However, performance in math does not vary by gender, whereas in reading the results show a larger gender gap in performance with boys lagging significantly behind girls. The PISA results also mirror the results of other international assessment that Kazakhstan took part. In 2011, Kazakhstan participated in the Trends in International Mathematics and Science Study (TIMSS), which measures cognitive skills. In TIMSS, 4th grade Kazakhstani students scored 501 points in Math, right at the mean; while 8th grade students scored 487 points, just below the mean of 500 points. In Science, 4th grade and 8th grade Kazakhstani students scored 495 points and 490 points, right below the mean.

Kazakhstan has a clear policy on teacher quality that supports teachers to improve instruction through professional development and has made progress in addressing teacher shortage in hard to staff schools. Notwithstanding of the progress, challenges remain in attracting the best into teaching and motivating teachers to perform. Despite substantial increases in teacher pay, the teaching profession remains one of the lowest paid professions. For instance, a teacher's starting salary is one third less of a health worker's and one six of a banking sector professional.

The policy of teacher quality does not adequately address pre-service training and qualifications to create a strong teaching workforce in Kazakhstan. The initial teacher education does not provide the prospective teachers with the knowledge and skills needed to be successful in classroom. Pre-service training is dominated by theory and has little contact with practice. Requirements for practical classroom experience appear less stringent for novice teachers. This deficiency at entry has limited Kazakhstan's potential to reach the performance benchmark of high performing education systems. While teacher practice has been increasingly shifting to student-centered approach, it has not been translated into significant improvement of learning strategies by students who still rely on memorization than inquiry based problem solving and critical thinking. Weak

school leadership for instruction and pedagogy is one of the obstacles for raising teacher effectiveness.

Kazakhstan's student learning assessment system has a strong foundation. Classroom assessments are conducted at school level on a regular basis. The country has been an active participant in international assessments. The Unified National Test (UNT) is used to certify learning at the end of the secondary cycle as well as for admission to higher education. However, while the formative assessment has been introduced to teachers, it has not been practiced in classroom to assess student progress and to inform teaching strategy and professional development of teachers. The UNT continues to generate debates about its effectiveness in serving the dual purpose that it claims and a culture shift is needed for using all assessment data to inform teaching and learning than control.

The education system continues to devolve from a top-down and centralized planning past. Education budgets are decentralized to local government (Akimat) level. School principals prepare budget requests for decision by Akimat that exercise full discretion. Autonomy in personnel management is exercised by school principals for hiring and firing of staff, and the Akimat level is solely responsible for appointing school principals. Stakeholders like parents participate in school activities through school councils without legal authority and school accountability is hampered by the lack of power of parents over key issues of budget and personnel management and weak linkages between student and teacher performance and school accountability.

Education spending has seen a declining trend and resource distribution is unequal. Expenditures of education have decreased from a share of 6 percent of GDP in the 1990s to around 3.6 percent in 2012, a level substantially below the comparator countries and the OECD average of 5-6 percent. General education is largely locally financed but the current inter-governmental transfer system is not working to address regional and local disparities caused by varied endowments and tax revenues. The inability and the lack of a mechanism to equalize at national level exacerbates the disparities between rich and poor regions and rural and urban populations in financing school recurrent costs. Among the resources available to schools, infrastructure has received most attention in recent years. Large numbers of facilities have been built or rehabilitated to address the needs in regions with growing student populations. Yet concerns exist about the equity and efficiency of distribution of other educational resources. Learning materials and information and communication technologies tend to be more prevalent in large, urban schools; while students in rural schools in particular "small-size" and "multi-grade class schools" often lack the basics, such as textbooks, computers and learning devices in science labs. A formula based per student financing scheme was developed and piloted which could address equity and efficiency in allocation but faced numerous challenges, including: lack of stakeholder support, effectiveness of the formula, and the conditions and capacity to be in place such as providing position of school accountant and legal barrier to open account at school level and training of school principals and Akimat officials.

Kazakhstan has maintained gender parity in universal access between boys and girls in primary and secondary education. However, the learning outcomes are less equal as reflected in the 2012 PISA results. Performance in math does not vary by gender but reading remains a major challenge for boys. The difference in reading scores was equivalent to one year schooling behind that of girls which appears significant compared with the peers from comparator countries like Turkey and Russia.

Driven by the ambition to race to the top and building on the reforms to date, the government of

Kazakhstan has established a strategic vision for the country and for education development. The Kazakhstan Strategy 2030 provides an overachieving framework with a political vision and rationale for reforms of the economy and society. The State Program of Education Development 2011-2020 (SPED) provides concrete plans to implement the first phase of the Kazakhstan 2030 Strategy. The SPED has laid out the priorities, targets and indicators to be achieved by 2020 from preschool to higher education. The main thrusts are driven by a strong economic motivation for competitiveness. It stated unmistakably the commitment to increasing competitiveness of education and human capital through access to quality of education for sustainable economic growth. While the SPED has a focus on access, quality, curriculum and inclusion, it also set out specific indicators to be achieved for primary and secondary education transitioning to a 12-year schooling system. The outcome focused indicators include targets of increased number of students completing science and math programs and improved ranking of results of Kazakhstani students in international assessments like PISA, TIMSS and PIRLS.

Nazarbayev Intellectual Schools (NIS) is a government-financed project to establish 20 “intellectual schools for the gifted and talented children aimed at education and upbringing of a new generation of intellectual elites,” but the innovations they bring need to be mainstreamed. While the NIS schools were created for a different purpose serving an elite segment of the population, the innovations generated through international partnership in bringing international practice with Kazakh tradition in curriculum development, assessment and pedagogical practice and school autonomy provided inspirations for the government and education research community in Kazakhstan in their pursuit to improve quality of the entire education system. In an effort to transfer the NIS innovations into the mainstream system, MOES has led the development of a new program with partnership of NIS schools, their international partners and the Kazakhstani education research community. A concrete output is a set of new education standards elaborated in a competence based curricular with aligned pedagogical approach and assessment practice and a new model of professional development of teachers. To spur the transfer of the knowledge and innovation, MOES laid out the following priorities in its Strategic Plan 2016-20: “(a). Introduction of a new education program across all subjects from Grade 1; (b) partial introduction of a new project work on science and math subjects and critical thinking in the 11-year schooling; and, (c) revisions of in-depth study of language and use of ICT.”

Relationship to CAS

The World Bank has an active and strategic engagement in Kazakhstan. The Country Partnership Strategy (CPS) for FY12-17 identifies three objectives for the Bank's involvement in Kazakhstan: (i) promote diversification, innovation, investment in human capital, and international trade integration for employment generation; (ii) promote improved governance in public administration and service delivery (including modernizing the judiciary and civil service); and (iii) ensure that development is environmentally sustainable. This project will contribute to the first objective of the CPS by seeking to increase equitable access to quality education that would strengthen the human capital that enhances Kazakhstan's competitiveness for sustained growth, productivity and capacity for innovation. The Partnership Framework Arrangement (PFA), agreed between the GoK and the World Bank Group in May 2014, aims to support the Government's efforts through investment and institutional capacity building projects, as well as technical assistance. The current project comprises part of the umbrella program on PFA pillar 3 “Development of human capital, promotion of science and innovation.” The project complements the on-going Technical and Vocational Modernization Project (TVEM) on raising system wide performance of functional literacy and closing achievement gaps in cognitive skills and modern competencies.

The project is clearly aligned to the Bank's twin goals of ending extreme poverty and boosting shared prosperity. As a growing body of evidence of economic research shows investment in quality of primary and secondary education yields significant returns to individuals and economy thus reducing the incidence of intergenerational poverty. While supporting system wide quality improvement of all schools, the project targets the most vulnerable groups including rural and underserved urban schools and disadvantaged population of lower economic and social status. This will lay the foundation for long-term productivity, higher earnings and shared prosperity of all intended beneficiaries.

II. Proposed Development Objective(s)

Proposed Development Objective(s) (From PCN)

The development objective of the project is to enhance the quality of primary and secondary education in Kazakhstan. The direct beneficiaries are about one million students, teachers and other stakeholders in more than 4,000 rural and underserved urban schools.

Key Results (From PCN)

The key results that the project seeks to produce are

- Incremental gains of student performance in math, science and reading disaggregated by gender measured by national assessments.
- Share of teachers who adopted student-centered and active learning pedagogical practice as measured by classroom observation.
- Share of students/schools benefited from enhanced distribution of learning resources.
- Share of School Boards with representation of parents participating in decision making over school budget and school improvement planning.

III. Preliminary Description

Concept Description

Aligned to the government's self-owned education program and informed by a strong body of analytical research, the project seeks to provide comprehensive and targeted support for system wide results of enhanced learning outcome in support of the transition to a 12 year schooling. In particular the project will support system wide reforms to

- develop, pilot and roll out modern learning standards and a competence based curriculum for grades 1-11; with aligned learning resources and ICT enabled technology;
- enhance teacher quality at entry and support professional development and pedagogical practice of existing teachers; strengthen student assessment system capacity and quality of assessment;
- enhance school accountability and autonomy, including school leadership and capacities to effectively and efficiently manage resources;
- build school and sector capacities for data driven decision making and use of data for accountability and learning improvement and
- ensure adequate distribution of learning resources to reduce disparity in learning outcomes

The project also seeks to adopt a result based financing approach to leverage system wide result of enhanced learning outcomes while addressing more equitable provision of essential learning

resources to ensure a balance of the result focus and the effective production function in the learning process.

Component One: Enhancing Learning Outcomes

This component aims to ensure that all students learn a curriculum that is based on modern competency standards. Their learning would be facilitated by quality teachers with effective student centered and active pedagogical practice. Their progress to master essential competencies would be measured on a continuum and at the end of the schooling cycle. They would have equal access to essential learning materials including ICT enabled resources aligned with the curriculum, with a particular focus on the disadvantaged schools and groups. The focus would be on supporting:

1.1 Evaluation of the learning standards and curriculum for grades 1-4, development and pilot of the standards and curriculum for grades 5-11 including development of textbooks and learning materials and ICT enabled resources aligned to the curriculum.

1.2 Reform of teacher preparation, professional development and practice by a review of the policy and practice in initial teacher education and recruitment at entry towards a strategy for reform. Enhancing teacher development and practice through in-service training for upgrading qualifications and on new teaching and learning strategies including the use of ICT enabled technology to deliver the new curriculum. Particular attention would be given to teaching and learning strategies to address the achievement gaps of boys in reading. Strengthening the support mechanism for continuous pedagogical guidance through enhanced mentoring, classroom observations and school leadership development.

1.3 Equitable provision of learning resources including textbooks, learning materials, teaching equipment and ICT enabled resources to deliver the new standards and curriculum. This is a targeted measure focused on the disadvantaged schools that face significant challenges in the provision of learning resources to narrow the gaps in the distribution of these resources within the system.

1.4 Strengthening the student assessment system and institutions. This aims to address the gaps in assessment practice and capacity for enhanced assessment quality and effectiveness. It entails building capacity for teachers and assessment professionals for formative assessment in classroom through training and peer learning, introduction of enhancement to the UNT, and adoption of ICT enabled technology to enhance the validity and reliability of the existing assessment instruments as well as more effective use and dissemination of assessment results.

Component Two: Strengthening Governance

This component aims to ensure that schools are governed by a strong leadership and that resources are accounted for with autonomy and participation of stakeholders in management and improvement planning including a pilot of an enhanced per student financing model. It also aims to equip schools and the system with an Education Management Information System that helps generate the information on school and system performance and the use of that information for accountability to government and stakeholders and for informing teaching and learning.

The component will focus on:

2.1 Enhancement of school leadership through training of school principals and Akimat officials; mainstreaming of school boards with representation of parents and other stakeholders and adoption of School Report Card to inform stakeholders on school budget, performance and school improvement planning.

2.2 Capacity building for data driven decisions making. This aims at supporting establishment of a school based Education Management Information System for accountability and learning improvement; training of school heads, Akimat and MOES officials for use of EMIS and data to generate and publish information for public dissemination.

Component Three: Supporting Citizen Engagement, Monitoring and Evaluation and Implementation

This component aims to engage and support stakeholders and citizens participation in project preparation as well as building capacity for implementation and monitoring and evaluation of key government reform initiatives and project results. It would focus on:

3.1 Supporting stakeholder participation through consultation and communications with stakeholders during project preparation and implementation process and establishment of a grievance redress system to handle public complaints and monitoring project implementation and evaluation of project results through a NGO monitoring exercise and independent evaluation by a third party of project results.

3.2 Evaluation of Government Reform Initiatives. This responds to government requests to review the on-going reforms in three policy domains: (i) a review of the country's Secondary Education Strategy on tracking following the 9th grade in light of a more viable strategy that would enhance efficient pathways and transition for secondary graduates to access tertiary education and decent job opportunities; (ii) a review of the existing Per Capita Funding formula and development of a pilot plan of the revised model in two oblasts and (iii) a review of the current performance based pay scheme for teachers towards a possible enhancement of the scheme.

3.3 Building capacity for project management and coordination through establishment and maintenance of a Project Implementation Unit with proper mix of skills to coordinate project implementation with the oversight of the MOES and building in house technical capacity in key functions to sustain and institutionalize the capacity within and beyond project life.

IV. Safeguard Policies that might apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01		✗	
Natural Habitats OP/BP 4.04		✗	
Forests OP/BP 4.36		✗	
Pest Management OP 4.09		✗	
Physical Cultural Resources OP/BP 4.11		✗	
Indigenous Peoples OP/BP 4.10		✗	
Involuntary Resettlement OP/BP 4.12		✗	

Safety of Dams OP/BP 4.37		x	
Projects on International Waterways OP/BP 7.50		x	
Projects in Disputed Areas OP/BP 7.60		x	

V. Financing (in USD Million)

Total Project Cost:	100.00	Total Bank Financing:	80.00
Financing Gap:	0.00		
Financing Source			Amount
Borrower			20.00
International Bank for Reconstruction and Development			80.00
Total			100.00

VI. Contact point

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