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Report No: PAD3551

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 18.2 MILLION
(US\$25 MILLION EQUIVALENT)

AND A PROPOSED GRANT

IN THE AMOUNT OF SDR 18.2 MILLION
(US\$25 MILLION EQUIVALENT)

TO THE

KYRGYZ REPUBLIC

FOR A

LEARNING FOR THE FUTURE PROJECT

March 10, 2020

Education Global Practice
Europe and Central Asia Region

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CURRENCY EQUIVALENTS
(Exchange Rate Effective February 04, 2020)

Currency Unit = Kyrgyzstan Som (KGS)

KGS 69.998= US\$ 1

US\$1.37695 = SDR 1

FISCAL YEAR
January 1 – December 31

ABBREVIATION AND ACRONYMS

BPFAD	Budget, Policy, and Financial Analysis Department
CbK	Community-based Kindergarten
CLASS	Classroom Assessment Scoring System
CPD	Continuous Professional Development
CPF	Country Partnership Framework
DP	Donor Partner
DPCC	Donor Partners Coordination Council
ECD	Early Childhood Development
ECE	Early Childhood Education
EDI	Early Development Instrument
EGRA	Early Grade Reading Assessment
ESMF	Environmental and Social Management Framework
ESRS	Environmental and Social Review Summary
FM	Financial Management
GDP	Gross Domestic Product
GNI	Gross National Income
GRS	Grievance Redress Service
HCI	Human Capital Index
IITT	In-Service Institute for Teacher Training
IPF	Investment Project Financing
KAE	Kyrgyz Academy of Education
KEEP	Kyrgyz Early Education Project
M&E	Monitoring and Evaluation
MoCIT	Ministry of Culture, Information and Tourism
MoE	Ministry of Economy
MoES	Ministry of Education and Science
MoF	Ministry of Finance
MSPD	Monitoring and Strategic Planning Department
NLA	National Learning Assessment
NLQA&IT	National Learning Quality Assessment and Information Technologies Center
NPV	Net Present Value
NSBA	National Sample-Based Assessment
NSC	National Steering Committee



OECD	Organization for Economic Cooperation and Development
OIITT	Oblast Institute of In-Service Teacher Training
PCU	Project Coordination Unit
PDO	Project Development Objective
PER	Public Expenditure Review
PFM	Public Financial Management
PIAAC	Programme for the International Assessment of Adult Competencies
PISA	Programme for International Student Assessment
POM	Project Operations Manual
PSSOED	Preschool, Secondary School, and Out-of-School Education Department
QCBS	Quality- and Cost-Based Selection
RED	Rayon Education Department
RFB	Request for Bids
RIITT	Republican Institute of In-Service Teacher Training
SESPA	Socio-Emotional Skills Pilot Assessment
SSER	Sector Support for Education Reform
STEM	Science, Technology, Engineering, and Mathematics
STEP	Systematic Tracking of Exchanges in Procurement
TA	Technical Assistance
TLMs	Teaching-Learning Materials
USAID	United States Agency for International Development
WDR	World Development Report

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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Kyrgyz Republic	Learning for the Future Project	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P170542	Investment Project Financing	Moderate

Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Disbursement-linked Indicators (DLIs)	<input type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made Disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	

Expected Approval Date	Expected Closing Date
31-Mar-2020	30-Sep-2025

Bank/IFC Collaboration

No

Proposed Development Objective(s)

The project development objective is to enhance school readiness and teacher effectiveness in pre-school through secondary education in targeted communities

Components

Component Name	Cost (US\$, millions)
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Enhancing Teaching and Learning	48.10
Managing Implementation for Results	1.90

Organizations

Borrower:	Kyrgyz Republic
Implementing Agency:	Ministry of Education and Science

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	50.00
Total Financing	50.00
of which IBRD/IDA	50.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	50.00
IDA Credit	50.00

IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
Kyrgyz Republic	50.00	0.00	0.00	50.00
National PBA	50.00	0.00	0.00	50.00
Total	50.00	0.00	0.00	50.00

Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2020	2021	2022	2023	2024	2025	2026
Annual	0.21	4.00	9.00	11.00	13.50	11.50	0.79



Cumulative	0.21	4.21	13.21	24.21	37.71	49.21	50.00
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INSTITUTIONAL DATA

Practice Area (Lead)

Education

Contributing Practice Areas

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	● Substantial
2. Macroeconomic	● Substantial
3. Sector Strategies and Policies	● Moderate
4. Technical Design of Project or Program	● Substantial
5. Institutional Capacity for Implementation and Sustainability	● Substantial
6. Fiduciary	● High
7. Environment and Social	● Moderate
8. Stakeholders	● Moderate
9. Other	● Moderate
10. Overall	● Substantial

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

Yes No



Does the project require any waivers of Bank policies?

Yes No

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Not Currently Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Currently Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Not Currently Relevant
Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank’s due diligence assessment of the Project’s potential environmental and social risks and impacts, please refer to the Project’s Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants

Sections and Description

For the purposes of overall Project management, implementation and coordination the Recipient, through MoES, shall establish and maintain, throughout the Project implementation, a PCU with staff, resources and terms of reference satisfactory to the Association.

Sections and Description

The Recipient shall maintain the National Steering Committee on Coordination of Programs and Projects for purposes of providing strategic guidance and oversight of the Project and ensure cross-institutional coordination.



Sections and Description

The Recipient, through MoES, shall: (a) carry out the Project in accordance with the Project Operational Manual, satisfactory to the Association, and setting out, inter alia, the institutional, disbursement, procurement and financial management (including Project related internal control, budgeting, external auditing, financial reporting and accounting policies and procedures) arrangements for the implementation of the Project; and (b) not amend, suspend, repeal or waive any of the provisions of the Project Operational Manual without the Association’s prior written agreement. In case of any discrepancy between the provisions of the Project Operational Manual and those of this Agreement, the provisions of this Agreement shall prevail

Sections and Description

The Recipient shall, not later than thirty (30) days from the Effective Date, install an accounting software capable to support the Association’s and the Recipient’s reporting and accounting requirements; all of the above in accordance with terms of reference acceptable to the Association.

Conditions

Type	Description
Effectiveness	The Recipient has established a PCU with staff, resources and terms of reference satisfactory to the Association.
Effectiveness	The Recipient, through MoES, has adopted a POM in form and substance satisfactory to the Association.



I. STRATEGIC CONTEXT

A. Country Context

1. The Kyrgyz Republic is a landlocked mountainous nation of 6.3 million people, with a gross national income (GNI) per capita of US\$1,220 (2018) and considerable economic potential based on its rich endowments. The annual population growth rate is 1.9 percent; 32.1 percent of the population and under the age of 15 and 63.6 percent of the population live in rural areas. The country is distinguished within the region by its liberal political regime, a lower level of capture of the state by narrow vested interests, and a lighter state footprint in the economy. The country has rich, largely unexploited, natural endowments in the form of minerals, as well as large potential to expand agriculture, hydroelectricity, and tourism. The Kyrgyz Republic is highly vulnerable to climate change, specifically to extreme precipitation, landslides,¹ floods,² and mudflow hazards, which occur frequently across the country. It sits at the crossroads of the Chinese, South Asian, and Russian markets, with unfettered access to the Eurasian Economic Union (of which it is a member).

2. The GNI grew at an average annual rate of 4.6 percent over 2000–2018, largely driven by gold extraction and worker remittances from abroad. Growth in recent years resulted in only modest improvements in welfare among the bottom 40 percent coupled with falling incomes for the upper 60 percent. Nearly one-fifth of the population live below the international poverty line of US\$3.2 per capita per day (2017), with a larger proportion of households clustered just above the poverty line and therefore vulnerable even to small shocks. Economic growth and poverty reduction are below the country's potential, due to a business environment inconducive to private investment and job creation, weak public institutions and services, and constrained human capital that lacks essential skills required for a more productive and dynamic economy.

3. Given the relatively high poverty and vulnerability, medium-term macro-sustainability risks, and the weakening relationship between poverty reduction and growth, sustained progress on the twin goals will depend on the Kyrgyz Republic's ability to shift to a new, more dynamic growth model under which human capital improvements across all strata can make a significant contribution to inclusive growth and productivity.

4. The Human Capital Index (HCI) ranked the Kyrgyz Republic 76 out of 157 countries in 2018 with an HCI of 0.58, meaning that children born today will be 58 percent as productive when they grow up as they could be if they enjoyed complete education and full health. Given a large bulge in its school and youth population ages under 30 years, the country has a challenge as well as a huge opportunity to boost its human capital. The index calculated a learning gap of 4.2 years; indicating that 12.6 years of preprimary, primary, and secondary school completed by age 18 is equivalent to only 8.4 years when years of schooling are adjusted for quality of learning.³ Altogether, these results point to the school system's lack of effectiveness and efficiency and the need to better prepare young people to carry out the tasks that enable them to participate effectively and proactively in economic and social life and, more generally, to

¹ It has 5,000 potentially active landslide sites mostly located in the south.

² More than 8,500 glaciers and over 3,000 rivers and 800 lakes in the high mountains are at risk for flooding due to heavy rains and snowmelt.

³ Human Capital Project. 2018. *Kyrgyz Republic, Human Capital Index*.



build the kind of human capital that is increasingly required by the Kyrgyz Republic's aspirations for a higher-productivity economy. An area of concern regarding effective participation in society are gender disparities in science, technology, engineering, and mathematics (STEM) fields in the labor market. A recent adult skills survey in 2019 using the Programme for the International Assessment of Adult Competencies (PIAAC) instrument of the Organisation for Economic Cooperation and Development (OECD) showed a gender gap, with fewer females in jobs related to STEM fields.

B. Sectoral and Institutional Context

5. **While schooling is nearly universal, learning outcomes are poor.** The Kyrgyz Republic has achieved near universal coverage in primary and secondary education. Enrollment rates for Grades 1–9 are high—above 99 percent for Grades 1–4 and 98 percent for Grades 5–9—with no disparity between girls and boys. Enrollment drops off at upper secondary. On the other hand, the net enrollment rate in early childhood development (ECD) institutions for children aged 3–6 years is low with 25 percent in 2016, with no disparities between girls and boys; the enrollment rate for children below the age of 3 years is roughly 4 percent.⁴ Enrollment rates in urban areas are roughly twice those of rural areas. The wealthiest quintile of households has a 50 percent enrollment rate compared to 12 percent for the poorest quintile.

6. **There is a huge learning gap.** In the calculation of the HCI using harmonized scores, students score 420 on a scale where 625 represents advanced attainment and 300 represents minimum attainment. In terms of learning-adjusted years of schooling, factoring in what children learn, expected years of school is only 8.4 years. In terms of learning poverty, 64 percent of children in the Kyrgyz Republic who should be finishing primary school today are not proficient in reading, adjusted for the out-of-school children. A point of concern in terms of gender disparities in learning outcomes is boys lagging girls in reading according to the Programme for International Student Assessment (PISA) 2009.

7. The education system is improving its performance with incremental gains in student learning results since 2010. However, significant gaps remain in learning achievements, leading to an urgency to accelerate. Further evidence can be found from large-scale international and national assessments including the Early Development Instrument (EDI), the Early Grade Reading Assessment (EGRA), the National Sample-Based Assessment (NSBA), the test for the OECD's PISA, and the Survey of Adult Skills of the OECD's PIAAC.

Box 1. International and National Assessments

Evidence from large-scale international and national investments are detailed below:

- EDI 2015/16 found that children enrolled in community-based kindergartens (CbKs) demonstrated improved EDI scores over the program's time frame, with the greatest gains in the language and cognitive development domain. However, one-quarter of children were still vulnerable in one or more domains even at the end of the program.
- EGRA 2017 found that only 44 percent and 47 percent of sampled students in Grades 2 and 4, respectively, attained grade-level oral reading fluency. These represented gains of 10/13 percentage points over the EGRA 2014 results.

⁴ MoES (Ministry of Education and Science). 2018. *National Education Plan 2021–26, First Draft*.



- NSBA 2017 found that many Grade 4 students performed below basic level in reading and comprehension (59.8 percent); mathematics (60.3 percent); and motherland studies (primary-level natural sciences, 53.1 percent). This was an improvement of 5.5, 3.5, and 8.6 percentage points, respectively, compared to 2014. As one indication of disparate performance, the percentage of students scoring below basic level in 2014 ranged widely from 43 percent in Bishkek to 60 percent in regional centers and small towns to 70 percent in rural schools.
- NSBA 2017 found that at Grade 8, performance had also increased over previous years though still at levels requiring attention. Further, the data showed that while performance in reading and comprehension improved over the schooling cycle (51 percent of students performed below basic level at Grade 8), it deteriorated to striking levels for mathematics (64.9 percent) and natural sciences (76.6 percent).
- The Kyrgyz Republic's results in PISA 2009 indicated that students age 15 years lag approximately 4.5 grade levels behind the OECD average and that there are large geographic variations in performance, with southern and Talas oblasts scoring poorly.
- The EGRA, NSBA, and PISA all found that, on average, girls performed better than boys in all subjects. The gaps are particularly pronounced in reading and comprehension and mathematics. For example, the NSBA found that at Grades 4 and 8, girls' mastery of the basic level in reading and comprehension is 10–15 percentage points higher than for boys, while in mathematics, it is 4–5 percentage points higher.
- A 2019 adult skills survey using OECD's PIAAC (E&S Online) instrument found that adults in the Kyrgyz Republic scored approximately 20 points lower than the OECD average in terms of functional literacy and numeracy (247 and 243 versus 268 and 263, respectively); it also found the highest variability in performance across respondents that it had recorded in any country to date.

8. There are several factors contributing to the deficiency in learning outcomes.⁵

9. **Children are not prepared for learning.** Data indicate that the relatively low early childhood education (ECE) coverage contributes to the education sector's poor performance.⁶ The PISA 2009 results showed that students who received more than one year of preprimary education performed better than those who had not. Further, EGRA 2011 found that Russian-speaking students with preprimary experience performed better compared to those without. At the same time, the quality needs to be enhanced with standards for child development and effective teaching practice that stimulate children's physical and emotional growth and readiness for learning. For instance, a representative sample of standardized classroom observations of the *Nariste* program⁷ in 2016 found that 65 percent had no book area assigned for reading, and more than 80 percent of classrooms had fewer than 15 books and limited writing materials. Students spent roughly 60 percent of their classroom time in a whole-group setting, indicating that didactic rather than explorative or play-based lessons are the norm.

10. **Teacher quality and competency contribute to ineffective practice.** About 65 percent of preprimary and 95 percent of primary-secondary teachers have university degrees. However, this does not necessarily imply that secondary teachers have a tertiary education in all the subjects they teach.

⁵ The analytical framework used here is derived from the World Development Report 2018: Learning to Realize Education's Promise.

⁶ As noted above, roughly 20 percent of children have no exposure to preschool education, while the enrollment rate for children aged 3–6 years in ECD institutions (other than *Nariste*) is only 25 percent, indicating that a substantial proportion of children start primary grades unprepared for learning.

⁷ A 480 hours school preparation program for children aged 6 years.



Further, given the quality of their initial teacher education, teachers often do not have the competency and pedagogy to adapt to student learning of varied levels and abilities, blending digital technology and social-emotional skills. While most preschool teachers are regular primary or secondary teachers who have been retrained with short courses, this has not been sufficient to ensure effective preschool teaching, which requires specific pedagogy and competency to engage and interact with children to stimulate their curiosity and learning.

11. The primary and secondary levels have made progress in recent years through in-service teacher training to introduce stronger practices, but there is still significant room for improvement. In general, teaching practices are oriented toward the whole group and rely heavily upon chalk-and-talk and simple question-and-answers techniques. In the higher grades, they make inadequate use of formative assessments and focus on teaching facts, simple operations, and getting students to recite back what they have heard or read rather than fostering higher-order learning and life-useful skills. Classroom Assessment Scoring System (CLASS) scores (using a seven-point scale and based on observations of a representative sample of Grade 4 classrooms) in 2017 were 5.7 for emotional support and 5.2 for classroom organization but only 2.8 for instructional support. The instructional support is measured along three domains: concept development, quality of feedback, and language modeling. The teachers scored 2.9 for concept development, which reflects the teacher's use of instructional discussions and activities to promote students' higher-order thinking skills and cognition and the teacher's focus on understanding rather than on rote instruction. The score was 2.8 for quality of feedback, which assesses the degree to which the teacher provides feedback that expands learning and understanding and encourages continued participation. Finally, the score was 2.6 for language modeling, which captures the quality and amount of the teacher's use of language-stimulation and language-facilitation techniques. In all these areas, teachers require greater capacities.

12. There is an operational system for continuous professional development (CPD), but it is not working effectively and could be substantially leveraged for impact with some quality improvements. As it is, the system for CPD is rigid, difficult to access, and expensive. Norms stipulate that teachers should receive 72 hours of in-service training every five years. Each year, approximately 10,000 teachers attend such trainings, roughly 60 percent of the target. These numbers somewhat overstate the system's capacity, in that there are substantial arrears of per-diem and transport allowances payable to teachers, that is, the teachers attended the trainings at their own expense. The trainings are of limited variety (depending on the teacher's formal qualifications and what they teach) and are generally delivered at one go over a period of days at either the Republican In-Service Institute for Teacher Training (RIITT) or Oblast In-Service Institute for Teacher Training (OIITT). The trainings have not been properly revised in many years. They do not reflect contemporary research on the science of pedagogy and indeed do not even adequately incorporate how to teach the competencies of the new curriculum. Further, the limited offerings make it difficult to meet teachers' individual professional development needs, which in any case are not systematically assessed against competencies. They do not address the use of IT, climate change, inclusive education, and fostering socioemotional skills. The lack of attention to gender sensitization in teacher professional development and student learning materials may have contributed in part to the gender disparities observed including boys' lag in early grade reading and girls' interest in STEM subjects. The World Bank-supported Sector Support for Education Reform Project introduced a standardized classroom practices observation instrument (CLASS), which can be used to identify professional development needs, but much work remains to institutionalize and scale up its use. The Republican Institute of In-Service Teacher Training (RIITT) has recently begun to experiment with the design and



delivery of online/offline courses, but it requires significant capacity building. These digital initiatives are part of a broader reform that the RIITT is developing to make the CPD system more flexible, responsive, accessible, and affordable.

13. **Lack of essential materials constrain learning.** Teaching-learning practices are constrained in part by the predominant role played by the textbook and the lack of other teaching-learning materials (TLMs) including IT equipment, science laboratories, and books. The Ministry of Education and Science (MoES) focused its energies in recent years on aligning textbooks with the new curriculum and developing a textbook rental scheme to resolve issues of availability and sustainability. These efforts are paying off, as nearly all textbooks have been revised to be aligned with the curricular competencies (except for social studies). The NSBA surveys of school management indicate that the average textbook availability increased from 74 percent in 2014 to 80 percent in 2017. The Government's Strategy 2040 and draft Education Sector Plan (ESP 2021–2026) recognize the pressing need to strengthen digital literacy and teaching-learning practices through the widespread use of digital technologies and content. The Government has supported limited initiatives to introduce digital technologies and content into schools through, among others, the World Bank-financed Sector Support for Education Reform (SSER) Project (benefiting 60 schools) and the 'Smart School' program (100 schools). However, the work to adapt, develop, and distribute digital content that can be accessed at schools has barely begun. In 2016, there was, on average, only one computer for every 25 students while nearly all schools have some form of Internet access, indicating that information technologies are a largely untapped resource for accessing and using digital content. These technologies are imperative for preparing students to become adaptive learners.

14. **Curriculum and assessment need to be aligned and enhanced.** The MoES and Kyrgyz Academy of Education (KAE) made substantial progress over the past decade in reforming the curriculum, which is now broadly competency based. The main challenge is to ensure that teachers understand the competency-based approach and teach and assess accordingly. The curriculum includes cross-cutting competencies such as self-organization and problem solving but has gaps pertaining to socioemotional skills.

15. The national assessment system covers classroom assessments for improving teaching and learning, examinations for making high-stakes decisions about individual students, and large-scale assessments for determining system-level learning and related factors. Institutional capacity has been strengthened with technical assistance (TA) financed by the Russian Education Aid for Development.

16. Classroom-based assessment is emerging as a key instrument for improving learning in the classroom. Teaching-learning practices and assessment are constrained in part by the traditional five-point system teachers use to report on students' progress. This rigid system is highly reductive and overly summative in character. It does not encourage teachers to think broadly about how well their students are learning. For instance, it does not emphasize how well students master and use the range of higher-order competencies that the revised curriculum targets and that are critical for building the foundations for skills valued later as human capital. It also does not include useful reflections or diagnoses as to what the student (with teacher and parental support) can do better to master these competencies. Moving toward a more comprehensive diagnostic system will require building teachers' capacities to assess their students and report on progress by established criteria.



17. Summative assessments need to be strengthened, particularly at Grade 4, to be better aligned with the competency-based curriculum. They are currently designed and administered by teachers and schools. The items tend to be traditional in character, in that they test memorization of facts or simple operations and use multiple-choice and short-answer formats. They do not assess competencies involving higher-order skills of understanding, analysis, argumentation, application of knowledge and skills to problem situations, and so forth. The lack of alignment between the summative exams and the competencies of the curriculum (including those needed for a more highly productive economy) works against the teaching of skills, as teachers tend to teach those capacities that are assessed at the end of a cycle.

18. The MoES has regularly supported large-scale assessments including the EDI (2015/16), EGRA (2017), and NSBA (2017), which evaluates learning in three subjects at Grades 4 and 8 and provides valuable system-diagnostic information. At an international level, the MoES participated in PISA (2009) and announced its intention to participate again in 2024. One notable gap in the country's array of assessments pertains to socioemotional skills, for which there is no in-country experience.

19. **Education spending should be more efficient and focused on results.** Government expenditures on education as a share of gross domestic product (GDP) grew from 6.3 percent in 2014 to 7.7 percent in 2016; during the same period, government expenditures on education of total expenditures remained consistent (from 18.5 percent to 18.9 percent).⁸ These levels are in line with spending from comparator countries including OECD members. However, if the spending is broken down by student, per student expenditure falls short due to a large cohort of preschool and school children relative to the general population. While the increases went almost entirely to preschool and general secondary education, this was driven mainly by the recovery of wage bill expenditures to the 2012 pre fiscal consolidation levels; and a tripling (between 2011 and 2016) of capital expenditures (measured as a percentage of GDP). The percentage of public education expenditures allocated to the preprimary level increased from 8.8 percent in 2011 to 13.0 percent in 2016. This was mainly due to a threefold increase in wages and a twofold increase in goods and services expenditures. The World Bank's 2017 Public Expenditure Review (PER) found that the share of preschool investments remains low (7.6 percent) despite the increases in capital expenditures for education. Further, the PER estimated that the Government would need to increase its 2016 level of preprimary expenditures by a factor of 5 to reach a net enrollment rate of 70 percent for children aged 3–6 years by 2021. The PER also suggested that areas where expenditures might be optimized for more efficient and equitable service provision include school meals and wages. Thirty-eight percent of non-wage recurrent expenditures in 2016 were allocated to the provision of meals. The combination of resource constraints and ambitious preschool enrollment targets indicates the need for relatively low-cost yet effective solutions that have affordable recurrent budget implications. Accordingly, the Government's strategy includes a focus on expanding access through CbKs, which tend to be located in existing primary schools with surplus physical capacity, thereby leveraging existing infrastructure while keeping incremental recurrent expenditures at a manageable level.

20. The MoES provides performance incentives for quality teaching but faces operational challenges. Each school has a committee to evaluate teachers but does not have clear standardized methods of evaluation. The MoES established a working group to reform the incentives system. The recent work to elaborate teacher professional standards will, once finalized and distributed, provide schools with an

⁸ World Bank. 2017. *Public Expenditures Review for the Education Sector*.



evaluative basis. The World Bank-supported SSER project introduced the use of valid and reliable classroom observations (using CLASS), which could be used to help determine incentives allocations, but it is yet to be institutionalized and scaled up.

C. Relevance to Higher Level Objectives

Government Strategy and Program

21. In 2018, the President of the Republic approved the ‘National Sustainable Development Strategy for 2018–2040 (Strategy 2040)’. Its focus is to create opportunities for human capital development including through education and the creation of highly productive quality jobs, particularly in strategic sectors. It is fully aligned with the Sustainable Development Goals. The first phase of the Strategy 2040, the ‘Development Program of the KR 2018–2022 (Program 22)’ acknowledges that the education system is not yet effective in developing the higher-order skills that are needed and identifies several education sector priorities, including (a) improving the quality of education, (b) making the education system more effective in teaching skills required by the modern economy, (c) supplying schools with a broader range of modern TLMs and innovative technology, and (d) strengthening the professional capacities of teachers. In the latest development, the MoES’ draft of the National Education Sector Strategy 2030 addresses the following priorities: (a) expanding access to ECE and improving its quality; (b) strengthening teacher professional capacities to effectively teach skills, including transversal competencies (such as digital literacy) and providing flexible, accessible, and affordable CPD; (c) improving the availability and use of digital TLMs at schools; and (d) strengthening assessment systems to ensure children are formatively assessed, summative assessments are aligned with curricular competencies, and sample-based learning outcome evaluations are carried out to identify and remedy system weaknesses.

22. The project seeks to contribute to achieving these objectives by expanding ECE and enhancing the quality of education, that is, by promoting the teaching-learning of higher-order curricular competencies including socioemotional skills to establish the foundation for adaptive learning to acquire the necessary skills for becoming a successful modern worker. In addition, it seeks to improve teaching-learning practices through the use of digital materials. The project also works to enhance the measurement of cognitive and non-cognitive skills and all three types of assessments outlined in the NEP 2026.

Relationship to the Country Partnership Framework

23. The project is aligned with the FY2019-2022 WBG CPF (Report No. 130399 discussed by the Board on November 13, 2018) for the Kyrgyz Republic and supports Focus Area 3 (Enhance economic opportunities and resilience) and Objective 7 (Develop human capital). One of the objective’s key outcomes is improved education outcomes related to results on the national school-leaving exam and adult competencies and workplace skills. To achieve this, the CPF includes strengthening the formal education system to increase market-relevant skills; enhancing learning outcomes in basic education, including digital literacy in the curriculum; improving assessment; expanding ECE to facilitate women’s participation in the labor market and develop children’s school readiness and well-being; and bridge gender-based educational gaps. The project will contribute to enhancing human capital development by results in two main areas: (a) increased child readiness for learning through increased access to ECE with the establishment of CbKs, enhanced quality, and measurement of child growth and development and (b) enhanced learning outcomes by strengthening teacher effectiveness, integrating improved pedagogy in



mathematics and the natural sciences as well as transversal teacher competencies related, among others, to digital literacy and socioemotional skills, and providing schools with digital content and technologies and modernized assessment tools.

II. PROJECT DESCRIPTION

24. Supporting the global imperative to end learning poverty, the project aims to take fundamental steps to close the achievement gaps in foundational skills that enable children to survive and thrive in a fast-changing world.

25. The project seeks to enhance learning outcomes by preparing children for raising their readiness for learning, building teachers' competencies and pedagogical skills to make them more effective in the classroom, strengthening assessment for generating data and information to measure progress and inform learning, and aligning the critical resources and materials to support teaching and learning. These evidence-based interventions will increase learning attainment in reading, mathematics, and science and in turn contribute to more effective acquisition of basic skills and the foundation for adaptability, creativity, and lifelong learning.

A. Project Development Objective

PDO Statement

26. The Project Development Objective (PDO) is to enhance school readiness and teacher effectiveness in pre-school through secondary education in targeted communities.

PDO Level Indicators

27. The PDO-level indicators are the following:
- School readiness score among project-targeted children aged 3-5 years, by gender
 - Teacher effectiveness score among project-targeted teachers

B. Project Components

Component 1: Enhancing Teaching and Learning (US\$48.1 million)

28. The objective of this component is to increase equitable access to quality ECE and enhance the effectiveness of teaching-learning practices in preschool through secondary education. The component will work to expand CbKs in poor rural areas; build the capacities of teachers for effective teaching including for students from diverse backgrounds; provide more teaching-learning resources for teachers and students that are gender-sensitive (that is, to address boys lag in reading and girls interest in STEM subjects) and more inclusive for children with special needs; and strengthen assessments to improve learning in the classroom and strengthen education policy. There are four subcomponents.



Subcomponent 1.1: Expanded school readiness for underserved children

29. The objective of this subcomponent is to increase access to ECE in poor rural areas with no or low access, through establishing CbKs.⁹ The project will support the creation of 500 new CbKs enrolling approximately 20,000 children aged 3–5 years. For each CbK, the project will provide furniture, equipment, and materials for play and learning; an outdoor playground; minor rehabilitation works including access for children with physical disabilities; and child- and disabled-friendly water and sanitation facilities. The design for the water and sanitation facilities will consider vulnerability to climate change.

30. The project will seek to ensure a broad, regionally, and ethnically balanced distribution of funds. It will target poor and rural communities, focusing where access to ECE services is below the national rural average and there are sufficient children to fill two communities. The Ayil Okmotu (village) will provide premises that it owns and that meet the relevant national pedagogical, safety, hygiene, and sanitation standards. It will provide suitable landscaping for the grounds and ensure there is a fence surrounding the property. It will maintain and operate the premises as a public preschool education service for at least 10 years; this will include paying all recurrent, operational costs and maintaining the premises in good condition. Finally, it will hire and ensure the salary for a qualified teacher for each new group created (covering two communities). The CbKs will implement a play-based curriculum and engage parents actively in supporting the educational process and tracking child development and growth.

Subcomponent 1.2: Increased effectiveness in teaching practice

31. The objective of this subcomponent is to increase teacher capacities in preschool and general secondary education through a strengthened professional development model that links the design and delivery of teacher training programs aligned to the new curricula and evidence from the science of learning with a feedback loop through conduct of regular classroom observations to provide feedback on teaching practice for improvement.

32. The project will finance a start-of-service training program for approximately 500 newly hired teachers at the CbKs established under Subcomponent 1.1. It will be delivered through the RIITT and the OIITTs, using master trainers who will receive project-supported refresher training on the program. This includes content on how to teach children with special needs, building on the program that was rolled out during the previous project (Kyrgyz Early Education Project [KEEP]). All CbKs will be provided with copies of the preschool education program and teacher guides.

33. At the general secondary level, acting on the findings from sample-based classroom observations that teachers in the Kyrgyz Republic appear to be strong in engaging children emotionally and classroom management but poor in instructional effectiveness, the project will finance the development of strengthened teacher training programs to enhance their pedagogical skills in three domains: basic digital literacy (for primary and secondary teachers); remedial reading in early grades to support children, particularly boys, whose reading skills are lagging; and pedagogy for primary and secondary sciences and secondary mathematics. The pedagogical courses for mathematics and science will be based on research findings from the science of pedagogy, with particular emphasis on strengthening teacher capacities for concept development, quality of feedback, and language modeling; be adapted for each of the four major

⁹ Here and throughout the project, poor communities will be identified using the country's poverty map.



subject areas (mathematics and three sciences); and include modules to better engage girls in science and mathematics subjects.

34. The teacher training programs will improve gender-focused pedagogical instruction by including a focus on boys in remedial reading and on girls to better engage them in science and mathematics subjects. This is an important shift from the current approach which does not address any gender differences in these areas. The traditional approach for reading needs to be strengthened to include remedial lessons for boys lagging and additional materials to help bring boys up to speed. Likewise, pedagogical practices for teaching science and mathematics need to be strengthened through gender-sensitive approaches to ensure girls' interest and involvement in these and related subjects to establish the necessary foundation for their future studies and careers.

35. Another enhancement to the teacher training in science is the introduction of climate change content into the environmental education of secondary students. The program will train teachers on climate change and how to incorporate the content into the curricula, including adaptation and mitigation (for example, energy conservation techniques). The student materials will be enhanced to include lessons on climate change and mitigation such as causes and impacts of climate change and activities that reduce, capture, or sequester greenhouse gas emissions.

36. The training programs will be integrated into existing systems of teacher training and support at both the preservice and in-service levels. The project will finance the capacity building of instructors to deliver the programs at the RIITT and six OIITs and of methodologists working at local and project school levels, as well as at the 13 universities and 8 pedagogical colleges where preservice teacher education is offered. The programs will also be designed in a digital format, so that teachers can follow the program using an online or offline digital version.

37. The project will finance the direct delivery of the basic digital literacy training program mentioned above to approximately 36,000 teachers working in the 1,200 schools targeted to receive an IT platform under Subcomponent 1.3. It will also finance the direct delivery of the remedial reading training program to approximately 7,000 primary teachers in the target schools and the pedagogy program to approximately 7,000 primary teachers and 8,000 secondary mathematics and science teachers in the target schools. Additionally, the proposed teacher training will explore innovations in interactive learning in reading with emphasis on improved proficiency in Kyrgyz language in early grades.

38. Complementing teacher professional development through training, the project will finance initial steps toward the institutionalization of classroom observations on a regular basis to assess and improve teaching practice. The observations will be based on a validated instrument (CLASS) that assesses three broad domains of teacher-child interactions: emotional support, classroom organization, and instructional support. The assessment will reveal the teacher's strengths and weaknesses in classroom practices to enhance self-understanding and facilitate improvement by identifying areas where the teacher would benefit from professional development. The feedback from classroom observations will be used in mentoring and coaching through pedagogical support by the local in-service training network.

Subcomponent 1.3: Technology-enabled support for learning

39. The objective of this subcomponent is to strengthen teacher capacities for effective teaching through digital resources aligned to the new curriculum that complement new textbooks. The project will



finance an IT platform to 1,200 schools (approximately 53 percent of all schools). Each school will receive a basic package of information technologies that will enable teachers and students to access digital content in classroom and library settings, to enhance the quality of teaching-learning practices. The package will consist of an e-library, six multimedia classrooms, and IT equipment for teachers and school administrators. The schools will be selected from villages in poor communities.

40. The project will also finance an IT platform for the RIITT, to enable it to develop digital content for teacher professional development, as well as IT classrooms at 8 preservice teacher colleges, to enhance their effectiveness in training new teachers in digital literacy and other domains.

41. The project will support the translation, adaptation, and development of digital content in areas where student learning requires strong improvement. These will include the key cross-cutting curricular competencies (mentioned above), secondary mathematics, and the natural sciences at primary and secondary levels. The project will provide TA to identify priority areas within these domains and to identify relevant digital content that already exists and that could be translated and/or adapted or that needs to be developed from scratch. The project will subsequently finance TA to translate, adapt, and develop the content and will make it available to all schools.

Subcomponent 1.4: Enhancing measurement of learning

42. Building on the national assessment system strengthened through TA under prior IDA and trust-funded operations, the objective of this subcomponent is to further enhance the measurement system and its capacity for assessing student learning outcomes in cognitive and non-cognitive domains, by gender. The interventions can be grouped into three categories, according to the purposes for which assessment is used in the country:¹⁰ formative assessments to improve teaching and learning at the individual and classroom level; summative assessments to make high-stakes decisions about individual students; and systemic assessments to determine system-level learning and identify related factors primarily for policy and system-strengthening measures, including participation in PISA 2024.

Formative

43. The project will support the KAE and National Learning Quality Assessment and Information Technologies Center (NLQA&IT) to develop a new criteria-based instrument and methodology for teacher monitoring, assessing, and reporting of student progress at the primary level. The project will finance technical assistants to work in close collaboration with the KAE and NLQA&IT to design the criteria-based instrument and methodology; revise the legal-regulatory framework as needed; design and oversee a pilot of the instrument in schools and subsequently to strengthen the instrument and methodology; and develop a training or orientation for teachers to explain the new system, as well as a communications strategy and materials for stakeholders. The project will also finance the training of instructors and methodologists at the RIITT/OIITTs and at preservice teacher training colleges so that use of the instrument can be integrated into teacher training and professional development programs. The official instructions and regulatory documents pertaining to the introduction of the instrument will be provided to all Rayon's Education Departments (REDs) and schools.

¹⁰ The categories are according to the primary purpose of the assessment, with the understanding that the assessments may also be used for other purposes and therefore that the categories overlap somewhat.



Summative

44. The project will support the NLQA&IT to develop and introduce standardized tests for Grades 4 and 8 that are aligned to the revised curriculum, to be administered by teachers to all students and used at school level. The project will finance TA to build NLQA&IT capacities in item writing and test construction and, in the analysis, and reporting of results, as well as to support the drafting of instructions and revisions to the legal-regulatory framework. The project will also finance the training/orientation of RED officials and all school deputy directors, focusing on the protocols and procedures for administration and marking, as well as on the in-school analysis and use of the results.

Systemic

45. **Early grades.** While United States Agency for International Development (USAID) will continue to finance the periodic administration of EGRA, the project will support the analysis of the EGRA results for the development of remedial reading programs, particularly for boys, and to monitor learning progress.

46. **National Learning Assessment (NLA) for Grades 4 and 8.** As noted above, standardized tests for Grades 4 and 8 will be developed with project support. The project will also finance technical and operational assistance for the NLQA&IT to administer them in 2023 to a representative sample of students in Grades 4 and 8, as an NLA, and to score, analyze, and report the results. As part of the NLA instrument development process, the project will finance TA to the NLQA&IT, as needed, to undertake a secondary analysis of the instruments and results of the NSBA (2017). The project will support the dissemination of NLA results and recommendations and discussions by stakeholders including decision makers.

47. **PISA 2024.** The project will finance the country's participation in PISA 2024 to provide a snapshot of the systemwide learning trends, including the participation fee and two PISA partnership options: capacity-building and project implementation support. The project will also finance the in-country operating costs associated with administering PISA as well as a range of activities to support students and teachers to prepare for the PISA; these administration and support activities will be led by the NLQA&IT.

48. **Social-emotional skills.** Finally, the project will support the NLQA&IT to conduct a Socio-Emotional Skills Pilot Assessment (SESPA). This will include financing TA and operational costs to enable the NLQA&IT to design and administer the instrument and to disseminate and discuss the results among stakeholders including decision makers.

49. **The results of all summative assessments will be analyzed by gender and reported on accordingly.** This will reveal any gender differences in skills and learning outcomes important for policy makers to understand and arm them with the information necessary to tailor education policies as needed for each group. The results cannot be used to measure the impact of the project interventions as it is too soon to observe learning outcomes during the project duration. Therefore, the project will track the number of boys and girls benefitting from the improved gender-focused training, as a key intermediate result contributing to improved future learning outcomes for boys in reading and girls in science and mathematics.

50. As noted in the above paragraphs, assessment-related activities (including those pertaining to CLASS) will be undertaken by the NLQA&IT, the public institution responsible for conducting assessments in the education sector.



Component 2: Managing Implementation for Results (US\$1.9 million)

Subcomponent 2.1: Implementation support

51. This component will support the coordination, technical quality, and fiduciary integrity of implementation and the monitoring, evaluation, and reporting on project processes and results. It also supports systems to collect beneficiary feedback to inform project implementation. It will finance activities to inform stakeholders about education sector reforms relevant to the project and ensure that any grievances or issues emerging during implementation are addressed in a timely, effective, and fair manner. It will finance project operating costs, including translation and interpretation, equipment, supervision costs, staff salaries for project coordination, technical support to MoES departments and affiliated institutions, and fiduciary functions. It will also finance the MoES' incremental operating costs.

Subcomponent 2.2: Evaluations

52. To assess the project impact, randomized control trials will be conducted for two key interventions. One is to determine if participation in the ECE program provided at the project-supported CbK improves children's development. The other is to determine if teaching practices in the classroom improve because of project interventions (that is, IT platform with digital content and teacher training). The evaluation design for both will use a randomized phase-in approach. A sample of early implementers will be included in the treatment and late implementers will be in control.

53. For CbKs, the evaluation design will use a randomized phase-in approach where communities receiving the early childhood intervention earlier will serve as the 'treatment group' and communities receiving the intervention later in the project cycle will serve as the 'control group'. The project will administer the EDI before the intervention is implemented to gather a baseline and again later to collect an end-line measurement, in the respective treatment and control groups. The impact of the ECE program including the CbKs will be assessed at project end using a 'difference-in-difference' approach. The project will measure the difference in EDI scores at the end line compared to the baseline within the treatment and control groups separately. The project will then compare the magnitude of change between the two groups. Positive changes are expected in both groups as children's test scores increase with age. The hypothesis is that the positive change in the treatment group will be larger than in the control group as a result of children's participation in the CbK.

54. For teachers, the evaluation design will use a randomized phase-in approach. A sample of early implementers will be included in the treatment and late implementers will be in control. The classroom practices observation instrument (CLASS) will be administered to measure teacher practice in the classroom. The expectation is that there will be an increase in teacher effectiveness among the treatment group. The hypothesis is that teacher effectiveness will increase over time in the treatment group and that the increase in effectiveness (that is, 'difference in difference') will be larger than that observed in the control group over time.



Subcomponent 2.3: Citizen engagement

55. Citizens will be engaged in the implementation of activities across the project, building on the mechanisms already in place to engage parents and community members.¹¹ Specifically, this includes (a) the production of information for parents and (b) community monitoring through community scorecards. Currently, parents provide feedback through regular household visits from teachers and participation in ad hoc school activities. Building on this, the project will raise awareness about ECE in communities and local governments expressing interest in opening a CbK. The project will produce information for school users and community members to enable an informed monitoring process. This will include information on the benefits of CbK and ECE programs and detailed descriptions of the scope of activities. The project will prepare awareness raising materials such as posters, pamphlets, brochures, or videos to inform/empower school users and local communities as to what they should expect to receive if they participate and also what they need to monitor during implementation.

56. The project will also build on the community scorecard tool piloted through the Engaging Communities for Better Schools in the Kyrgyz Republic Project (P159699). This will give communities the opportunity to monitor and provide feedback on the CbKs and the IT platform being introduced to schools as well as any other issues they wish to provide feedback on. The results of the scorecard will be used to develop a dialogue between parents, community members, and school staff enabling a feedback loop. Parents and community members will provide feedback on the progress of rehabilitation works and the IT platform, including verifying that inputs were supplied and are being used. The output from the community scorecard process will be an action plan for staff, community members, and school users to help improve performance. To ensure a constant stream of feedback and monitoring, the scorecard will be implemented semiannually in half the target schools each time. While the project focuses on these two interventions, community members will be encouraged to provide feedback on any school-related issues they wish to share. The related citizen engagement indicators measuring beneficiary feedback are included in the Results Framework— ‘schools where communities report the CbKs meet their needs (%)’ and ‘schools where communities report that the IT platform is implemented (%)’. The data for these indicators will come directly from the community scorecards.

57. In addition, the following corporate priorities described in box 2 are embedded in the project interventions in Component 1.

Box 2. Corporate Priorities

Gender. Gender parity has been achieved for access to preschool and general education since 2010. However, disparities exist in student learning outcomes particularly in that boys lag in reading and comprehension. The project’s training programs will focus on teaching diverse groups and, in particular, instructing teachers on pedagogical techniques to implement remedial program activities for boys in reading and comprehension and encouraging girls’ interest in STEM subjects. The content and learning materials will be updated to make them gender sensitive and to facilitate learning in lagging behind groups. The projects complement ongoing efforts on the ground such as USAID’s targeted reading program for primary grades. Learning will be monitored, analyzed, and reported on according to gender to track progress on these initiatives’ outcomes.

Inclusive education. The project is supporting more equitable access to preschool and improved learning through

¹¹ The recently completed IDA-financed Sector Support for Education Reform Project (P115530) supported establishment of school boards. The ongoing trust fund-financed Engaging Communities for Better Schools in the Kyrgyz Republic (P159699) supports capacity building for Boards of Trustees, community score cards, and performance and budgetary information.

general education for children with special education needs. It will support building teacher’s pedagogical capacity on how to integrate children with special education needs into a regular school environment. In addition, the new CbK facilities will comprise necessary improvements to ensure access for children with physical disabilities including child- and disabled-friendly water and sanitation facilities.

Climate change. The project will incorporate climate change into the new competency and skills framework for teachers’ professional development and training to build their capacity to integrate the subject into teaching including both climate change mitigation and adaptation. Additionally, the learning materials for teaching and learning to be developed will incorporate the climate change content including both adaptation and mitigation.

C. Project Beneficiaries

58. The project is expected to directly benefit (approximate numbers)

- 20,000 children aged 3–5 years who will enroll in newly established CbKs;
- 500 kindergarten teachers recruited for the CbKs, who will be trained on ECD and the preschool curriculum;
- 58,000 primary and secondary teachers, who work at target schools who will receive an IT platform, are trained for digital literacy, and are also trained in remedial reading (primary teachers) and/or pedagogy (primary teachers and secondary mathematics and sciences teachers). Among these will be 4,000 teachers who will work at one of the 120 schools where CLASS is institutionalized; and
- 560,000 primary and secondary students who attend the target schools.

59. Indirect beneficiaries are expected to include

- 50,000 primary and secondary teachers (at non-target schools), who will gain access to the strengthened training programs provided to the in-service institutes for teacher training (IITTs) and to digital content developed under the project and made accessible online; and
- The parents, caregivers, and household members of students in the 500 communities where the CbKs are newly established and the 1,200 communities where the target schools are located.

D. Results Chain

Component	Activities	Intermediate Results	PDO Outcomes	Long-term Outcome
Component 1: Enhancing Teaching and Learning	Subcomponent 1.1: Expanded school readiness for underserved children Establish 500 CbKs, providing: <ul style="list-style-type: none"> • Equipment and materials 	500 CbKs established/operational enrolling 20,000 children	Increased readiness for learning of 20,000 children aged 3-5 in poor communities’ country wide,	Students master the foundational skills that matter in future workplace including cognitive, non-cognitive and social-emotional skills



Component	Activities	Intermediate Results	PDO Outcomes	Long-term Outcome
	<ul style="list-style-type: none"> • Sanitary facilities • Rehabilitated premises <p>Subcomponent 1.2: Increased effectiveness in teaching practice Train approximately 500 newly hired teachers at CbKs Build key competencies for effective teaching in primary and secondary school through</p> <ul style="list-style-type: none"> • New training courses developed and integrated into preservice and in-service teaching training programs, • Digital literacy training for 36,000 teachers at target schools; remedial reading training for 8,000 primary teachers; pedagogy training for 14,000 primary and secondary mathematics/science teachers, and • Classroom observation of teacher practice <p>Subcomponent 1.3: Technology-enabled support for learning IT platform provided to RIITT to develop digital content for teacher professional development; and to preservice teacher training colleges to build trainee digital</p>	<p>Enhanced teacher capacities to improve child readiness for learning; to use digital technologies for professional development and effective classroom teaching; to teach remedial reading for those lagging behind at primary level, particularly boys; and to teach primary sciences and secondary mathematics and natural sciences, including promotion of girls' interest</p> <p>Increased use of complementary TLMs by teachers and students (updated to provide gender-focused and disability inclusive customized learning)</p> <p>Classroom observations mainstreamed in 120 schools, to foster improvements in teaching-learning practices and identify professional development needs</p> <p>Improved diagnosis of student strengths and weaknesses for remediation through teaching-learning practices</p>	<p>measured by EDI for physical, emotional and language growth</p> <p>Improved teacher instructional effectiveness in 1,200 schools (53% of total)</p>	<p>Reduced gender differences in early grade reading for boys and science/mathematics subjects for girls</p>

Component	Activities	Intermediate Results	PDO Outcomes	Long-term Outcome
	<p>capacities. IT platform supplied to 1,200 target schools Digital content developed and made accessible to teachers and students online and (for target schools, as needed) offline, for teaching and learning</p> <p>Subcomponent 1.4: Enhancing measurement of learning</p> <p>Tracking early child development in project CbKs Develop new criteria-based instrument and methodology for formative assessment and teacher monitoring and reporting on student progress Develop and introduce standardized Grade 4/8 tests, to assess mastery and promote teaching of new curricular competencies Support conduct of NLA 2023 (Grades 4+8) and participation in PISA 2024 Pilot assessment of socioemotional skills</p>	<p>Information on preschool and primary/secondary system performance by gender generated for stakeholders including decision makers</p>		
<p>Component 2: Managing Implementation for Results</p>	<ul style="list-style-type: none"> • Engage citizens and stakeholders • Communication • Advocacy • Parental education • Monitoring and feedback system • Community scorecard tools • Impact evaluation 	<p>Citizens informed and supported implementation</p>		



E. Rationale for Bank Involvement and Role of Partners

60. The World Bank has extensive experience of the education sector in the Kyrgyz Republic, supporting four projects over the past decade. This has enabled it to develop a deep understanding of the education system's needs, to understand what is feasible operationally, and to create a national network of partners that can be mobilized in support of project objectives. Further, the World Bank can draw on expertise throughout the region and internationally to assist the MoES and its partners in the implementation of projects. This has been valuable, for example, in facilitating the participation in and use of such assessments as PISA, CLASS, and EDI; strengthening curricula; and supporting financial reforms. It will be useful again in this project to improve assessments, find the right model for IT platforms, strengthen teacher training programs, and develop digital content.

61. Partners will play important complementary roles. The partners coordinate closely through the Local Education Group. The Local Education Group is working with the Government to finalize the education sector strategy and action plan, which the various donor partners (DPs) will support such that their contributions complement one another and do not overlap. In particular, USAID is completing its support at the primary level for early reading and comprehension and plans to support new initiatives to support primary mathematics; for this reason, the project focuses on other important gaps in effective teaching-learning practices, which pertain to the natural sciences and secondary mathematics. Similarly, the Asian Development Bank and the European Union plan to support digital technologies, and the MoES has coordinated closely with these partners during project design to ensure complementarity of inputs.

F. Lessons Learned and Reflected in the Project Design

62. The project design was informed by global evidence on what works in education, an analysis of learning outcome assessments, and lessons from previous World Bank-supported projects.

63. **Early learning is important and can be provided cost-effectively.** International evidence suggests that ECE can lead to improved learning and life outcomes. This finding was buttressed nationally by the 2009 PISA results for the Kyrgyz Republic, which found that children with more than one year of kindergarten had better results than those without. Evaluation of the developmental outcomes of children enrolled at CbKs, a low-cost CbK model supported under a previous World Bank-supported project (KEEP), showed improvement in children across all five domains. This experience has also led to operational improvements in project design, including strengthened support to communities during the preparation phase as well as for works supervision, and ensuring rehabilitation is adequate to bring premises into conformity with relevant standards.

64. **Teacher effectiveness matters.** International evidence shows that the quality of teaching is the most important predictor of student learning. An OECD report on international evidence found that schools are only as good as their teachers, with the quality of teaching being affected by many factors, including teachers' initial education, their skills at entry, classroom practices, opportunities for CPD, and being a respected professional with decent pay.¹² In terms of classroom practices in the Kyrgyz Republic, the CLASS observations of primary teachers found that teachers are relatively strong in providing emotional support and organizing the classroom but are quite weak in instructional support. These finding

¹² OECD. 2014. *PISA 2012 Results in Focus: What 15-Year-Olds Know and What They Can Do with What They Know*. Paris.



are reflected in how the project will strengthen the content of teacher training programs. Experience from a previous World Bank-financed project (SSER) has informed how this project will approach the delivery of teacher training. The SSER directly supported the delivery of in-service training programs, which was an effective and quick means for imparting knowledge and skills to large numbers of teachers, but it is expensive and difficult to sustain. It is more cost-effective to improve the existing model of CPD, which, despite its shortcomings in terms of training program design and rigidity, trains over 10,000 teachers each year. This can be done by strengthening its regular training programs and by expanding their access while lowering the cost of delivery through digital distance-learning technologies.

65. **Learning resources make a difference and should be distributed equitably.** The PISA 2012 results showed that school systems with good performance tend to allocate resources more equitably between advantaged and disadvantaged schools and that in many high-performing countries, the principals of disadvantaged schools reported that their schools had adequate educational resources as much as principals in advantaged schools. Experience under the SSER also showed that the technologies can be more effective if the content they access is tailored to areas where teachers and students experience difficulty in delivering and mastering the curriculum. The project incorporates these lessons by targeting digital technologies on schools in poor communities and by focusing content development on areas that learning assessments indicate are weak and in places where teachers express the strongest need.

66. **Learning assessments are critical.** An effective assessment system is essential to collect, analyze, and provide information on student learning to inform system strengthening and support for teacher development. The system should ensure that assessments reflect the curriculum; have instruments that are valid and reliably administered and have a balance between ongoing formative assessments used by teachers and students to improve learning, summative assessments that certify learning, and systemic measurements that provide policy-level insights into system performance. The project interventions reflect this need for balance. Assessments should also be conducted of classroom practices, as they are a relatively low-cost intervention with potential for leverage and can be used to identify teachers' strengths and weakness, highlight professional development needs, and provide an objective basis for evaluation. Based on the successful introduction of CLASS under the SSER, the process of institutionalization at school level will begin under this project.

67. **Stakeholders must be engaged.** For reforms to succeed and be sustained over time, the engagement of citizens, support of teachers and administrators, and participation of key stakeholders are key. A clear communications, advocacy, and engagement strategy to explain to the public the benefits of reforms supported by the project and to ensure citizen participation is indispensable. Project design will benefit from close consultation with, and continuous engagement of, stakeholders in the planning and implementation stages.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

68. The MoES is responsible for project implementation and ensuring that the project results are met on time. The project implementation will be supervised by the MoES using existing institutions, structures, and selective TA to support the ministry and institutions involved in project implementation. Such institutions include the KAE, the NLQA&IT, the RIITT/OIITs, preservice teacher training colleges, schools,



and kindergartens. Within each agency, a head of the relevant department/unit will be designated lead the agency's efforts in project implementation and supervision regarding relevant results indicators.

69. The deputy minister responsible for basic education will be the national coordinator for the project. The deputy minister will oversee, coordinate, and facilitate project implementation, reporting regularly to the minister, with support from the Permanent Secretary of Education, responsible for administrative issues.

70. MoES departments directly involved in project implementation include Pre-School, Secondary School, and Out-of-School Education Department (PSSOED); Budget, Policy and Financial Analysis Department (BPFAD); Office of the Press Secretary; Monitoring and Strategic Planning Department (MSPD); Procurement and Infrastructure Sector; Information Technologies Sector; and the Vocational Education Department. Department heads will provide day-to-day coordination and support to staff and technical assistants involved in the implementation of activities and provide data as needed on project indicators relevant to their department's scope. These departments will be complemented by additional technical and fiduciary consultants as needed and report directly to the deputy minister. In aspects pertaining to the legal-regulatory framework and budget operation, they will also report to the Permanent Secretary of the MoES.

71. A Project Coordination Unit (PCU) will be established to carry out such key functions as coordination, fiduciary, monitoring and evaluation (M&E), and reporting. The PCU will be led by a director and consist of fiduciary, M&E, and administrative staff. It will be responsible for supporting the MoES to achieve the PDO and intermediate results by coordinating with the relevant institutions and MoES departments; administering the project in accordance with the Project Operations Manual (POM); organizing all procurement, supply, and financial management (FM) processes; ensuring that all World Bank requirements are met pertaining to safeguards and citizen engagement; drafting work plans and budgets; supporting TA provided to MoES departments and other institutions; and monitoring and reporting on implementation and results.

72. The National Steering Committee (NSC) on Coordination of Programs and Projects in preschool and school education will provide strategic guidance and oversight of the project to ensure cross-agency coordination when needed. The NSC is chaired by the Vice Prime Minister on Social Affairs and comprises representatives from the Ministry of Finance (MoF), Ministry of Economy (MoE), and Ministry of Culture, Information and Tourism (MoCIT); Chairman of the MoES Public Supervisory Board; and the Chair of the Donor Partners Coordination Council (DPCC). It meets twice per year.

B. Results Monitoring and Evaluation Arrangements

73. The MoES will be responsible for the project monitoring through the subordinated institutions and the related functional departments.

74. The PDO-level indicators will be tracked through (a) sample-based observations of teaching-learning practices in the classroom using the CLASS instrument and (b) sample-based surveys measuring development of children's cognitive and non-cognitive skills in early years using the EDI. As noted in the Results Framework, the target for each of these indicators is a statistically significant improvement among project target populations: for the CLASS, this is an improvement in the score among teachers in Year 5



compared to the baseline score in Year 1 and for the EDI, this is an improvement in the score among preschool children at the end of the school year in Year 5 compared to the baseline score at the start of the school year in Year 4. The project will also attempt to measure scores among control populations in the same periods, for both teachers and students, and to compare these control population scores to the target population scores. Having data sets at baseline and end line for the treatment and control groups would enable the project to assess impact using a difference-in-differences technique, providing greater confidence in the measurement of PDO-level results.

75. The intermediate outcome results will be tracked through the existing routine data reporting systems of the ministry and the project records pertaining to the project supported activities. The MoES collects data from education institutions using a combination of paper (OSH 1, D-12) and electronic reporting modes.

76. The MoES focal point team under the Monitoring Strategic Planning Department, supported by the M&E specialist of the PCU, will be responsible for the timely collection of all documentation relevant to measuring progress of the results indicators. The MoES focal team/PCU will also consolidate all the project activity and fiduciary reports as required, review them, and prepare a progress report on a semiannual basis. The progress report will include information on progress achievement of the results indicators, highlighting bottlenecks and proposed corrective measures.

C. Sustainability

77. The project is aligned to a wider framework of government policies and strategies such as the National Sustainable Development Strategy of the Kyrgyz Republic for 2018–2040 and the MoES draft Education Sector Strategy for 2030 and Action Plan for 2021–2023. The project directly supports a set of interventions derived from the Action Plan 2021–2023 to enhance and institutionalize the ongoing reforms.

78. The project was designed considering a risk of a tight fiscal situation. The project complements limited public funding for these reforms to ensure the quality of investments at the initial stage of the reforms with the expectation that the Government will maintain funding at the regular stage of implementation beyond the project period. The project also strengthens technical capacity of institutions and structures so that the project-supported reforms will continue beyond the project period and that provided inputs will be used efficiently. For these reasons, the project is expected to have a high level of sustainability while also contributing to the fiscal sustainability of the reforms following completion of the project.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis (if applicable)

Technical

79. The project design is based on cutting-edge research and builds on the incremental gains from prior trials in the Kyrgyz Republic using a human capital lens conceptualized by the Human Capital Project



and informed by the World Development Report (WDR) 2018 ‘Learning to Realize Education’s Promise’ and the WDR 2019 ‘The Changing Nature of the Work’.

80. WDR 2018 recommended a three-pronged strategy to prioritize learning: assess learning, act on evidence, and align all actors to learning. In elaborating on ‘Innovation and Evidence for Learning’, the WDR 2018 highlighted the following core messages:

- There is no learning without prepared, motivated learners—invest early to prepare children for school.
- Teacher skills and motivation matter—most teacher training is ineffective, but targeted training with coaching aligned to best classroom practice has benefits.
- Everything else should strengthen the teacher-learner interaction—align inputs, materials, and technology to support teaching and learning.

81. Accordingly, the project adopted these core interventions:

- Prepare children for learning through expanded preschool education in targeted communities.
- Increase teacher effectiveness through professional development on customized learning (for example, targeting boys lagging in reading, girls in STEM, and children with disabilities) and mentoring and coaching informed by observation of classroom practice.
- Enhance the measurement of learning from early years to end of cycle and participate in international assessments.
- Provide technology-enabled access to materials and resources for learning.

82. The project is also built on specific interventions and lessons learned under the previous IDA- and trust fund-financed operations.

83. **CbKs as an alternative to expand coverage in low-income communities.** KEEP, which closed in December 2017, successfully piloted CbKs as a quality and affordable alternative to traditional state kindergartens for children from low-income rural households in 220 rural communities. The evaluations conducted by the Independent Evaluation Group and ECADE on the results recognized that the CbK was a highly successful cost-effective alternative.

84. **Teacher professional development should be informed by classroom observations.** KEEP and the IDA-financed Sector Support for Education Reform Project demonstrated that videotaped classroom observations using CLASS were critical in informing programs for teacher in-service training, mentoring, and coaching that enhanced teacher practice in classroom. The pilot program evaluations indicated highly effective results on teachers’ performance in the classroom which were complemented by strong enthusiasm for the approach by the teachers who participated in them. This, combined with the institutional capacity built to replicate and scale up CLASS, led to the Government’s decision to institutionalize the instrument systemwide.



Economic and Financial

85. An economic analysis was carried out to address the key questions: (a) the project's development impact, (b) the rationale of public investment, (c) the value added of the World Bank's assistance, and (d) the measurement of cost-benefit ratio and economic return of project components. The economic analysis confirms that the benefits of the proposed interventions bring private and social benefits which exceed the initial cost of US\$50 million planned for a five-year period. The main benefits of the projects are derived from the expansion of the school readiness for underserved children, improvement of teacher effectiveness, provision of IT platform for educational purposes, and measurement of learning.

86. Early interventions produce substantial positive benefits on students, which extend beyond childhood. These benefits include enhanced school readiness, improved cognitive and socioemotional skills, lower repetition and dropout rates, improved overall educational outcomes, and increased engagement of mothers in the workforce. In addition, professional development of teachers is key to improve learning because it would enhance teacher effectiveness in classroom affecting students' daily experiences and progression in learning, while the access to IT platform and digital content supports better learning process. Measurement of learning enables information to improve teaching and learning outcomes.

87. The economic analysis used a cost-benefit methodology that accounts for the cash flow generated by a person over the course of his or her productive lifetime. The underlying assumption was that the project interventions improve students' learning outcomes, which in turn leads to higher earnings and economic private returns in labor market. The model also considers the effect of the investment in the Kyrgyz economy, measured by the spending multiplier.

88. The baseline scenario shows a net present value (NPV) of US\$1,470 million and a benefit-to-cost ratio of 22, equivalent to an internal rate of return of 24 percent, indicating that the proposed project is a cost-effective investment. It is important to note that the model captures only part of the project's benefits and underestimates overall gains. The analysis captures the improved student's learning outcomes, but it does not capture other private and social outcomes such as better health, lower criminality, better-informed voters, lower teenage pregnancy, and lower dependence on welfare, which are associated with more developed skills. In addition, the economic model does not capture either the medium- or long-term benefits associated with managing the implementation for results.

B. Fiduciary

(i) Financial Management

89. The FM assessment of the MoES for project implementation was conducted in accordance with the Financial Management Manual for World Bank Investment Project Financing Operations that became effective on March 1, 2010 (revised on February 10, 2017). Although the MoES has implemented a number of the World Bank-financed projects in the past, with the most recent one currently in grace period, the FM capacity and arrangements were mainly maintained through the PCU staffed with an FM manager and disbursement specialist. However, by the time this project (Learning for the Future) begins implementation, the PCU will have been dissolved and FM arrangements at the MoES are assessed to meet the minimum requirements of the World Bank's Policy and Directive on Investment Project



Financing subject to implementation of the following recommended actions: (a) accounting software capable of supporting the Government's and the World Bank's reporting and accounting requirements will be installed for the project within 30 days of project effectiveness and (b) the FM arrangements of the project, including internal controls, will be documented in the FM section of the POM by effectiveness. The disbursement/accounting consultant will be hired at a later stage for capacity strengthening purposes.

90. The project will produce a full set of quarterly interim unaudited financial reports to be submitted to the World Bank within 45 days of the end of each calendar quarter, from the first disbursement and throughout the project's life. The audit of the project's annual financial statements will be conducted (a) by independent private auditors acceptable to the World Bank, on terms of reference acceptable to the World Bank and procured by the MoES and (b) according to the International Standards on Auditing issued by the International Auditing and Assurance Standards Board of the International Federation of Accountants. The annual audits of the project's financial statements will be provided to the World Bank within six months of the end of each fiscal year as well as at project closing. The costs of the project audits will be financed from the proceeds of the project. The recipient has agreed to disclose the audit reports for the project within one month of its receipt from the auditors and acceptance by the World Bank, by posting the reports on the website of the MoES or other official websites of the recipient. Following the World Bank's formal receipt of these reports from the recipient, the World Bank will make them publicly available according to the World Bank Policy on Access to Information.

91. According to the latest Doing Business Survey 2018, the Kyrgyz Republic was among the bottom-rated Commonwealth of Independent States countries and scored modestly compared to many other developed and developing countries (77 out of 190) on the ease of doing business. Meanwhile, according to the 2017 Transparency International Corruption Perception Index, the Kyrgyz Republic was ranked 135 in the list of 180 countries. The latest Public Expenditure and Financial Accountability report (conducted in 2014) found that several critical public financial management (PFM) elements including internal controls, external audit (Supreme Audit Institution), and financial reporting remain weak. While some elements of the country PFM, such as the country's budget system, can be used for the project, other PFM elements (accounting, financial reporting, internal controls, funds flow under the project) require ring-fenced systems to be established. For these reasons, the FM risk is assessed as high.

(ii) Procurement

92. The World Bank team conducted a procurement capacity and risks assessment using the Procurement Risk Assessment and Management System. The review identified several risks related to procurement policy and institutional arrangements which need to be mitigated.

93. There are several key issues and risks concerning procurement for implementation of the project. First, the Procurement Department of the MoES has no experience in implementing World Bank-financed projects; officials who would be involved in some project procurements through tender committees may not be familiar with World Bank procurement procedures; and political developments may lead to frequent turnover of tender committee members. The MoES will follow Public Procurement Law and national procurement procedures when procurement follows a national market approach; this may entail risks pertaining to system issues with e-GP. Second, there may be procurement delays. Experience with past and ongoing projects in the country shows frequent procurement delays due to poor procurement



planning. Third, the level of competition is low in the IT sector. Experience showed that procurement in the country has not attracted adequate competition in the IT area. Further, procurement packages under the project are complex IT procurements. Fourth, there may be inadequate contract management and lower-than-required quality of procured equipment and construction. Fifth, the perceived level of corruption is high, as measured by Transparency International. Considering the above, the procurement risk is assessed as high.

94. To bring the procurement arrangements in compliance with the World Bank’s requirements, the MoES will need to implement the following mitigation actions. First, the MoES will create a separate PCU for the project with competitively selected staff, including a senior procurement specialist and a procurement specialist, as well as technical experts in IT and civil works areas. Second, the MoES should have an opportunity to be registered separately for the project as a purchaser in the state procurement portal. The bidding process shall not be canceled solely for the reason that the minimum bid price is larger than the amount allocated by the procuring entity for the procurement. Third, procurement packaging will be done carefully to foster competition; there will be wide and advance advertising as well as proactive search and outreach with potential suppliers, contractors, or consultants. Fourth, there will be more emphasis and training on appropriate contract management as well as regular physical inspections by World Bank supervision missions.

95. The activities under the project will be subject to the World Bank’s New Procurement Framework. All procurement of contracts will be conducted using procedures as specified in the World Bank’s Procurement Regulations for IPF Borrowers - Procurement in Investment Project Financing Goods, Works, Non-Consulting and Consulting Services, dated July 2016, revised November 2017 and August 2018 (Procurement Regulations). The project will also be subject to the World Bank’s Anti-Corruption Guidelines, dated July 1, 2016. The procurement and contract management processes will be tracked through the Systematic Tracking of Exchanges in Procurement (STEP) system. As required by the Procurement Regulations, a Project Procurement Strategy for Development has been developed, on the basis of which the Procurement Plan has been prepared, setting out the selection methods to be followed by the borrower during project implementation in the procurement of goods, works, and non-consulting and consulting services financed by the World Bank (details are provided in Annex 1).

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

D. Environmental and Social

96. The proposed project components are environmentally benign except that Subcomponent 1.1 will support installation of indoor water latrines and sanitation facilities designed for children on the premises of about 500 existing CbKs’ buildings (same footprint), which will involve existing building renovations. These renovation activities will not generate adverse environmental impacts or substantial risks on human population, and the predictable impacts are expected to be temporary, reversible, low in magnitude, and site specific. The expected environmental impacts may be listed as follows: improper care, handling, and storage of building renovation material and waste; generation of excessive noise and dust levels; and



health impacts related to inadequate disposal of asbestos-containing material. The CbK locations are in built-up areas that are not expected to be close to areas of biodiversity significance or cultural heritage. Due to the nature of proposed works and associated environmental risks, and limited capacity of the MoES in understanding and application of the World Bank's Environmental and Social Framework and relevant standards, the project is classified as Moderate risk from an environmental perspective and as defined under the World Bank's Environmental and Social Framework.

97. To ensure adequate occupational health and safety practices are safeguarded an Environmental and Social Management Framework (ESMF) has been adopted and disclosed at project appraisal. A professional design must be made for the early childhood water, toilet, and sanitation facilities in the CbKs, following relevant national guidelines on school water, sanitation, and hygiene facilities and professional supervisors will need to be hired to oversee installation. Sewage water disposal/treatment shall be carefully assessed, and proper arrangements put in place to prevent soil pollution (septic tanks, filters, and so on). School teachers and children's parents should be engaged for supervision of installation as well. The site-specific environmental management and safety measures to be prepared following the project ESMF should be included in the contracts for installation.

98. The project will support IT equipment for teaching and learning purposes. As an integral project activity, the project will finance preparation of an environmentally sound installation and disposal plan for all electronic equipment to be financed by the project to ensure that this equipment will not cause environmental and health risks in future when it retires.

99. The social impacts associated with the project activities are considered positive and beneficial for the society, especially rural communities. Social risk is rated Moderate based on the information available. Project activities will be site specific, with the likelihood that any impacts beyond the project footprint will be low in magnitude and easily mitigated in a predictable manner. The selected beneficiary communities must own the premises and commit to maintaining them as a preschool institution for at least 10 years. If project activities show the potential for temporary or permanent involuntary land acquisition, a negative impact on economic activities, or restricting access to resources, then the activities will not be financed under the project. Activities associated with the project will also be screened to ensure there is no involuntary resettlement or negative impact on livelihood. Subprojects will be assessed through the ESMF and will be monitored during supervision.

100. Risk related to labor management including influx is not substantial given the small-scale nature of school rehabilitation works. The distribution of project benefits across geographic areas within the country is particularly sensitive given the complex interethnic relationships which led to social upheavals in the past and the eruption of violent interethnic clashes in the south of the country. There is also a risk that children with disabilities or developmental delays may be excluded from project benefits. Beneficiary (school and kindergarten) selection criteria need to be carefully elaborated to ensure inclusive access to poor communities and children with disabilities, as well as a regionally equitable and ethnically balanced distribution of funds.

V. GRIEVANCE REDRESS SERVICES

101. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the

WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VI. KEY RISKS

102. Based on the integrated risk assessment carried out during preparation, the overall risk of the operation is considered Substantial.

Table 1. Systematic Operations Risk Rating Tool

Risk Categories	Rating
1. Political and governance including refugee protection	Substantial
2. Macroeconomic	Substantial
3. Sector strategies and policies	Moderate
4. Technical design of the project	Substantial
5. Institutional capacity for implementation and sustainability	Substantial
6. Fiduciary	High
7. Environmental and social	Moderate
8. Stakeholders	Moderate
9. Others	Moderate
10. Overall	Substantial

103. The most significant areas of risk are related to politics and governance, macroeconomics, technical design and capacities for implementation and sustainability, and fiduciary matters. Measures have been integrated into the project design to mitigate these risks where feasible.

104. **Political and governance risks against the PDOs are Substantial.** Over the past decade, there have been frequent changes of government and of ministers within governments. The coming parliamentary elections could result in policy changes that will negatively affect the project and undermine national ownership. The current government has a clear set of development priorities enshrined in published development strategies, which are generally supported across the political spectrum and are consistent with the project. While the principles of transparency, accountability, and participation have been adhered to in previous World Bank-supported projects, the overall context in these areas remains challenging.

105. **Macroeconomic risk is rated Substantial.** Economic growth has been volatile, and the economy is highly dependent on remittances from Kazakhstan and the Russian Federation. The World Bank's engagement in the upcoming period, as envisioned in the CPF, entails the development of policy operations on fiscal adjustment. Together with IMF-supported programs, these operations are intended



to deal with economic risks. Any adverse impacts on the macroeconomic situation may constrain public budgets, which in turn might negatively affect project implementation and/or the sustainability of results.

106. **Sector strategies and policies.** Risks related to sector strategy and policy are rated Moderate. The MoES is developing its National Education Strategy 2030 and an Action Plan 2021–2023 in line with a broader government strategy, using a process that combines political guidance regarding priorities, technical expertise inputs, and broad consultations with stakeholders. Further, it is based on a comprehensive Education Sector Analysis, which was prepared with support from donors and incorporated substantial stakeholder consultation and feedback. Sector policies are generally sustainable. There is a risk of some disconnect between policy targets and funding allocations, as well as implementation difficulties pertaining to capacities and entrenched interests. However, given the stability of the sector policy, the funding of the sector priorities for reforms is more or less predictable and agreed with development partners. And there have been successes in making progress toward targets and introducing reforms over the past two sector plans.

107. **Technical design of the project and institutional capacity for implementation and sustainability.** The design of the project is rated Substantial as is institutional capacity for implementation and sustainability. The project focuses on areas and includes activities that have a track record of success, yet nonetheless run risks pertaining to design, implementation, and sustainability. The expanded coverage of CbKs in Component 1 includes activities that have been successfully implemented by the MoES as part of a previous project financed by the Global Partnership for Education and supervised by the World Bank, but there is no guarantee that local communities and the Government will be able to find adequate resources to initiate and sustain these activities in new communities. The work in Component 2 pertaining to teacher professional development and the introduction of digital technologies has similarities to activities undertaken in previous projects supported by both the World Bank and other DPs, but institutional rigidities of the OIITs may prevent the successful and sustainable implementation of project training-related activities and at school level, it may not be possible to sufficiently motivate or raise the capacities of teachers to effectively use digital technologies and learning resources. Finally, some of the project's assessment activities will build upon prior exercises that have been successfully implemented, but capacity constraints at the National Testing Center combined with the logistical complexities related to large-scale assessments may undermine the design and implementation of assessments. The risks related to technical design and institutional capacity will be mitigated through the provision of TA to strengthen project coordination including technical functions within the MoES. Regarding sustainability, the ECE services supported in Subcomponent 1.1 are based on models that explicitly incorporate sustainability commitments and guarantees from the community and local government, as explained earlier in the component description. The activities of Subcomponent 1.2 are designed for sustainability in that they are embedded within existing systems and programs for CPD.

108. **Fiduciary.** Fiduciary risks are currently assessed as High and are discussed in section IV.B.

109. **Environmental and social risks** are currently assessed as Moderate and are discussed in section IV.D.

110. **Stakeholders.** Risks related to stakeholders are assessed as Moderate. The project has carefully selected and designed interventions to build stakeholder support for them in implementation. While the



interventions involve reforms and behavior change, they will be supported through effective communications, advocacy, and the feedback and grievance system to be built under the project.



VII. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY: Kyrgyz Republic
Learning for the Future Project

Project Development Objectives(s)

The project development objective is to enhance school readiness and teacher effectiveness in pre-school through secondary education in targeted communities

Project Development Objective Indicators

Indicator Name	DLI	Baseline	End Target
Enhance school readiness and teacher effectiveness in pre-school through secondary education			
School readiness score among project-targeted children aged 3-5 years, by gender (Text)		To be collected under the project	A statistically significant improvement among project-targeted children
school readiness score among project-targeted children aged 3-5 years -females only (Text)		To be collected under the project	A statistically significant improvement among project-targeted children (females only)
Teacher effectiveness score among project-targeted teachers (Text)		To be collected under the project	A statistically significant improvement among project-targeted teachers

Intermediate Results Indicators by Components

Indicator Name	DLI	Baseline	End Target
Enhancing Teaching and Learning			



Indicator Name	DLI	Baseline	End Target
Students enrolled in community-based kindergartens in target communities, by gender (Number)		0.00	20,000.00
Teachers at target CbKs certified as having successfully completed the course under the project (Number)		0.00	500.00
Students enrolled in community-based kindergartens in target communities - female (Number)		0.00	10,000.00
New teacher training programs officially adopted and delivered by RIITT/OIITTs (Number)		0.00	3.00
Teachers certified upon completion of the training program supported under the project (Number (Thousand))		0.00	40.00
Average daily visits to online digital library per target school (Text)		zero	Annual increases each year (target value TBD)
Number of large-scale assessments completed at the primary or secondary levels, by exercise (NLA 2023, PISA 2024) (Number)		0.00	2.00
IITTs that have officially adopted and integrated CLASS instrument for teachers into their regular training program (Number)		0.00	7.00
Enhanced student assessment instruments developed, by instrument (criteria-based monitoring instrument, Grade 4 examination) (Yes/No)		No	Yes
Students benefiting from direct interventions to enhance learning (CRI, Number)		0.00	560,000.00
Students benefiting from direct interventions to enhance learning - Female (CRI, Number)		0.00	280,000.00
Gender responsive approach incorporated into the teacher training program (Text)		No	Yes
Students benefitting from teachers trained in gender-focused training, by gender (Number)		0.00	240,000.00
Students benefiting from teachers trained in gender-focused training - females only (Number)		0.00	120,000.00



Indicator Name	DLI	Baseline	End Target
Managing implementation for results			
Grievances/complaints addressed through grievance redressal mechanism (Percentage)		0.00	60.00
Schools where communities report the CbKs meet their needs (Percentage)		0.00	60.00
Schools where communities report that the IT platform is implemented (Percentage)		0.00	100.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
School readiness score among project-targeted children aged 3-5 years, by gender	School readiness is measured by a composite index generated by the Early Development Instrument (EDI), covering key domains of physical, emotional and academic/linguistic development.	Twice -at baseline (before the intervention) and end line (after receiving intervention)	Database of student results from EDI instrument	A representative sample of students will be selected through scientific random sampling. Data derived through EDI (an instrument tested for validity) by observers trained for reliable recording.	NLQA&IT (National Learning Quality Assessment and Information Technologies Center)
school readiness score among project-targeted children aged 3-5 years - females only	Subsample of the indicator - females only	same as above	same as above	same as above	same as above



Teacher effectiveness score among project-targeted teachers	Effective teaching practices are measured using the Classroom Assessment Scoring System (CLASS), covering key domains of classroom management, social-emotional engagement and instructional effectiveness. Teachers' scores will be compared over time to assess improvements in teaching practices as a result of the interventions.	Twice -at baseline (before the intervention) and end line (after receiving intervention)	Evaluation survey, two rounds	A representative random sample of teachers working in the 1,000 schools that receive project-financed IT platforms and training will be selected. Data will be derived through observations using CLASS (an instrument tested for validity).	the National Learning Quality Assessment and Information Technologies Center (NLQA&IT).
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Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Students enrolled in community-based kindergartens in target communities, by gender	Number of children enrolled in newly opened CbKs in communities supported by project. Students enrolled in CbKs are 20,000, of which 10,000 female.	Annual starting in Year 3.	Community-based Kindergartens (CbKs) enrollment registers	Project will verify and record data in registers	Data collection is responsible by Project Coordination Unit (PCU) and Citizens engagement and communication specialist and Monitoring and Evaluation Officer.
Teachers at target CbKs certified as having successfully completed the course under the project	Number of newly hired kindergarten teachers certified as having successfully completed the	Twice, in Years 3 and 4	Project records including reports from	Project records including reports from RIITT that deliver the training course, will be	MoES working with Project Coordination Unit (PCU) and Monitoring



	course supported under the project divided by the number of newly hired kindergarten teachers		RIITT that deliver the training course.	used to determine the number of newly hired teachers and the number certified.	and Evaluation Officer.
Students enrolled in community-based kindergartens in target communities - female	Students enrolled in CbKs are 20,000, of which 10,000 female.				
New teacher training programs officially adopted and delivered by RIITT/OIITTs	Three strengthened training programs that will be designed for delivery by RIITT/OIITTs as part of their regular in-service teacher training programs. The three programs will cover: digital literacy; remedial reading; and pedagogy focused on primary sciences and secondary mathematics and physics, chemistry and biology. The programs must be officially adopted for use by the RIITT/OIITTs; each of the country's 7 IITTs must have at least two instructors who have been trained on delivering the strengthened training program; and the programs must be part of the programs being actively offered at each of the 7 IITTs. The programs must	Once , in Year 3	Project records	MoES to verify that the RIITT/OIITTs have officially approved the training programs for use; that at least two instructors at each IITT has participated in the training of trainers course; that teachers are attending IITT courses that deliver the strengthened training programs; and that the training program includes modules in digital format that have been put on a platform that can be accessed by teachers either online or offline.	MoES/RIITT/OIITTs working with Project Coordination Unit Monitoring and Evaluation Officer



	each also have modules in digital format that can be accessed either online or offline.				
Teachers certified upon completion of the training program supported under the project	Measures the number of teachers who have attended and successfully completed one or more training programs supported under the project, by training program (digital literacy, remedial reading, and pedagogy).	Once, in Year 3	Project records	RED authorities and training provider to compile attendance and completion records at rayon-level training session.	MoES working with Project Coordination Unit Monitoring and Evaluation Officer
Average daily visits to online digital library per target school	Indicator tracks the daily average number of times the online digital library is accessed	Yearly (Annual increases each year)	Project records/digital library database	The average daily visits should be calculated from data captured by the digital library database.	MoES working with Project Coordination Unit Monitoring and Evaluation Officer
Number of large-scale assessments completed at the primary or secondary levels, by exercise (NLA 2023, PISA 2024)	CRI refers to rounds of a large-scale assessment, for which the results are made publicly available within 2 years of the assessment administration; the assessment round is counted for the year in which the data are released; This includes the following assessment exercises: NLA 2023 and PISA 2024 .	Yearly	Analytical reports and official minutes of discussions.	The analytical report on the findings and recommendations for each assessment exercise; as well as the official minutes of discussions by senior decision-makers at roundtables organized to discuss report.	MoES working with Project Coordination Unit Monitoring and Evaluation Officer
IITTs that have officially adopted and	Count of the IITTs that	Yearly	Project	MoES to verify that the	MoES/RIITT/OIITTs



integrated CLASS instrument for teachers into their regular training program	officially adopted CLASS instrument for teachers and include it in their regular training program.		records.	RIITT/OIITTs have officially approved the CLASS instrument for teachers and that each IITT has integrated it into their regular training program	working with Project Coordination Unit Monitoring and Evaluation Officer
Enhanced student assessment instruments developed, by instrument (criteria-based monitoring instrument, Grade 4 examination)	A binary indicator, measuring whether or not the MoES has developed a set of guidance and legal-regulatory documents explaining the use of the criteria-based instrument	Once, in Year 4	Guidance and legal-regulatory documents either approved by MoES or ready for approval	Documents to be collected from MoES	MoES working with Project Coordination Unit Monitoring and Evaluation Officer
Students benefiting from direct interventions to enhance learning		Yearly	School administrative records	Data to be collected from MoES	MoES working with Project Coordination Unit Monitoring and Evaluation Officer
Students benefiting from direct interventions to enhance learning - Female					
Gender responsive approach incorporated into the teacher training program	Indicator is yes when (1) remedial program is developed to address boys lag in reading and (2) module on engaging girls in STEM is developed	Annual	Project records	MoES to verify that the teacher training program develops remedial reading program for boys and module for engaging girls in	MoES/RIITT/OITTs working with Project Coordination Unit Monitoring and Evaluation Officer



				STEM	
Students benefitting from teachers trained in gender-focused training, by gender	Total students who participated in classes by teachers trained in either of the gender-focused modules (a. remedial program is developed to address boys lag in reading and b. module on engaging girls in STEM)	Annual	School administrative data and project records	The project will draw on school administrative data to record the number of students benefiting from the teachers trained in the gender focused training modules.	MoES working with Project Coordination Unit Monitoring and Evaluation Officer
Students benefitting from teachers trained in gender-focused training - females only	Total female students who participated in classes by teachers trained in either of the gender-focused modules (a. remedial program is developed to address boys lag in reading and b. module on engaging girls in STEM)	annual	School administrative data and project records	The project will draw on school administrative data to record the number of students benefiting from the teachers trained in the gender focused training modules	MoES working with Project Coordination Unit Monitoring and Evaluation Officer
Grievances/complaints addressed through grievance redressal mechanism	Number of complaints addressed through grievance redressal mechanism divided by the total complains made in the GRM.	Yearly	Project records	MoES documents all complaints filed and actions taken to address them.	MoES documents all complaints filed and actions taken to address them.
Schools where communities report the CbKs meet their needs	The indicator is calculated as the total schools where communities reported that the CbK met their needs	semi-annual by half of target	community scorecards	data will be collected through the community scorecards	schools, communities,



	divided by the total schools where CbKs were established.	beneficiaries			
Schools where communities report that the IT platform is implemented	The indicator is calculated as the total schools which report the IT platform has been implemented (i.e. installed and being used) divided by total target schools.	semi annually by half of target beneficiaries	community scorecards	data will be collected through the community scorecards	MoES, schools, communities,



ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Kyrgyz Republic Learning for the Future

1. The project will be implemented by the MoES through existing institutions. Institutions involved in the project implementation include the Kyrgyz Academy of Education, the NLQA&IT, the state and regional in-service teacher training institutions, preservice teacher training institutions, schools, kindergartens, and local self-governance bodies (Ayil Okmotu). Within each agency, a head of relevant department/unit would be designated to lead the agency's efforts in project implementation and supervision.
2. The Deputy Minister of Education and Science responsible for preschool and secondary education will be the national coordinator for the project. With support from the Permanent Secretary of Education, responsible for administrative issues, he or she would coordinate, oversee, and facilitate project implementation, reporting regularly to the Minister.
3. MoES departments directly involved in the project implementation include PSSOED, BPFAD, Office of the Press Secretary, MSPD, Procurement and Infrastructure Sector, Information Technologies Sector, and Vocational Education Department. These departments would report directly to the national coordinator/deputy minister and will
 - Oversee implementation progress of the project in accordance with the POM;
 - Oversee progress and provide data on the results indicators and advise on and facilitate, as needed, corrective actions to ensure the project's attainment of the PDO;
 - Review and approve the project's annual work plans and budgets;
 - Endorse any major changes in the implementation arrangements in consultation with the PCU; and
 - Oversee compliance with fiduciary and citizen engagement requirements of the World Bank.
4. A PCU will be established to carry out key functions such as coordination, fiduciary, M&E, and reporting. The PCU will be led by a director and consist of an FM specialist, an accountant, one or two procurement specialists as needed, an M&E specialist, and administrative staff for support and interpretation. The main responsibilities of the PCU will be to
 - Ensure achievement of the project's planned PDO and intermediate results through coordination with the relevant institutions and departments of the MoES;
 - Administer the project in accordance with the POM on a daily basis;



- Develop terms of reference, purchasing contracts, and other procurement-related documents; organize all procurement processes in collaboration with the relevant department of the MoES; and oversee delivery of project inputs;
- Draft annual work plans and budgets and monitor their execution;
- Ensure that the project M&E framework is operational, and all M&E activities are properly undertaken;
- Prepare regular progress reports for submission to the MoES and any other reports on specific project-related issues as requested by the MoES;
- Support FM arrangements (external audit, internal audit, accounting, and so forth);
- Ensure that all fiduciary and citizen engagement requirements of the World Bank are met;
- Report any major issues to the MoES and, if required, recommend changes to the POM;
- Coordinate with all involved stakeholders; and
- Coordinate awareness-raising campaigns and support the grievance redress system.

5. Technical assistants will be hired by the MoES to support institutions or departments involved in project implementation on ECD for the PSSOED, on teacher trainings for the RIITT, on digital equipment/platforms and content development, and on measurement of learning for the NLQA&IT. Specific short-term technical assistants will be hired to fill in specific knowledge and technical gaps during project implementation. Contracts with technical assistants will be signed by the project national coordinator and the contracted technical assistant will be managed by the head of the relevant department or institution.

6. Strategic guidance and oversight of the project to ensure cross-agency coordination when needed will be provided by the NSC on coordination of programs and projects in preschool and school education. The NSC is chaired by the Vice Prime Minister on Social Affairs and comprises representatives from the MoF, MoE, and MoCIT; Chairman of the MoES Public Supervisory Board; and the Chair of the DPCC. It meets twice per year. The PCU and all structures involved in project implementation will provide semiannual reports to the NSC on implementation progress.

Procurement

7. **Applicable procurement framework.** The activities under the project will be subject to the World Bank's New Procurement Framework. All procurement of contracts will follow the procedures specified in the Procurement Regulations. The project will also be subject to the World Bank's Anti-Corruption Guidelines, dated July 1, 2016. The procurement and contract management processes will be tracked through the STEP system.

8. **Summary of Project Procurement Strategy for Development.** As required by the Procurement Regulations, a Project Procurement Strategy for Development has been developed based on which a



Procurement Plan has been prepared setting out the selection methods to be followed by the borrower during project implementation in the procurement of goods and non-consulting and consulting services financed by the World Bank. The procurement approaches for key packages have been determined in the Project Procurement Strategy for Development as described in the following paragraphs.

9. **Procurement approach for key goods, works, and non-consulting services contracts.** To achieve the project's objectives, the key considerations for determining the procurement approach are the following:

- **Civil works.** Construction of sanitary facilities and rehabilitation of rooms within the premises of 500 CbKs will be procured through Request for Bids (RFB).
- **Goods.** (a) Computer equipment for schools and teacher education institutions, (b) procurement of outdoor playground equipment (supply and installation) for 500 CbKs, (c) development toys for 500 CbKs, (d) furniture for 500 CbKs and air conditioners for 1,200 schools and 8 education colleges will be procured through RFBs.

10. **Procurement approach for key consultancy contracts.** Consulting services will include (a) development of an online digital library of TLMs (translation, adaptation, and development of the materials); (b) support to LSG in mobilization and monitoring the construction of sanitary facilities and rehabilitation of premises for CbKs; (c) design construction of sanitary facilities and rehabilitation of rooms for 500 CbKs; and (d) technical supervision of construction of sanitary facilities and rehabilitation of rooms within the premises of 500 CbKs. These consultancies will be selected through Quality- and Cost-Based Selection (QCBS) method.

11. **Key conclusions from the conducted market analysis.** Market research has concluded that there are national market players who can satisfy procurement needs to provide IT goods, but the size of the local market particularly when seen in the regional context may attract new, larger participants who may seek to establish their presence in Central Asia, starting with the Kyrgyz Republic. However, the Government should be aware that tenders for common government educational platforms may need to be structured in a way to attract international players. Both parties agreed on the need to attract technical experts with relevant experience as well as to develop close relations with the World Bank's technical and procurement specialists.

12. The Government has realized that additional efforts would be required in terms of ongoing consultations with the industry, a thorough approach to the development of procurement documentation, and targeted efforts to widely advertise tenders to ensure an appropriate level of participation of both local and international suppliers. Identified risks and mitigation measures include risk sharing for the party that is best suited for risk management. The local market has enough potential companies for rehabilitating premises and constructing sanitary facilities for CbKs.

13. **Procurement risks analysis.** Procurement capacity assessment was performed by the World Bank using the Procurement Risk Assessment and Management System. Based on the assessment, the project procurement risk is rated High.



Table 1.1. Procurement Risks and Mitigation Measures

Description of Risk	Risk Rating	Mitigation Measures
The Procurement Department of the MoES has no experience of implementing World Bank-financed projects.	H	The MoES will create a separate PCU for the project with competitively selected staff.
Potential procurement delays. Experience with the past and ongoing projects in the country shows frequent procurement delays.	H	Careful procurement planning and realistic scheduling, advanced preparation of technical specifications or terms of references, close World Bank supervision and monitoring, particularly from the country office
The MoES will follow Public Procurement Law and national procurement procedures when procuring following national market approach. This may bring the risk of system issues with e-GP.	S	The MoES should have an opportunity to be registered separately for the project as a purchaser in state procurement portal. The bidding process shall not be canceled solely for the reason that minimum bid price is larger than the amount allocated by procuring entity for this procurement.
Perceived high level of corruption as measured by Transparency International	H	Close supervision by the World Bank staff
Low level of competition in the IT sector. Experience indicates that the procurement in the country has not attracted adequate competition in the IT sector.	S	Careful procurement packaging to foster competition; wide and advance advertising; proactive search and outreach with potential suppliers, contractors, or consultants
Procurement packages under the project are complex IT procurements.	H	The PCU will hire qualified procurement staff as well as technical experts in IT areas.
Inadequate contract management and lower-than-required quality of procured equipment	H	More emphasis and training on appropriate contract management and regular physical inspections by World Bank supervision missions

14. **Use of national procurement procedures.** In accordance with paragraph 5.3 of the Procurement Regulations, when approaching the national market (as specified in the Procurement Plan tables in STEP), procurement under World Bank-financed operations may be carried out in accordance with the ‘single-stage bidding’ method set forth in the Public Procurement Law of the Kyrgyz Republic dated April 3, 2015 N 72 with amendments dated November 18, 2016 N 182, December 10, 2016 N 195, February 14, 2017 N 25, May 30, 2017 N 93, March 29, 2018 N 32, January 11, 2019 N 4, June 26, 2019 N 76, provided that such arrangements continue to meet the requirements of paragraph 5.4 of the Procurement Regulations and the following conditions:

- The Request for Bids/Request for Proposals document shall require that bidders/proposers submitting bids/proposals present a signed acceptance at the time of bidding to be incorporated in any resulting contracts, confirming application of and compliance with World Bank Anti-Corruption Guidelines, including without limitation the World Bank’s right to sanction and the World Bank’s inspection and audit rights.
- Bidding documents, including contract forms, acceptable to the World Bank shall be used. Bidding documents shall include provisions, as agreed with the World Bank, intended to adequately mitigate against environmental, social, health, and safety risks and impacts.



- The bidding process shall not be cancelled solely because the minimum bid price is larger than the amount allocated by the procuring entity for the procurement in question.
- There shall be no preference applied during procurement of goods and works.
- The implementing agency shall have an option to publish procurement notice without disclosing a cost estimate.

15. When national procurement arrangements other than national open competitive procurement arrangements are applied by the borrower, such arrangements shall be subject to paragraph 5.5 of the Procurement Regulations. Other national procurement arrangements such as the 'Simplified Method' (Request for Quotation) may be applied on the same conditions stated earlier for procuring limited quantities of readily available off-the-shelf goods or simple civil works of small value. In addition, not less than three quotations shall be requested to ensure competition.

16. **Training and operating costs.** The project will finance the operating costs of the PCU, including PCU personnel, comprising mainly salaries and fees, office operations, and travel and subsistence expenses. PCU personnel will be selected on the basis of experience, qualifications, and capability to carry out the assignment. The selection shall be carried out through the comparison of the relevant overall capacity of at least three qualified candidates among those who have expressed interest in the assignment. Detailed procedures will be outlined in the POM. The PCU will develop a detailed training plan and prepare annual operational budget for the World Bank team's review and clearance. Operating costs and training will be financed as per annual budget approved by the World Bank.

17. **Record keeping.** All records pertaining to award of tenders, including bid notification, register pertaining to sale and receipt of bids, bid opening minutes, bid evaluation reports and all correspondence pertaining to bid evaluation, communication sent to/with the World Bank in the process, bid securities, and approval of invitation/evaluation of bids would be retained by respective agencies and uploaded in STEP.

18. **Disclosure of procurement information.** The following documents shall be disclosed: (a) a Procurement Plan and updates; (b) an invitation for bids for goods and works for all contracts; (c) request for expression of interest for selection/hiring of consulting services; and (d) contract awards for goods, works, and non-consulting and consulting services. The following details shall also be published in the United Nations Development Business and World Bank's external website: (a) an invitation for bids for procurement of goods and works following open international market approaches, (b) Request for Expression of Interest for selection of consulting services following open international market approaches, and (c) contract award details of all procurement of goods and works and selection of consultants using open international market approaches.

19. **Advance procurement and retroactive financing.** To facilitate implementation of the project, all new procurement activities will be advanced as feasible in line with the agreed Procurement Plan. There will be a provision for retroactive financing up to an aggregate amount not exceeding US\$20,000 equivalent. This will cover eligible expenditures procured in accordance with the World Bank guidelines and implemented in accordance with other relevant operational policies for executing project activities



incurred before effectiveness. Retroactive financing will finance the relevant project expenditures incurred and payments made on or after April 1, 2020.

20. **Fiduciary oversight by the World Bank and procurement supervision.** The World Bank shall prior review contracts as per prior review thresholds set out in the Project Procurement Strategy for Development/Procurement Plan. All contracts not covered under prior review by the World Bank shall be subject to post review during implementation support missions and/or special post review missions, including missions by consultants hired by the World Bank. Two half-yearly missions are envisaged for procurement support and supervision of the proposed project.

Table 1.2. Summary Procurement Plan

Contract Description	Estimated Cost (US\$ equivalent)	Procurement Method	Procurement Approach	World Bank Review (prior/post)
Works				
Construction of sanitary facilities and rehabilitation of rooms within the premises of 500 CbKs	11,250,000	RFB	Open international	Prior
Goods/				
Computer equipment for schools and teacher education institutions	18,332,070	RFB	Open international	Prior
Air conditioners for schools and teacher education institutions	471,120	RFB	Open international	Post
Procurement of outdoor playground equipment (supply and installation) for 500 CbKs	2,250,000	RFB	Open international	Prior
A package of development toys for 500 CbKs	575,000	RFB	Open international	Post
Furniture for 500 CbKs	450,000	RFB	Open national	Post
Carpets for 500 CbKs	300,000	RFB	Open national	Post
Goods for the communications campaign and citizens engagement	130,000	RFB	Open national	Post
Printing of visual learning materials	100,000	RFB	Open national	Post
Computer equipment for NTC and video camera for schools	151,000	RFB	Open national	Post
Consulting services				
Development of online digital library of TLMs (translation, adaptation, and development of the materials)	4,500,000	QCBS	Open international	Prior
Supporting of LSG in mobilization and construction of preschools	342,000	QCBS	Open international	Post
Design construction of sanitary facilities and rehabilitation of rooms for 500 CbKs	375,000	QCBS	Open international	Post



Contract Description	Estimated Cost (US\$ equivalent)	Procurement Method	Procurement Approach	World Bank Review (prior/post)
IT platform/distance learning in teaching subjects	300,000	QCBS	Open international	Post
Technical supervision of construction of sanitary facilities and rehabilitation of rooms within the premises of 500 CbKs	375,000	QCBS	Open international	Post
Project audit	100,000	LCS	Open international	Post
Other low-value goods	192,170	Request for Quotations		
Other low-value consulting services	1,051,750	CQS, IC		
Trainings	5,886,760	AP		
Fees for PISA 2024	500,000			
Project management	2,368,130			

Note: CQS = Consultant's Qualifications Based Selection; IC = Individual Consultant; AP = Approved proposals.



ANNEX 2: Detailed Project Description

COUNTRY: Kyrgyz Republic Learning for the Future

1. Acting on cutting-edge research evidence and building on the incremental gains from prior trials, the project will contribute to building adaptable human capital through core interventions in raising child readiness for learning and improvement in educational attainment essential to building the foundational skills to succeed in the future work place.
2. The design uses a human capital lens conceptualized by the Human Capital Project and informed by the WDR 2018, 'The Changing Nature of the Work'. Specifically, the new demand for skills emphasizes the need for building foundational skills and adaptability to change. These skills refer to basic and advanced cognitive skills and socioemotional skills that enable learning and adapt in a life cycle. The ongoing analytical work on adult skills in the Kyrgyz Republic indicates that basic cognitive literacy and numeracy are essential to survive and thrive economically and socially, and the growing role of technology in life and business requires even more advanced cognitive skills. Socio-behavioral skills established in one's early years are shaped throughout a lifetime and are critical to developing skills for adaptability to change. These analytical underpinnings reshaped the concept of the project from a traditional quality enhancement approach.

Component 1: Enhancing Teaching and Learning (US\$48.1 million)

3. The objective of this component is to increase equitable access to quality ECE and enhance the effectiveness of teaching-learning practices in preschool through secondary education. The component will work to expand CbKs in poor rural areas, build the capacities of teachers for effective teaching, provide more teaching-learning resources for teachers and students, and strengthen assessments to improve learning in the classroom and strengthen education policy. There are four subcomponents.

Subcomponent 1.1: Expanded school readiness for underserved children

4. The objective of this subcomponent is to increase access to ECE in poor rural areas with no or low access, through establishing CbKs. The project will support the creation of 500 new CbKs enrolling approximately 20,000 children aged 3–5 years, following a model that was successfully operationalized in a previous World Bank-supervised project (KEEP). For each CbK, the project will provide furniture, equipment, and materials for play and learning; an outdoor playground; rehabilitation (as needed) of the walls, windows, doors, electric wiring, heating, plumbing, the roof, and access for children with physical disabilities; and child- and disabled-friendly water and sanitation facilities.
5. The project will seek to ensure a broad, regionally, and ethnically balanced distribution of funds. It will target poor rural communities. From these, the project will select communities where access to ECE services is below the national rural average and there are sufficient children to fill two communities. The selection process will give preferential consideration to communities where there are larger numbers of children without access. The communities will be transparently selected, using a mechanism similar to the one used under KEEP and that will be detailed in the Operations Manual.



6. To qualify for partnership with the project, beneficiary communities will commit in writing to certain contributions. The Ayil Okmotu will provide premises that it owns and that meet the relevant national pedagogical, safety, hygiene, and sanitation standards. It will provide suitable landscaping for the grounds and ensure that there is a fence surrounding the property. It will maintain and operate the premises as a public preschool education service for at least 10 years; this will include paying all recurrent, operational costs and maintaining the premises in good condition. Finally, it will hire a qualified teacher for each new group created (covering two communities) and pay their salary until the Republican budget may assume financial responsibility.

Subcomponent 1.2: Increased effectiveness in teaching practice

7. The objective of this subcomponent is to increase teacher capacities in preschool and general secondary education through the strengthened design and delivery of teacher training programs aligned to the new curricula and evidence from the science of learning.

8. The project will support the professional development of approximately 500 newly hired teachers at the CbKs established under Subcomponent 1.1, by financing a start-of-service training program developed under KEEP that has been approved by the KAE and RIITT and is certified by the RIITT/MoES. It will be delivered through the RIITT and the OIITs, using master trainers who will receive project-supported refresher training on the program. The training will cover topics such as ECD and the preschool curriculum, as well as specialized topics including the integration of children with special education needs. All CbKs will be provided with copies of the preschool education program and teacher guides.

9. At the general secondary level, the project will finance the development of strengthened teacher training programs in three domains: basic digital literacy (for primary and secondary teachers); remedial reading in early grades to support children, particularly boys, whose reading skills are lagging; and pedagogy for primary and secondary sciences and secondary mathematics. The pedagogical courses will be based on research findings from the science of pedagogy, with particular emphasis on strengthening teacher capacities for concept development, quality of feedback, and language modeling. The courses will be adapted for each of the four major subject areas (mathematics and three sciences) and will include modules to better engage girls in science and mathematics subjects.

10. The teacher training program will improve its gender-focused pedagogical instruction by including some focus on boys in remedial reading and on girls to better engage them in science and mathematics. This is an important shift from the current approach which does not address any gender differences in these areas. For instance, it uses the traditional approach for reading without additional remedial lessons for boys lagging or any additional materials to be used to bring boys up to speed. Likewise, the pedagogical practice for teaching science and mathematics does not include a gender-sensitive approach to ensure girls' interest and involvement in related subjects to establish the necessary foundation for their future studies and careers.

11. Another enhancement to the teacher training in science is the introduction of climate change content into the environmental education of secondary students. The program will train teachers on climate change and how to incorporate the content into the curricula including adaptation and mitigation (for example, energy conservation techniques). The student materials will be enhanced to include lessons



on climate change and mitigation such as causes and impacts of climate change and activities that reduce, capture, or sequester greenhouse gas emissions.

12. The training programs will be integrated into existing systems of teacher training and support at both the preservice and in-service levels. The project will finance the capacity building of instructors to deliver the programs at the RIITT and six OIITTs and of methodologists working at local and project school levels, as well as at the 8 pedagogical colleges where preservice teacher education is offered. The programs will also be designed in a digital format, so that teachers can follow the program using an online or offline digital version. The training programs will be delivered to trainee teachers and in-service teachers as part of the regular curriculum offered by the preservice and in-service teacher training institutes. Each year, approximately 800 trainee teachers enroll at the universities and pedagogical colleges and 10,000 in-service teachers follow a training program at the RIITT/OIITTs.

13. To ensure that teachers have the digital skills needed to access and follow the digital versions and to make effective use of the IT platforms and digital content to be provided under Subcomponent 1.3, the project will finance the direct delivery of the basic digital literacy training program mentioned above to approximately 36,000 teachers working in the abovementioned 1,200 targeted schools. The program will be delivered at the local level using the RED's e-library facilities. It will also finance the direct delivery of the remedial reading training program to approximately 6,000 primary teachers in the target schools and of the pedagogy program to approximately 7,000 primary teachers and 8,000 secondary mathematics and science teachers in the target schools.

14. Complementing teacher professional development through training, the project will support the NLQA&IT to take initial steps toward institutionalizing the use of the CLASS instrument. The CLASS instrument assesses three broad domains of teacher-child interactions—emotional support, classroom organization, and instructional support—each of which is scored along 10 dimensions. The NLQA&IT will review and adapt the instrument as needed. It will work with approximately 120 schools (2 per rayon with more for Bishkek); in at least one of these schools, there will be one or more preschool classrooms for children aged 3–5 years. The schools will be selected from poor communities.

15. In each participating school, the NLQA&IT will train the deputy director (responsible for pedagogy), a methodologist, and teachers on operationalizing the CLASS instrument, including how to video-record the classroom and edit the video, score the observation, and analyze and use the results. In parallel, the NLQA&IT will train instructors from the RIITT and all OIITTs, as well as Rayon methodologists, so that the CLASS instrument can be integrated into their in-service teacher training and support programs. The main purpose of the analysis will be to clarify the teacher's strengths and weaknesses in classroom practices so as to enhance self-understanding and improvement, structure and enhance the productivity of the supportive role played by the methodologist in relation to the teacher and identify areas where the teacher would benefit from professional development. Finally, an online resource center will be developed through the project to provide users nationwide with guidance and materials on how to operationalize the instrument at school. To complete these institutionalizing activities, the project will finance TA, equipment, and materials and operating costs for the NLQA&IT.



Subcomponent 1.3: Technology-enabled support for learning

16. The objective of this component is to strengthen teacher capacities for effective teaching through digital resources aligned to the new curriculum that complement new textbooks. The project will finance an information technology platform to 1,200 schools (approximately 53 percent of all schools), with consideration given to the school's access to the Internet. Each school will receive a basic package of information technologies that will enable teachers and students to access digital content in classroom and library settings, to enhance the quality of teaching-learning practices. The package will consist of an e-library equipped with computers, projector, and printer; six multimedia classrooms equipped with a computer and projector, to be used preferentially by Grade 4 and secondary mathematics and natural sciences teachers; and IT equipment for teachers and school administrators. The schools will be selected from villages using the poverty map in selecting communities for intervention.

17. The project will also finance an IT platform for the RIITT to enable it to develop digital content for teacher professional development, as well as IT classrooms at 8 pedagogical colleges, to enhance their effectiveness in training new teachers in digital literacy and other domains.

18. The project will support the translation, adaptation, and development of digital content in areas where student learning requires strong improvement. These will include secondary mathematics and the natural sciences at primary and secondary levels. To identify required content, the project will first provide TA to identify priority areas where teachers would benefit from supplementary teaching-learning materials, working in close collaboration with the KAE and teachers and to identify relevant digital content that already exists and that could be translated and/or adapted or that needs to be developed from scratch. The project will subsequently finance TA to translate, adapt, and develop the content and will make it available to all schools either through a hosted platform (for Internet access) or in an offline format.

Subcomponent 1.4: Enhancing measurement of learning

19. Building on the national assessment system strengthened through TA under prior IDA- and trust-funded operations, the objective of this subcomponent is to further enhance the system's capacity for assessing student learning outcomes in cognitive and non-cognitive domains, by gender. The interventions can be grouped into three categories, according to the purposes for which assessment is used in the country:¹³ formative assessments to improve teaching and learning at the individual and classroom level; summative assessments to make high-stakes decisions about individual students; and systemic assessments to determine system-level learning and identify related factors primarily for policy and system-strengthening measures, including participation in PISA.

Formative

20. The project will support the KAE and NLQA&IT to develop a new criteria-based instrument and methodology for teacher monitoring, formative assessment, and reporting of student progress at the primary level. This strengthened approach will be designed to build on the traditional five-point system, by clarifying the criteria determining the teacher's assessment; incorporating criteria that account for the

¹³ The categories are according to the primary purpose of the assessment, with the understanding that the assessments may also be used for other purposes and therefore that the categories somewhat overlap.



higher-order competencies of the new curriculum; and identifying the student's strengths as well as areas of weakness that the teacher, student, and parents can jointly work to remediate. The project will finance technical assistants to work in close collaboration with the KAE and NLQA&IT to design the criteria-based instrument and methodology; revise the legal-regulatory framework as needed; design and oversee a pilot of the instrument in schools and subsequently to strengthen the instrument and methodology; and develop a training or orientation for teachers to explain the new system, as well as a communications strategy and materials for stakeholders. To provide a sustainable foundation for the reform, the project will finance the training of instructors and methodologists at the RIITT/OIITTs and at 8 pedagogical colleges so that use of the instrument can be integrated into teacher training and professional development programs. The official instructions and regulatory documents pertaining to the introduction of the instrument will be provided to all REDs and schools.

Summative

21. For summative purposes, the project will support the NLQA&IT to develop and introduce standardized tests for Grades 4 and 8 that are aligned to the revised curriculum. The instrument will focus on reading and comprehension and mathematics; be designed by the NLQA&IT; and be administered, scored, and analyzed annually at the school level by teachers and school management. It will be designed to build teachers' familiarity with the competencies of the new curriculum, as well as their capacities to assess students against the competencies; to orient teaching toward the curricular competencies; to provide teachers with insight as to the effectiveness of teaching-learning practices; to certify completion at Grade 4; and to provide Grade 5 and 9 teachers with useful information about their incoming students. The project will finance TA to build NLQA&IT capacities in item writing and test construction and, in the analysis, and reporting of results, as well as to support the drafting of instructions and revisions to the legal-regulatory framework. This work will be done in close collaboration with the KAE, to ensure conformity of the instrument with existing learning standards and promote discussion of how they can be strengthened. The project will also finance the training/orientation of RED officials and all school deputy directors, focusing on the protocols and procedures for administration and marking, as well as on the in-school analysis and use of the results.

Systemic

22. The project will work on four exercises. First, at the early grade level, while USAID will continue to finance the periodic administration of EGRA, the project will support the analysis of the EGRA results to support the development of remedial reading programs, particularly for boys, and to monitor learning progress.

23. Second, the project will finance the NLA for Grades 4 and 8. As noted earlier, standardized tests for Grades 4 and 8 will be developed with project support. The project will also finance technical and operational assistance for the NLQA&IT to administer them in 2023 to a representative sample of students in Grades 4 and 8, as an NLA; and to score, analyze, and report the results. As part of the NLA instrument development process, the project will finance TA to the NLQA&IT, as needed, to undertake a secondary analysis of the instruments and results of the NSBA (2017). The project will support the dissemination of NLA results and recommendations and discussions by stakeholders, including decision makers.



24. Third, the project will finance the country's participation in PISA 2024. This will cover three areas. First, including the participation fee, the project will finance two PISA partnership options: capacity building (including capacity needs analysis, capacity building plan, project implementation plan, and project implementation support including TA in support of survey operations) and analysis and reporting (including preparation of stakeholders for PISA results, analysis of PISA results and country report, dissemination of results and evidence-based policy dialogue, and better policies for improved learning outcomes). Second, the project will finance the in-country operating costs associated with administering the PISA. Third, the project will finance a range of activities to support students and teachers to prepare for the PISA. These will include providing technical support to the national coordinating agency and/or the NLQA&IT to strengthen the item writing and test development for PISA-like instruments, and to develop software for digital test formats. The project will also finance the reproduction and dissemination to schools of PISA-like instruments in digital and paper-based formats, along with instructions and guidance to teachers on their administration, scoring, and analysis, with emphasis on analyzing the results to improve instructional areas and techniques.

25. Finally, the project will support the NLQA&IT to conduct SESPA. This will include financing TA and operational costs to enable the NLQA&IT to design and administer the instrument on a pilot basis, including the development of instructions and guidance for teachers and school staff and to disseminate and discuss the results among stakeholders including decision makers.

26. As noted in the previous paragraphs, assessment-related activities (including those pertaining to CLASS) will be undertaken by the NLQA&IT, the public institution responsible for conducting assessments in the education sector.

Component 2: Managing Implementation for Results (US\$1.9 million)

Subcomponent 2.1: Implementation Support

27. This component will support the coordination, technical quality, and fiduciary integrity of implementation and the monitoring, evaluation, and reporting on project processes and results. It also supports systems to collect beneficiary feedback to inform project implementation. It will finance activities to inform stakeholders about education sector reforms relevant to the project and ensure that any grievances or issues emerging during implementation are addressed in a timely, effective, and fair manner. It will finance project operating costs, including translation and interpretation; equipment; supervision; staff salaries for project coordination, technical support to MoES departments and affiliated institutions, and fiduciary functions; and the MoES' incremental operating costs.

Subcomponent 2.2: Evaluations

28. To assess the project impact, randomized control trials will be conducted for two key interventions. One intervention is to determine if participation in the ECE program provided at the project-supported CbK improves children's development. The other is to determine if teaching practices in the classroom improve because of project interventions (that is, IT platform, digital resources for teaching-learning, and training in pedagogy and digital literacy). The evaluation design for both will use a randomized phase-in approach. A sample of early implementers will be included in the treatment and late implementers will be in control.



29. For CbKs, the evaluation design will use a randomized phase-in approach where communities receiving the early childhood intervention earlier will serve as the 'treatment group' and communities receiving the intervention later in the project cycle will serve as the 'control group'. The project will administer the EDI before the intervention is implemented to gather a baseline and again to collect an end-line measurement later, in the respective treatment and control groups. The impact of the ECE program including the CbKs will be assessed at project end using a 'difference-in-difference' approach. The project will measure the difference in EDI scores at the end line compared to the baseline within the treatment and control groups separately. The project will then compare the magnitude of change between the two groups. Positive changes are expected in both groups as children's test scores increase with age. The hypothesis is that the positive change in the treatment group will be larger than in the control group because of children's participation in the CbK.

30. For teachers, the evaluation design will use a randomized phase-in approach. A sample of early implementers will be included in the treatment and late implementers will be in control. The classroom practices observation instrument (CLASS) will be administered to measure teacher practice in the classroom. The expectation is that there will be an increase in teacher effectiveness among the treatment group. The hypothesis is that teacher effectiveness will increase over time in the treatment group and that the increase in effectiveness (that is, 'difference in difference') will be larger than that observed in the control group over time.

31. The sampling and timing for the measurements for both exercises will also be designed to generate data for the PDO indicators. The NLQA&IT will take direct responsibility for the execution and quality control of all aspects of the exercises and will be provided with TA through the project as needed. The project will also support the dissemination of the findings and recommendations, including discussions involving decision makers and other stakeholders.

Subcomponent 2.3: Citizen engagement

32. Citizens will be engaged in the implementation of activities across the project, building on the mechanisms already in place to engage parents and community members.¹⁴ Specifically, this includes (a) the production of information for parents and (b) community monitoring through community scorecards. Currently, parents give feedback through regular household visits from teachers and participation in ad hoc school activities. Building on this, the project will raise awareness about ECE in communities and local governments expressing interest in opening a CbK. The project will produce information for school users and community members to enable an informed monitoring process. This will include information on the benefits of CbK and ECE programs and detailed descriptions of the scope of activities. The project will prepare awareness raising materials such as posters, pamphlets, brochures, or videos to inform/empower school users and local communities as to what they should expect to receive if they participate and also what they need to monitor during implementation.

33. The project will also build on the community scorecard tool piloted through the Engaging Communities for Better Schools in the Kyrgyz Republic Project (P159699). This will provide communities the opportunity to monitor and provide feedback on the CbKs and the IT platform being introduced to

¹⁴ The recently completed IDA-financed Sector Support for Education Reform Project (P115530) supported establishment of school boards. The ongoing trust fund-financed Engaging Communities for Better Schools in the Kyrgyz Republic (P159699) supports capacity building for Boards of Trustees, Community Scorecards, and Performance and budgetary information.



schools as well as any other issues they wish to provide feedback on. The results of the scorecard will be used to develop a dialogue between parents, community members, and school staff. Parents and community members will provide feedback on the progress of rehabilitation works and the IT platform including verifying that inputs were supplied and are being used. The output from the community scorecard process will be an action plan for staff, community members, and school users to help improve performance. To ensure a constant stream of feedback and monitoring, the scorecard will be implemented semi-annually in half the target schools each time. While the project focuses on these two interventions, community members will be encouraged to provide feedback on any school-related issues they wish to share. The related citizen engagement indicators measuring beneficiary feedback are included in the Results Framework— ‘schools where communities report the CbKs meet their needs (%)’ and ‘schools where communities report that the IT platform is implemented (%)’. The data for these indicators will come directly from the community scorecards.



ANNEX 3: Detailed Economic Analysis

COUNTRY: Kyrgyz Republic
Learning for the Future

Introduction

1. The economic analysis for the proposed project was carried out to address the following four key questions: (a) the project's development impact in terms of benefits, (b) the rationale of public investment, (c) the value-added of the World Bank's assistance, and (d) the cost-benefit-ratio and economic return of the project's components. The economic analysis measures the expected project benefits over the long run for targeted students. Benefits result from the expansion of school readiness for undeserved children, improvement of teacher effectiveness, provision of IT platforms for educational purposes, and measurement of learning (Component 1).

Rationale for Investing in ECE Services, Teacher Training, IT Platforms and Measurement of Learning

2. The project's components are expected to have significant and long-lasting social and private economic benefits. Expanding access to early childhood education and care services, in particular for children from socially disadvantaged backgrounds, produces substantial positive benefits on students, which extend beyond childhood. These benefits include enhanced school readiness, improved cognitive and socioemotional skills, lower repetition and drop-out rates, and increased engagement of mothers in the workforce. Other positive effects may include lessening social and economic problems such as delinquency and crime, teenage pregnancy, and dependence on welfare.

3. Results for countries participating in PISA 2012 show that ECA students who attended preschool programs for more than one-year outperformed peers who had not attended such programs by 0.053 standard deviation, after accounting for a set of socioeconomic factors. In the Kyrgyz Republic, students who attended more than one year of preschool education outperformed by 0.109 standard deviation in the same assessment in 2009, last year of PISA participation. This effect is similar to that found in East Africa.¹⁵

4. Teacher training interventions are found in empirical literature to generate one of the highest impacts on student achievement. Teacher training is key to school success because it could enhance teacher productivity and effectiveness and it has an effect on student daily experiences. Empirical estimates show that the change of 1 standard deviation in teacher effectiveness has an effect of 10–20 percent of a standard deviation in student's attainment¹⁶.

5. Providing technology to support learning also produces positive effects on students' learning. According to estimations based on PISA 2009, Kyrgyz students whose schools do not have shortage of computers outperform by 0.28 standard deviation after accounting for several socioeconomic variables. However, technology by itself cannot improve students' academic outcomes. In general, technology is

¹⁵ Bietenbeck, et al. 2017. *Preschool Attendance, School Progression, and Cognitive Skills in East Africa*. Retrieved from IZA DP11212.

¹⁶ Burgess, Simon. 2019. "Understanding Teacher Effectiveness to Raise Pupil Attainment." *IZA World of Labor* 2019: 465. Retrieved from IZA Articles: Understanding-teacher-effectiveness-to-raise-pupil-attainment.



more effective when students and teachers are taught on how to use it. It is important to note that the project will support teacher training on digital literacy.

6. Measurement of learning is associated with increased performance. Standardized external testing for comparison purposes is related to an increase in mathematics achievement by more than one-quarter of a standard deviation. For non-OECD countries, the changes that occur from one PISA wave to the next is close to 16.4 points, equivalent to 0.164 standard deviation. In addition, over a 15-year-period, the total effect of external comparison is 61.2 PISA points, equivalent to 0.612 standard deviation (Bergbauer et al. 2018).¹⁷

Rationale of Public Investment

7. The provision of education in the Kyrgyz Republic is mainly assumed for the public sector. The government expenditure on education was 6.1 percent of the GDP in 2017. Public investment on school readiness and quality-related intervention in schools will help address market failures and promote equity, especially for the most vulnerable. In particular, public investment is needed where there are limited or no incentives for private provision. Moreover, the project is expected to generate positive externalities on the overall population.

Rationale for World Bank's Assistance

8. The World Bank has substantial international experience in the education field. In particular, the World Bank has supported the implementation of projects aiming to improve quality and access in preprimary education systems across the world, as well as intervention in subsequent levels of education. Additionally, the World Bank has extensive knowledge of the local conditions.

Cost-Benefit Analysis

9. The economic analysis of the project is assessed using a standard cost-benefit analysis. The analysis used a cost-benefit economic model that accounts for the cash flow generated by a person over the course of his or her productive lifetime. The underlying assumption was that the project interventions improve students' learning outcomes, which in turn leads to higher earnings and economic private returns in labor market. The analysis is conducted in the following way. First, the number of students who will increase their academic achievement as a direct result of the investment is projected. Second, the benefits for the students are estimated considering the expected additional earnings once they participate in labor market. Third, these benefits are compared to the project costs (initial and recurrent expenses) and the internal rates of return are estimated. The project is implemented over a six-year period between 2020 and 2026.

10. The project's assumptions are summarized in table 3.1. The project cost on all components totals US\$50 million, of which US\$20 million aims to expand ECE services, US\$3.5 million to support teacher effectiveness, US\$20.5 million to provide technology for learning purposes, and US\$2.7 million to support the measurement of learning. Another US\$3 million is allocated to Component 2. The impact of 0.06 standard deviation of the subcomponent that aims to enhance the measurement of learning is

¹⁷ Bergbauer, et al. 2018. "Testing." Retrieved from <http://ftp.iza.org/dp11683.pdf>.

proportional to the students' time exposure. Impact on school readiness and technology is net of the impact of teacher training.

Table 3.1. Main Parameters for the Cost-Benefit Analysis

Parameters	Unit	Value
Exchange rate	Kyrgyzstan som to U.S. dollar	0.014
Earnings per year (2019)	US\$	2,969
Impact on academic achievement		
Subcomponent 1.1: Expanded school readiness for underserved children	Standard deviation	0.26
Subcomponent 1.2: Increased effectiveness in teaching practice	Standard deviation	0.15
Subcomponent 1.3: Technology-enabled support for learning	Standard deviation	0.13
Subcomponent 1.4: Enhancing measurement of learning	Standard deviation	0.06
Returns on academic achievement (returns to 1 SD increase in student achievement)	%	12
Years of labor market participation	Years	25
Number of years with effect		
Subcomponent 1.1: Expanded school readiness for underserved children		15
Subcomponent 1.2: Increased effectiveness in teaching practice		5
Subcomponent 1.3: Technology-enabled support for learning		5
Subcomponent 1.4: Enhancing measurement of learning		11
Number of Beneficiaries		
Subcomponent 1.1: Expanded school readiness for underserved children		20,000
Subcomponent 1.2: Increased effectiveness in teaching practice		480,000
Subcomponent 1.3: Technology-enabled support for learning		480,000
Subcomponent 1.4: Enhancing measurement of learning		1,197,941
Cost		
Subcomponent 1.1 Cost of Project (Project Investment) - ECD	US\$	20,000,000
Per child cost of operating preschools (2019)	US\$	136
Subcomponent 1.2: Increased effectiveness in teaching practice	US\$	3,478,840
Subcomponent 1.3: Technology-enabled support for learning	US\$	20,548,075
Subcomponent 1.4: Enhancing measurement of learning	US\$	2,659,895

Note: a. This is the middle point estimate.

Project's Expected Net Benefit

11. Table 3.2 summarizes the NPV of total quantifiable benefits and costs associated with the project. The economic analysis confirms that the benefits of the proposed interventions exceed the initial costs of US\$50 million planned for a 6-year period. The baseline scenario shows an NPV of US\$1,470 million and a benefit-to-cost ratio of 22—an equivalent internal rate of return of 24 percent—which indicates that the proposed project is a promising investment. Projected benefits over the students' productive life are depicted in figures 3.1 to 3.4.



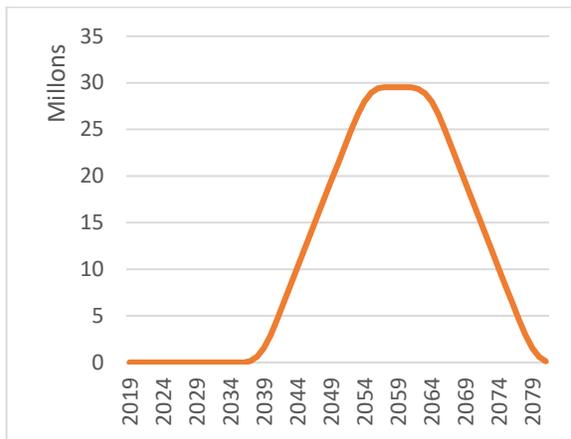
Table 3.2. Summary of Costs and Benefits (US\$) for Base-Case Scenario

	Present Value of Benefits	Present Value of Costs	NPV	Benefit-Cost Ratio	Internal Rate of Return (%)
Subcomponent 1.1: Expanded school readiness for underserved children	227,154,606	46,028,310	181,126,296	4.9	9.2
Subcomponent 1.2: Increased effectiveness in teaching practice	555,697,893	2,961,189	552,736,705	187.7	58.5
Subcomponent 1.3: Technology-enabled support for learning	484,171,204	17,490,521	466,680,683	27.7	28.7
Subcomponent 1.4: Enhancing measurement of learning	273,988,294	2,264,103	271,724,191	121.0	45.2
Total	1,541,011,998	71,297,722	1,469,714,276	21.6	24.2

Source: World Bank staff calculations.

Note: (a) Discount rate of 3 percent and number of beneficiaries; (b) Total present value of costs includes US\$3 million in present value of Component 2.

Figure 3.1. Benefits on Future Earnings of School Readiness Expansion



Source: World Bank staff calculations.

Figure 3.2. Benefits on Future Earnings of Teacher Effectiveness

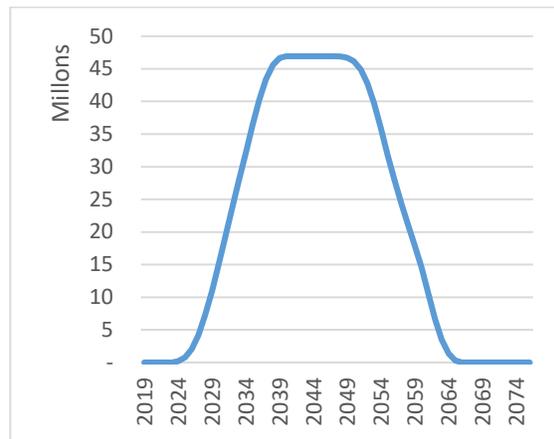




Figure 3.3. Benefits on Future Earnings of Technology Enabled Support for Learning

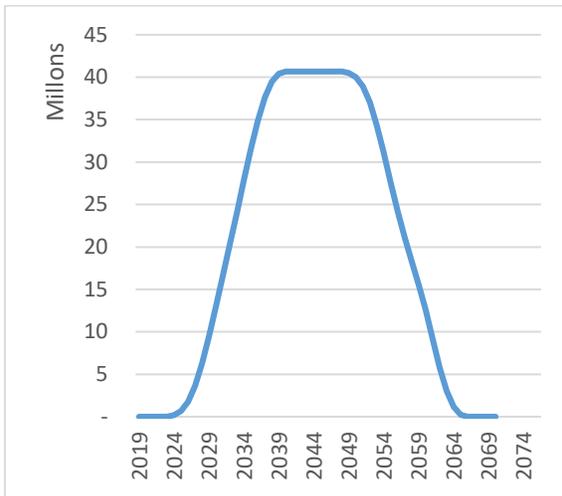
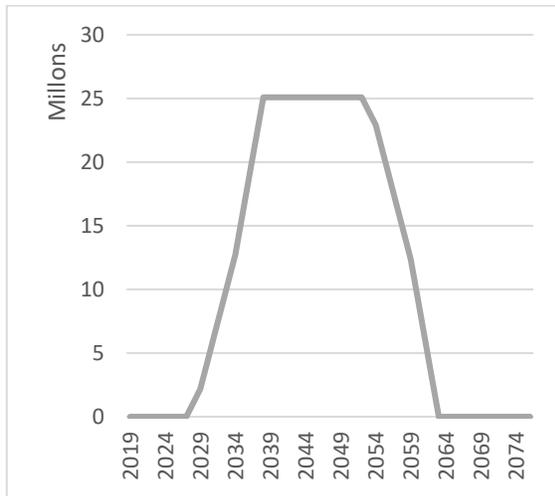


Figure 3.4. Benefits on Future Earnings of Enhancing Measurement of Learning



Source: World Bank staff calculations.

12. The sensitivity analysis confirms that the project brings private benefits which exceed the initial costs under different assumptions, specifically an increase and reduction of 20 percent of beneficiaries. The internal rate of return ranges between 22 percent and 26 percent and the benefit-cost ratio between 20 percent and 24 percent.

Table 3.3. Summary of Costs and Benefits (US\$) - Reduction of 20 Percent in Number of Beneficiaries

	Present Value of Benefits	Present Value of Costs	NPV	Benefit-Cost Ratio	Internal Rate of Return (%)
Subcomponent 1.1: Expanded school readiness for underserved children	181,723,685	40,227,448	141,496,237	4.5	8.8
Subcomponent 1.2: Increased effectiveness in teaching practice	443,966,077	2,961,189	441,004,888	149.9	54.2
Subcomponent 1.3: Technology-enabled support for learning	387,336,964	17,490,521	369,846,442	22.1	26.1
Subcomponent 1.4: Enhancing measurement of learning	273,988,294	2,264,103	271,724,191	121.0	45.2
Total	1,287,015,020	65,496,860	1,221,518,159	19.7	22.1

Note: Reduction in number of beneficiaries only for Subcomponents 1.1, 1.2, and 1.3.

Table 3.4. Summary of Costs and Benefits (US\$) - Increase of 20 Percent in Number of Beneficiaries

	Present Value of Benefits	Present Value of Costs	NPV	Benefit-Cost Ratio	Internal Rate of Return (%)
Subcomponent 1.1: Expanded school readiness for underserved children	272,585,528	51,829,172	220,756,356	5.3	9.6
Subcomponent 1.2: Increased effectiveness in teaching practice	667,429,710	2,961,189	664,468,521	225.4	62.3



	Present Value of Benefits	Present Value of Costs	NPV	Benefit-Cost Ratio	Internal Rate of Return (%)
Subcomponent 1.3: Technology-enabled support for learning	581,005,445	17,490,521	563,514,924	33.2	30.9
Subcomponent 1.4: Enhancing measurement of learning	273,988,294	2,264,103	271,724,191	121.0	45.2
Total	1,795,008,977	77,098,584	1,717,910,392	23.3	26.0

Note: Increase in number of beneficiaries only for Subcomponents 1.1, 1.2, and 1.3.

13. It is important to note that the model captures only part of the project's benefits and underestimates the true economic benefits of the project. The analysis captures the improved student's learning outcomes, but it does not capture other private and social outcomes such as better health, lower criminality, better-informed voters, lower teenage pregnancy, and lower dependence on welfare, which are associated with more developed skills. In addition, the economic model does not capture either the medium or long-term benefits associated with the managing implementation for results (Component 2).



ANNEX 4: Detailed Project Costing

COUNTRY: Kyrgyz Republic
Learning for the Future

Kyrgyz Republic
Learning for the Future
Components by Financiers
(US\$ '000)

	International Development Association		Total (Incl. Taxes)	
	Amount	%	Amount	%
A. Enhancing Teaching and Learning				
1. Increased school readiness for underserved children	16,100	100	16,100	32.20
2. Increased effectiveness in teaching practice	6,100	100	6,100	12.20
3. Technology enabled support for learning	23,700	100	23,700	47.40
4. Enhancing measurement of learning (including Fees for PISA 2024)	2,200	100	2,200	4.40
Subtotal	48,100	100	48,100	96.20
B. Managing implementation for results				
1. Implementation Support	1,600	100	1,600	3.20
2. Evaluations	200	100	200	0.40
3. Citizen Engagement	100	100	100	0.20
Subtotal	1,900	100	1,900	3.80
Total PROJECT COST	50,000	100	50,000	100



ANNEX 5: Evaluations

COUNTRY: Kyrgyz Republic Learning for the Future

1. This annex provides further detail on the evaluations to be undertaken under Subcomponent 2.2 and provides some guidance on their design. The final design will be elaborated by the NLQA&IT during implementation of the project, to be consistent with the component description. There are two evaluations. The first evaluates the impact on child development of the ECE provided at the CbKs supported under Subcomponent 1.1. The second evaluates the impact on teacher effectiveness at target schools of the provision of teacher training (under Subcomponent 1.2) and an IT platform with digital materials (Subcomponent 1.3). Both evaluations are randomized control trials that use a randomized phase-in approach so as to enable a difference-in-difference analysis of changes on treatment and control groups. A sample of early implementers will be included in the treatment group and late implementers in the control group.

Evaluation #1: Child development

2. A total of 500 communities will be selected for inclusion under Subcomponent 1.1, following similar procedures used under KEEP and that will be elaborated in the Operations Manual. The selected communities will be randomly assigned to two groups: early (treatment) and late (control) implementers. A sample of children/communities will be drawn from each group, in line with sample size and strata requirements. The sample must be random and representative. In the year in which the CbKs open for the treatment group, the children of the treatment and control groups will be observed twice, at the beginning (baseline) and the end (end line) of the academic year. In the treatment group, the children will be observed by teachers and parents using the relevant EDI, that is, the instrument to be used by teachers and the instrument to be used by parents, while in the control group, the children will be observed by parents using the parental EDI. The EDI measures child growth in the following domains: Physical Health and Well-Being, Emotional Maturity, Social Competence, Language and Cognitive Development, and Communications Skills and General Knowledge.

3. The impact of the intervention will be assessed by comparing the magnitude of change in EDI scores in the treatment group to the magnitude of change in the control group, commonly known as a 'difference-in-difference' approach. Two comparisons will be used: between the parental scores of the treatment and control groups and between the teacher scores of the treatment group and the parental scores of the control group. Only same-person scores will be used within either group. That is, for both the treatment and control groups, the same child will be observed and scored at baseline and end line. The corollary is that no end-line score for an individual child will be used if there is no corresponding baseline score. Therefore, the sample size will need to account for possible turnover or losses. Positive changes are expected in the scores for both groups, as the children's test scores are expected to increase as they age. The hypothesis is that the positive change in the treatment group will be larger in the control group as a result of the treatment children's participation in the ECE program provided at the CbK.

4. The EDI administered by teachers has already been developed for the Kyrgyz Republic under a previous project. The EDI to be administered by parents will be a slightly modified instrument, which must first be adapted, piloted, and validated before it is used for evaluation. Teachers and parents will be



trained by the NLQA&IT to reliably administer the instrument. The observations will be compiled and analyzed by the NLQA&IT, drawing as needed on TA.

5. The differential performance of the treatment group with respect to the control group is not used as the final value of the PDO indicator. The PDO values are determined rather by the scores of the treatment group at the baseline and at end line.

Evaluation #2: Teacher effectiveness

6. A total of 1,000 schools will be selected for inclusion under Subcomponent 1.2/1.3. The selected schools will be randomly assigned to two groups: early (treatment) and late (control) implementers. A sample of teachers will be drawn from each group, in line with sample size and strata requirements; there must be at least one stratum for primary (preferably Grade 4) and one stratum for secondary teachers (including only teachers of mathematics, physics, chemistry, and biology). The sample must be random and representative. During an academic year before any of the inputs of Subcomponents 1.2 or 1.3 have reached the treatment or control schools, the sampled teachers of both the treatment and control groups will be observed and scored using the CLASS instrument. During the academic year after the inputs of Subcomponents 1.2 and 1.3 have reached the treatment schools but before the inputs of Subcomponents 1.2 and 1.3 have reached the control schools—and preferably at a time in the year that is close to the baseline observation—the same sampled teachers of both the treatment and control groups will again be observed and scored using the CLASS instrument. The CLASS instrument measures three domains of teacher effectiveness, as explained in annex 2.

7. The impact of the intervention will be assessed by comparing the magnitude of change in CLASS scores in the treatment group to the magnitude of change in the control group (again, a ‘difference-in-difference’ approach.) Only same-person scores will be used within either group. That is, for both the treatment and control groups, the same teacher will be observed and scored at baseline and end line. The corollary is that no end-line score for an individual teacher will be used if there is no corresponding baseline score. Therefore, the sample size will need to account for possible turnover or losses. Positive changes are expected in teacher effectiveness among the treatment group because of the training and IT platform with digital TLMs received by the teachers, while no changes (either positive or negative) are expected in teacher effectiveness among the control group (who will not have received any of the inputs at the time of the end line). That is, the hypothesis is that teacher effectiveness will improve over time (as captured by the CLASS score) in the treatment group, and that this increase will be larger (‘difference in difference’) than that observed in the control group over the same time period.

8. The CLASS instrument has already been developed for the Kyrgyz Republic under a previous project. The observations and scoring will be undertaken by persons trained and quality controlled by the NLQA&IT, supported as needed with TA. The NLQA&IT will also be responsible for compiling, analyzing, and reporting on the scores.

9. The differential performance of the treatment group with respect to the control group is not used as the final value of the PDO indicator. The PDO values are determined rather by the scores of the treatment group at baseline and at end line.

10. An indicative timing of evaluation activities is provided in table 5.1.

Table 5.1. Indicative Timing of Activities for Two Evaluations of LFF Project

	2020/21 Year 1	2021/22 Year 2	2022/23 Year 3	2023/24 Year 4	2024/25 Year 5	2025/26 Year 6
EDI	<ul style="list-style-type: none"> Community selection completed Testing of parent-administered instrument 	<ul style="list-style-type: none"> Sampling completed Finalization of teacher-administered instrument Finalization of parent-administered instrument. 	<ul style="list-style-type: none"> First CbKs begin to operate; control communities excluded 	<ul style="list-style-type: none"> CbKs continue to open; control communities excluded Training of observers (teachers and parents) Baseline observations, treatment and control - start of academic year End-line observations, treatment, and control - end of academic year 	<ul style="list-style-type: none"> CbKs open in control communities 	
CL ASS	<ul style="list-style-type: none"> School selection completed Finalization of instrument 	<ul style="list-style-type: none"> Sampling completed Training of observers. Baseline observations treatment and control 	<ul style="list-style-type: none"> Treatment schools receive training and IT platform with digital TLMs; control schools excluded 		<ul style="list-style-type: none"> Refresher training of observers. End-line observations treatment and control. Control schools start to receive training 	<ul style="list-style-type: none"> Receipt of training and IT platform with digital TLMs completed at control schools.



					and IT platform with digital TLMs	
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