

Document of
The World Bank

Report No: ICR1666

IMPLEMENTATION COMPLETION AND RESULTS REPORT
(IDA-H2210 IDA-H3730 TF-96333)

ON A

GRANT

IN THE AMOUNT OF SDR 2.787 MILLION
(US\$4.0 MILLION EQUIVALENT)

AND AN

ADDITIONAL FINANCING GRANT

IN THE AMOUNT OF SDR 0.62 MILLION
(US\$1.0 MILLION EQUIVALENT)

TO

MONGOLIA

FOR A

RURAL EDUCATION AND DEVELOPMENT PROJECT

August 27, 2013

East Asia and Pacific/Education
EACCF
East Asia and Pacific Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective August 1, 2013)

Currency Unit = Tugriks
1,000 MNT = US\$0.67
US\$1.00 = 1,502 MNT
SDR 1 = US\$1.51

FISCAL YEAR
January - December

ABBREVIATIONS AND ACRONYMS

CAS	Country Assistance Strategy	MEA	Mongolia Education Alliance
ECD	Education and Culture Department	MECS	Ministry of Education, Culture and Science
EEC	Education Evaluation Center	MOF	Ministry of Finance
EGMA	Early Grade Mathematics Assessment	NCB	National Competitive Bidding
EGRA	Early Grade Reading Assessment	NGOs	Non-Government Organizations
EGSPRS	Economic Growth Support and Poverty Reduction Strategy	OLPC	One Laptop Per Child
EPDF	Education Program Development Fund	PAD	Project Appraisal Document
ESMP2	Education Sector Master Plan	PIRLS	Progress in International Reading Literacy Study
FM	Financial management	PDO	Project Development Objectives
GGSEDM	General Guideline for Socio-Economic Development of Mongolia	PMU	Project Management Unit
GOM	Government of Mongolia	PPF	Project Preparation Facility
ICB	International Competitive Bidding	READ	Rural Education and Development
ICDL	International Children's Digital Library	TIMSS	Trends in International Mathematics and Science Study
ICR	Implementation Completion Report	QER	Quality Enhancement Review
IDA	International Development Association	VSO	Voluntary Service Overseas
M&E	Monitoring and Evaluation		

Vice President:	Axel van Trotsenburg
Country Director:	Klaus Rohland
Sector Manager:	Luis Benveniste
Project Team Leader:	Prateek Tandon
ICR Team Leader:	Prateek Tandon

MONGOLIA
RURAL EDUCATION AND DEVELOPMENT PROJECT

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A. Basic Information			
Country:	Mongolia	Project Name:	Rural Education and Development (READ) Project (formerly Rural Education Support Project)
Project ID:	P096328	L/C/TF Number(s):	IDA-H2210,IDA-H3730,TF-96333
ICR Date:	08/27/2010	ICR Type:	Core ICR
Lending Instrument:	SIL	Borrower:	MONGOLIA
Original Total Commitment:	USD 4.00M	Disbursed Amount:	USD 5.01M
Revised Amount:	USD 4.76 ¹ M		
Environmental Category: C			
Implementing Agencies: Ministry of Education, Culture and Science			
Cofinanciers and Other External Partners:			

B. Key Dates				
Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	07/01/2005	Effectiveness:	08/10/2006	08/10/2006
Appraisal:	02/27/2006	Restructuring(s):		06/26/2008 06/30/2008
Approval:	05/23/2006	Mid-term Review:	09/30/2008	09/15/2008
		Closing:	02/29/2012	02/28/2013

C. Ratings Summary			
C.1 Performance Rating by ICR			
Outcomes:	Satisfactory		
Risk to Development Outcome:	Moderate		
Bank Performance:	Satisfactory		
Borrower Performance:	Satisfactory		
C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)			
Bank	Ratings	Borrower	Ratings
Quality at Entry:	Satisfactory	Government:	Satisfactory

¹ A system glitch incorrectly captures the revised amount as US\$4.76 million, instead of US\$5 million. This issue could not be rectified by the time of ICR submission.

Quality of Supervision:	Satisfactory	Implementing Agency/Agencies:	Satisfactory
Overall Bank Performance:	Satisfactory	Overall Borrower Performance:	Satisfactory

C.3 Quality at Entry and Implementation Performance Indicators			
Implementation Performance	Indicators	QAG Assessments (if any)	Rating
Potential Problem Project at any time (Yes/No):	No	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	No	Quality of Supervision (QSA):	None
DO rating before Closing/Inactive status:	Moderately Satisfactory		

D. Sector and Theme Codes		
	Original	Actual
Sector Code (as % of total Bank financing)		
Central government administration	25	25
Primary education	75	75
Theme Code (as % of total Bank financing)		
Education for all	67	67
Rural services and infrastructure	33	33

E. Bank Staff		
Positions	At ICR	At Approval
Vice President:	Axel van Trotsenburg	Jeffrey S. Gutman (acting)
Country Director:	Klaus Rohland	David R. Dollar
Sector Manager:	Luis Benveniste	Christopher J. Thomas
Project Team Leader:	Prateek Tandon	Charles Abelmann
ICR Team Leader:	Prateek Tandon	
ICR Primary Author:	Sandra Beemer, Franco Russo	

F. Results Framework Analysis

Project Development Objectives (from Project Appraisal Document)

The objective of the project is to assist the Recipient in enhancing the quality of education in rural primary schools, grades 1-5, by improving students' access to, and use of, quality learning materials and improving teachers' skills through promoting professional networks.

Revised Project Development Objectives (as approved by original approving authority)
N/A

(a) PDO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1:	Students in grades 1-5 of bagh and soum schools will increase their reading time in class and demonstrate improvements in their literacy skills (Yes/No)			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met. There was 100% increase in reading time based on the impact evaluation results.			
Indicator 2:	Number of students in grades 1-5 in rural bagh and soum schools have access to learning materials and improved teaching practices			
Value quantitative or Qualitative)	0	128,000		130,000
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was exceeded.			
Indicator 3:	Number of teachers, librarians, school directors and ECD primary methodologists in rural bagh and soum schools who have participated in project professional development activities			
Value quantitative or Qualitative)	0	4,029		4,549
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was exceeded.			
Indicator 4:	Classroom teaching practices reflect enhanced knowledge in reading instruction and use of learning materials (Yes/No)			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met. Teacher training had a positive impact on 98 percent of the teachers in terms of their knowledge of reading and writing instruction.			

Indicator 5:	Use of student assessment data and reports to inform policy decisions			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met. The grade 5 student assessment and policy studies were completed and in particular, the teacher training study changed the teacher training policy with the institutionalization of a cascade model.			
Indicator 6:	Use of outcome based contracts that reflect teaching practices linked to child-friendly schools.			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met.			
Indicator 7:	Number of students in selected rural bagh and soum schools that received laptops connected to servers with the improved Mongolian adapted version of ICDL software installed			
Value quantitative or Qualitative)	0	2,000		2,000
Date achieved	5/30/2008	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met.			
Indicator 8:	Number of teachers in selected rural bagh and soum primary schools that received integrated training in effective use of XO laptop computers and ICDL software including basic hardware and software troubleshooting			
Value quantitative or Qualitative)	0	200		200
Date achieved	5/30/2008	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met.			
Indicator 9:	Classroom teaching practices in selected rural bagh and soum schools reflect enhanced knowledge in reading instructions and use of XO laptop computers and ICDL as learning materials			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/30/2008	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met. The 2011 and 2012 baseline and follow-up survey show a slight increase in improved reading.			

Indicator 10:	Completion of baseline and follow-up of teacher and classroom surveys			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/30/2008	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met. There was a 2007 and 2008 and a 2011 and 2012 baseline and follow-up survey completed			
Indicator 11:	Completion of baseline and follow-up assessments of students in terms of literacy, math, ICT skills and behavioral skills (critical thinking, discipline, motivation etc.)			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met. There was a 2007 and 2008, and a 2011 and 2012 baseline and follow-up survey completed			

(b) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1:	Number of classroom libraries established in grades 1-5 in 383 schools			
Value quantitative or Qualitative)	0	4,029		3,560
Date achieved	5/16/2007	2/28/2013		1/15/2013
Comments (incl. % achievement)	Target was met because all rural schools were covered. The actual number decreased due to modifications made in the school cycle and a new grade skipping policy.			
Indicator 2:	Number of bagh and soum librarians, school directors and ECD primary methodologists who participated in professional development activities			
Value quantitative or Qualitative)	0 librarian & principals 0 ECD methodologist	1,149 librarians & principals 21 EDC methodologists		1,149 librarians & principals 21 ECD methodologists
Date achieved	5/16/2007	2/28/2013		1/15/2013
Comments (incl. % achievement)	Target was met.			

Indicator 3:	Number of additional qualified primary teachers resulting from project interventions (Core IDA)			
Value quantitative or Qualitative)	0	4,029		4,144
Date achieved	5/16/2007	2/28/2013		1/15/2013
Comments (incl. % achievement)	Target was exceeded.			
Indicator 4:	Classrooms covered by the project will increase student's classroom reading time per week by 100% (indicator measures the change)			
Value quantitative or Qualitative)	0	100%		100%
Date achieved	5/16/2007	2/28/2013		1/15/2013
Comments (incl. % achievement)	Target was met.			
Indicator 5:	Teachers covered by the project will increase classroom literacy activities per week by 100% (indicator measures the change)			
Value quantitative or Qualitative)	0	100%		100%
Date achieved	5/16/2007	2/28/2013		1/15/2013
Comments (incl. % achievement)	Target was met			
Indicator 6:	Students read 30 books per year			
Value quantitative or Qualitative)	0	30		40
Date achieved	5/16/2007	2/28/2013		1/15/2013
Comments (incl. % achievement)	Target was exceeded.			
Indicator 7:	Number of computers delivered to schools for digital libraries			
Value quantitative or Qualitative)	0	125		125
Date achieved	5/16/2007	2/28/2013		1/15/2013
Comments (incl. % achievement)	Target was met. However, the number of schools receiving computers was exceeded (10 schools actual versus 5 schools planned).			

Indicator 8:	Number of schools that received furniture and maps			
Value quantitative or Qualitative)	0	4,000		3,560
Date achieved	5/16/2007	2/28/2013		1/15/2013
Comments (incl. % achievement)	Target was met because all rural schools were covered. The actual number decreased due to modifications made in the school cycle and a new grade skipping policy.			
Indicator 9:	Number of new children's books available on the local market, either written by local authors or translated into Mongolian from international publishers			
Value quantitative or Qualitative)	0	150		200
Date achieved	5/16/2007	2/28/2013		1/15/2013
Comments (incl. % achievement)	Target was exceeded, including 75 new titles developed by Mongolian authors.			
Indicator 10:	Number of books delivered to classrooms by READ			
Value quantitative or Qualitative)	0	670,000		676,575
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was exceeded.			
Indicator 11:	Teachers maintain student writing portfolios in 50% of project classrooms			
Value quantitative or Qualitative)	0	50%		90%
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was exceeded based on verification reports submitted by aimag education departments.			
Indicator 12:	Number of titles related to teaching practices in lower grades translated and distributed to universities and teachers			
Value quantitative or Qualitative)	0	3		3
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met.			

Indicator 13:	Increased opportunity for teachers to meet with and observe instruction of teachers from other schools (Yes/No)			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was achieved. Teachers were provided the opportunity which was validated by the surveys of 2007 and 2008.			
Indicator 14:	Number of teachers from core schools trained and supported as peer mentors			
Value quantitative or Qualitative)	N/A	315		178
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	The number of mentor teachers required were fewer than originally estimated but 178 from 95 core schools was more than appropriate for the project.			
Indicator 15:	Number of visits per school from peer mentors to classrooms in 383 schools			
Value quantitative or Qualitative)	0.00	2.00		2.26
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was exceeded.			
Indicator 16:	Number of full page ads about the benefits of reading appear in newspapers			
Value quantitative or Qualitative)	0	85		85
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met.			
Indicator 17:	Number of airtime minutes on TV promoting reading			
Value quantitative or Qualitative)	0	240		240
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met.			

Indicator 18:	Satisfaction results of all professional development participants			
Value quantitative or Qualitative)	0	100%		100%
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met. All participants indicated that they had positively benefitted from the project with 99% indicated they had benefitted significantly from the project.			
Indicator 19:	Number of hours per teacher a week that teachers use the XO laptop computers for planning and designing class related activities			
Value quantitative or Qualitative)	0.0	5.0		5.0
Date achieved	5/30/2008	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met. Data provided by the 2012 impact evaluation.			
Indicator 20:	Number of hours per teacher a week that teachers use ICDL for in-class activities			
Value quantitative or Qualitative)	0.0	5.0		5.0
Date achieved	5/30/2008	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met. Data provided by the 2012 impact evaluation.			
Indicator 21:	Number of hours per teacher a week that teachers use the XO laptop computers for non-class related activities but for their own-activities			
Value quantitative or Qualitative)	0.0	5.0		3.0
Date achieved	5/30/2008	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was missed. Data provided by the 2012 impact evaluation.			
Indicator 22:	Number of hours a week of laptop and/or ICDL use in basic subjects			
Value quantitative or Qualitative)	0.0	5.0		5.0
Date achieved	5/30/2008	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met. Data provided by the 2012 impact evaluation.			

Indicator 23:	Number of hours per student a week that students effectively use the laptops and ICDL for school related work			
Value quantitative or Qualitative)	0.0	5.0		5.0
Date achieved	5/30/2008	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met.			
Indicator 24:	Number of hours per student a week that effectively use the XO laptop computers and ICDL for non-school related work (outside school hours)			
Value quantitative or Qualitative)	0.0	5.0		5.0
Date achieved	5/30/2008	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met.			
Indicator 25:	Number of students (hours a week per student) that reported shared-use of XO laptop computers/ICDL with their family			
Value quantitative or Qualitative)	0	500		500
Date achieved	5/30/2008	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met.			
Indicator 26:	Students from nationally representative sample of schools participate in National Assessment of Student Progress for Mongolian language and Mathematics and TIMSS			
Value quantitative or Qualitative)	No TIMSS participation prior to project.	TIMSS completed and Mongolia benchmarked.		Partially met.
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Mongolia participated in the data collection but data quality was poor and Mongolia was not benchmarked.			
Indicator 27:	Assessment tool available for use by all schools for grade 5 students			
Value quantitative or Qualitative)	N/A	Assessment completed		Assessment completed
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met. National grade 5 assessment on literacy and math was conducted in 2008.			

Indicator 28:	Test design used to develop writing rubrics that can be used widely by teachers to promote better writing (Yes/No)			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met. The test was developed.			
Indicator 29:	Use of rubrics to evaluate student writing becomes part of teaching practice (Yes/No)			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met. The test design was used to develop 8 booklets with writing rubrics which is being used by teachers to assess writing skills.			
Indicator 30:	Test materials used by teacher professional development cluster (Yes/No)			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met. Teacher development clusters are using the 8 booklets as well.			
Indicator 31:	System of learning assessment at the primary level			
Value quantitative or Qualitative)	No	Yes		Yes
Date achieved	5/16/2007	2/28/2013		2/28/2013
	Utility of the learning assessment system			
Value quantitative or Qualitative)	1	2		2
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met.			
Indicator 32:	Survey on interpersonal relationship in a local context			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Study was completed by the Education Evaluations Center (EEC)			

Indicator 33:	Children's book market survey			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Study was completed by the EEC.			
Indicator 34:	Primary teacher's profile study			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Study was completed by the EEC			
Indicator 35:	Education assistance to the poor: targeting and implementation issues			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Study was completed by the EEC.			
Indicator 36:	READ'S training of local officers on efficient targeting scheme for child benefits			
Value quantitative or Qualitative)	N/A	Yes		Yes
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Training was conducted in April 2009.			
Indicator 37:	Number of schools receive and participate in delivery confirmation to monitor libraries arrive to their classrooms			
Value quantitative or Qualitative)	N/A	383		383
Date achieved	5/16/2007	2/28/2013		2/28/2013
Comments (incl. % achievement)	Target was met.			

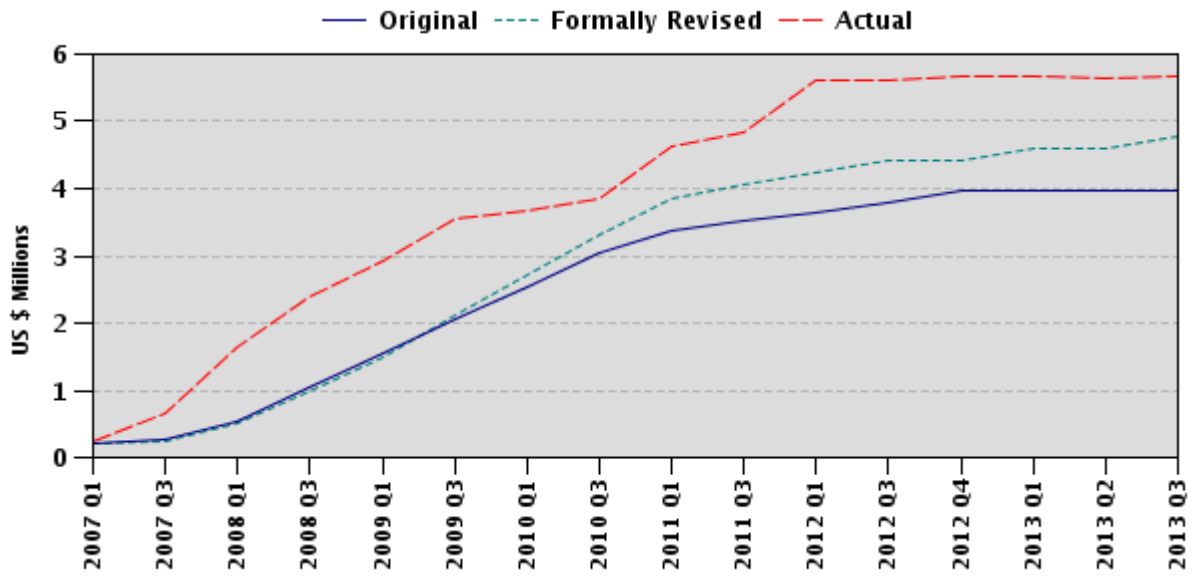
G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	07/14/2006	Satisfactory	Satisfactory	0.00
2	10/11/2007	Satisfactory	Satisfactory	1.65
3	06/12/2008	Satisfactory	Satisfactory	2.73
4	11/16/2008	Satisfactory	Satisfactory	3.08
5	06/12/2009	Satisfactory	Satisfactory	3.54
6	12/23/2009	Satisfactory	Satisfactory	3.65
7	06/29/2010	Satisfactory	Satisfactory	4.04
8	01/01/2011	Satisfactory	Satisfactory	4.20
9	07/18/2011	Moderately Satisfactory	Moderately Satisfactory	4.78
10	01/29/2012	Satisfactory	Satisfactory	4.96
11	07/04/2012	Satisfactory	Satisfactory	5.01
12	02/26/2013	Moderately Satisfactory	Moderately Satisfactory	5.01

H. Restructuring (if any)

Restructuring Date(s)	Board Approved PDO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in USD millions	Reason for Restructuring & Key Changes Made
		DO	IP		
06/26/2008		S	S	2.73	Additional financing of US\$1 million
06/30/2008		S	S	2.73	Reallocation of grant proceeds

I. Disbursement Profile²



² The data sheet and disbursement graphs display different actual amounts disbursed due to a glitch in the system pulling data from different sources of funding. This technical issue could not be resolved by the time of ICR submission, and therefore, the ICR bases its analysis on the disbursement status at the time of account closures (i.e., US\$4.86 million), which mirrors the information in the loan system.

1. Project Context, Development Objectives and Design

1. **Country and Sector Context.** In 2006, the Government of Mongolia (GOM) and the education sector were recovering from the fall of communism and the subsequent departure of Soviet support. The GOM was working hard to protect public spending on education and to recover from a drop in enrollments that occurred in the mid-1990's. Education remained a high priority within the Government's overall action plan. The Government Action Plan (GAP) and the Government's Economic Growth Support and Poverty Reduction Strategy (EGSPRS) supported strengthening basic education in Mongolia by raising the capacity of education administrators and teachers and fostering competition.

2. The Ministry of Education, Culture and Science (MECS) had developed a new Education Sector Master Plan (ESMP2) for 2006-2015 that built on the General Guideline for Socio-Economic Development of Mongolia (GGSEDM) for 2006-2008. The GGSEDM identified five priority actions for education: (i) reduce school dropouts and provide elementary education for all children (raising primary education coverage to 94.5 percent by 2008); (ii) transform secondary education into an 11-year system by 2006 and a 12-year system by 2007; (iii) improve the learning environment and physical facilities at secondary schools and assure sufficient supply of teachers and textbooks; (iv) lower gender inequality in primary and secondary school enrollment as well as literacy levels; and (v) increase access to schools for children with disabilities by establishing necessary equipment at schools. The ESMP2 sought to sequence the government priorities by: (i) upgrading education quality at all levels of schooling and producing citizens who could function effectively in a modern market economy; (ii) providing education services that could be accessed by children in all parts of the country, including rural areas, and poor and vulnerable groups; and (iii) improving the management capacity of central and local educational institutions at all levels.

3. Since Mongolia became a member of the World Bank in 1991, there had been no direct loan, credit or grant to the education sector. The Bank's involvement in the education sector was consistent with the GOM's commitment to the achievement of the Millennium Development Goals (MDGs) by 2015. Moreover, the project was consistent with the Country Assistance Strategy (CAS) 2005-2008 which had the goal of reducing rural-urban disparities. The EGSPRS set as a priority improving quality and access to basic education services and was an important pillar of the Bank support as articulated in the CAS. The government knew that low levels of educational attainment were key determinants of poverty and that poverty could be a key factor that limited access to and quality of schooling. Therefore, investment in education was important because improvements in the sector could break the intergenerational transmission of poverty.

1.2 Original Project Development Objectives (PDO) and Key Indicators

4. The objective of the project was to assist the Recipient in enhancing the quality of education in rural primary schools, grades 1-5, by improving students' access to, and use of, quality learning materials and improving teachers' skills through promoting professional networks. The key indicators selected to measure progress toward the PDO were: (i) students in grades 1-5 of bagh and soum³ schools will increase their reading time in class and demonstrate improvements in their literacy skills; (ii) number of students in grades 1-5 in rural bagh and soum schools have access to learning materials and improved teaching practices; (iii) number of teachers, librarians, school directors and Education and Culture Department (ECD) primary methodologists in rural bagh and soum schools who have participated in project professional development activities; (iv) classroom teaching practices reflect enhanced knowledge in reading instruction and use of learning materials; (v) use of student assessment data and reports to inform policy decisions; and (vi) use of outcome based contracts that reflect teaching practices linked to child-friendly schools.

1.3 Revised PDO (as approved by original approving authority) and Key Indicators, and reasons/justification

5. The PDO was not revised during project implementation, and the key development indicators remained the same throughout the life of the project. However, at the time of the 2008 additional financing, twelve new intermediate output indicators were added to the project to monitor the new activities associated with the distribution of 2,000 customized children's laptop computers with Mongolia-specific educational content to selected pilot rural primary schools.

1.4 Main Beneficiaries

6. The targeted beneficiaries in the project consisted of: (i) all children in rural bagh and soum primary schools including Kazakh children which are the only ethnic minority group in Mongolia; (ii) staff, school librarians, manager principals and methodologists in rural areas; (iii) ECD professional development providers and primary methodologists; (iv) parents and communities through the public reading campaign; (v) the Education Evaluation Center (EEC) to improve their capacity for domestic and international assessment; and (vi) staff of the MECS.

³ Aimags (provinces) are divided into districts called soums and baghs are small towns or villages in soums. Mongolia is divided into 21 aimags, or provinces, not including the capital of Ulaanbaatar.

1.5 Original Components

7. There are slight differences in wording between the Project Appraisal Document (PAD) and the financing agreement for the component names. Therefore, the Implementation Completion Report (ICR) will refer to the PAD's component description.

8. **Component 1: Improving Teaching and Learning in Rural Schools. (approximately US\$2.87 million).** This component included support for: (i) the establishment of classroom libraries in rural schools and selected kindergartens, dorms and non-formal education centers; (ii) the improvement in learning conditions in rural schools through the provision of classroom furniture for grade 1 students and books shelves for grade 1-5 classrooms; (iii) the development and implementation of a training program to promote improved teaching strategies among teachers, ECD's primary methodologists, school principals and managers, and librarians as well as the provision of technical assistance; and (iv) promotion of reading activities for families and children while at home and at school.

9. **Component 2: Improving National Monitoring of Quality and Efficiency (approximately US\$0.38 million).** This component was to: (i) strengthen the capacity of the EEC within MECS to undertake large-scale assessment activities; and (ii) improve efficiency of education policy tools through the carrying out of studies.

10. **Component 3: Project Management and Evaluation (approximately US\$0.75 million).** This component provided financial assistance for project management and monitoring and evaluation of the implementation of the project, including provision of technical assistance, staffing, facilities and other resources in respect of such activities.

1.6 Revised Components

11. On June 26, 2008, the Bank approved an additional financing grant in the amount of US\$1 million to scale up activities under READ in rural schools that specifically supported the distribution of customized children's laptop computers (XO laptop computers, a proprietary item produced only by the One Laptop Per Child (OLPC) organization) with Mongolia-specific educational content to children in selected pilot rural primary schools.⁴ The proposed new activities fit within the original project objective and complemented original component 1 activities to provide improved learning materials. Specifically, the additional financing grant supported: (i) the procurement of approximately 2,000 XO laptop computers from the OLPC organization with Mongolia-specific educational content; (ii) the training of teachers and students in the successful use of XO laptop computers; and (iii) the design of an effective monitoring and evaluation system.

⁴ Project Paper for an Additional Financing, p. 4, report number 43424-MN, World Bank, May 2008

1.7 Other significant changes

12. As indicated above, on June 26, 2008, the Bank approved an additional financing grant in the amount of US\$1 million to scale up activities under READ in rural schools with a closing date of February 28, 2013. The original project closed on February 29, 2012 as designed.

13. On June 30, 2008, the Bank approved the government's request to reallocate grant proceeds under the original grant. The request was made to provide additional resources to support the acquisition of additional equipment and capacity building activities for the EEC under component 2 and off-set additional operating costs.

14. On March 18, 2010, the Bank and the government signed a US\$1 million grant agreement with funding from the Education Program Development Fund (EPDF) to support the government in a renewed effort⁵ to participate in the Trends in International Mathematics and Science Study (TIMSS) and the Progress in International Reading Literacy Study (PIRLS). Although the grant was linked to the project to facilitate administration and disbursement, it had its own development objective and was treated as a separate activity. An Implementation Completion Memorandum to evaluate the EPDF grant was prepared on November 7, 2011. Therefore, this ICR will not include a discussion or evaluation of that grant.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry

15. **Project Preparation.** In 2005, the GOM and the International Development Association (IDA) decided to support the EGSPRS with a sector investment grant under IDA 14 that would focus on quality issues in rural education. In addition, the project was based on the CAS that called for institutional reforms to improve public sector and market efficiency. The Bank preparation and appraisal teams consisted of technical experts that were appropriate for the development of the project. Project preparation was also spread over several months, which allowed for a sector-wide dialogue with the government, MECS, non-government organizations (NGOs) and the donor community on the project. There was a consultative workshop held with publishers/printers, authors, MECS staff and local organizations involved in teacher training and in supporting children's books in hard copy or digital format. There was a project preparation facility (PPF) grant which allowed MECS to have access to an advance on the IDA grant that was used to lay the foundation for the full implementation of the project. The PPF grant supported: (i) cataloging supplementary reading materials that were currently available

⁵ The original project included support for the government's participation in the 2007 TIMSS exercise, which it successfully carried out. However, data collection and obtaining good quality statistics proved to be challenging for Mongolia given the novelty of conducting such large scale sampling and testing. Therefore, Mongolia's data was only included in the TIMSS report annexes, which led to a renewed effort in 2010 to be featured in the main section of the 2011 TIMSS report.

on the market and categorizing them by age appropriateness, concepts conveyed, and links to curricular activities; (ii) development of instruments to assess student reading and comprehension levels; (iii) development and/or modification of training clusters for the project already being piloted in Mongolia; (iv) selection of a local firm to assist MECS with the book selection process; (v) international technical support for how to handle bidding document issues related to books where local authors hold rights, where printers hold rights and/or where public domain resources exist; (vi) building the financial management and procurement capacity of staff who would implement the project; (vii) writing of the project implementation plan and financial management manual; and (viii) equipping and training of implementing units to ensure a rapid project start up. Moreover, the PPF could be used to work with the International Children's Digital Library (ICDL) to ensure that it was hosted on a local server within MECS as well as to support the EEC as it began to prepare for Mongolia's participation in the 2007 TIMSS. The project preparation process was thoughtful, collaborative, and technically sound. In addition, and with the support of the PPF, the preparation process gave the MECS the opportunity to be ready for a quick start-up once the project became effective. This was especially important since this was the first IDA-supported education project for Mongolia and it proved to be a highly successful aspect of the project preparation process.

16. **Project Design.** The READ project design fit squarely into the government's EGSPRS, the ESMP2 (2006-2015) and the Bank's CAS 2005-2008. They shared the common objectives of establishing an accessible and high quality education system that would nourish the intellectual development of Mongolian citizens while fostering economic growth. The project design took into consideration comments from the January 2006 Quality Enhancement Review (QER) as well as the comments from peer reviewers during the concept and appraisal review meetings which included: (i) making the PDO more precise; (ii) not overestimating the outcome of the project in terms of student learning but to carry out, in a sample of schools, the collection of baseline information on reading levels, teaching practices and reading habits to track changes; (iii) strengthening the institutional linkages with the line departments; and (iv) clarifying the role of the reading campaign. Since this was the first Bank-supported education project in Mongolia, the preparation team did not have lessons from past Mongolia projects. However, the team did learn lessons from other Bank projects such as preparing a simple, well designed project is important to ensure smooth implementation given the limited experience and capacity within the MECS. In addition, the design team drew sector specific lessons from similar Bank-supported projects in Moldova, Brazil and Bolivia as well as other international projects and research on literacy.

17. The overall project design was focused on quality rather than access and school construction. This was a shift in focus for MECS. This change in focus was significant because it introduced reading-centered activities before the development of early grade reading tools such as Early Grade Reading Assessment – EGRA, which are available today and gaining in popularity in the region. The project PDO was precise and key indicators were appropriate for measuring progress toward achieving the PDO. The project results framework was based on the early log frame structure and included 37 intermediate indicators all of which were appropriate for measuring implementation of

the project components. While this was a large number of indicators, they were largely input indicators which were included to assist the MECS, as a new borrower, in monitoring the implementation of the project. The project included a baseline and follow-on survey to measure the impact of the project's new classroom libraries and digital libraries. The design was also to be implemented at the classroom level in an effort to empower teachers and included the creation of a cascade teacher training model. The preparation team identified project risks and proposed adequate mitigation measures. Given the limited capacity to implement Bank-support projects, the design appropriately included the creation of a steering committee that included staff from Ministry of Finance (MOF), MECS, reading experts and representatives from local NGOs to oversee the work of the project management unit (PMU) and provide guidance. The design also included the support of a Voluntary Service Overseas (VSO) volunteer who was contracted to help the PMU with project implementation. This project management design along with the PPF grant was highly appropriate to ensure a quick start up to project activities, smooth project implementation, and continued ownership of the READ project. The additional financing did not modify the original design but added US\$1 million to scale up activities under READ by: (i) purchasing 2,000 children's laptop computers in selected pilot rural primary schools to enhance the learning experience; (ii) providing additional teacher training in the utilization of the computers; and (iii) examining the role of information technology in improving the overall quality and effectiveness of education. At that time, the Bank team added appropriate intermediate indicators to measure implementation and the impact of these activities.

2.2 Implementation

18. As mentioned above, implementation actually began with the PPF grant that allowed MECS to have access to an advance on the IDA grant, which was used to lay the foundation for the full implementation of the project. This was instrumental for ensuring that: (i) the government met all the conditions of effectiveness on time; (ii) a firm⁶ was contracted to manage the book selection process; (iii) a contract with the International Children's Digital Library (ICDL) was signed to begin the digital library component; and (iv) a local publishers workshop was completed, which explained the process of how they could submit books to be considered for inclusion in the READ project libraries. Once the project became effective in August 2006, implementation was well underway with no delays. By May 2007, the MECS and PMU had: (i) completed the baseline survey as designed; (ii) selected 200 titles from 1,000 submitted by 21 publishers and already received 600,000 titles that were grade-specific; (iii) purchased bookshelves in all but one aimag; (iv) begun work on translating books into Kazakh language; (v) begun selecting books for teachers; (vi) begun teacher training; (vii) started purchasing maps for schools; (viii) started adding books to the ICDL and selecting the pilot schools for the ICDL activities; (ix) started preparation of the book voucher program that would be used to replace and augment the book collections; (x) begun the professional development and

⁶ The Open Society Forum (OSF) was selected to manage the book selection process which involved collecting books, working with an international publishing expert to train the selection panel and overseeing the process. All of this was to ensure maximum transparency in the book selection process.

public reading campaign that would be launched in seven pilot aimags; (xi) successfully completed the administration of TIMMS and had forwarded the results to Stats Canada; and (xii) begun consultation on the development of the grade 5 reading, writing, and mathematics assessments. The VSO volunteer had also begun to work with the PMU. This was substantial progress in one year considering the MECS had never implemented a Bank-supported project prior to READ.

19. Since the READ implementation was progressing well, the GOM, in May 2008, requested US\$1 million additional financing to scale-up the READ activities, which was approved by the Bank. At that time, the project had disbursed 56 percent (approximately US\$2.38 million) of the IDA grant, all time bound actions had been met, there had been full compliance with all covenants, the public reception of the project was positive, the MECS was exploring opportunities to expand the project to support reading materials for students in higher grades and the project was rated **satisfactory**. In May 2008, the GOM also requested a reallocation of the Special Drawing Rights (SDRs) in the amount of approximately US\$500,000 equivalent. The US\$500,000 were gains in the project due to a weak U.S. Dollar. These funds were reallocated to support Component 2 and 3. In September 2008 there was a mid-term review (MTR) that determined the project was still relevant, the development objectives remained valid, the PDO was achievable, and disbursements were on track with 60 percent of the original US\$4 million grant.

20. There were substantial successes in the implementation of all project activities. By the end of the project, the PMU, with the support of the VSO and technical assistance, had been able to satisfactorily implement all original and additionally financed activities in the project despite the remoteness of the locations. This was supported by an audit of schools that showed: (i) all the books in all the classrooms visited were present; (ii) maps were posted in all classrooms and teachers reported that they were used as a resource to inform teaching practices; (iii) 2,000 students in selected rural bagh and soum primary schools received netbooks connected to servers and with the improved Mongolian and adapted version of ICDL software installed; (iv) all the teachers were trained through the cascade system with no observed dilution of the training; and (v) all policy studies were completed. Moreover, the 2007 baseline survey and 2008 follow up survey were carried out as designed as well as the netbook impact evaluation completed. By 2012, the netbooks were all distributed and teachers trained on the utilization of the computers in the classroom and finally, the impact evaluation was completed. Lastly, the successful partnership with the ICDL not only facilitated Mongolia's access to the global education platform and exposure to international expertise but also helped bring Mongolia-specific education materials to a global audience.⁷ Again, these are highly laudable accomplishments.

⁷ In 2008, an ICDL staff member listed three Mongolian titles under the "featured books" section of the ICDL website. Furthermore, Mongolian books can be accessed directly from the website's homepage under "from our shelves", which exposes Mongolia-specific books to a much wider audience than would have been possible without the partnership with ICDL.

21. There were also challenges during implementation. Mongolia participated, as designed, in 2007 TIMSS and submitted the data to the International Education Association (IEA). However, Mongolia was not included in the international exhibits of the main report due to non-compliance of protocol and poor data quality. This was not surprising considering Mongolia had not participated in TIMSS prior to 2007 and had limited knowledge of the process. In the end, there was a one-page summary of Mongolian student achievement data included in an appendix in the International TIMSS Report, and information on the Mongolian mathematics and science curriculum was included in the relevant sections of the main report. More important was the capacity development for staff within EEC that then led to: (i) 80 enumerators being trained; (ii) training of early childhood development methodologists; and (iii) field test experience. The second challenge faced during implementation was the procurement of laptop computers from the OLPC. The original design included single source procurement of the proprietary XO laptops however, the OLPC would not agree on the use of the Bank standard bidding documents, which led the government and the Bank to use International Competitive Bidding (ICB) instead. This quickly resolved the problem which allowed the government to successfully purchase and distribute 2,000 netbook computers, train teachers and conduct the impact evaluation.

22. There were twelve Bank review and implementation support missions from June 2006 through February 2013. The makeup of the Bank teams was well balanced with financial management, procurement, monitoring and evaluation specialists, and consultants as well as technical specialists⁸ as necessary. The original grant activities were all completed as designed by February 29, 2012. There was a cancellation of SDR 160,667.28 due to SDR:US\$ exchange rate gains. The additional financing grant activities were all completed by the February 28, 2013 closing date with all SDR 620,000 almost fully disbursed. The total project disbursements in US\$ equivalent were US\$4.86 million⁹ or 97.2 percent of the combined total of US\$5 million equivalent.

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

23. **Design.** The M&E design was two-fold. The monitoring of the results framework and project outputs was to be done by the PMU while the impact of the project would be assessed through an impact evaluation, with the help of technical assistance, that would assess any changes in teaching practices as well as the effects on children's reading levels. The impact evaluation was to be conducted in two stages with the first stage consisting of

⁸ The missions included School-based Management specialists, teacher development experts, quality assurance practitioners, and data management experts when appropriate for review of project activities.

⁹ The difference between disbursed amounts in the data sheet, the disbursement graph and the amounts referenced in the ICR analysis is due to the fact that the data sheet and disbursement graph pull information from different funding sources and represent a glitch in the system. This glitch could not be rectified by the time of ICR submission. The ICR analysis is thus based on achievements made through funds that supported the project's PDO (i.e., the original grant and the additional financing) for a total of US\$5 million, of which US\$4.86 million were disbursed as recorded in the Bank's loan system. A separate Implementation Completion Memorandum to evaluate the EPDF was prepared on November 7, 2011.

a baseline teacher/classroom survey and literacy assessment and the second stage being a follow-up survey conducted a year later. The evaluation looked at classrooms that: (i) were given books; (ii) received books and teacher training; and (iii) did not benefit from any project support. At the time of the additional financing, the second evaluation was added to measure the impact of the netbooks on teachers and students. As stated previously, the original results framework was appropriate for the project design to measure achievement of the PDO. The intermediate indicators were also linked to the components and were appropriate to measure intermediate level achievements. The results framework included 37 intermediate indicators. While this is a large number of indicators, they were output indicators included to ensure that project activities were completed as designed. The inclusion of the original impact evaluation was highly relevant and an important design feature for understanding the impact of the project interventions. However, the design would have benefited from delaying the follow-up survey until year three of the project, which would have provided more time to fully measure the project impact. The impact evaluation added at the time of the additional financing was equally relevant for the introduction of the netbooks computers.

24. **Implementation and Utilization.** The MECS and PMU regularly provided Bank missions with data and information that allowed the teams to make judgments on progress toward achieving the PDO and the project's overall implementation. This information was consistently reported on by the Bank in aide-memoires and ISRs. The PMU also monitored the project outputs and used the information to make the appropriate adjustments in their annual plans and progress reports. In addition, both impact evaluations were carried out during the project period and the original impact evaluation was carried out as designed. The data was analyzed during which it became evident that the period was too short to tease out the full benefits of the project interventions. However, the data and analysis did show that there were already signs of improvements in teachers' abilities to use reading materials in their teaching and that students, parents and communities were responding positively. The impact evaluation for the netbooks was modified during implementation to a difference-in-difference evaluation due to a change in aims that were to receive the netbooks. The minister/vice minister modified the design and the computers were sent to aims of their choice. While this was not as designed, the PMU and Bank team were nimble in adjusting the methodology which was an appropriate alternative to the original design. The evaluation required a baseline survey and a follow-up survey, both of which were completed with the data analyzed and provided in the form of an Impact Evaluation report. The report provided valuable information on the overall impact of this intervention and is being used by the government to assess the activities to be included in future donor supported projects.

2.4 Safeguard and Fiduciary Compliance

25. **Safeguards.** This is a Category C project and no policies were triggered.

26. **Financial Management and Audits:** Financial management (FM) was rated **satisfactory** throughout implementation. FM team members participated in supervision

and carried out financial management reviews: each mission confirmed that the project had an adequate project financial management system in place, which provided accurate and timely information on the utilization of grant funds. The project was also successful early on in preparing quarterly and annual financial plans as recommended by the Bank's FM team and introducing a computerized accounting system – InfoSystem in July 2007, which remained in place until project closing. There were minor issues that were flagged during FM reviews such as exceeding the petty cash limit because the PMU used cash to pay for small expenses like per-diem and transportation costs. Given that the PMU consistently documented these expenses, the limit was ultimately raised from US\$100 to US\$500, which resolved this issue. Other minor issues included were the absence of tagging/coding the bookshelves that were distributed in 2007/08 and training attendance sheets that were all commented on by the FM team and resolved prior to the next supervision mission.

27. **Procurement.** The project's procurement performance has consistently been rated **satisfactory**. Bank procurement staff was an integral part of supervision, and their reviews confirmed that the PMU procurement filing was in good order and post-reviews revealed that procurement guidelines were followed. Minor challenges were noted in the following areas: (i) Procurement of READ library bookshelves: Initial challenges in terms of bookshelf quality were overcome by transferring the procurement process from the regional to the central level. Beneficiary feedback and in-class observations confirmed that the centrally-led procurement process not only led to improved quality of bookshelves but also ensured that they were age appropriate and easy to assemble. (ii) Procurement of XO laptops from OLPC: The procurement of XO laptops was supposed to be done on a single-source basis. However, the OLPC would not agree to the use of the Bank standard bidding documents for the procurement process, which ultimately led the government to abandon the contract negotiations with OLPC. Instead, the government and the Bank agreed to use ICB instead and swiftly developed the technical specifications and subsequent procurement documents, as well as terms of reference for computer training. Ultimately, the government was successful in procuring and distributing 2,000 netbook computers, and training teachers in their use and care. This successful resolution of contract negotiation challenges with OLPC also allowed the government to conduct an impact evaluation of computer use on children's ability to learn, which provided the government with timely and useful insight regarding the use of technology in early grades.

28. Based on the discussions above, safeguards and fiduciary compliance is rated **satisfactory**.

2.5 Post-completion Operation/Next Phase

29. The READ project has become the cornerstone of basic education for the government. The next operation, which the Bank is working on with the GOM, will build on the success of the READ project and will: (i) scale up the teacher training; (ii) provide small grants to schools to lengthen the school day; (iii) include an EGRA activity; and (iv) include an Early Grade Mathematics Assessment (EGMA).

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

30. **Relevance of Objectives.** The project development objectives were **highly relevant** to the country's sectoral needs when the project was developed. The objectives fit squarely into the government's EGSPRS, ESMP2, and the Bank's 2005-2008 CAS. They shared the common objectives of establishing an accessible and high quality education system that would nourish the intellectual development of Mongolian citizens while fostering economic growth. The project objectives continue to fit into the 2013-2017 Country Partnership Strategy (CPS) which seeks to address vulnerabilities through improved access to services and better service delivery which includes education, health, justice and infrastructure.

31. **Relevance of Design.** The project design was **highly relevant**. The project design was appropriately aligned with the ESMP2. In addition, the project design was simple with limited activities so that the MECS, with no previous Bank project experience, could implement the design. The PDO was precise and PDO indicators were appropriate to measure project impact. The PPF grant was important for ensuring quick start-up of project activities for which the design team should be commended. The inclusion of the two impact evaluations, again, was a highly relevant design feature and provided valuable information on the impact of project activities. The project risks and mitigation measures were also appropriate. The additional financing used to scale up the project activities was highly relevant. The impact of the netbooks and teacher training was considerable and led to measured increases in curiosity and willingness to explore technology for the purposes other than reading or doing homework.

32. **Relevance of Implementation.** The relevance of project implementation is judged to be **high**. As indicated above, implementation of the majority of project activities was highly successful. All project activities for both the original grant and the additional financing grant were implemented. Where the PMU encountered implementation challenges such as with the 2007 TIMSS data, procurement of the laptop computers and laptop impact evaluation, they were able to work with Bank staff to find solutions to the problems and resolve the issues quickly so that implementation could continue. This is highly commendable considering the limited experience and knowledge the PMU had with Bank projects and procedures. The project was consistently rated satisfactory, except in June 2011 and December 2012, when implementation and progress towards achieving project objectives were rated moderately satisfactory. The decision to lower the ratings in 2011 was based on the government's decision to: (i) discontinue the implementation of TIMSS and PIRLS in April 2011; and (ii) modify the design of the netbook distribution. However, the 2011 TIMSS and PIRLS activities were not part of the project design as previously mentioned, and the netbook impact evaluation was carried out despite the change in design. The last ISR rated overall implementation as moderately satisfactory because of the difficulties with procurement of netbooks and the Bank team's cautionary approach regarding the PMU being able to collect and analyze the final data in time for the ICR. Latest information available at the time of ICR writing,

however, revealed that the PMU: (i) had been able to quickly resolve the netbook procurement challenges; and (ii) completed the impact evaluation, analyzed the data and produced a report, which also provided evidence of the project's final achievements. These were positive developments and an indication of increased capacity. Again, while there were issues with the TIMSS data which excluded Mongolia from the international TIMSS report, the experience was important for building the capacity of the ECC, which helped implement the grade 5 national assessment. These were all positive outcomes.

3.2 Achievement of Project Development Objectives

33. The project development objective was to assist the recipient in enhancing the quality of education in rural primary schools, grades 1-5, by improving student's access and use of quality learning materials and improving teachers' skills through promoting professional networks. This section evaluates the outcomes against the results framework that was in the PAD and the indicators added at the time of the additional financing to measure the impact of the use of netbooks in the classroom. More details on project outputs can be found in Annex 2.

34. **Enhancing the quality of education in rural primary schools, grades 1-5** was to be measured by increasing the students reading time in class and demonstrating improvements in their literacy skills. This PDO level indicator target was achieved with a 100 percent increase in reading time. Additional intermediate indicators show that the children in each grade read all the available books provided through the READ libraries in a given year (i.e., 40) which exceeded the target of 30 and that 50 percent of children participated in other reading-related activities¹⁰ sponsored by READ, exceeding the target of 20 percent.

35. **Access and use of quality learning materials and improving teacher's skills through promoting professional networks** was originally to be measured by five PDO level indicators. When the netbook computers were provided with the additional financing, there were four additional PDO level indicators added to the results framework. The results of all nine indicators are as follows:

- (i) The number of students in grades 1-5 in rural bagh and soum schools that have access to learning materials and improved teaching practices increased from a baseline of 0 to 130,000 surpassing the target of 128,000. This is impressive considering that 90 percent of beneficiary schools reported not having had books prior to the project's interventions. In addition, schools with internet access can now choose from ICDL's complete library which includes all 237 Mongolian language children's books. All 383 READ schools were also given CDs containing the full 237 books. This far exceeds the number of books from other countries in the region available in the ICDL library.

¹⁰ Non-reading related activities included poetry competitions and inter-school tournaments.

Table 1: Sample of ICDL-available books by country

Country	Number of ICDL-available books
Mongolia	237
Japan	13
China	9 (simplified Chinese)
Indonesia	7
Korea	6
Cambodia	1
Vietnam	1

- (ii) The number of teachers, librarians, school directors and ECD primary methodologists in rural bagh and soum schools that participated in professional development activities increased from 0 to 5,718¹¹ surpassing the target 5,178.
- (iii) Classroom teaching practices reflect enhanced knowledge in reading instruction and use of learning materials improved substantially during the project exceeding the target. This is reflected by the fact that 90 percent of teachers maintain student writing portfolios. Teachers also involved students and parents in the development of approximately 10,000 “big books”¹² which have been credited with improving the interaction between teachers and students as well as more active student participation. Teachers worked with students to write approximately 200,000 “small books”¹³ which is credited with improving students’ grammar and spelling and increasing their self-confidence. Moreover, classroom visits showed that 50 percent of the observed teachers use READ books to teach other subjects such as mathematics, science or Mongolian language and literature. These are substantial achievements.
- (iv) The use of student assessment data and reports to inform policy decisions was met. The original 2007 and 2008 survey of students and teachers showed MECS that teachers had gained new ideas and ways to teach effectively. This knowledge led the MECS to change the teacher training curriculum and to institutionalize the teaching practices introduced in READ. In addition, the grade 5 assessment was made available on the READ website and the test design was used to develop 8 booklets with writing rubrics that have helped to promote better writing skills and are being used by teachers to assess student writing.

¹¹ This figure includes: 4,144 grade 1-5 bagh and soum teachers, 383 school directors and 21 ECD methodologists, 1,149 school managers, principals and librarians participated in a 2 – 5 day professional development workshop and 21 primary ECD methodologists were trained in initial core schools

¹² “Big books” are books that are produced by the school and include stories based on READ library books but modified to encourage student participation and stimulate children’s curiosity and imagination (i.e. altering the story’s outcome, introducing new characters or events, etc.)

¹³ “Small books” are paper booklets, written and illustrated by students, which allow students to use their imagination freely to recount real-life stories, share cooking recipes or develop new stories to be read by others.

- (v) The use of outcome based contracts¹⁴ that reflect teaching practices linked to child friendly schools was met. Funding was provided for teachers within a cluster to meet with and observe instruction of their peers in other schools, which was not the case prior to project intervention. In addition, there were 178 teachers from 95 core schools that were trained and acted as mentors to their peers. An average of 2.26 visits per schools was carried out by mentors exceeding the 2 visit end target. All this support and training led to the use of classroom library books to support teaching, the display of library books in classrooms, development of “small books” by children, and maps hanging in classrooms and being used for teaching. The satisfaction results of all professional development participants indicate that all participants have positively benefitted from the training, and that 99 percent benefitted in a significant manner.
- (vi) The four indicators added at the time of the additional financing were all met. They are as follows: (i) number of students in selected rural bagh and soum schools that received laptops connected to servers and with the improved Mongolian adapted version of ICDL software installed was 2,000 thereby meeting the target; (ii) number of teachers in selected rural bagh and soum primary school that received integrated training in effective use of the netbooks computers and ICDL software including basic hardware and software troubleshooting was 200 thereby meeting the target; (iii) classroom teaching practices in selected rural bagh and soum schools reflect enhancement of knowledge in reading instruction and use of netbook computers and ICDL as learning materials with 44.4 percent of teachers using the netbook in-class for 11-20 minutes and 11.1 percent using them for 20 minutes which was up from 6.2 percent. The impact evaluation indicated that teachers spent 3 hours a week using the netbook for non-class related activities slightly missing the target of 5 hours; and (iv) completion of baseline and follow-up of teacher and classroom surveys were completed and the results are being used to report on the project achievements. The impact evaluation also showed that 45 percent of students report using the netbook inside the classroom for more than 20 minutes a day compared to 20.8 percent during the baseline survey; approximately 36 percent of students reported using their netbook computers for reading purposes (i.e. ICDL) and 28.3 percent reported using their netbook computers to play games, surf the internet and other non-school related activities, indicating an increased curiosity and willingness to explore technology for purposes other than reading or doing homework. These are all significant outcomes considering the project’s focus was remote rural areas with limited access to computers prior to the project and considering that the computers were only in use for a short period (9 months) of time before the impact evaluation was conducted.

¹⁴ Outcome based contracts were designed such that if a portion of teachers in the teacher training program passed a competency test at the end of the program, the trainers would receive a bonus.

3.3 Efficiency

36. The project was cost efficient given the comparison of unit costs of goods and services procured under the project (books, furniture and training), as well as the additional goods and services delivered under the project because of the reallocation of proceeds. One of the main activities under Component 1 was to establish classroom libraries. The books procured under the project were low cost in comparison to similar interventions in the sector. The unit cost of one book in the READ classroom libraries (*including delivery*) was on average US\$2.1. The unit cost of a book in non-READ classroom libraries (*excluding delivery*) was US\$3.5. The distribution of the books was efficient, and the delivery to schools was confirmed by a delivery confirmation system. The project procured furniture for new classroom libraries at a per classroom cost of US\$71.5 while the market price for the same set is approximately US\$183. These costs include the price of one bookshelf, a map of Mongolia and the cost of furniture delivery to schools. All of the furniture for each classroom library was locally produced and procured through National Competitive Bidding (NCB), and the delivery was ensured by a delivery confirmation system. Similarly, the project delivered teacher training in a more cost effective manner than other teacher training projects. The training cost per teacher was US\$3.14 per day per teacher under READ while the same cost was US\$7.62 for other similar training. Moreover, the trend of public spending per child from 2006 to 2011 shows consistent increases, even taking into account the rising enrollment and the fluctuation of the exchange rates. The MECS received 23 percent of the government's recurrent budget in 2009, a major increase from about 17.5 percent in 2007, and is by far the largest ministry. By a law established in 2002, education is to receive at least 20 percent of the budget. The wage bill accounts for about 69 percent of MECS recurrent expenditures. The Ministry's share of the investment budget has ranged between 5 percent and 10 percent in recent years. (See Annex 3 for more details.)

3.4 Justification of Overall Outcome Rating

Rating: Satisfactory

37. The overall outcome rating of the project is **satisfactory**. The relevance of design was high. The design was simple and focused on quality inputs that would have a meaningful impact on rural schools. It shifted the orientation of the sector to focus on software and provided a good entry point for a dialogue with government on quality. In that the project was implemented at the classroom level, it also empowered teachers which was a marked and positive shift from the centralized structure of delivery and is now a key feature of the ongoing reform. The design also recognized the limited capacity of a new partner and therefore limited the activities and procurement requirements, which facilitated the implementation process. The relevance of implementation was high. While there were challenges during implementation with the TIMSS assessment, computer procurement, and impact evaluation activities, the MECS and PMU worked with the Bank team to resolve the problems and increase their capacity at the same time. Efficacy is rated satisfactory because the PDO was achieved as measured by the achievement of the PDO indicators, as well as the observed improvements in teaching and student and parent participation as reported in the impact evaluations included in the project design.

Finally, the project was implemented efficiently. It should also be noted that the Bank external relations department found the project to be successful to the extent that a video was developed to showcase the impact of the project, which is expected to be released in September 2013.

Table 2: Project ratings

Project Relevance	Achievement of PDO (Efficacy)	Efficiency	Overall Rating
High	Satisfactory	Substantial	Satisfactory

3.5 Overarching Themes, Other Outcomes and Impacts

(a) Poverty Impacts, Gender Aspects, and Social Development

38. The project supported the translation of grade 1 and 2 books into Kazakh language to support early literacy. The project financed 20,000 books that included stickers with Kazakh translations and the assembly of classroom libraries. The MECS viewed this aspect of the project as being successful to the extent that the next project will continue with the translation of additional books in the Kazakh language. The impact evaluations of 2007-2008 and 2011-2012 both looked at the impact of the project on gender. While the time between the baseline and follow-up survey was short, therefore making it difficult to tease out actual project impact, the results showed that: (i) female students got higher scores on the reading test than male students; (ii) gender differences had no influence on students' writing skills; and (iii) female students tended to have lower scores on vocabulary tests than male students. Direct attribution to the project is difficult to make because the impact evaluation showed other factors also contributing. However, the evaluation did show that access to books and computers were among the factors that influenced improvements and that: (i) a television at home, kindergarten attendance or access to a computer was positively correlated with higher reading scores, but that living in dormitories negatively affected students' reading test results; and (ii) vocabulary test scores were positively influenced by having a computer in the house, living in a dormitory and achievement levels in Mongolian language and mathematics tests.

(b) Institutional Change/Strengthening

39. The institutional changes were substantial. The government has fully embraced the "book project", which has now become the cornerstone for basic education in Mongolia. As mentioned previously, the impact of the READ project is such that the next education project will expand on READ and will include EGRA and EGMA, teacher training, and translation of books into Kazakh language. In addition, the teacher training institutes have fully integrated the teaching practices linked to child-friendly schools and have modified their curriculum to include all the READ initiatives. Moreover, the project helped to institutionalize a cascade teacher training system that is proving to be relevant for Mongolia. The project also helped develop a voucher scheme for the purchase of books that is open and transparent and can be used going forward to replenish and

augment the classroom libraries. All of these are positive institutional change outcomes of the project.

(c) Other Unintended Outcomes and Impacts (positive or negative)

40. The innovative project design and subsequent implementation success also inspired other countries to model primary education projects after READ. A study tour comprising 21 delegates from five South-East Asian countries in 2009 was specifically organized to introduce participants to education interventions instituted by READ and gather any relevant lessons learned. As a result of that study tour, the government of Papua New Guinea developed a new education project modeled on READ, which was also endorsed and supported by the Global Partnership for Education (formerly the Education For All-Fast Track Initiative). The fact that an external partner approved a project with this type of design highlights the relevance of such interventions for non-Bank financed operations as well.

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

Not applicable.

4. Assessment of Risk to Development Outcome

Rating: Moderate

41. There were seven issues identified as risks during project preparation with an overall rating of **moderate** (formerly referred to as modest). The ratings were primarily related to possible capacity constraints, and book acquisition and distribution challenges. The mitigation measures incorporated in the project, with the utilization of the PPF and procurement and financial management capacity development, were appropriate and ultimately responsible for ensuring smooth project implementation. The early preparation work done to inform publishers of the project and the requirements for submission of titles also ensured that book acquisition went smoothly. In addition, the development of the transparent voucher scheme was instrumental for ensuring the easy acquisition of new and replacement books for libraries. Going forward, the risks identified during preparation should remain **moderate** given there is increased capacity within the MECS, and processes related to book acquisition are well defined. The new operation will build on the successes of the READ project to further support the government's efforts to improve reading and math skills with a focus on remote rural communities.

5. Assessment of Bank and Borrower Performance

5.1 Bank Performance

(a) Bank Performance in Ensuring Quality at Entry

Rating: Satisfactory

42. The project preparation team ensured that the project design was closely aligned with the EGSPRS, ESMP2 for 2006-2015, and the Bank's 2005-2008 CAS. The design

was simple, the PDO was precise and key indicators were appropriate for measuring progress toward achieving the PDO. The design took into consideration the recommendations of the QER, comments from peer reviewers and lessons learned from other Bank-supported projects. The design team's utilization of a PPF grant was highly appropriate to ensure a quick implementation start-up and continued ownership of the project. The preparation team identified the appropriate risks and incorporated design features to mitigate them and included the relevant technical specialists to develop the project. The team also actively engaged the MECS, teacher training institutes, and publishers through workshops and discussions on the design, content, and implementation arrangements of the project. The additional financing did not modify the original design but added US\$1 million to scale up activities which was appropriate given the implementation capacity exhibited by the MECS. All-in-all, the quality at entry for the READ project was satisfactory.

(b) Quality of Supervision

Rating: Satisfactory

43. As previously mentioned, there were twelve Bank review and implementation support missions which included a mid-term review. The project team was actively engaged in supporting the government in its efforts to implement the project. Whenever implementation challenges arose, the Bank team worked with government to find appropriate solutions that would not compromise the integrity of the design. The supervision teams consistently reported on financial management and procurement progress during supervision missions and worked with the PMU team to build their capacity in these areas. They also systematically documented project progress in aide-memoires, back-to-office reports and ISRs, all of which kept Bank management informed of progress and provided the foundation for the ICR analysis. Key to the project's achievements was the consistent supervision and support provided to the PMU team.

(c) Justification of Rating for Overall Bank Performance

44. Based on the implementation analysis above, overall Bank performance is rated **satisfactory**.

5.2 Borrower Performance

(a) Government Performance

Rating: Satisfactory

45. At the time of preparation, the government was fully committed to the project. MOF and MECS were responsive to the utilization of the PPF grant and sent the formal request to the Bank with adequate time to utilize the PPF grant during preparation. As stated previously, this is viewed as being of single importance for ensuring the quick start-up of the project. The MECS agreed and worked with the Bank to design a simple, quality focused project which would be relevant to the needs of Mongolia. The MOF and MECS actively participated in the project launch workshop and remained committed to the overall goals of the project. As mentioned above, the MECS has embraced the "book

project”, and the READ design has now become the cornerstone of the government’s basic education program.

(b) Implementing Agency or Agencies Performance

Rating: Satisfactory

46. The PMU was responsible for managing all aspects of implementation. If faced with implementation challenges, the PMU was able to work effectively with the Bank to resolve them as indicated above. The capacity building activities were successful in that FM was constantly rated satisfactory throughout the life of the project. The PMU ensured that an adequate project financial management system was in place, which provided accurate and timely information on the utilization of Bank funds. The PMU was also successful early on in preparing quarterly and annual financial plans and introducing a computerized accounting system – InfoSystem. The project’s procurement performance was also consistently rated satisfactory due to fact that procurement files were in proper order and post-reviews revealed that procurement guidelines were followed. The PMU was able to work with various project units to ensure that all project activities were implemented on time. Capacity within the EEC was also improved to the extent that they were able, with TA support, to manage the implementation of two impact evaluations, carry out the 2007 TIMSS (albeit with data issues) and develop a grade 5 assessment. Based on these aspects, the implementation agency performance is rated satisfactory.

(c) Justification of Rating for Overall Borrower Performance

Rating: Satisfactory

47. Based on the implementation analysis above, overall borrower performance is rated **satisfactory**.

6. Lessons Learned

48. **Lesson 1. Simple innovative project designs that focus on quality, when administered well, can have substantial impact.** The introduction of classroom libraries with the appropriate child-friendly approach to teacher training has demonstrated that teachers, students and parents are more engaged in the education process. The inclusion of the two evaluations in the design was critical for measuring impact and providing valuable insights into project intervention effectiveness. The results of the evaluations and school visits led to the government embracing the “book project” concepts and incorporating them into their basic education program.

49. **Lesson 2. Focus on project implementation during preparation can have a highly positive impact on the quick start-up of project implementation.** The use of the PPF grant funds during preparation was instrumental in ensuring the smooth implementation of the project. It helped the government meet all conditions of effectiveness on time and allowed the PMU to: (i) contract the firm to manage the book selection process; (ii) sign a contract with the ICDL to jump start the digital library component activities; and (iii) hold a local publishers workshop to explain the book

submission process. All of these activities were completed before the project became effective and contributed positively to the implementation success.

50. **Lesson 3. There should be early agreement with Single Source providers that they will be required to use Bank standard bidding documents.** The procurement of the XO laptop computers would have proceeded more quickly had there been an early understanding on the part of OLPC that they would be required to use Bank standard bidding documents.

7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners

(a) Borrower/implementing agencies

(b) Cofinanciers

(c) Other partners and stakeholders

Comments received from the University of Maryland's Human-Computer Interaction Laboratory in charge of the ICDL.

ICDL worked very well with the READ project, incorporating 237 Mongolian books for free access through the online library. Several successful activities were carried out with ICDL's direct support, including the setting up a local version of ICDL at two rural schools that were not on the internet and setting up a Mongolian version of the ICDL for internet access that is still available at <http://www.read.mn/>. In addition, several training workshops were provided on how to use the ICDL to support literacy in Mongolia. To this day, the ICDL website receives about 1,000 visitors per month from Mongolia even after conclusion of ICDL's active participation in the READ project. This is impressive, especially if looking at countries like Spain and the United Kingdom, which only record approximately 50 percent of ICDL usage compared to Mongolia. The high volume of ICDL library visits attests to the importance and effectiveness of having good content and a translated interface.

Annex 1. Project Costs and Financing

(a) Project Cost by Component (in USD Million equivalent)

Components	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions) *	Percentage of Appraisal
Component 1: Improving Teaching and Learning in Rural Schools	2.76	3.79	137.32
Component 2: Improving National Monitoring of Quality and Efficiency	0.35	0.41	117.14
Component 3: Project Management and Evaluation	0.69	0.66	95.65
Total Baseline Cost	3.80	4.86	
Physical Contingencies	0.13	0.00	
Price Contingencies	0.07	0.00	
Total Project Costs	4.00	4.86	
	0.00	0.00	
Total Financing Required	4.00	4.86	121.50

* Includes US\$1 million additional financing under Component 1.

(b) Financing

Source of Funds	Type of Cofinancing	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Borrower		0.00	0.00	.00
IDA Grant		4.00	4.86	121.50

Annex 2. Outputs by Component

Component 1: Improving Teaching and Learning in Rural Schools (approximately US\$2.87 million – Original Grant; and US\$1 million – Additional Financing)

51. This component aimed to improve access to and use of learning materials in soum and bagh schools by increasing the availability of learning materials and improving the skills of teachers related to literacy development.

52. **Sub-component 1.1: Increasing the availability of learning materials by establishing classroom libraries.** Original grant activities under this sub-component were: (i) the central selection and procurement of illustrated children’s books and the establishment of classroom libraries in grade 1-5 classrooms; (ii) pilot the conversion of selected books into a digital format and making them available through the ICDL; (iii) the provision of computers to five pilot schools for the use of such libraries and associated capacity building activities; (iv) the procurement of child-friendly bookshelves and classroom furniture; and (v) the development and implementation of a book voucher scheme.

53. The following indicators were used to track sub-component progress: (i) Number of students in grades 1-5 in rural bagh and soum schools having access to learning materials and improved teaching practices, which exceeded the target of 128,000 by 2,000 students; (ii) 3,560 grade 1-5 classroom libraries in 383 schools have been established, missing the initial target of 4,029 due to structural changes to the education system and grade skipping;¹⁵ (iii) 676,575 books¹⁶ have been procured and distributed to project schools, exceeding the 670,000 target; (iv) 200 book titles are now available on the local market, exceeding the target of 150 titles; (v) although 4,000 maps were procured, only 3,560 were distributed due to the smaller-than-anticipated number of eligible classrooms following the structural changes to the education system; (vi) 10 schools received computers and training to effectively use the ICDL, exceeding the target to reach 5 schools; however, not all schools could accommodate the intended 25 computers due to insufficient space. These “excess” computers were therefore used to equip the additional 5 schools, which led to the installation of all 125 computers procured by the project and hence meeting the end target for number of computers to be acquired; (vii) 200 out of the expected 400 grade 1 furniture sets were delivered to eligible schools, missing the target; and (viii) 3,560 bookshelves were purchased and set-up in libraries, missing the 4,000 target due to structural changes to the education system mentioned above.

¹⁵ Between 2005 and 2008, the schooling cycle in Mongolia was gradually extended from 10 years to 12 years. This was achieved by having certain students skip a grade and be placed in a “transitional grade”, thereby reducing the actual number of classrooms that would receive libraries (i.e. grade skipping occurred in grades 3 – 5, which would have been eligible to receive libraries). Although the number of classrooms was reduced, the coverage remained the same because all the rural schools were covered as designed.

¹⁶ Total books distributed were as follows: 600,000 (total number of books procured under phase I) and 76,575 additional books through the voucher program.

54. Further accomplishments include:
- (i) The delivery of 190 additional READ libraries to all 21 aimag Education and Culture Centers for grades 4 and 5, non-formal education centers and orphan centers and shelters in Ulaanbaatar;
 - (ii) 90 percent of beneficiary schools reported not having had books prior to project intervention;
 - (iii) 237 children's books have been included in the ICDL; CDs containing these books were produced for off-line use and subsequently distributed to all 383 READ schools;
 - (iv) Of the 200 book titles available on the local market, 75 are new titles, developed by Mongolian authors;
 - (v) By encouraging Mongolian authors to submit their children's book titles for consideration to be included in the READ libraries, the project helped stimulate and establish a local children's book market, which is still in place and functioning;
 - (vi) Teachers involved parents and students in the development of approximately 10,000 "big books", which have been credited with increased interaction between teachers and students and more active student participation;
 - (vii) Approximately 200,000 "small books" have been written by students and credited with improving children's grammar and spelling; teachers also reported noticing an increased self-confidence in students' willingness to express themselves in writing;
 - (viii) Parents were involved in the production of "book bags" to allow children to borrow a "small book" from another student, take it home and read it with their families, thereby encouraging reading at home before returning it within a predetermined period;
 - (ix) The voucher scheme and the related "Children's book catalog" for purchasing books have been developed and successfully rolled out to all 3,560 classrooms covered by the project; to date, 76,575 books have been ordered and distributed to participating schools to replenish or augment the existing library stock.
 - (x) The success of using READ books was evident during classroom visits, where 50 percent of observed teachers used them to teach other subjects such as mathematics, science or Mongolian language and literature.
55. Additional financing activities included: (i) the procurement of approximately 2,000 XO laptop computers from OLPC; (ii) the provision of Mongolia-specific educational content on XO laptop computers through an improved and adapted version of the ICDL software; (iii) the training of teachers and students in the successful use of XO laptop computers to optimize their effect on student learning; and (iv) the design of an effective monitoring and evaluation system.
56. Due to challenges in procuring XO laptops, the project opted to purchase netbooks instead. Given that these netbooks were equipped with the same content as envisaged for the XO laptops, the ICR will report on netbook use in lieu of XO laptop use.

The project-financed accomplishments are: (i) 2,000 students in selected rural bagh and soum primary schools received netbooks connected to servers, which had the improved and Mongolia-adapted version of ICDL software installed; (ii) 200 teachers in selected rural bagh and soum primary schools received integrated training in the effective use of netbook computers and ICDL software, including basic hardware and software troubleshooting; (iii) overall classroom teaching practices in selected rural bagh and soum schools showed evidence of enhanced knowledge in reading instructions, and use of netbook computers and ICDL as learning materials; (iv) baseline and follow-up of teacher and classroom surveys were completed, as were baseline and follow-up assessments¹⁷ of students in literacy, math and Information, Communication and Technology – ICT skills; (v) 44.4 percent of teachers used the netbook in-class for 11 – 20 minutes a day and 11.1 percent 20 minutes or more (up from 6.2 percent); (vi) an increased number of teachers reported using ICDL for in-class activities for 5 hours; (vii) teachers spent 3 hours a week using the netbook computers for non-class related activities but for their own-activities, which slightly missed the end target of 5 hours a week; (viii) 5 hours a week of laptop and/or ICDL use in basic subjects were reported, hence meeting the target; (ix) 45 percent of students reported using the netbook inside the classroom for more than 20 minutes a day compared to 20.8 percent during the baseline survey; (x) although approximately 36 percent of students indicated using their netbook computers for reading purposes (i.e. ICDL), 28.3 percent reported using them to play games, surf the internet and other non-school related activities, which points to an increased curiosity and willingness to explore technology for purposes other than reading or doing homework; and (xi) a total of 27.2 percent of students acknowledged sharing a computer (22.4 percent of students shared a netbook with one other student, while 4.8 percent shared a netbook with two or three students).

57. Additional achievements are:

- (i) Both teachers and students reported an increase in computer literacy skills during the follow-up assessment: teachers' computer literacy skills increased from 14.2 to 61.9 percent, while those of students increased from 41.6 percent to 76.1 percent.
- (ii) The impact evaluation also revealed useful information for policy formulation purposes: students with a computer at home scored higher in their "vocabulary" tests than those without a computer. Furthermore, students using a computer for purposes other than reading (i.e. playing a game, doing homework and accessing to internet) scored higher in reading tests than those not using a computer.
- (iii) The distribution of netbooks showed preliminary signs that sharing a netbook could in fact enhance children's writing skills, which could be an

¹⁷ The initial idea was to also include behavior skills in the proposed assessments such as critical thinking, discipline, motivation etc. However, the time frame between baseline and assessment would not have resulted in a meaningful analysis, leading the evaluation team to exclude these aspects from the questionnaire. This was an appropriate decision. Anecdotal information, however, shows that students were increasingly enthusiastic about coming to school because of netbook presence in classrooms and had to adjust their behavior to properly care for the computers.

important statistic for determining whether or not to pursue a “one laptop per child” policy in Mongolia.

58. Sub-component 1.2: Promoting reading through professional development, teacher networks and public reading campaigns. Activities financed included: (i) the development of a teacher’s handbook on literacy activities and a set of possible performance contract monitoring indicators; (ii) the hiring of a professional development provider, training of school professionals, follow-up visits to schools, and monitoring and evaluation activities; (iii) the delivery of classroom libraries, and a process to verify their reception and utilization; (iv) transportation costs for bagh school teachers to observe their peers in other cluster schools; and (v) a national reading campaign.

59. Progress was measured by the following indicators: (i) outcome-based contracts for training providers were used, which reflected improved teaching practices linked to child-friendly schools as a result of the training provided to teachers; (ii) 4,144 additional qualified primary teachers were registered in the education system as a result of the project, exceeding the 4,029 end target; (iii) teacher practices and in-class time spent on reading activities both increased by 100 percent as a result of project interventions, thus meeting the targets; (iv) students from each grade read all the books available through the READ libraries (i.e. 40 books) in a given year, exceeding the end target of 30 books a year; (v) 50 percent of children participated in other reading-related activities¹⁸ sponsored by READ, thus exceeding the 20 percent end target; (vi) verification reports submitted by aimag education departments showed that 90 percent of teachers maintained student writing portfolios, which exceeds the 50 percent end target; (vii) three titles¹⁹ related to reaching practices in lower grades were translated into Mongolian and distributed to universities and teachers, meeting the target; (viii) funding was provided for teachers within a cluster to meet with and observe instruction of their peers in other schools, which was not the case prior to the project’s intervention; (ix) 178 teachers from 95 core schools were trained and acted as mentors to their peers, missing the 315 teacher end target due to the smaller-than-anticipated number of teachers that needed to be trained²⁰; (x) an average of 2.26 visits per school were carried out by mentors exceeding the 2 visit end target; (xi) satisfaction results of all professional development participants indicated that all participants have positively benefitted from the training, and that 99 percent benefitted in a significant manner; (xii) 85 full-page advertisements regarding the reading campaign were published in local newspapers, meeting the end target; and (xiii) the project successfully met the 240 airtime minutes on TV target, highlighting the benefits and importance of reading.

¹⁸ Non-reading related activities include poetry competitions and inter-school tournaments

¹⁹ The three titles were: (i) Writing skills improvement guide; (ii) Reading skills improvement guide; and (iii) Thinking skills development guide.

²⁰ The PAD had over-estimated the number of teachers to be trained; during implementation, it became apparent that some parts of Mongolia required less mentors due to the small population density.

60. Additional accomplishments include:
- (i) The teacher handbook was developed and, after initial revisions, extensively used in training of teachers and mentors, which facilitated the cascading model of teacher training in all 21 aimags. The handbook includes a section on overall methodology regarding the importance of books in the development of children's literacy levels and specific examples of how books can be used in classrooms and at home with parents. The handbook was seen as an important part of the teacher training and literacy activity successes and has been adopted by teacher training institutions.
 - (ii) A professional development provider (the Mongolia Education Alliance – MEA) was hired, a professional development team put in place and teacher trainings performed. Furthermore, the professional development team conducted follow-up visits in core schools during which MEA worked with each school to select mentor teachers. The 178 selected mentors were only allowed to train fellow teachers once MEA confirmed their readiness and understanding of the READ methodology and materials. During field visits, it was reported that no loss of knowledge/understanding of the training material or teaching methodology had been observed, which is commendable especially given Mongolia's size and population density.
 - (iii) The READ methodology was introduced as part of the pre-service teacher curriculum and exemplary READ libraries were set-up in teacher training institutions;
 - (iv) A READ website has been established; offering information on teachers' best practices, and listing actual teachers lesson plans, sample big and small books and other classroom-related materials. A 30-minute demonstration lesson video was produced, uploaded to the website and distributed to libraries, including libraries not covered by the project. These activities have greatly increased general knowledge of the project and the potential benefits of the READ methodology.

61. Although the ISR includes several indicators to track professional development of educators, the actual end targets appear to confuse the different target groups. Therefore, the ICR will base its analysis on the latest information contained in the government's report: by project closing, a total of 4,548 educators²¹ were trained in effective literacy development and use of reading materials, 1,149 school managers, principals and librarians participated in a 2 – 5 day professional development workshop and 21 primary ECD methodologists were trained in initial core schools. The PAD projected providing 5,178 educators with professional development in reading and writing. Given that the total number of education professionals having been trained amounts to 5,718, the ICR considers this indicator to have been exceeded.

²¹ 4,144 grade 1-5 bagh and soum teachers, 383 school directors and 21 ECD methodologists

Component 2: Improving National Monitoring of Quality and Efficiency (approximately US\$0.38 million)

62. This component was to contribute to the implementation of the sector strategy by supporting the monitoring of student learning in grade 5 as well as participation in international assessments. The component also provided support for policy research and implementation of enhanced tools to improve the efficiency and effectiveness of education services.

63. Indicators used to measure progress were: (i) 4,750 grade 5 students from 166 schools who participated in a national assessment on reading and mathematics, exceeding the 4,500 end target; furthermore, their test results were scored, processed and presented in a comprehensive final report; (ii) 4,764 grade 4 and 4,837 grade 8 students successfully participated in the TIMSS, exceeding the 9,000 aggregated end target; (iii) assessment tools for grade 5 tests were developed and made available on READ's website; (iv) the test design was used to develop 8 booklets with writing rubrics, which helped promote better writing and are being used by teachers themselves to assess student writing. Furthermore, teacher professional development clusters are using test materials as part of their professional training; (v) a system of learning assessment at the primary level is in place and data is analyzed; (vi) 5 reports were produced by the EEC over the life of the project, meeting the end target; (vii) approximately 23 presentations were given by EEC staff at other national and international institutions, also meeting the end target; (viii) 55 press articles and other publications making reference to the results of the work done by EEC were published, hence meeting the target; (ix) 4 research and policy publications were prepared by institutions *other than the EEC*, using the data generated and disseminated by the EEC, thus missing the 13 end target; (x) 4 policy notes²² were produced and made available on the READ website; and (xi) a training on efficient targeting scheme for child benefits covering 21 local education officials was carried out in April, 2009, hence meeting the end target.

Component 3: Project Management and Evaluation (US\$0.75 million)

64. Component 3 provided funding for operating a small PMU, the monitoring and evaluation arrangements to measure project outcomes and component outputs, and a baseline and follow-up survey of classroom and teaching practices.

65. This component was tracked by the following indicators, which have been met: (i) all 383 school directors participated in the delivery verification exercise and confirmed reception of classroom libraries; and (ii) the completion of the 2007 baseline and 2008

²² The policy notes are: (i) Survey on interpersonal relationship in a local context (July 2008); (ii) Children's book market survey (May 2008); (iii) Primary teacher's profile (January 2009) and (iv) Education assistance to the poor: targeting and implementation issues (March 2009). Although these titles are different from the ones initially proposed in the PAD, they were deemed necessary by MECS and responded to a need at the time of project implementation.

follow up for a teacher/classrooms survey and literacy assessments, which were discussed above. Findings include:

- (i) Almost 100 percent of teachers reported having gained new ideas and ways to teach effectively as a result of project-supported trainings;
- (ii) 98 percent of teachers having attended READ trainings expressed a desire to expand their knowledge of how to properly evaluate their students' reading and writing abilities;
- (iii) Average scores in mathematics increased from 2.21 to 4.91, which is a significant increase. However, the highest score being 12 shows that there remains an opportunity to further improve math skills; and
- (iv) Listening comprehension scores remained practically unchanged between the baseline and follow-up survey but continue to be higher than average mathematics scores, while reading comprehension increased from an average of 5.23 to 6.9 in grade 3 and 8.35 in grade 4.

66. Although student performance was mixed, the assessment did provide important insights into the classroom dynamics and served as a foundation for informed education policy formulation.

Annex 3. Economic and Financial Analysis

67. The economic analysis in the PAD provided a general rationale for investments in the education sector by showing correlations between educational attainment, improved educational quality, and higher wages. It argued that investing in rural primary education was justified because rural areas were lagging behind urban areas in terms of access and quality. The financial analysis included trends in primary and secondary education finance and the projections over the life of the project based on assumptions about changes in population, and increases in educational coverage and GDP growth. The economic and financial analysis for the PAD was comparable to that of similar projects at the time.

68. This ICR provides a discussion of the efficiency aspects of the project in terms of unit costs, as well as a review of the current trends in education financing. The ICR has not conducted a “Cost-Benefit Analysis” where it calculates a “Net-Present Value” or “Internal Rate of Return” in the absence of good data that links project activities with specific educational attainments clearly attributable to the project.

Project efficiency

69. The ICR judges the READ project to having been cost efficient based on the comparison of unit costs of goods and services procured under the project (books, furniture and training), as well as the additional goods and services delivered under the project because of the reallocation of proceeds.

70. **READ Books.** One of the main activities under component 1 was to establish READ classroom libraries. A classroom library/one set of READ books consisted of 40 titles with four copies per title. The books included both local titles and translations of international titles. Phase two of this component provided READ schools with vouchers to renew the stock of classroom library books. By the project closing, 3,750 sets of books (676,575 books) were distributed. Of these, 3,560 sets of books were given to classroom libraries, 63 sets were given to 21 aimag education departments, 84 sets were given to non-formal education centers, and 43 sets were given to children’s organizations such as children’s prisons and orphanages in Ulaanbaatar.

71. The books procured under the READ project were low cost in comparison to similar interventions in the sector. The unit cost of one book in READ classroom libraries (*including delivery*) was on average US\$2.1. The unit cost of a book in non-READ classroom libraries (*excluding delivery*) was US\$3.5.²³ The distribution of the books was efficient, and the delivery to schools was confirmed by a delivery confirmation system.

²³ Asian Development Bank, “Financial Services for the Poor” Project, 2008.

Table 3: Cost of one classroom library book (US\$)

	READ	Non-READ
Unit cost for a classroom library book	2.1	3.5

72. **Furniture for classroom libraries.** For the establishment of classroom libraries, the project not only provided books but also a set of furniture. READ procured furniture for new classroom libraries at a per classroom cost of US\$71.5 while the market price for the same set is approximately US\$183.²⁴ These costs include the price of one bookshelf, a map of Mongolia and the cost of furniture delivery to schools. The furniture for classroom libraries was locally produced and procured through NCB, and the delivery ensured by a delivery confirmation system.

Table 4: Cost of school furniture per classroom (US\$)

	READ	Market price
Unit cost for a set of classroom library furniture	71.5	183.6

73. **Teacher training.** Similarly, the project delivered teacher training for READ classroom teachers in a more cost effective manner than other teacher training projects. The training cost per teacher was US\$3.14 per day per teacher under READ while the same cost was US\$7.62 for other similar training.²⁵ These costs include per diem for teachers as well as other administrative costs to run trainings.

Table 5: Cost of training per teacher (US\$)

	READ	Non-READ
Unit cost for teacher training	3.14	7.62

74. **Reallocation of proceeds.** During the course of READ implementation, the SDR rate against the U.S. Dollar appreciated, resulting in exchange rate gains and the reallocation of proceeds among disbursement categories. The reallocation was approved in June 2008. The specific reallocation amounts for each disbursement category are listed in Table 6.

²⁴ MES Education Sector Plan 2006-2015.

²⁵ Ibid.

Table 6: Reallocations of proceeds amount for each disbursement category

No.	Category of Expenditure	Original (SDRs)	Reallocation (2008) (SDRs)
1	Goods	480,000	724,000
2	Learning Materials	1,259,000	878,000
3	Consultancy Services	487,000	943,000
4	Local Training	336,000	56,000
5	Incremental Operating Costs	155,000	168,000
6	Project Preparation Funds	70,000	18,000
	TOTAL	2,787,000	2,787,000

75. The SDR appreciation meant that the project gained an extra US\$500,000 and allowed the project to deliver more than originally planned. Under the reallocated amounts, four additional soum level school dormitory libraries were “renovated”,²⁶ 1,216 additional books were delivered for the classroom libraries, and 50 laptop computers for digital libraries were purchased.

Financial analysis

76. The PAD noted that “the low population density of rural Mongolia explains the high costs of education provision on a per-pupil basis as well as the need for public investment in rural education.” This trend continues. The cost of education in Mongolia is still high due to the sparse population and wide geographical spread. The Government has spent more than 20 percent of its budget and over 6 percent of its GDP on education since 2006.

77. The PAD also provided trends and projections of education finance and enrollment until 2008, which predicted a steady increase in both. The trend of public spending per child from 2006 to 2011 shows consistent increases, even taking into account the rising enrollment and the fluctuation of the exchange rates. In particular, during the recession of 2008 and 2009, it should be noted that there was no budget cut on education. On the contrary, the Government provided free textbooks to children in lower grades to ensure that they would not drop out due to financial reasons. However, the current issue is that the Government will not be able to keep pace with the rising enrollment.

78. The PAD noted an increasing trend of public education spending since the mid-1990s. Since 1998, per student financing has been in place in an attempt to ensure an equitable allocation of resources across all schools. The MECS receives 23 percent of the recurrent budget (2009), a major increase from about 17.5 percent in 2007, and is by far

²⁶ The term “renovated” does not refer to civil works but the replacement of dilapidated library furniture and bookshelves.

the largest ministry. By a law established in 2002, education is to receive at least 20 percent of the budget. The wage bill accounts for about 69 percent of MECS recurrent expenditures and the Ministry's share of the investment budget has ranged between 5 percent and 10 percent in recent years.

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
Lending			
Maria Caridad Araujo	Economist	EASHS	
Carol Chen Ball	Consultant	EASHE	
Chandra Chakravarthi	Program Assistant	EASHD	
Jian Hou	Program Assistant	EACCF	
Xiaoping Li	Sr. Procurement Specialist	AFTPW	
Haixia Li	Sr. Financial Mgmt Specialist	EASFM	
Tserendagva Odongua	Consultant	DECDG	
Cristobal Ridao-Cano	Country Sector Coordinator	EASHS	
Margaret Clarke	Sr. Education Specialist	HDNED	
Jugder Byambatsogt	Consultant		
James A. Stevens	Sr. Education Specialist	EASHE	
Sabrina Gail Terry	Program Assistant	EASHD	
Supervision/ICR			
Charles Abelman	Lead Program Coordinator	HRSLD	
Carol Chen Ball	Consultant	EASHE	
Kin Bing Wu	Lead Education Specialist	EASHE	
Donald A. P. Bundy	Lead Specialist	AFTHE	
Tungalag Chuluun	Operations Officer	EASHS	
Jugder Byambatsogt	Consultant	EACMF	
Haixia Li	Sr. Financial Mgmt Specialist	EASFM	
Katherine B. Nesmith	Junior Professional Associate	EASHD	
Cristobal Ridao-Cano	Country Sector Coordinator	EASHS	
Prateek Tandon	Education Economist	EASHE	
James A. Stevens	Sr. Education Specialist	EASHE	
Gerelgua Tserendagva	Procurement Specialist	EASR2	
Franco Russo	Operations Officer	EASHE	
Sandra Beemer	Consultant	EASHE	

(b) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	USD Thousands (including travel and consultant costs)
Lending		
FY06	85.07	253.14
FY07	13.00	3.42
Total:	98.07	256.56
Supervision/ICR		
FY07	53.17	80.95
FY08	53.11	97.42
FY09	21.78	47.82
FY10	9.43	55.38
FY11	25.53	80.75
FY12	18.90	103.21
FY13	16.20	74.46
Total:	198.12	539.99

Annex 5. Beneficiary Survey Results

Not Applicable

Annex 6. Stakeholder Workshop Report and Results

Not Applicable

Annex 7. Summary of Borrower's ICR

(Full document is available on file upon request)

Implementation

79. At the central level, MECS and MOF were responsible for overall coordination and implement national level project activities (training, book distribution) as well as review of progress and annual activities, preparation of reports and the ICR.

80. PMU was set up under MECS which was responsible for actual implementation, including planning, procurement of books, financial management, supervision and monitoring. It oversaw delivery of goods, coordinated contract management with the providers and furnished required reports to the MOF, MECS and the Bank.

81. Steering Committee (SC). A multidisciplinary panel advised MECS on pedagogical, social, economic and operational aspects of the Project and assisted in supervision. The SC coordinated support to PMU.

Monitoring and Evaluation (M&E), Design, Implementation and Utilization

82. The Project monitoring indicators included student teacher reading rates and literacy skills achievement.

83. The Project output indicators that were periodically collected and reported by the PMU to systematically monitor the completion of its different components and track the progress of the project were developed and maintained.

84. An impact evaluation was conducted for the Project. The baseline survey conducted in 2007 had a control and a treatment group. The latter is the group that received the libraries in the first year and the former was the group that received them only starting on the second year of project implementation. Baseline information documented the validity of the comparison across these two groups of schools. A follow-up survey allowed comparing outcomes across the treatment and the control group and observed differences between them to the impact the project had on these outcomes.

Safeguard and Fiduciary Compliance

Rating: Satisfactory

85. **Financial management:** Generally, appropriate financial management arrangements were put in place to ensure proper use and accounting of project funds. **Procurement:** There was no major procurement issue. International competitive bidding and consultancy were the two major methods of procurement. **Indigenous people:** The project beneficiaries were ethnic minority group of Kazakh students in Bayan-Ulgii aimags. The education strategy to improve ethnic minority education included the following elements: (i) inclusion of books and reading materials in their own local language using the most cost-effective and innovative approach (stickers with translated

texts were put on original books); (ii) development of training manuals in local Kazakh language to train teachers; (iii) improving the quality of education through increased reading at early grades.

Post-completion Operation/Next Phase

There are two main issues in the post-operation phase:

86. **Continuation of professional development network in rural soums:** READ piloted the cascade model which was a way to eliminate a gap in expenditure, build local capacity and to reach every rural teacher to be trained in reading technique methodology. About 2 mentor teachers from each core school, totaling 178 mentors, were trained as mentors who traveled to satellite schools and trained other teachers. In the future, these mentors can be a local resource person in teachers professional development since reaching a rural teacher is a challenge due to geographical and infrastructure conditions. The government and other donors can benefit from these trained resources in rural areas and continue strengthening this developed model of professional development.

87. **Maintaining the digital library:** A Mongolian version of the ICDL containing 237 children's books has been developed under the Project. This library's online version is accessible for every Mongolian student. An offline version on CDs was distributed to 383 soum school libraries. In the future, the government should consider maintaining the website of online version of ICDL and distributing to needy schools and students.

88. **Supply of more books:** As a result of READ, many teachers and students became readers and reading became a practice in rural primary classrooms. A new brand of "classroom library" was introduced into primary teaching. During the supervision missions to more than 50 schools of READ, 80 percent of teachers and students requested to have more books to read in the future. Therefore, the government may consider supplying new books to schools to enrich their existing classroom libraries every 5 years.

Assessment of Outcomes

Relevance of Objectives, Design and Implementation

Rating: Highly relevant

89. The objective to improve the quality of rural primary education was highly relevant because they were the most disadvantaged groups. The project played a role in helping Mongolia reach its own goal which is consistent with Millennium Development Goals for education.

90. The achievement of PDO is related to its design. The first component, which increased the availability of learning materials by establishing classroom libraries in every primary classroom complemented with a teacher training on teaching reading methodology for teachers and various reading activities in classrooms made the school more attractive. Parental involvement in education was improved. For example, parents of 128,000 students created at least one big book or book bag together with their children

since book bags “traveled” or “slept over” at students’ homes. The second and third components helped to build management capacity and evaluation experiences.

Achievement of Project Development Objectives

Rating: Satisfactory

91. The performance indicators were outcome focused. All the outcome indicators were achieved on time which can be evidence that the PDO was achieved.

92. School visits found excited results on the ground. The project outcomes were not diluted across the country ensuring that the same follow-up activities were taking place in all the schools visited. Children interviewed were cheerful to tell stories or books they read from their classroom libraries. At any soum, a primary student met in the streets was eager to say that they have classroom libraries and read books from them regularly.

Efficiency

93. There was evidence that Project resources were used efficiently. It can be regarded as the most cost-efficient approach to improve literacy skills of students. For a total of US\$5 million spent on classroom libraries READ provided 3,560 libraries with approximately 700,000 books. This amounts to a unit cost of about US\$33 per student and teacher. It should be noted that: (i) the remote location of schools and the lack of nationwide delivery system like FedEx in Mongolia entailed a challenge to deliver classroom libraries to every classroom on time. The project developed a special delivery confirmation system to ensure every teacher got the book boxes. The PMU kept all the receipts.

94. Training cost was also relatively low cost. Spending US\$571,623.30 to train 4,548 educators made the unit cost of US\$125.7 per teacher lower than it was before (US\$154 per teacher). This would cover the cost of trainee’s transportation, handbooks, accommodation, food and per diem. The training duration varied from 2 days to 5 days.

Overarching Themes, Other Outcomes and Impacts

(a) Poverty Impacts, Gender Aspects, and Social Development

95. The Project’s theme is promotion of reading and reading activities, creation of classroom libraries, promotion of children’s book industry and local capacity building in professional development. Early reading habits will have positive effects on students’ future education, socialization, and personality development. By ensuring the universal coverage and improving literacy skills of students, the Project helped stop intergenerational poverty cycle.

96. Parental involvement in education improved through engaging in student-parent reading activities such as making big books and book bags based on books read together.

For example, there are many unemployed parents in soums who took part in reading of books from classroom libraries when their child brings a book home.

(b) Institutional Change/Strengthening

97. Teachers' professional development network in rural areas helped to work schools closely and share their experiences, improve teaching methodology inspiring teachers to develop teaching aids by themselves together with students and parents. It emphasized the approach to empower local teachers to improve their self-development skills in a situation of lacking funding and support from the central government.

(c) Other Unintended Outcomes and Impacts (positive or negative)

98. The unintended positive impact is the use of the Project developed outcomes by other social groups. The Project developed a Children's Book Catalog which contains 200 best children's books. It was used for voucher scheme to enrich classroom libraries at the second stage of the project. The PMU witnessed cases of using this Catalog by many others. For example, in Darkhan province, a bookstore managed by an individual uses the Catalog to get book orders from customers or parents and supplied book from Ulaanbaatar. Another NGO, EduRelief run by a US individual, used the catalog to find books and donated books to rural schools in Erdenet and Bulgan aimags.

Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

99. There was no stakeholder workshop at the end of the Project. However, throughout supervision missions, in all the school visits, the mission teams interviewed teachers, parents, students and school administrators and heard directly appreciation and excitement about the Project. Many expressed the Project design book selection quality, a new and effective book distribution model and reading activities taking place in classrooms.

Assessment of Bank and Borrower Performance

Bank Performance

(a) Bank Performance in Ensuring Quality at Entry

Rating: Satisfactory

100. The Task team provided high quality inputs at the design stage. One of the successes of the project was its design and proper consideration of local needs. The social assessment was well done. The PDOs were highly relevant to the needs of rural Mongolia. The key performance indicators captured the achievement of the development objectives. The partnership with MECS and MOF was collaborative.

(b) Quality of Supervision

Rating: Satisfactory

101. The Bank's supervision focused on proper implementation of the project and helped to make monitor project outcomes. Supervision paid attention on high quality of book selection and quality of training. The recommendations provided by supervision missions were taken into account which helped to monitor project progress.

102. There were four Task Team Leaders during the life of the Project. They all were highly experienced in project management and education. However, there has not been any problem; instead diversity brought richness in the supervision. The Procurement and Financial management teams provide valuable assistance in reviewing since this project was the first Bank-supported project and the government staff lacked experiences at the beginning.

(c) Justification of Rating for Overall Bank Performance
Rating: Satisfactory

103. The Banks' major contributions were in project design and provision of technical advice. The Bank's satisfactory performance led to the Project's success on the ground. Every parent, teacher or student in rural Mongolia knows now the World Bank and appreciates this project.

Project-specific achievements

Component 1: Improving Teaching and Learning in Rural Schools

104. Increasing the Availability of Learning Materials by Establishing Classroom Libraries. 130,000 rural primary students in 383 rural soum schools received 3,560 classroom libraries with 160 books each, accounting 100 percent of the planned number of schools. 200 new children's books were available at the market accounting for 100 percent of the planned number.

105. Promoting Reading through Professional Development, Professional Teacher Networks and a Public Reading Campaign. The local professional development network has been set up consisting of 95 core schools and 178 mentor teachers. 4,144 rural primary teachers, 383 school directors and 21 ECD primary methodologists were trained accounting for 100 percent of the planned number.

Component 2: Improving National Monitoring of Quality and Efficiency

106. Strengthening National Assessment. 4,750 students from nationally representative sample of schools participate in National Assessment of Student Progress for Mongolian language and Mathematics in 2008 and TIMSS in 2007.

107. Improving Efficiency of Education Policy Tools. Four policy studies have been undertaken and policy recommendations were developed.

Component 3: Project Management and Evaluation

108. Project Management. PMU adopted a delivery confirmation mechanism ensuring timely delivery of classroom libraries to 3,560 rural classrooms.

109. Monitoring and Evaluation. Baseline and follow-up Impact Evaluation surveys were conducted in 2007 and 2008.

Project Overview

110. On 23 June, 2006, the World Bank, and the Mongolian government signed the Financing Agreement of the above project and on October 7, 2008, the Financing Agreement on Additional Financing. The project became effective on August 10, 2006.

111. The government education strategy has been facing transformation from rote learning to student-centered teaching for the last 20 years investing more on basic education access in rural areas. The successful implementation of READ project supported this government priority on rural basic education. The beneficiaries of the project were more than 128,000 rural primary students and 4,548 educators in 383 soum and bag schools in 21 aimags. All the measures taken have pushed forward to fill the gap between rural and urban students' learning achievement. One of the gaps was the lack of effective approaches to teaching children to read because this field was in its infancy. This reflects the fact that children's reading materials and books have only recently become sufficiently affordable and available.

112. The objectives of the project are to improve the quality and access to rural primary education in Mongolia. Under the project, every rural primary classroom of Mongolia received the classroom library consisted of 160 titles. In 2006-2008, totally 3,560 classroom libraries reached more than 128,000 soum school students.

113. Project had 3 main components. First, improving teaching and learning in rural schools; second, improving national monitoring of quality and efficiency; and third, project management and evaluation.

114. READ experience showed that it was the most cost effective way to reach every isolated rural soum of Mongolia. Every classroom created tens of big books, thousands of small books and many book bags.

115. Project financing and cost: The total grant disbursement amounts to US\$4 million and US\$1 million as an additional financing, taking up 100 percent of project plan. The project funds were disbursed against the planned costing at the design stage. Due to inflation rates, the training cost was increased and needed re-allocations were made at the request of the training provider.

116. The project supplied classroom libraries to 3,560 rural primary classrooms grade 1-5. Training for all the rural primary teachers, training managers and school directors

were performed using the cascade model which found to be the most cost-effective approach. The second component is the provision of teacher training to enroll every rural teacher through cascade model. A teacher is supposed to travel to nearest soum to get training. The cost per teacher to train through this model is US\$124. It means the cost per student for teacher training who is benefiting from training is US\$4.4.

Project implementation overview

117. The implementation of the project has greatly improved the conditions and teaching quality for more than 128,000 of Mongolia's rural students and has brought a significant change in reading and literacy skills of students. The project was carried on smoothly during the implementation period. Most of the project targets were met and some were even exceeded. Achievements are supported generally by progressively positive statistics in rural primary education sub-sector and there is evidence of increased enrolment or access to primary education. In 2006, the primary enrolment was 90 percent and now it reached to 99 percent. Raising the level of reading amongst the students also boosted their mathematics skills, according to the project impact study. 90 percent of classrooms have books while they had none before. 99 percent of teachers express READ training gave new ideas useful for teaching. The use of READ books in teaching of other subjects increased by 50 percent according to the project impact evaluation study.

118. Ministry of Education, Culture and Science strengthened the national level management and paid more attention on the pilot stages providing technical and policy supports to project implementing agencies and committed to the project's sustainability. One of the evidence of sustainability is to continue the digital library component in other schools in the future.

Classroom Libraries

119. One of the specifics of this project was to promote reading in every rural primary classrooms through creating reading-friendly environment followed by training the teachers in reading techniques. Integration of the two project components was the key to the success of the project.

120. The goal of holistic approach was achieved through the following steps:
- Teacher training covered the topics on how to use books from classroom libraries
 - Teachers use classroom library books when they implement training results in their everyday teaching
 - Classroom libraries are given with book shelves which is child-friendly and accessible to everyone, at any time
 - Good quality books that can attract children's reading interest have been selected for the library
 - Every year, a primary student is supposed to read new classroom library books, since 40 titles per grade (1-5) were selected. At the end of the primary level of education, a student is expected to read 200 books

- It was planned and implemented to ensure that classroom libraries reached all the soum schools before the teacher training starts
- At the second stage, the project piloted the voucher scheme to enrich classroom libraries. Schools were given credits. The children's book catalog was developed for the first time. Teachers ordered books from the catalog.

What books to select for the classroom library and how to deliver was the most challenging part of the project

121. "I found out that promoting reading skills for students was the basis of good learning and better expression of themselves. Students read faster now than before because of READ books." (Teacher from Selenge)

122. One of the challenges was where to find those nice books for the library. It is due to the fact that children's book industry did not have enough time to be reformed since 1990's transition to democracy and market system. The idea and content of the old editions were filled with socialist ideology. The project's desire was to get very nice, colorful, good quality books for rural children who never had that chance of having books. Children told that they have no books to read at home because no shopping outlet is available at their soum. Rarely, someone who went to Ulaanbaatar brings books and that book is borrowed by many.

123. To establish the library, the bidding among local publishers was organized. Interestingly, this bidding involved so many children's authors' submitted new manuscripts for selection. Out of 200 books selected, 75 were new manuscripts or new books. It means READ project helped to promote children's book development market. A group of rural primary teachers selected 200 children's titles from 1,000 books submitted for selection by publishers.

Challenge to deliver libraries to rural places

124. One of the challenges was how to deliver libraries to every isolated soum where FedEx is not available. READ designed the system to confirm the receipt of libraries by every teacher and all teachers were excited to receive a box labeled for their classroom.

Classroom library-way to promote reading not only among students but also among the soum community

125. READ created the new reading spirits within rural soum level involving parents and all local soum agencies. It could make the soum as Reading soum. Soum agencies and parents do book bags with their children together. Then a book bag travels to all students homes. Before making a book bag, parents are given training on how to design and create the book bags and why they are specific and significant for reading improvement of their children.

126. Thus, READ became one example of involving the local community in schooling of their children. Some parents told that they wait for their children come from school waiting to see which new books their kids will bring from the library. Since there are unemployment rate is high among soum parents and they enjoy reading books borrowed from classroom libraries.

127. But Mr. M. Bataa, Ulziit sum Governor in Bayanhongor aimag said the project's impacts were being felt beyond the classroom. "Everyone reads now and every day we breathe by books," he said. "Our soum school organized training for the public on how to engage in reading together with our children. It was fun. I am sure all the families have benefited from this project. I am sure no family is left behind. "When you go to nomadic families we can see that they are reading books borrowed from READ classroom libraries taken home by their children. It is a custom that all the family members read books taken by their children home from classroom libraries.

READ Training Cascade Model

128. Teacher professional development training provided for all 4,548 rural primary teachers focusing on issues of creative technique of writing and reading. It established 97 core school networks in all rural aimags which can be used for further professional development resources to enhance project's sustainability. Badamkhand a Grade 1 teacher from Bulgansoum, a district in Dornod aimag, said she was happy to see the impact READ had on the children and her teaching methods. "Before we asked students to read books after going through all the letters or alphabet," she said. "But now we teachers have learned how to make our students good readers. Also, students' learning interest has been increased significantly."

At the end of training, teachers expressed their opinions about the training as follows:

- Training gave us a lot of energy, experience and enthusiasm. Since today, I decided to be a real teacher. (Davaa, Arkhangai)
- Training was interesting because it had less boring theories but gives us an idea that we can make change if we try hard (Erdenechimeg)
- I have been primary teacher for 32 years. I have been telling our students just to read books but I did not teach them how to read books. Now I realize that it is very important. (Odsuren, Zavkhan)
- I am a primary teacher and mother. These days, we are really enjoying our school because everyone enjoys reading classroom library books and talk about it. The whole school environment is all about READ project and the books. Parents are happy because their children have something to spend the time efficiently. I think Mongolian education is now moving forward to the right direction. (Tsetsegnaym, Arkhangai)

How training was designed

129. The training was designed to reach every rural teacher of Mongolia. It was designed to train national trainers first, and then the national trainers go to the aimags to

replicate the training modules for the core school teachers in 4 days. Core schools are the schools selected among aimag schools. Each aimag has 5 core schools or soums. Each core school has several satellite schools nearby. Core schools should meet certain criteria to be eligible for core schools. READ covered 95 core schools and 204 satellite schools.

130. After the core school training, mentors were selected from core school teachers who can cascade the training for satellite soum teachers in 3 days.

131. The cascade model of rolling out of training has valuable merit because it helped to enhance confidence for rural teachers and capacity of teachers in terms of teaching methodology.

132. It was one of the most cost-effective training program in terms of reaching every rural teacher without inviting all of them to come to the capital city for training. Because of the long distance of traveling, the local transportation cost is always much higher than other costs. The cascade model was a way to eliminate this gap in expenditure.

Lessons learned from pilot

133. Based on lessons learned from pilot, the mentor development process was re-designed. Opportunities for improvement have been discovered from time to time. Let's illustrate some of the points of this issue.

134. There was evidence from pilot training that the quality of training conducted by mentors was less good at the satellite level in comparison with the training given by national trainers at the core schools two months ago. In some ways, this was not surprising because the core schools were chosen because of their reputation for good teaching practices at the aimag level which implies that the cluster schools were not considered to be that much good like core schools. So, satellite schools would need more attention and special help. Based on the lessons learned, the weakness of training conducted by mentors for satellite schools was eventually addressed as follows:

- In consultation with the World Bank task team, their time for training was extended from 2 to 3 days.
- Accordingly, teachers' training handbook on reading technique was revised to make it more user-friendly and enriched with examples from classroom library books.
- The selection procedure of mentors from core schools has been revised. Two mentors from each core schools were selected. During the pilot period, they were not selected transparently; they were nominated by a school director. It is quite common practice in Mongolia that school director is involved in every aspect of outside communication. It was evident that, mentors nominated by a school director were not the exact "leaders" in terms of teaching capacity and enthusiasm and they did not meet the criteria of mentors assigned by READ project.

Thus, the Mentor teacher selection procedure was revised as follows:

- New criteria for mentor teachers was developed such as good use of classroom libraries with students, demonstrative evidence of creative reading activities utilizing books, enthusiasm and willingness to become a peer mentor.
- National trainers came to every core school to administer the selection process through observing each teacher's lessons, observe activities done by teachers as a follow-up of training. They have seen incredibly creative practices of teachers which were specific to each teacher and each school.
- National trainers used standardized evaluation sheets with clear criteria when they observed lessons and teachers' practices.
- After this observation and evaluation, a shortlist for the choice of the mentor was made and this was then voted on the whole primary teachers. It was crucial that teachers understand that the staff is choosing two leaders for the satellite training who will be supported in this task by all the other teachers.
- Then selected mentors were invited to Ulaanbaatar to supplementary training conducted by national trainers to make sure mentors are well prepared for satellite school training afterwards. Many mentors felt uncomfortable to stand before peer teachers for the first time to teach them.

Revision of content of training modules

135. Development of training modules is critical part of the project. The first focus is how to identify the needs of teachers and see the gaps in teaching methodology of creative reading. The first design of the training modules was organized from international practice, namely, two international consultants from Norway helped us to develop the first draft. The first draft was piloted in five pilot aimags. Based on the pilot experience, the training module was revised as a lessons learnt from pilot. For example, there was a mechanical session on classification of books by types of writing. It was omitted because it was not important for teachers and students to know. We learned that pilot stage is extremely important for the success of the project.

What worked well?

- The initial design of not only the cascade model but also the whole project designing worked well. The goal of improving the local capacity of teachers at the soum level has been achieved through preparing mentor teachers.
- World Bank as the funding agency provided valuable expertise and supervision at all levels of project implementation which is one of the key to success
- School administration was very helpful for mentors' activities when mentors visited satellite schools to give guidance and advice to teachers as follow-up of the training.
- Involvement of school directors in training was helpful. Understanding of the activities by school administration is important for success. Because

the director is the key person whom everyone listens to and follows the rules given by him. There were cases of failing schools because of director's lack of involvement.

- Dedicated mentors can be change-agents in an isolated rural settings

What did not work well?

- The experiences of teachers need to be exchanged widely which was hard to achieve due to the lack of communication network.
- The training provider was unable to reach every satellite school. Some satellite schools unreachable for monitoring due to long distance of traveling.

What project circumstances were not anticipated?

- Some mentors felt quite uncomfortable when they teach peer teachers
- The duration of 3-4 days was not enough for preparing mentors for the next round of training

What surprises did we see?

- Some teachers re-designed the classroom environment which looks completely different than before
- Over 200,000 small books were written by students as follow-up of teacher training
- The students' speaking and writing skills have been increased significantly
- Many students can be seen as taking books in their hands
- More parents came to school
- It promoted creative activities among students, parents and teachers. For example, to make a big book, every teacher used different materials and got incredible ideas. Papers, recycled cloth, wall papers, plastic bags, paper box, scotch or were used to make big books. It showed that READ helped teachers on how to fill the gap of lacking teaching aids.

What was a take-away for teachers after the project?

- Every year a teacher will get a classroom library specifically designed for their students' grade specific needs and continue enjoying with the students and parents the reading promotion activities
- Teachers learned a new methodology of how to make their students good readers using the classroom library books
- Teachers learned different teaching methods to enhance all the five components of effective reading such as phonemic awareness, phonics, fluency, vocabulary and comprehension.

Assessment of World Bank's Performance

136. Interactions between the Bank and MOF and MECS concerned with the project have been balanced and productive and could be rated as positive overall. The World Bank's PAD was a foundation of successful implementation of the project guiding all the

steps in the project as an example of good planning exercise. Staff of World Bank and Task Team Leaders have been consistent supporters and provided high quality technical advice when needed and relevant critics in helping PMU to maintain its momentum and sense of direction in contract management process. For example, at the beginning PMU had difficulty to deal with the Banks' procurement rules since it was the first World Bank funded project in education. In that case, the Bank staff provided good training and support.

137. The Task Team's Supervision Missions provided valuable comments for future implementation for schools and PMU which have been reflected in Aide Memoires.

Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders

Please see section 7 (c).

Annex 9. List of Supporting Documents

Project Appraisal Document, Report No. 35058-MN, World Bank, 2006

Project Paper, Report No. 43424-MN, World Bank, 2008

Impact evaluation report of the Rural Education and Development (READ) project, 2012

Mongolian Institute of Educational Research, 2012

Follow-up survey for the READ project, MECS and LRMC, 2008

