



1. Project Data

Project ID P125958	Project Name PK: Punjab Education Sector II	
Country Pakistan	Practice Area(Lead) Education	
L/C/TF Number(s) IDA-51060	Closing Date (Original) 31-Dec-2015	Total Project Cost (USD) 4,407,000,000.00
Bank Approval Date 26-Apr-2012	Closing Date (Actual) 31-Dec-2016	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	350,000,000.00	0.00
Revised Commitment	350,000,000.00	0.00
Actual	331,945,477.37	0.00

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2. Project Objectives and Components

a. Objectives

According to the Financing Agreement (page 5) and the Project Appraisal Document (PAD, page 4), the project objective was as follows:

- **To support the education sector reform program of the Government of Punjab to increase child school participation (at multiple levels) and student achievement.**



b. Were the project objectives/key associated outcome targets revised during implementation?

No

c. Will a split evaluation be undertaken?

No

d. Components

1. Results-based component (Appraisal: US\$ 340.0 million; Actual: not reported): This component aimed to improve teacher quality and performance, as well as to promote gains in school participation. Funds were to be disbursed according to ten Disbursement-Linked Indicators (DLIs) in the following categories: field-based advisory support to teachers; test-based recruitment of teachers; teacher rationalization; school-specific non-salary budgeting; decentralized school financial management; teacher performance; school councils; student performance monitoring; private school vouchers; and secondary school stipends for rural girls.

2. Technical assistance (TA) component (Appraisal: US\$ 10.0 million; Actual: not reported): This component aimed to provide technical, advisory and capacity-building support to strengthen fiduciary, environmental management, administrative, and monitoring and evaluation activities. Analytical and advisory support included, for example: teacher performance and management; school council performance; student assessment; fiduciary and environmental management; and school budget management.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project cost

- The appraised project cost was US\$ 4,407.0 million. The actual project cost is not reported in the ICR (Annex 1 reports costs, but these appear to be only Bank disbursements). IEG calculations, based on actual IDA, Borrower, and co-financier contributions, give a total of US\$ 7.945.2 million.

Financing

- The project was financed by an IDA Investment Policy Financing Credit of US\$ 350.0 million, of which US\$ 331.9 million was provided.
- DFID was expected to provide co-financing in the amount of US\$ 200.0 million (of which US\$ 200.0 million was provided); CIDA was expected to provide co-financing in the amount of US\$ 19.3 million (of which none was provided).



Borrower contribution

- The Borrower was expected to provide US\$3,387.7 million, of which US\$ 7,394.0 million was provided.

Dates

- *June 2013*: The project underwent a Level II restructuring, to revise one of the ten DLIs agreed with the government. The original DLI devolved financial management power to clusters of schools, but subsequently, it appeared more effective and efficient to transfer powers directly to school council bank accounts. This revision did not entail any changes to the PDO, results framework, safeguards, legal covenants, or implementation arrangements.
- *December 2015*: The project closing date was extended from December 2015 to June 2016, to utilize unspent funds under Component 2 (a sample-based learning assessment was dropped due to the existence of a comparable student assessment being conducted through another donor's technical assistance).
- *June 2016*: The project closing date was extended from June 2016 to December 2016, in order to allow completion of technical assistance activities.

3. Relevance of Objectives & Design

a. Relevance of Objectives

The objectives were highly relevant to the country context and the pertinent Bank and country development strategies. Punjab is the country's largest province, comprising approximately three-fifths of the total population and total income. At the time of project appraisal, there were approximately 58,187 government schools in Punjab, which enrolled 8.4 million children in grades 1 and above. An additional 1.1 million children were supported through government vouchers to attend low-cost private schools. Relative to other countries in the region and at similar levels of per capita income, the country's educational outcomes are poor, albeit slightly higher in Punjab compared to the other provinces. Net enrollment rates at the primary, secondary, and high school level are 70%, 37% and 25%, respectively (2010-11). As noted in the PAD (page 2), the child's age and the household's socioeconomic status and location appear to be significant factors in school participation. Student achievement levels are low, with province-level results for grade 3 in the subjects of English, Urdu and mathematics falling in the 27% to 38% range.

The province of Punjab has been implementing a multifaceted sector reform program since 2003, which primarily addresses public education at public and secondary school levels. Reforms have included developing administrative systems, improving quality of inputs, and strengthening accountability for service delivery. Teacher quality and performance, in particular, has been recognized as a key reform area. The Bank's Country Partnership Strategy for FY 2015-19 identifies accelerating improvements in services as a key strategic pillar, including increasing enrollment and quality as key outcomes.



Rating

High

b. Relevance of Design

Improving teacher quality and performance is at the core of the results chain, as improvement teacher quality and performance directly impacts student learning outcomes, and, in the longer term, positively impacts student retention and participation rates. Project interventions to improve teacher quality and performance included support for institutional arrangements (i.e. teacher recruitment and deployment, decentralized school management), resources and advisory support (i.e. field-based advisory support through teacher educators, non-salary budget support), and accountability (monitoring school, teacher and student performance). The Disbursement-Linked Indicators approach was intended to build in some accountability for performance, by reimbursing government expenditures incurred for selected key education budget line items.

The project design also included measures to directly and immediately increase school participation (i.e. vouchers and stipends), including in low-cost private schools. The rise in the number of institutions in the private school system, including those reaching low-income and rural populations, has been considered as positive development in the sector, with the share of children attending private schools increasing 6-7% from 2004/05 to 2010/11 for both primary and middle school age groups. Therefore, private schools were utilized to ensure that attendance rates could increase even in the constrained environment of the public system. These key outputs of improved teacher quality and increased enrollment were likely to lead to the intended outcomes of increased participation and achievement; however, a shortcoming was the focus on net enrollment increases rather than school participation increases, given the trend towards late-age entry into the school system.

Rating

Substantial

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

To increase child school participation (at multiple levels)

Rationale

Outputs

- Provision of private school vouchers to 361,000 students.



- Provision of supplemental stipends to 411,000 female students in rural government schools.
- Recruitment of 33,000 teachers through a test-based process.
- Provision of field-based professional support for primary school teachers, including mentoring support from 4,000 district teacher educators.

Outcomes

According to the project results framework, child school participation was to be measured by the Net Enrollment Rate (NER), which officially measures enrollment according to age and grade-appropriateness. Per the ICR (page 10, footnote) and the project team (drawing upon extensive analysis of NERs, GERs, and participation rates to determine the appropriate indicator), this measure has shortcomings for the following reasons: i) Late entry into the school system is common in Punjab district; ii) It does not include children enrolled in katchi grades (early childhood/kindergarten); iii) It does not include children enrolled in NGO-schools, madrasses, or other private schools. Therefore, the ICR suggests that School Participation Rate (SPR) (source: Pakistan Standards of Living Measurement Survey (PSLM) data 2010-11 and 2014-15, cross-checked by MICS data 2011-2014) is a more accurate measure as it calculates the share of children in a specified age cohort who are enrolled in school regardless of grade. The ICR (page 11) notes that as both NER and SPR are calculated from sample-based household surveys which are dependent on up-to-date population census information, the last of which was conducted in 1998, there is still a need to further verify the numbers.

Primary level (ages 6-10)

- The net enrollment rate remained at 70% (target: 75%). The school participation rate decreased from 73% in 2011 to 70% in 2016 (target: 77%). However, the school participation rate, including katchi, increased from 80% to 83% (no target set).
- The net enrollment rate in rural areas decreased slightly from 67% to 66% (target: 71%). The school participation rate decreased from 69% to 66% (target: 74%).
- The net enrollment rate for rural girls decreased from 64% to 62% (target: 69%). The school participation rate decreased from 65% to 62% (target: 71%).
- The net enrollment rate in asset-poor households decreased from 47% to 45% (target: 49%). The school participation rate decreased from 48% to 45% (target: 50%).
- The net enrollment rate in participation-poor districts decreased slightly from 55% to 54% (target: 59%). The school participation rate decreased from 57% to 52% (target: 62%).

Middle level (ages 11-13) and High/Matriculate level (ages 14-15)

- The net enrollment rate in middle level increased slightly from 37% to 38% (target: 44%); for high level, from 25% to 29% (target: 32%). The school participation rate for both levels remained at 70% (target: 76%).
- The net enrollment rate in middle level in rural areas increased slightly from 31% to 34% (target: 39%); for high level, from 20% to 23% (target: 25%). The school participation rate for both levels in rural areas



remained at 65% (target: 71%).

- The net enrollment rate in middle level for rural girls increased slightly from 29% to 31% (target: 33%); for high level, from 19% to 21% (target: 25%). The school participation rate for both levels for rural girls remained at 58% (target: 67%).
- The net enrollment rate in middle level for asset-poor households increased slightly from 13% to 15% (target: 14%); for high level, from 7% to 7.5% (target: 7%). The school participation rate for both levels for asset-poor households increased slightly from 38% to 39% (target: 40%).
- The net enrollment rate in middle level for participation-poor districts increased slightly from 23% to 24.5% (target: 25%); for high level, it remained the same at 17% (target: 21%). The school participation rate for both levels for participation-poor districts decreased from 55% to 50% (target: 60%).

Administrative enrollment data from the government's monthly monitoring data also provides supplemental information.

- Public school enrollment in grades katchi to 12 increased 10%, from 8.9 million students in 2011 to 9.8 million students in 2014.
- Low-cost private school enrollment increased from 1.2 million students in 2011 to 2.1 million students in 2014.

Achievement of this objective is rated Modest due to mixed evidence. Results on school participation are mixed, alongside some data limitations and the need to reconsider how to measure school participation given the increasing role of the private sector.

Rating

Modest

Objective 2

Objective

To increase student achievement

Rationale

Outputs

- Recruitment of 33,000 teachers through a test-based process.
- Provision of field-based professional support for primary school teachers, including mentoring support from 4,000 district teacher educators.
- Post-induction training of teachers.
- Provision of teacher performance bonuses.



- Rationalization of teaching posts to improve deployment of teachers.
- Implementation of needs-based formula for setting school-specific non-salary budgets and support to School Councils to improve management of school funds.

Outcomes

- The average share of correct answers on an independent test (DFID test) for grade 3 increased from 55% in 2014 to 60% in 2016 (target: 60%).
- The mean test score (Punjab Examination Commission test) for grade 5 students in government schools increased from 158 in 2011 to 197 in 2015/16 (target: 174).
- The mean test score for grade 5 students in government schools in participation-poor districts increased from 173 in 2011 to 209 in 2015/16 (target: 190).
- The mean test score for grade 8 students in government schools increased from 188 in 2011 to 217 in 2015/16 (target: 207).
- The mean test score for grade 8 students in government schools in participation-poor districts increased from 194 in 2011 to 239 in 2015/16 (target: 213).
- The share of children in grade 3 (Annual Status of Education results) that could read a story in Urdu remained at 27% (no target provided).
- The share of children in grade 3 that could perform 3-digit division (DFID test) increased from 13% in 2012 to 19% in 2014 (no target provided).
- The mean monthly assessment score for grades 4 and 5 (Directorate of Staff Development results) increased from 32% in 2011 to 47% in 2013 (no target provided).

Additional outcomes are reported below; however, more information on prior Bank interventions in the education sector would provide greater confidence that these results are attributable to the actual activities of the project, given the very short timeframe of implementation.

- The primary completion rate for ages 15-19 decreased slightly from 92% in 2011 to 91% in 2016 (target: 94%). However, the secondary school completion rate for ages 20-24 increased from 50% in 2011 to 52% in 2016 (target: 53%).
- The primary completion rate for ages 15-19 in rural areas decreased slightly from 90% in 2011 to 89% in 2016 (target: 92%). However, the secondary school completion rate for ages 20-24 increased from 41% in 2011 to 44% in 2016 (target: 44%).
- The primary completion rate for ages 15-19 for rural girls decreased slightly from 90% in 2011 to 89% in 2016 (target: 93%). However, the secondary school completion rate for ages 20-24 increased from 43% in 2011 to 48% in 2016 (target: 48%).
- The primary completion rate for ages 15-19 in asset-poor households increased slightly from 76% in 2011 to 77% in 2016 (target: 78%). However, the secondary school completion rate for ages 20-24 remained at 17% (target: 21%).



Also,

- The teacher absentee rate decreased from 16% in 2011 to 6% in 2016 (target: 15%).
- Recurrent non-salary expenditures increased from RPs 8 billion in 2011 to RPs 24 billion in 2016 (target: RPs 15 billion). On average, schools spent RP 1,000 more per student than in recent years.
- The share of non-salary expenditures as a percentage of total recurrent expenditures increased from 7% in 2011 to 13% in 2016 (target: 12%).
- However, there were no other measures for improved teacher quality or performance, other than as reflected in student achievement.

Achievement of this objective is rated Substantial due to extensive evidence of improved test scores and decreased teacher absenteeism.

Rating

Substantial

5. Efficiency

The ICR presents a cost-benefit analysis in Annex 3, which covers both the project and the broader government sector program. Costs include the government's budget expenditures (non-salary recurrent and development expenditures), Bank project costs, and private costs (direct household expenditures and opportunity costs of attending school). Benefits are estimated according to higher wage earnings for the additional primary and secondary school completers, higher productivity premium for primary school completers due to improved quality and relevance of education, and reduced wastage of public and private school resources due to lower repetition and dropout rates.

Actual enrollment data for 2011-2015 are used to estimate the number of primary and secondary school completers; however, the actual benefits materializing may be lower given the mixed outcomes on completion rates (primary completion rates decreased while secondary completion rates increased).

Using the above elements, the net present value of economic benefits ranges from US\$ 286 million (low case) to US\$ 523 million (high case). The benefit-cost ratio ranges from 1.17 (low case) to 1.3 (high case). The economic internal rate of return ranges from 12% (low case) to 14% (high case).

The ICR also notes a reduction in teacher absenteeism from 16% to 6%; which is a robust indicator of increased efficiency in the education sector. Although it is unclear whether this was calculated for project-supported schools only, the province-wide nature of the project suggests that it may still be a valid indicator of project efficiency. In addition, there was timely disbursement of DLIs and the use of the direct fund transfer system for non-salary budgets (which were disbursed directly to school accounts rather than a more centralized mechanism, which reduced the potential for fund leakages).



Efficiency Rating

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	13.00	100.00 <input type="checkbox"/> Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Relevance of the project objectives is High while relevance of the project design is rated Substantial. Achievement of the objective to increase child school participation (at multiple levels) is rated Modest due to mixed evidence of the project's impact on school enrollment. Achievement of the objective to increase student achievement is rated Substantial due to evidence of improved student performance. Efficiency is rated Substantial.

Therefore, overall outcome is rated Moderately Satisfactory due to shortcomings in impact on school participation.

a. Outcome Rating

Moderately Satisfactory

7. Rationale for Risk to Development Outcome Rating

The embedding of this project within the broader sector reform program has helped to institutionalize some of the project features, such as the use of data, the funding mechanisms, and the use of school-level entities. A follow up Bank operation (Third Punjab Education Sector Project), third in the series, was approved in June 2016 and became effective in October 2016. The project features similar investment levels and project design, with objectives also focused on improving school participation, school completion, and teacher quality. Sector financing from the government has increased steadily in nominal terms, although still remains at sub-optimal levels. Security and political risks also remain, although thus far these have had minimal impact on the sector operations, including effective mitigation of the politically sensitive reforms on teacher accreditation.



a. Risk to Development Outcome Rating
Modest

8. Assessment of Bank Performance

a. Quality-at-Entry

The project objectives were highly consistent with the government reform priorities and the design drew upon lessons and experience from the predecessor Bank project, including the following: a significant technical assistance (TA) component to support achievement of Disbursement-Linked Indicators, and increasingly higher reimbursement levels of expenditures (as opposed to project advances) to ensure sustained levels of implementation. The overall project risk was appropriately assessed as significant, highlighting macroeconomic shocks, political changes, and weak decentralized capacity as the main risks. Notably, weak procurement capacity for the TA activities was highlighted as a lesson from the predecessor project but was not effectively mitigated. The M&E arrangements were sound, drawing upon existing information systems to collect data, while also using third party assessments to validate outcomes. However, there were shortcomings in the choice of key project indicators (see Section 10).

Quality-at-Entry Rating
Moderately Satisfactory

b. Quality of supervision

Supervision by the Bank team was regularly conducted, with a relevant mix of specific skills present (specialists in ICT-based social mobilization, public-private partnerships in education, and conditional cash stipends) for supervision missions and in coordination with other donors. While there were no major implementation problems noted in the ICR, the shortcomings in the results framework do not appear to have been recognized in a timely manner. Implementation Supervision Report ratings were all in the satisfactory range for the entire project period, for both Implementation Progress and Development Objective reflecting the lack of realization of the shortcomings in the results framework. There were significant delays in procurement of TA and in establishing the baseline for the key outcome of improved student achievement, and in recognizing the volatility of the NER.

Quality of Supervision Rating
Moderately Satisfactory

Overall Bank Performance Rating
Moderately Satisfactory

9. Assessment of Borrower Performance



a. Government Performance

The government of Punjab was willing to undertake politically unpopular, but critical, reforms including merit-based teacher recruitment and teacher rationalization, and was effective in initiating these measures. It was also effective in taking the necessary steps to achieve all ten Disbursement-Linked Indicators, which was the key mechanism for access project funds. The government provided increasing budget allocations to the education sector, as well as providing supportive actions such as increasing district administrators' oversight of schools and providing ancillary facilities for schools (i.e. latrines and drinking water). However, there were some delays in the transfer of non-salary funds to schools, and district-level audit reports were not submitted on an annual basis, as required by legal covenant.

Government Performance Rating

Moderately Satisfactory

b. Implementing Agency Performance

The School Education Department (SED) within the government of Punjab was the primary implementing agency. SED was effective in taking actions to achieve all Disbursement-Linked Indicators, despite high turnover in the PMIU staff, and even expanded the scope of teacher mentoring and teacher rationalization activities beyond the geographic areas originally planned. There were some shortcomings in procurement, as technical assistance activities were marked by delays in meeting deadlines and paying contractors, although as reported by the project team, the SED was still able to achieve all Disbursement-Linked Indicators by project closing. There were no other problems reported in financial management or safeguards compliance.

Implementing Agency Performance Rating

Satisfactory

Overall Borrower Performance Rating

Moderately Satisfactory

10. M&E Design, Implementation, & Utilization

a. M&E Design

The results framework was overall sound with a robust project logic chain and sound monitoring arrangements. Data collection arrangements relied on existing well-functioning administrative systems of SED, while achievement outcomes were to be gathered through learning assessments, some of which were to be conducted as part of project activities. The regular monitoring sources included: Annual School Census (conducted by SED); monthly monitoring visits by the Chief Minister's Monitoring Force (unannounced school visits to collect data on school infrastructure, student and teacher presence); and third-party assessments. However, there were some shortcomings. Although the predecessor project had noted no problems with using Net Enrollment Rate (NER) as the key outcome indicator for participation (indeed, as noted in the PAD (page 4,



footnote), it was selected to align with the indicator for MDG2), the volatility of the NER and the failure to account for the late-age entry tendency in the province were not well-considered and led to difficulties in measuring achievements. Also, given the emphasis on improving teacher quality, there were no official measures for this outcome other than as reflected in student achievement.

However, there were some shortcomings. Although the predecessor project had noted no problems with using Net Enrollment Rate (NER) as the key outcome indicator for participation (indeed, as noted in the PAD (page 4, footnote), it was selected to align with the indicator for MDG2), the volatility of the NER and the failure to take into account the late-age entry tendency in the province were not well-considered and led to difficulties in measuring achievements. Also, given the emphasis on improving teacher quality, there were no official measures for this outcome other than as reflected in student achievement.

b. M&E Implementation

Data was collected through the planned monitoring activities (annual school census, monthly monitoring visits, student assessments), although the baseline for the student achievement-related key indicator was delayed in being established. Impact evaluations were carried out as planned for the teacher performance incentives program and supplemental stipends program, though results from the latter evaluation have yet to be finalized. The shortcomings in the NER indicator were not recognized in a timely manner, as project restructurings did not revise the indicator.

c. M&E Utilization

As reported in the ICR (page 6), monitoring data was utilized in the following ways: annual census data was used to determine school-specific non-salary budget allocations; annual census data was used to determine school-specific teacher needs and to inform school report cards which updated community members on school quality; monthly monitoring data were reviewed quarterly at district meetings to track performance against indicators; and third party assessments were used to verify reforms supported by DLIs.

M&E Quality Rating

Substantial

11. Other Issues

a. Safeguards

The project was classified as an Environmental Category "B" project due to potential rehabilitation of schools, thereby triggering the safeguard policy on Environmental Assessment (OP/BP 4.01). An Environmental and Social Management Framework, which had been prepared under the predecessor project, was updated for this project and included mitigation measures and monitoring requirements. The ICR (page 6) reports that safeguards compliance was satisfactory, with activities such as training and monitoring implemented as planned.



b. Fiduciary Compliance

Financial management: Financial management performance was overall satisfactory, with the project implementation unit adequately staffed and funds made available in a timely manner. There were some delays in the transfer of non-salary funds to the schools during the initial project period. Financial reports for the education sector were prepared on a regular basis, although complete district-level audit reports were not submitted annually per legal covenants. Interim financial reports and annual external audit reports were prepared as per Bank guidelines.

Procurement: There were some shortcomings with regards to the TA activities, including delays in meeting procurement deadlines and updating the procurement plan to accurately reflect project progress. Payments to two contracted firms were also delayed. Findings from the Post-Procurement Review include minor issues related to poor record-keeping, lack of appropriate documentation, and weak contract management. However, there were no other significant problems reported.

c. Unintended impacts (Positive or Negative)

d. Other

12. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	---
Risk to Development Outcome	Modest	Modest	---
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Borrower Performance	Satisfactory	Moderately Satisfactory	There were shortcomings in meeting of all legal covenants.
Quality of ICR		Substantial	---



Note

When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.

The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

13. Lessons

Lessons drawn from the ICR:

- The use of a results-based lending instrument creates effective incentives for government action, and also helps to increase focus on outcomes. In the case of this project, the use of ten Disbursement-Linked Indicators, several of which were critical to key education sector reforms, helped to ensure that policy actions were followed through and also helped to clearly identify the desired outcomes.
- The selection of the original PDO-level indicator did not adequately take into account local context. In the case of this project, the trend towards late-age entry into the formal school system had a significant impact on Net Enrollment Rates, while School Participation Rates were more accurate measure of the objective to increase child participation. Moreover, the shift to a new operational model (inclusion of private sector) also warranted a reconsideration of measurement approaches.

14. Assessment Recommended?

Yes

Please explain

To verify results in school participation rates, including outcomes in the private sector. Also, to learn lessons from the significant focus on the private sector.

15. Comments on Quality of ICR

The quality of the evidence and analysis is substantial. The ICR is strongly outcome-oriented and does a commendable job in drawing upon data from various sources and for non-PDO indicators, in an effort to validate project achievements.

Note: The ICR assesses three project objectives - support to the government program, increase in child participation, and increase in student achievement. However, the IEG does not consider the first - support to the government program - to be a separate, stand-alone objective, and therefore assesses only the latter two.



a. Quality of ICR Rating
Substantial