

1. Project Data:		Date Posted : 03/15/2011		
PROJ ID : P073526			Appraisal	Actual
Project Name :	Py - Education Reform Project	Project Costs (US\$M):	26.50	27.11
Country:	Paraguay	Loan/Credit (US\$M):	24.00	22.80
Sector Board :	ED	Cofinancing (US\$M):		
Sector(s):	Secondary education (60%) Central government administration (20%) Sub-national government administration (10%) Other social services (5%) Tertiary education (5%)			
Theme(s):	Education for the knowledge economy (29% - P) Education for all (29% - P) Participation and civic engagement (14% - S) Access to urban services and housing (14% - S) Rural services and infrastructure (14% - S)			
L/C Number:	L7190			
		Board Approval Date :		07/31/2003
Partners involved :		Closing Date :	06/30/2007	12/30/2009
Evaluator :	Panel Reviewer :	Group Manager :	Group :	
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2. Project Objectives and Components:

a. Objectives:

The project was the first phase in a two-phase Education Reform Program, supported by two proposed Adaptable Program Loans (APL). The PAD (page 3) describes the objectives of the Program as twofold : first, “[to] assist the Government of Paraguay in its efforts to achieve necessary efficiency gains across the [education] system;” and second, “[to] introduce initiatives to enhance quality and expand equitable access at the secondary level .”

The PAD (page 3) describes the development objectives (PDO) of the project (Paraguay Education Reform Program Phase I, or PERP-1) as the improvement of “(a) management and efficiency of the education system and (b) educational outcomes and equity in opportunity at the secondary education level .” This statement of objectives is

consistent with that in the Loan Agreement .

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

No

c. Components (or Key Conditions in the case of DPLs, as appropriate):

Component A-Improved Tools for Planning and Management of the Education System (Appraisal : US\$ 8.86 million Actual : US\$ 8.52 million):

Sub-component A-1. Improvement of system management capacity by (i) building structures and organizational tools to generate macro and micro planning management and supervision capacity; (ii) establishing the accreditation and (iii) the certification systems; (iv) supporting student performance evaluation; and (v) promoting social awareness and ownership of the education reform program .

Sub-component A-2. Human resource development: upgrading leadership and teaching capacity by : (i) designing a continuous teacher training program conceptually embracing both the initial and in -service teacher training segments, and training secondary school teachers; and (ii) implementing a graduate program tailored to upgrade the skills of a select body of education professionals and leaders . In addition the Loan Agreement (LA) included the following activities: (iii) the provision of specialized training to Ministry of Education and Culture's (MEC) educational professionals (p.18).

Component B-Secondary School Improvements (Appraisal : US\$8.40 million : Actual: US\$ 7.57 million)

Sub-component B-1. Quality Inputs - Provision of didactic materials, equipment and teacher training to secondary schools by supporting (i) newly designed textbooks (ii) learning resource centers (CRAs); (iii) science and technology laboratories; and (iv) training for teachers in the adequate use of the three aforementioned teaching/learning materials and modes .

Sub-component B-2. Community-Associated Management by redesigning the institutional model for planning and management through introduction of school development plans (PEIs) and social community projects (PSPs) with wider parent participation The sub-components include : (i) the introduction of PEIs in select schools; (ii) the introduction of the PSPs to select schools focused on education and the learning process; and (iii) the enhancement of PEIs, PSPs and other aspects of school life informed by participation of parent associations (ACEs) at the secondary level, who would be offered training to strengthen capacity .

Component C - Mechanisms to Provide more Equitable Access to Secondary Education (Appraisal :US\$7.80 million Actual :US\$6.82 million)

Sub-component C-1 Sustainable scholarship program for extremely poor students in six states to improve efficiency rates.

Sub-component C-2 Alternative secondary school programs for rural and working children offered in five states . This program focused on rural areas, give working youth the opportunity to study outside the formal institutional structure .

Sub-component C-3 .Construction of three prototype schools in marginal urban areas to showcase the new curriculum, use of materials and equipment, and teaching methods .

Component D - Project Management (Appraisal: US\$ 1.20 Actual:US\$1.09 million This component was to cover the costs of (i) the management of the project by the Project Coordination Unit (PCU) and (ii) project monitoring, including a number of impact evaluations .

d. Comments on Project Cost, Financing, Borrower Contribution, and Dates:

Project Cost and Financing : The project was appraised at US\$ 26.50 million, but at project closing, costs equaled US\$27.11 million -- an overrun of US\$0.61 million. There was a reallocation among the four components, with under spending in components A, B, and D, and overspending in component C, compared to appraisal estimates . The under spending in components A and B is explained by delays in procurement for consultants for component A, the reallocation of loan proceeds from component A for the construction of two prototype schools in Component C, and the decision not to acquire one science lab under component B . The overspending in Component C is explained by increased costs of civil works and overspending on project management . The appreciation of the local currency vis-à-vis the US dollar also played a role .

Significant delays occurred in disbursement and it took 33 months after Board approval before all project activities were underway. Between the mid-term review (MTR) in March 2006 and the end of 2007, implementation speeded up with 67% (US\$16 million) of the total amount being disbursed during this period. Prior delays were caused by (i) the delay in Congressional approval required for loan effectiveness; (ii) the lack of project readiness for implementation at time of loan approval; (iii) delay in the establishment of the PCU; and (iv) delays in implementation during in August 2008-to March 2009 when a new Administration took office after the elections in mid -2008,

Borrower Contribution : The planned Borrower contribution was US\$ 4.3 million, compared to an appraisal estimate of US\$2.5 million.

Dates: Due to delays in the 2003-2005 period, the GOP requested three extensions to the closing date to the project which were agreed by the Bank. The initial closing date was 06/30/2007 but the project finally closed on December 30 2009.

3. Relevance of Objectives & Design:

Relevance of Objectives is rated **high**. The PDOs were well attuned to Paraguay's 2002 Poverty Reduction Strategy, which highlighted the important relationship between greater equality in education opportunities and poverty reduction, and to its MDG of increasing literacy rates among 15-24 year-olds. They were also consistent with the Bank's 1997-2003 Country Assistance Strategy (CAS) which specifically included the aims of increasing coverage and quality of secondary education to enhance the supply of qualified labor, strengthening the Ministry of Education's capacity for information-based decision making, and promoting decentralized participation in sector decisions. The PDOs remain relevant for the current Country Partnership Strategy which includes, *inter alia*, the following goals: (i) strengthened state institutions to improve policy making, public service provision, and the rule of law; (ii) improved investments in the social sectors, focusing public spending on the extreme poor; and (iii) growth with a focus on employment generation and on improving income distribution, without destabilizing the country's macroeconomic framework or the environment (pp.16-17).

Relevance of Design is rated **modest**. The strategic relevance and approach were based on sector studies and lessons learned, both from the Bank's Secondary Education Improvement Project (ongoing during preparation of this operation) and from Inter-American Development Bank-financed education projects. Experts from countries such as Argentina and Chile, which were undergoing education reforms, also gave advice. The choice of an APL instrument was appropriate in view of the Government's desire for a gradually achieved, medium-term vision of education sector reform. This choice was not obviated by the decision of the new Government, which took office in mid -2008 (less than eighteen months before closure), not to proceed with the second phase of the APL. There were, nonetheless, a number of important design weaknesses. The time horizon of the APL was too short, and the limited financial resources and geographic scope afforded to Phase 1 constrained the project's contribution to the reform process. Design was overly complex and ambitious, covering too many areas (seventeen key activities grouped in seven sub-components and four components). The causal links in the results framework were not well thought out. In particular, the connection between some key outcome indicators -- national aggregate enrolment, drop out and repetition rates, and average class sizes, for example -- and the PDOs was not clear. These indicators could be influenced by many factors beyond the relatively narrow geographic and financial scope of APL 1.

4. Achievement of Objectives (Efficacy):

- (i) **Improve the management and efficiency of the education system . Modest.**

Outputs

- *Enhancement of macro and micro planning*- a competency based screening and selection for new teachers was established and has been institutionalized in the MEC since 2004; the statistical management information system(MIS) and a school mapping system has been strengthened at the MEC and Department (state) Statistical Units(UDE)and now MEC can produce annual timely and reliable data .
- *Management re-engineering*-Designed and validated a new management tool to be used in the education sector for better management linking personal, financial resources, and student certification MIS country wide . The system has been adapted in two areas of Central MEC but not in the supervisory coordination units in the districts.
- *Construction of State (Department) Education Councils (CDEs)*-Five CDEs has been supported under this project, all, with the exception of one are complete .
- *Design and approval by MEC of an accreditation system for pre -service and in-service teacher training Institutes and a certification system for MEC professionals, administrative staff and teachers* -Two models of accreditation and certification have been developed and approved by the MEC, one for teacher -training institutes and second

for professional educators. The later model had been implemented at 20 teacher-training institutes and the latter model is being applied to teachers of basic and secondary education.

- *Pre and in-service teacher training*-both models of pre and in-service teaching training have been designed and approved by MEC. The Pre-service training has been implemented in 20 institutions and 1,730 teachers have undergone in-service training.
- *Leadership Program*-98 of the proposed 100 professionals of MEC has been through a leadership program and many of these are in key decision making positions within the MEC.

Outcome:

Despite achievement of many of the intermediate outputs, little progress was made between 2001 and 2008, towards attainment of the project objectives using the indicators presented in the PAD:

- No increase in class size, at any level, has been achieved, and at the secondary level, average class size actually fell from 25 to 21.
- Gross completion rates at the secondary level, rather than rising, fell from 76% to 69%.
- Drop-out rates did fall slightly from 11% to 10.7%, but they were still above the target level of 9% for the end of APL1.
- Repetition rates fell from 1% to 0.6%, thereby exceeding the target of 0.9% for the end of the program.
- As noted in Section 3 above, the PAD indicators are, for the most part, national aggregates that are influenced by factors beyond the control of the project. However, neither the PAD nor the ICR mention other, alternative indicators which might present a different view of the degree of achievement of this project objective.

(ii) Improve educational outcomes . Modest.

Outputs:

- *Quality learning inputs for secondary education -textbook*-In this project, 547,000 textbooks and 45,000 teaching guides across a number of subject areas (except science) were handed out across 1,757 public secondary schools at all three grade levels of secondary schooling.
- *Quality-learning inputs for secondary education* - Prototype Learning Resource Centers (CRAs) were established as were the 20 in teacher training institutes. The project also rehabilitated 74 spaces, four more than the original design. New learning resources for each CRA were acquired. Approximately 220 teachers (facilitators) were trained to use these new resources.
- *Quality-Learning inputs for secondary education -Science laboratories*-Twenty-four science laboratories were built and 1,000 operational manual for using these laboratories were prepared and distributed to selected schools.
- *Management community-based strategies*-The project financed the development and implementation of 100 PEIs, 100 PSPs, and 600 ACEs. Institutional Management Team (EGIs) were also established in 100 schools.

Outcome:

It is not possible to gauge achievement of this objective, since the only outcome indicator - results of the National Student Assessment System (SNEPE) in Spanish Literature and Language and Mathematics - was dropped during implementation following a change in methodology. 2006 SNEPE results were to be the new baseline, measured against achievements in 2010 and 2014. The application of the 2010 assessment has been postponed until 2011.

(iii) Greater equity of opportunity in secondary education . Substantial.

Outputs:

- *Scholarships*- The project financed 4,500 secondary education scholarships per year for poor students and those coming from lower-income families.
- *Prototype schools*- Two prototype schools were completed out of an original three.
- *20 alternative secondary school programs* for rural and working children were offered in five states. This program focused on rural areas, give working youth the opportunity to study outside the formal institutional structure.

Outcome:

Two indicators were used to assess achievement of this objective: changes in the net enrolment rate and incremental growth in the number of secondary school students from poor and lower income families.

- Net enrolment increased from 33% to 42% between 2001 and 2008, thus achieving the target for APL 1.
- Targeting and transparency of scholarship allocation ensured that only poor students and those in the lower income groups received the benefit. The project also financed capacity building within the MEC to manage and monitor the scholarship scheme. Beyond 2006, the GOP has subsequently gone on to finance, from its own resources, 4,518 scholarships in 2007, 3000 in 2008 and 10,060 in 2009. Bank sector work indicates that the

scholarship program remains cost effective .
 By contrast, the prototype school and alternative secondary school programs were not cost -effective (see Section 5).

5. Efficiency (not applicable to DPLs):

Efficiency is rated as **modest**. At appraisal, it was estimated that the NPV of APL 1 would be US\$3.8 million with an ERR of 15% for a ten year scenario. The ICR re-estimated the NPV and the ERR at the closure of APL 1 using actual values of the program and the same assumptions . These re-calculations resulted in an EER of 8%, below the estimated opportunity cost of capital (OCC) in Paraguay of 10%. Even if the time horizon were extended to 20 years, the ERR would still only be 11%, barely above the estimated OCC . There are two other indications of modest efficiency. First, the prototype schools were considerably scaled up (from 3,700 to 6,600 square meters) without undertaking a prior cost-benefit analysis. The resulting cost overruns meant that one of the three schools had to be dropped. Second, the alternative secondary education programs have turned out to be cost -ineffective. Only 172 of the 600 students who started participating in 2006 have remained in 17 sites (three of the original 20 sites have dropped out of the program). Of these 172, only 76 had graduated at the end of the 2009-2010 school year, signifying that it took them more than three-and-a-half years to complete their secondary education, some six months longer than in a regular school. Those of the remaining 96 to graduate in 2010-2011 will have taken more than four years.

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

	Rate Available?	Point Value	Coverage/Scope*
Appraisal	Yes	15%	100%
ICR estimate	Yes	8%	100%

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

6. Outcome:

Modest progress had been achieved by the end of APL 1 in enhancing management and efficiency of the education system, while it was not possible to gauge whether or not there had been any improvements in educational outcomes. On the other hand, the scholarship program targeted to students from poor and lower income families has been successful; although other activities meant to increase equity of opportunity (prototype schools and the alternative secondary education program) were not cost effective. Efficiency is modest. Although relevance of objectives is substantial, that of design is modest . Outcome is assessed as **moderately unsatisfactory** .

a. Outcome Rating : Moderately Unsatisfactory

7. Rationale for Risk to Development Outcome Rating:

The following present moderate risks to the development outcome :

- The Government is making progress in the implementation of the management re -engineering component of the project. The HR, financial and management system has been designed and validated, and is being used by the MEC. The Government expects that by December 2011 the system will be fully operational at the central and departmental level.
- Several components of the National Student Achievement Assessment System SNEPE to measure learning outcomes are in place. At the end of 2010, the Paraguayan Congress approved several laws to provide resources for secondary education . As a result, preschool and upper secondary education are both free of charge and mandatory; and all public schools receive additional finances based on the number of student enrollment to pay for non-salary recurrent and capital expenditures . The Government has also taken steps under the Budget law for 2011 to finance textbooks introduced under the Project .
- There is political commitment to sustaining the scholarship program which is positive for achieving the equity in opportunity component of the second objective .
- The Government is committed to the Project's goals and has requested a follow -up operation to improve outcomes and efficiency in education through better trained teachers and adequate learning environments .

a. Risk to Development Outcome Rating : Moderate

8. Assessment of Bank Performance:

a. Ensuring Quality -at-Entry: Quality of Entry is rated as **moderately unsatisfactory** . A number of factors under the remit of the Bank undermined the project .:

- Design was over-ambitious and covered too many areas .
- The project was not ready for implementation at the time of Board approval, and a number of components, particularly pilot programs, still lacked technical and operational details at effectiveness .
- There was no cost-benefit analysis for the three proposed prototype schools as originally designed .
- The links between the different (and numerous) activities of the project and the PDOs were poorly articulated.
- Insufficient thought was given in the design of the results framework to the links between inputs, outputs, outcomes and chosen target outcome indicators . This subsequently undermined the quality of supervision .

b. Quality of Supervision : Quality of Supervision is rated as **moderately unsatisfactory** . Although supervision was regular and a number of key issues were flagged and adjusted during and following missions, two key actions were not taken . First, there was no attempt to address the poor results framework, although this weakness was recognized in various Implementation Status Reports . Second, there was no adequate justification or cost benefit analysis undertaken prior to the decision to increase the size of the prototype schools from 3,700 to 6,600 square meters.

a. Ensuring Quality -at-Entry:Moderately Unsatisfactory

b. Quality of Supervision :Moderately Unsatisfactory

c. Overall Bank Performance :Moderately Unsatisfactory

9. Assessment of Borrower Performance:

a. Government Performance : Government performance is rated **moderately unsatisfactory** . During preparation, the Borrower was supportive of the project, but during implementation, there were problems . The project benefited from political stability until August 15, 2008. The change in Administration at that time, combined with Congressional non-approval of the 2008 and 2009 Budget Laws, led to the withdrawal of financing for key inputs under Component B. Outstanding payments by the GOP on another Bank project also led to delays in disbursements. Although the Bank team benefited from interaction with a highly qualified technical counterpart team at the MEC, one aspect of the Ministry's management that proved detrimental to the project was the lack of coordination between the various teams within the MEC /UCP responsible for various components of the project .

b. Implementing Agency Performance :

Implementing Agency performance is rated **moderately satisfactory** . The performance of the PCU can be divided into three phases. First, during 2004-2006, the Unit was ineffective in implementing required procurement procedures due to lack of preparedness at loan effectiveness . Second, between March 2006-and the end of 2007, the PCU's improved performance contributed to the disbursement of 67% of the loan. Third, after the new Government assumed office in August 2008, the pace of activities slowed again, because of personnel changes made by the new Administration and because the project was running out of funds . An effective relationship between the MEC and the PCU existed (except in the area of infrastructure) until August 2008.

a. Government Performance :Moderately Unsatisfactory

b. Implementing Agency Performance :Moderately Satisfactory

c. Overall Borrower Performance :Moderately Unsatisfactory

10. M&E Design, Implementation, & Utilization:

M&E Design: There were a number of significant shortcomings in M&E design :

- It was too complex and there were too many indicators
- There were significant discrepancies between the indicators presented in the text of the PAD and those in Annex 1.
- The causal links between, inputs, outputs outcomes and indicators were not well thought out (see Section 3 above).
- Some indicators of the achievement of the first project objective (improved management and

efficiency of the education system) -- such as class size and completion rates - are national aggregates that would have been influenced by factors beyond the control of the project.

- There was a lack of indicators to measure several of the intended managerial improvements .
- Monitoring the impact of several activities, including the outcomes of the pilots financed by the project, was to rely on a series of evaluation studies, for which insufficient funding was provided .

M& E Implementation : Of the six outcome indicators agreed upon at Negotiations, only two were regularly reported on in the ISR for Phase I -- net enrolment and gross completion. Key APL II triggers were monitored, though in the end were moot. The key learning outcome indicator - SNEPE results in language and mathematics -- was dropped due to methodology changes. Impact evaluations of the pilot activities, except for the scholarship program, were not implemented. Although, M&E design weaknesses were recognized by the TTLs in various ISRs, no attempt was made to address them during supervision .

M&E Utilization : The PCU regularly provided information to all stake-holders. However, a number of indicators were not systematically collected, and there is little evidence that monitoring informed strategic redirection of the project or resource allocation .

a. M&E Quality Rating : Modest

11. Other Issues (Safeguards, Fiduciary, Unintended Positive and Negative Impacts):

Safeguards: The ICR reports that environmental and resettlement assessments were carried out for the two prototype schools built under the project in accordance with the Bank’s safeguards policies. Although similar exercises were not carried out for five CDCs, a retroactive assessment was undertaken by the Bank and no environmental issues surfaced. No Indigenous Peoples Plan was prepared to take account of the requirements of the indigenous children enrolled in some project schools . However, the ICR reports that the effect of this preparation stage oversight was mitigated by the government policy of mandating the teaching of the Guarani indigenous language in all primary and secondary schools .

Fiduciary compliance : According to the ICR, the financial management and procurement process complied with the Bank's stipulations. The PCU was efficient in providing the Bank with quarterly financial management reports and unqualified annual audit reports in a timely manner .

Unintended (positive and negative) consequences : On the positive side, the PCU for this project was the winner of the Ministry of Finance’s prize for good governance and transparency for implementing the nationwide system of integrated acquisition management procedure. This is a digital back-up of all acquisitions of goods, services, and works undertaken during the lifetime of the project . The interests of indigenous peoples were safeguarded through the Government national bilingual education policy which mandates the production of textbooks and learning material in the indigenous language (Guarani).

12. Ratings :	ICR	IEG Review	Reason for Disagreement / Comments
Outcome:	Moderately Unsatisfactory	Moderately Unsatisfactory	
Risk to Development Outcome:	Moderate	Moderate	
Bank Performance :	Moderately Unsatisfactory	Moderately Unsatisfactory	
Borrower Performance :	Moderately Satisfactory	Moderately Unsatisfactory	The ICR's ratings of Government performance (moderately satisfactory) and Implementing Agency performance (moderately unsatisfactory) are the same as IEG's According to the harmonization criteria, the overall

			Borrower performance rating in such a case should be guided by outcome and is therefore moderately unsatisfactory .
Quality of ICR :		Satisfactory	

NOTES:

- 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:

- **Political support and ownership is a key condition and a good predictor for success** . The stability existing within the MEC authorities throughout the entire lending and implementation cycles (**up** to August 15, 2008) created the required conducive environment by limiting shifts in education policy and implementation strategy and of changes in key implementation players . On the other hand, the revision and appropriation of the ongoing project by the new education authorities resulted in a delay of project activities .
- **Appropriate results framework is needed to inform the Borrower and Bank management about progress towards achieving the expected project development objective** . Clear plausible articulation of the results chain linking the PDO with inputs, outputs and outcome indicators is critical for successful Bank and Borrower management and for successful achievement of objectives . Further the number of outcome and output indicators need to be minimized to facilitate timely updating and to reduce cost and data processing . Also all attempts should be made to make appropriate attributions to protect changes in outcomes from actions outside the scope of the project.
- **Cost-benefit analysis is useful at the preparation stage of a project** to avoid the inclusion of cost-ineffective interventions and to facilitate the choice between design options .
- **The choice of targeting approach is relevant for equity, transparency, program ownership and effectiveness** . The scholarship scheme was a good example of (a) a targeted intervention that was directed to poor secondary education students; (b) transparent selection criteria and accountability; (c) cost-effective investment as indicated by an impact evaluation; and (d) sustainability, demonstrated by the GOP's decision to make this a regular program within MEC's annual budget.

14. Assessment Recommended? Yes No

Why? To verify the ratings and address knowledge gaps concerning the project's outcomes.

15. Comments on Quality of ICR:

The ICR was **satisfactory** with some shortcomings. The document is thorough and makes a convincing argument for the ratings given. However, although the ICR recognizes the weaknesses of the results framework, no alternative means of assessing the achievement of certain project objectives are provided .

a. Quality of ICR Rating : Satisfactory