Evaluation of the World Bank's Assistance to Primary Education in Peru

A Country Case Study

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Preface

From 1990, the year of the World Conference on Education for All (EFA), through mid-2005, the World Bank committed approximately $12.5 billion in support of the expansion and improvement of primary education in developing countries. By the early years of the current century support to primary education was nearly half of the Bank's lending portfolio in education. Sector studies and Bank strategies have emphasized the critical role of primary education --especially the basic knowledge and skills it provides. Expansion and improvement of primary education are often at the center of a country's poverty reduction efforts.

In 2006, the Independent Evaluation Group issued From Schooling Access to Learning Outcomes: An Unfinished Agenda, which assessed the development effectiveness of World Bank assistance to improve countries' knowledge and skills base through the provision of quality primary education to all children, especially since 1990. The evaluation drew on many sources of information, including desk reviews of the portfolio of primary education lending and analytic work, in-depth project evaluations and country case studies.

The country case studies assessed the overall cumulative support of the Bank (lending and non-lending) to primary education in the context of historical and concurrent factors that impinged upon and shaped them. In particular, they addressed three questions: (a) What changes have taken place in primary education service delivery and outcomes since 1990? (b) To what extent have Bank efforts (though lending and non-lending channels) contributed to those changes? and (c) To what extent would the changes have taken place in the absence of Bank support?

The four case study countries – Mali, Pakistan, Peru, and Romania -- were selected based on their performance (strong or weak) in improving learning outcomes and their per capita income, from among those countries that had received at least US$100 million in support from the World Bank for primary education. Each case study was undertaken by a team of 4 members, 2 educator-researchers from outside the country and 2 from within. The studies were reviewed both by the headquarters evaluation team and by World Bank project and sector managers for the country.

This case study of Peru was based on a two-week mission in April 2005. The evaluation team consisted of Martin Benavides, Martin Carnoy, Santiago Cueto, and Amber Gove. The team is grateful to the numerous government officials, including many former Ministers of Education and members of non-government organizations, who provided insights into the challenges of primary education in Peru. Given the limited time available, the team's field visits were limited to the region around Lima (Ventanilla-Callao) and nearby agricultural and coastal areas within two hours drive of Lima (Huaral, Mala and Cañete). At the World Bank headquarters in Lima, the team interviewed staff members who worked on primary education in Peru during the 1990s, and reviewed scores of documents.

The team also observed classrooms and conducted interviews at 5 primary schools in Lima and nearby regions. In each of these schools the team interviewed teachers,

principals, students and parents about system and schooling conditions, expectations for student success, and factors contributing to student learning. In several schools we asked children to read aloud from their textbooks and reviewed student mathematics workbooks and problem solving strategies. While this clearly was not a full-scale or representative assessment, it provided the team with a clearer understanding of student learning achievement than would have been attained by simply by talking to teachers and observing the school. The team is grateful to the teachers and pupils for their cooperation. The teachers were particularly generous with their time and were both frank and perceptive in their comments.

The team also expresses its gratitude to the World Bank Resident Mission in Lima and especially Livia Benavides, Senior Social Science Specialist, who facilitated our work and provided valuable information and insights concerning primary education in Peru. Finally, the team appreciates the cooperation of staff members of other bilateral and international agencies, who took time to meet with the mission team and to offer their perspectives.

Summary

During the past decade the World Bank developed and launched two major education loans in Peru, one in 1995, aimed at improving urban primary education, and the second in 2002, focused on upgrading rural primary education. The first loan contributed US$146.4 million towards a total investment of US$300 million (the rest were counterpart funds) for building urban primary schools, developing and distributing school textbooks, and improving classroom teaching. The second loan is still in progress, but is expected to contribute roughly $170 million over 10 years to a total investment of nearly US$350 million (counting counterpart funds) to improve rural primary teaching, test incentive systems to improve teacher and student attendance, and develop a secondary school distance education system.

The objective of this report is to evaluate the relevance and effectiveness of World Bank efforts in support of primary education in Peru. To carry out the task, the mission team interviewed seven of the 16 former ministers of education from the period 1990–2005, including the current minister, a number of key past and present educational policymakers who were involved in the negotiations and implementation of the two loans, the local World Bank education representative, and representatives of other international agencies that provide financial or technical assistance to education in Peru, including the Inter-American Development Bank and the German international technical cooperation agency, GTZ. The mission also visited a number of schools, where mission members interviewed administrators, teachers and parents, and observed classes.

During the period analyzed by this report, 1990–2005, the World Bank lent only for primary education (grades 1–6) in Peru, although the rural primary loan does include a component for secondary distance education. The Bank has been a major force in stimulating primary education improvement in Peru, largely because the Ministry of Education—aside from counterpart funds for Bank loans—uses essentially its entire available primary education budget to pay salaries and to meet other usual and current expenses. Further, Peru has had a new education minister almost every year over the past 15 years. Thus, the Bank has ended up being an important shaper (as well as the institutional memory) of many, if not most, primary educational improvement efforts during this period.

Primary education in the national economic and political context

The context for these efforts was an economy that suffered serious setbacks in the 1980s (GDP decline and rapid inflation), a political system threatened in turn in the 1980s and 1990s by terrorists, assaults on the Constitution by the elected president in the late 1990s, and the undermining of the political system by drug cartels. In education, beginning in the 1970s, a series of governments emphasized expanding access more than improving quality. Educational attainment is relatively high in Peru but is still very unequally distributed between urban and rural areas. The past 15 years of primary school expansion has produced near universal access to full primary education. The majority of urban youth are also likely to finish secondary education (64 percent of urban 16- to 18-year-olds have completed secondary school), but the vast majority of rural youth are not (only 24 percent of 16- to 18-year-olds have competed secondary

school). In urban areas, a relatively high percentage of youth also attends some years of post-secondary school.

Peru expanded education largely by making it less expensive—principally by reducing teacher salaries in real terms. Except for 1985–87 and an earlier spending jump in 1980–81, educational spending per student fell steadily since the early 1970s. Indeed, by 1990, spending per student had fallen about 60 percent from 1973–74 levels, whereas GDP had risen about 14 percent and GDP per capita had fallen about 23 percent. This necessarily meant steep declines in teachers' real salaries. Teachers earned about 25–30 percent more than per capita income in the early 1970s and earned about 23 percent less than per capita income in 1990, a drop of about 50 percent relative to the average Peruvian. Part of this decline in teachers' relative position is due to an increase in average education in Peru's labor force, but part is due to a decline in teachers' wages relative to those of other professionals.

Quality of education, as measured by pupils' scores on international tests, is at the low end in Latin America, much below results on the same tests in Argentina, Chile, Colombia, and Mexico. This is not just an artifact of Peruvian students' lower socioeconomic background. The top 10 percent of achievers in Peru on OECD's Programme for International Student Assessment (PISA) scored at about the same level as the sixtieth percentile in Argentina. On UNESCO's Latin American Laboratory for the Assessment of the Quality of Education (LLECE) test, Peruvian pupils from higher socioeconomic backgrounds also scored much lower than their counterparts in many other Latin American countries, and rural Peruvian students scored among the lowest in Latin America.

World Bank support for expanding and improving primary education

The initial history of World Bank support for Peruvian education mirrors that of many other Latin American countries: loans for primary education in Peru started only in the mid-1980s, following a cycle of technical and vocational education projects in the 1970s, and a round of tertiary education projects in the 1960s. In 1984, a loan to improve and expand primary education was approved, with the goal of supporting the first 3-year phase of a 10-year education program designed to (*a*) provide sufficient and adequate student places for school-age children, (*b*) improve the quality of primary education, and (*c*) improve primary education management. The loan became effective in June 1985; less than 2 years later the Bank suspended disbursements to Peru. The project outcome was rated as unsatisfactory.

In 1993, the government of President Alberto Fujimori, with Bank support, developed an extensive diagnostic of Peruvian education and called for actions to improve educational quality, efficiency, and equity. That report led to the design of the Primary Education Quality Project (MECEP). The report pointed to key issues of instructional materials, teacher training, public school autonomy and accountability, school infrastructure, and bilingual-intercultural education. Together, the first four issues became the basis for the broad 1994 loan in the amount of US$146.4 million (with a government contribution of US$152.2).[1] Although it was not initially contemplated in

[1] Cancellation of some loan amounts and reduction of government counterpart contributions reduced the loan in the end to US$122.2 million and counterpart funding to US$147.1 million.

the project design, school infrastructure became the project's largest component, accounting for nearly half of project funds. This was the direct result of President Fujimori's insistence on school construction as the project's main goal. To ensure that school buildings did not take priority over "soft" investments, Bank staff set specific yearly targets for textbooks and training. Achievement of these targets triggered the release of funds for the construction component.

Beginning in 2001 the Bank signed a series of programmatic Structural Adjustment Loans designed to transfer funds directly to the Ministry of Finance in exchange for a broad array of social sector policy reforms (including health, education, and social protection). Each of the Programmatic Social Reform Loans (PSRLs), I–IV, was signed in the amount of US$100 million (except for PSRL III, in the amount of US$150 million). Through the PSRLs, the Bank financed the publication of both international (UNESCO/LLECE) and national assessment results, established monitoring and supervision systems including the creation of a payroll system to track the problem of ghost teachers and to compare teaching responsibilities with payroll amounts, piloted a program of local control in the distribution of salary incentives for rural teachers guaranteeing budgetary allocations for counterpart funds for finalizing MECEP, and developed a monitoring and evaluation system designed to provide transparency of information during the decentralization process. In 2004, a technical assistance loan in the amount of US$7.8 million was approved to support the development of an accountability system for decentralization in the social sectors, particularly to improve monitoring and evaluation activities.

In 2003, the Bank and the government of President Alejandro Toledo realized a long-in-gestation Rural Education Project (PEAR). The first phase PEAR Adaptable Program Loan (APL) was signed in the amount of US$52.5 million (with a government contribution of US$41.7 million of which US$12.2 million would be cofinanced by the Inter-American Development Bank (IDB)). The total program amount of the 10-year, three-phase APL is expected to be US$347.2, of which US$172.5 is a World Bank loan and the rest counterpart contributions. Project components include (a) expanding access for rural children, (b) improving quality in rural primary school, and (c) reforming teacher policy and education management. Expansion of access under the first project component focuses on both preschool and secondary education.

These loans represent significant amounts of money in the context of Peruvian educational spending. The $300 million primary education project in 1995–2000 represented about 5–6 percent of the total education budget for those 5 years and almost 20 percent of the total budget for primary education. The rural education project now underway also represents a significant fraction of the money being spent on rural primary education.

The Bank's contribution to sectoral changes in the past 15 years

Each of the two Bank projects and PSRLs implemented during 1995 to 2005 has generally been based on recommendations from detailed research-based diagnostics. These diagnostics were the keys to shaping the direction of the projects and helped to build consensus around the challenges and potential solutions for the MECEP project in the 1990s and the rural project. The activities outlined in the MECEP and PSRL projects seemed appropriate to education needs in Peru at the time, and usually focused on areas where the Bank could contribute extensive experience and technical assistance;

for example, in textbook distribution, teacher training and teacher incentive pilots, and distance education in rural areas.

Although the design of the MECEP project was relevant to the needs identified in the diagnostic, as highlighted in the OED review, the institutional development component was overly ambitious, especially given the volatile nature of the political context and the lack of specific project measures to help the Ministry of Education develop and build consensus around proposed reforms of school governance (especially autonomy) and administration (e.g., decentralization reforms). Although school autonomy and regional decentralization were proposed in the original project design, neither was implemented under the MECEP project, partly because the original project did not adequately take into account issues of political will. Some aspects of the original project design appeared in later projects (such as the rural education project), and through independent Ministry of Education actions, such as the new teacher hiring process, which was implemented at the beginning of the presidency of Alejandro Toledo.

There are three important caveats to the overall positive assessment of the relevance of Bank project activities. The first is the inclusion of the construction component in the MECEP project, which was not originally seen as a priority in the sector diagnostic. The Fujimori government, however, had threatened not to have a project at all unless the construction component was included; in exchange for guaranteeing advances in other areas, Bank staff included school infrastructure. In hindsight, there was considerable need for physical school improvements, although as discussed below, these likely would have occurred even without an MECEP project.

The second caveat relates to the low level of institutional capacity building in project activities. The Bank helped modernize the Ministry of Education through financing the technical assistance, hardware, and software to install information systems for payroll and recordkeeping. The Bank financed the technical assistance to make the ministry more cost-efficient through the elimination of many superfluous payroll positions, and the Bank supported the ministry in developing and sustaining the Quality Measurement Unit (UMC), which has done excellent work in achievement measurement and analysis over the past 10 years. Yet, at the same time, the Bank-created and Bank-financed Project Management Unit in the ministry has had little impact on training people in the rest of the ministry or in departmental offices, or installing management systems that have become permanently part of the ministry’s mode of operation.

One of the main problems in this regard has not been under the Bank’s control—the almost constant change in education ministers over the past 15 years. It is telling that the implementation of the MECEP project and PLANCAD is largely due to one minister, Domingo Palermo, who served 3 years during the presidency of Alberto Fujimori.

The third caveat concerns the absence of a method for evaluating and monitoring project activities and impact. NO ex-post evaluations of project impact have occurred, even though data are or could have been available for assessing the effect of textbooks and teacher training on student achievement over the 5-year period, 1996–2001. There is some indication that test scores for primary school children have remained relatively constant throughout the period, and this at a very low level compared with other large Latin American countries. However, this indication is not based on strict comparisons of like items on tests at the fourth grade level, for example, which would have been

possible if Bank or Bank-financed ministry staff had built project evaluation into the Bank project. In the absence of further evaluation, we do not know whether teachers changed their practice. We do know that thousands of teachers received training of varying quality from a variety of agencies contracted by the Ministry of Education.

Each of the PSRLs were highly relevant in establishing key administrative and legislative benchmarks for improvements within the education sector as well as protecting key social sector antipoverty measures from budgetary cuts during the transition period. Highly relevant measures include laying the administrative groundwork for the Rural Education Project, reforming the payroll system, and creating additional transparency within the Ministry of Education budget system.

Project activities as part of the rural education project are relevant, especially given the advances achieved under the PSRLs in the creation of school councils, more autonomous regions, and schools. There is, however, a concern that the rural project may be doing too much (i.e., it is spread too thin across a variety of activities). Some of the elements of the rural education project are being evaluated carefully, using comparison groups. But there is no separate evaluation component using UMC data in the project design (although there are planned M&E activities). A recent progress report on this project shows some major problems, especially the lack of an implementation strategy, an overall monitoring and evaluation plan, and a communications strategy aimed mostly at parents, teachers, and administrative personnel linked with the project.

Lessons learned about reform strategies in primary education

Peru's history of progress in primary education is typical of developing countries in some ways and very untypical in others. Peru has enrolled high numbers of its population into primary education even in poor rural areas, and it has rather high completion rates for primary schooling (and secondary school attendance) for marginalized urban and rural youth. This makes it somewhat atypical for a lower middle-income country. It is also atypical in the financial effort it has expended to accomplish these goals. Peru spends relatively little on its primary education system. Its per pupil costs are among the lowest in Latin America, and its teachers are paid among the lowest in the region relative to per capita income and compared with other similarly educated professionals.

Nevertheless, Peru is typical of countries investing so little per pupil in public primary education (Central American countries, for example) that its students score very low on international achievement tests, both at the primary level (LLECE) and in middle school (PISA) even when adjusted for socioeconomic class differences. Peru is also typical of most developing countries in that the teaching supervision system and teacher and school accountability systems are essentially nonexistent. Finally, Peru shares with most countries a fundamental lack of capacity for managing a massive and highly spread out primary education system. That is one more reason why the quality of these services is so low.

These underlying conditions suggest that improving teacher capacity and the governance of primary (and secondary) education are crucial to improving quality and efficiently increasing the amount of schooling received by each student. The experience in Peru suggests that management capacity building, from ministry to school to

classroom, should be a priority for governments and for agencies lending for primary education in developing countries.

Development effectiveness of Bank support

The Bank strategy under such conditions seems to have been to invest in projects that emphasized successful delivery of educational inputs rather than the delivery of educational outcomes. In the 1996 urban primary education loan, MECEP focused on two inputs—textbook distribution and improved classroom pedagogy. In theory, the delivery of these inputs should produce higher student outcomes, but this is not what the Bank emphasized.

Under programs that emphasize input delivery, managers are considered successful if they repair buildings, supply textbooks, or train teachers. In Latin America it should be expected that projects could go to the level of outcomes: delivering textbooks that are used in instruction, and changing teacher and management behaviors. It appears that the project took the less demanding road and focused on inputs and not on outcomes, such as actual textbook use, teacher behavior in the classroom, and most importantly, student learning outcomes.

The Bank's strategy implicitly assumed that if textbooks arrive at the school, teachers and students would use them effectively, and that if teachers learned better teaching techniques, they would utilize them effectively. Although there was slippage in textbook distribution and some teacher corruption in taking commissions from competing publishers to not use the free textbooks, the presence of textbooks and exercise books probably did contribute positively to pupils' learning. But a greater emphasis on the effectiveness of textbook use would have had to include considerable investment in management capacity. Teachers did apparently use at least some of what they learned in the in-service training courses and, based on teacher interviews, teachers who took the courses considered them valuable. Contract teachers who were not eligible for the courses also wanted very much to take them. But even though investing in such inputs is a correct strategy, the question is whether without supportive investments in supervision and content knowledge their yield is high enough to justify spending considerable sums on them (particularly the much more expensive pedagogical training part). It does not appear that the yield on pedagogical improvement was very high in the context of teachers' low content knowledge, but an emphasis on outcomes may have forced a more effective investment strategy.

The emphasis of the Rural Education Project (2003) is also on delivery educational inputs, such as expanded access, nonformal preschools run by community groups, and direct access to distance secondary education, all based on programming by a central core of experts. A few components do focus on outcomes, such as pilot community incentive programs to improve rural teacher attendance and teacher accountability, but not on learning outcomes.

Limiting the emphasis in the two Bank-supported projects mostly to improved delivery of educational inputs may have been a prudent choice, given the general country context of low management capacity. However, low management capacity, especially at the school level, tended to undermine the extent to which the improved inputs could be translated into better learning outcomes. In the long term, educational improvement will

depend on the ability of projects to influence both educational inputs and management capacity, and harnessing both to improve teacher behaviors and student learning.

With constant changes in education ministers, it is admittedly difficult to maintain continuity in reform efforts. The Bank has been fairly successful in Peru despite this difficulty because of the skilled personnel in the local office of the Bank, and because the Bank's education sector specialist has been in place for 10 years. Thus, the Bank has been an important part of the institutional memory for reform, and has, by being firm in not changing the shape of its loan agreements once signed, been able to get most of what it wanted in loan agreements and implementation. This is not always a good thing, but for the most part, keeping the implementation of agreements on course has worked reasonably well. All in all, however, the Bank should have been more aware of the longer-term nature of successful educational reforms, particularly in a country in which the educational system requires long-term improvements in quality.

1. Introduction and Analytic Framework

During the past decade the World Bank developed and launched two major education loans in Peru, one in 1995, aimed at improving urban primary education, and the second in 2002, focused on upgrading rural primary education. The first loan contributed US$146.5 million towards a total investment of US$300 million (the balance coming from counterpart contributions) for building urban primary schools, developing and distributing school textbooks, and improving classroom teaching. The second loan is still in progress, but is expected to contribute roughly $170 million over 4 years to a total investment of nearly US$350 million (counting counterpart funds) to improve rural primary teaching, test incentive systems to improve teacher and student attendance, and develop a secondary school distance education system.

The objective of this report is to evaluate the relevance and effectiveness of World Bank efforts in supporting primary education in Peru. To achieve this goal, the World Bank's Operations Evaluation Department (OED) selected a team of researchers to review documents, conduct interviews, and draft and case study report. The analysis of the effect of World Bank efforts in education also includes the secondary effect the loans may have had on developing capacity in the Peruvian Ministry of Education to initiate and implement these and other attempts to improve the quality of primary education in the country.

To carry out the task, the mission team interviewed seven of the 16 former ministers of education from the period 1990–2005, including the current minister, a number of key past and present educational policymakers who were involved in the negotiations and implementation of the two loans, the local World Bank education representative, and representatives of other international agencies that provide financial or technical assistance to education in Peru, including the Inter-American Development Bank and the German international technical cooperation agency, GTZ. The mission also visited a number of schools, where mission members interviewed administrators, teachers and parents, and observed classes. The interviews and school visits, and the many documents and background data the mission team analyzed provide a detailed picture of the political context for the Bank loans, the manner in which the strategy surrounding the loans were developed and implemented, the relationship between the Ministry of Education and the Bank, and the ultimate impact of the loans.

During the period analyzed by this report, 1990–2005, the World Bank lent only for primary education (grades 1–6) in Peru, although the rural primary loan does include a component for secondary distance education. The Bank has been a major force in stimulating primary education improvement in Peru, largely because the Ministry of Education—aside from counterpart funds for Bank loans—uses essentially its entire available primary education budget to pay salaries and to meet other usual and current expenses. Further, Peru has had a new education minister almost every year over the

past 15 years. Thus, the Bank has ended up being an important shaper (as well as the institutional memory) of many, if not most, primary educational improvement efforts during this period.

The context for these efforts is an educational system that in recent history has emphasized expanding access more than improving quality. Educational attainment is relatively high in Peru but unequally distributed between urban and rural areas. The past 15 years of primary school expansion has produced near universal access to full primary education. The majority of urban youth are also likely to finish secondary education (64 percent of urban 16- to 18-year-olds have completed secondary school), but the vast majority of rural youth are not (only 24 percent of 16- to 18-year-olds have competed secondary school). In urban areas, a relatively high percentage of youth also attends some years of postsecondary school.

Quality of education, as measured by pupils' scores on international tests, is at the low end in Latin America, much below results on the same tests in Argentina, Chile, Colombia, and Mexico. This is not just an artifact of Peruvian students' lower socioeconomic background. The top 10 percent of achievers in Peru on OECD's Programme for International Student Assessment (PISA) scored at about the same level as the sixtieth percentile in Argentina. On UNESCO's Latin American Laboratory for the Assessment of the Quality of Education (LLECE) test, Peruvian pupils from higher socioeconomic backgrounds also scored much lower than their counterparts in many other Latin American countries, and rural Peruvian students scored among the lowest in Latin America.

Peruvian education is inexpensive. Teachers' salaries are low at all levels of education, including university. Many of our interviewees argued that unlike Chile and Mexico, Peru never committed itself to restoring and improving educational quality after the major economic recession in the 1980s.

In this context, we ask, what impact did the World Bank have on the Peruvian educational system, and what impact *could* the Bank have had? In the early 1990s, the school system was in total decline. In many rural areas, the *Sendero Luminoso*, not the Peruvian state, controlled the schools. In the 1980s, the quality of education delivery had deteriorated significantly in urban areas. The Bank chose to focus on urban primary education and to improving its quality. Because rural education was considered a security issue, the Bank's choice made sense. The Bank was also a logical partner for the Peruvian government in tackling the quality issue because of the Bank's technical expertise. Further, local Bank personnel were particularly effective in partnering with other donors to avoid overlap—the World Bank was able to focus on primary education, whereas the Inter-American Development Bank focused on secondary education reform. However, as this report will argue, the process and the results of the first loan for primary urban education and the second loan for rural primary education did not and will not produce the kind of results that its designers had hoped for. Much of the shortfall in results was due and continues to be due to circumstances beyond the control of Bank staff. Yet, the results can provide important lessons for future lending in Peru and countries like Peru, where underlying conditions make it unlikely that even large

education loans will elicit counterpart commitments large and sustained enough to significantly improve schooling.

Specifically, this case study addresses the following broad questions:

- What have been the main changes in Peruvian primary education in the 1990s and early 2000s?
- What has been the Bank's strategy to improve primary education in Peru since 1990 and what assistance has the Bank provided to achieve that goal? Has the strategy been relevant to Peru's needs?
- What other development agencies have been active in supporting primary education (and other levels of education) and how have their efforts related to World Bank lending?
- How much did the Bank's lending and technical assistance in the past 15 years influence education outcomes, either directly, through improving school facilities and classroom teaching, or indirectly, through building institutional capacity in government ministries, district offices, and schools to effect improvement, or through building more efficient cooperation among donors and increasing support for education in the society as a whole?
- To what extent would the changes have taken place in the absence of Bank support?
- What were the main challenges and obstacles to the implementation of programs for improving access and outcomes of primary education?

The report is divided into six main sections, in addition to this introduction. Section two contains a brief description of changes in the condition of primary education in Peru over the past generation, as well as the Peruvian political context in that period as it shaped the government's role in education and primary education strategies. The third section provides a description of World Bank lending to Peru for primary education in the past 15 years. An analysis of changes in Peruvian education over the past 15 years, including enrollment, financing, demand, and achievement outcomes is the topic of section four. Section five analyzes the World Bank's contribution to changes in policies, capacity, services, and outputs/outcomes. Section six documents the lessons learned from World Bank strategies and lending practices in Peruvian primary education, and the final section presents some conclusions.

2. Primary Education in National Economic & Political Context

The main focus of this report is the period 1990–2005; however, the 20 years before the 1990s did much to define the underlying economic and educational conditions in Peru and the context for change. We have constructed a number of graphics showing gross domestic product (GDP), GDP per capita, school enrollment by grade, and education spending per student and by level of education (see Figures 1–4). The figures differ somewhat in their details, but all show the same trend: although GDP and GDP per

capita grew in the 1970s, the economic shocks of the 1980s have left GDP per capita in 2003—even after a decade of growth—at the same level as in 1970. Educational spending per student declined even in the 1970s, so that by 1990, education funding in Peru was among the lowest in Latin America.

The 1980s were a period of great economic difficulty for Peru, just as they were for the rest of Latin America. Higher interest rates imposed in the United States at the end of the 1970s to halt inflation precipitously raised the cost of earlier foreign borrowing by developing countries and caused sharp recessions and cutbacks in social services throughout the Latin American region in the 1980s. In Peru as elsewhere, the early 1980s were marked by sharp declines in education spending per student at all levels, including primary schooling. However, the behavior of Peru's social spending in the 1980s differed in one important way from social spending in much of the rest of Latin America: when Alan Garcia was elected president in 1985, he greatly increased social spending—including spending on education—fueling a short spurt of economic growth and inflation. Yet by 1987, the economy resumed its downward slide and educational spending collapsed. In the 5-year period of 1985–90, GDP decreased from $41.270 million to $37.405 (constant 1994 US dollars), or, in per capita terms, GDP fell from $2,130 to $1,750. Inflation rose from a 54 percent increase in the price index in 1985 to 47,635 percent in 1989 (*Peru en Números, 1990*), and terrorist actions by two revolutionary groups and counterterrorism by the Peruvian military were at their peak

Figure 1 suggests that between 1970 and 1990, spending per student fell steadily except for brief increases in 1979–80 and 1985–87. Indeed, by 1990, spending per student had fallen about 60 percent from 1973–74 levels, whereas GDP had risen about 14 percent and GDP per capita had fallen about 23 percent. Because the composition of enrollment shifted upward toward secondary education during this period, and secondary and postsecondary education are more expensive per pupil than primary schooling, the decline in average spending per student underestimates the drop in spending at each level. This necessarily meant steep declines in teachers' real salaries.

At the same time, however, Peruvian primary, secondary, and postsecondary education enrollment continued to expand (Figures 2, 3, and 4). Thus, in general terms, we can characterize the nature of the Peruvian educational system in the 1970s and 1980s as one having financed continued expansion of enrollment at all levels by lowering the cost per student—principally by reducing teacher salaries in real terms. Figure 1 indicates that if the index of educational spending per student is a proxy for an index of teachers' salaries, teachers earned about 25–30 percent more than per capita income in the early 1970s and about 23 percent less than per capita income in 1990, a drop of about 50 percent relative to the salary of the average Peruvian. Part of this drop in teachers' relative salary is due to an increase in average education in Peru's labor force, but part is due to a drop in teachers' wages relative to those of other professionals.

This is borne out by the decline in total educational spending as a proportion of GDP from about 3.5 percent in the early 1970s to 2.2 percent in 1990. Even after the increases of the 1990s, Peru's public sector was still spending less than 3 percent of its GDP on education. This compares with a Latin America regional average of 4.5 percent

in the late 1990s and an OECD average of 4.6 percent. Because about one-third of Peru's population attends school, which is much higher than, say, the 16 percent in France and the United Kingdom or the 14 percent in Japan, and higher even than the 28 percent in Mexico and the 23 percent in Chile, Peru should be spending a higher percentage of it GDP on educational services to produce a similar level of educational delivery. This makes Peruvian spending on education even lower in both relative and absolute terms than is suggested by the comparison of percentage of GDP. Although some economists have argued that the quality of education cannot be systematically related to spending per student (Hanushek, 1986), it is safe to say that the quality of Peruvian education has not been helped by such a long and steady decline in spending per student and in teachers' relative salaries.

Given this background, it is relevant to ask how administrations during the period we analyze (1990–2005) changed the economic, political, and educational climate and how the Bank interpreted its role in contributing to educational recovery from a probable long decline in quality. It is also important to analyze the limitations the Peruvian government and the Bank faced in their tasks. This section presents a brief account of major political and social changes in Peru in the 15-year period, 1990–2005. We have divided the analysis by presidential periods: Alberto Fujimori (elected in 1990, reelected in 1995 and 2000), Valentín Paniagua (November 2000 to July 2001), and Alejandro Toledo (2001 to 2006).

President Fujimori: 10 years of dubious democracy

In 1990, Alberto Fujimori was elected President of Peru for 5 years. His anti-inflation program was implemented shortly after he was elected. It caused continued disruption in the short run, as prices of most items rose 10-fold or more. But eventually, beginning in 1992, these economic policies achieved their goals of halting inflation and restoring economic growth (see Figure 1). In an unusual move during a period of economic austerity policy, Fujimori gradually increased spending on education even in 1990–92.

Terrorism continued to be a major national problem. Accusing the National Congress of blocking his counterterrorism initiatives (President Fujimori did not have majority in the Congress in the early 1990s), he closed it in April 1992, thus violating the Constitution he had sworn to uphold. To do this, he needed the support of the military, and eventually of public opinion. In September 1992, police arrested Abimael Guzman, the leader of the major terrorist group, *Sendero Luminoso* (The Shining Path). This proved to be a blow from which the terrorists would not recover, although they continued to have some followers in remote areas in the jungle and highlands of Peru.[2]

> By the mid-1990s, President Fujimori had achieved broad popularity with his economic and antiterrorist successes. International pressure forced him to call for congressional elections. The new Congress, dominated by pro-Fujimori representatives, reformed the Constitution,

[2] The second terrorist group, *Movimiento Revolucionario Tupac Amaru*, was extinguished in April 1997, when troops ended a 5-month hostage crisis in the Japanese embassy by killing 15 guerillas and one hostage.

allowing President Fujimori to run successfully for reelection in 1995. Fujimori then ignored his own Constitution to run for a third term in 2000. His presidency should have lasted until July 2005, but it was cut short due to political scandals revealing major levels of corruption among Fujimori's closest collaborators.

An important part of President Fujimori's popularity came from his school construction program and his expansion of access to primary education, particularly in rural areas. In the 1990s, Peru reached near universality of primary school completion (6 years of education). The president had a clear conception of the use of public works to fortify his political power base, and educational expansion was part of that strategy. He increased spending per student, but much of that increase went into capital investment. *In other words, educational expansion and access was almost entirely a political strategy, designed to strengthen the power of the Fujimori presidency.* This had a positive effect on education, particularly primary education, because it helped provide access to a full 6 years of schooling in rural and marginal urban areas. But it was not part of an overall strategy to turn the educational system around.

It is important to understand this period because the World Bank's major ($146.5 million) loan for urban primary schooling was negotiated with the Fujumori government in the 2 years after he closed the Congress and had established himself as a populist quasi-dictator. In hindsight, this seems politically questionable. But the Fujimori presidency was not so easily interpreted at the time (1992–95). On the one hand, his government halted hyperinflation and greatly reduced terrorism. In his first term (1990–95) the economy also made a broad recovery: GDP per capita rose 20 percent. On the other, it is clear that President Fujimori had little respect for democracy and the law. In the late 1990s, this had negative effects on the economy. Near the end of his second term, his presidency began to be widely considered a masked form of dictatorship supported by the military. There is also considerable evidence that the reelection processes (especially in 2000) involved some forms of fraud. President Fujimori was forced to resign at the end of 2000, when a video was released showing his right-hand advisor, Vladimiro Montesinos, bribing a congressman to desert his party and join Fujimori's.

The Bank, as we shall show below, may have contributed indirectly to Fujimori's popularity in the 1990s by using, at the president's insistence, most of the Bank's loan for school construction (counterpart funds were used for teacher in-service training). The approximately 450 schools the Bank helped build, along with many more schools built or repaired by the Fujimori administration during the mid- and late 1990s using other funds, still stick in the minds of electors as a major contribution by the Fujimori government to bettering the lives of Peruvians. In his first term, President Fujimori also rapidly increased social spending, including spending on education (see Figure 1). Implicit in these data are increases in teachers' salaries relative to per capita income between 1990 and 1995, even though Fujimori's regime crushed union activities as part of its crackdown on civil rights. However, the increase in educational spending was only partially absorbed by increases in personnel costs. Unlike educational spending increases in other countries, a substantial part of the increase in spending during the Fujimori regime went to school construction and teacher training. Personnel costs increased by 64 percent compared with a 94 percent increase in overall public spending on education. Spending on construction increased from 1.4 to 15 percent of total spending on education in 1990–94, then gradually fell back to 8 percent by 1997 (World Bank, 1999).

Even so, total public spending per student in primary and secondary education at the end of the Fujimori administration was among the lowest in Latin America, far below other large countries in the region (Table 1).

Table 1. Spending per pupil in primary and secondary school in various Latin American countries, 2000

Country	GDP per capita (2002 $)	Spending per capita (primary) as a percent of GDP per capita	Spending per capita (secondary) as a percent of GDP per capita	Spending per pupil on primary education (2002 $)	Spending per pupil on secondary education (2002 $)
Brazil	2860	11.3	10.9	323	312
Chile	4340	15.8	15.6	686	677
Colombia	1810	15.9	17.9	288	324
El Salvador	2110	8.1	10.4	171	219
Mexico	5950	13.8	18.4	821	1095
Peru	2020	7.0	9.2	141	186

Source: World Bank, World Development Indicators

In addition, much of the new spending went to the university level, where spending per student increased much more rapidly than it did for other education levels (World Bank 1999). Figure 5 shows that the proportion of university public spending increased steadily from 1990 to 2001 in Peru, whereas the proportion spent on primary education declined. Peru now spends a higher proportion of its educational budget on university education than many other Latin American countries.

The transition government

When Fujimori resigned, the President of Congress, Valentin Paniagua, was sworn in as President of Peru, and new elections were called. President Paniagua was in office only for a few months from the end of 2000 until July 2001. He did not initiate major changes in any sector; rather, his work facilitated the transition toward a new presidency.

The presidential elections in 2001 included as the preferred candidates Alan García, president from 1985 to 1990, and a relative newcomer to politics, Alejandro Toledo, who ran against Alberto Fujimori in 1995, garnering only 10 percent of the vote. Yet, Toledo won the presidency in 2001 in a second round against García, mainly because he and his movement were viewed as having forced Fujimori from office and because at least part of the electorate remembered the economic disaster of García's term in the 1980s.

As is shown in greater detail below, the transition also included some attempts to formulate strategic plans to improve education, but the period was too short to put anything in place.

The Toledo presidency and high expectations

President Toledo's term began in July 2001 and was to end in 2006.[3] His presidency was expected to restore democracy and end corruption. There were high expectations that he would stimulate economic growth, and Peru would recover from the stagnancy of Fujimori's second term. Economic growth was supposed to create more and better jobs—this was one of candidate Toledo's main campaign promises.

President Toledo managed to produce consistent and relatively large increases in the real GDP (about 4.8 percent annually), to keep the inflation rate at historic lows, and to increase exports substantially. Yet, almost from the beginning of his presidency he was highly unpopular. In his last 2 years in office, national surveys placed his approval rate somewhere around 10 percent to 15 percent. One probable cause of his lack of popularity was the failure of GDP increases to trickle down to the poor. Other causes may have been the corruption scandals that were regularly reported in the press. Toledo's presidency has managed to promote or sign important contracts with other governments and private companies, including activities in mining and gas, and the government is negotiating a free trade agreement with the United States. Yet it is hard to argue that presidents Toledo, Paniagua, or Fujimori have promoted significant structural changes in the social sectors. One indication of this is that poverty appears to be decreasing at a very slow pace, as shown in Table 2.

Table 2. Percent of Peru's population living in poverty and extreme poverty, 1991–2002

	1991	1996	2002
Poverty (%)	53.7	49.0	46.6
Extreme poverty (%)	21.7	16.6	19.4
Population (thousands)	21,966	23,947	26,749

Source: Perú en Números, editions for 1992, 1997, and 2004, Lima: Cuánto. The authors warn that the results from different years might not be strictly comparable due to changes in sampling methods.

President Toledo called for regional elections for the first time, which could have important repercussions for education in the next decade. Regional presidents were elected and took office in early 2003. This decentralization process is expected to be a major source of change in Peru, but the actual process of transferring facilities and resources from the central government to the regions has been slow, especially in education.

The main policy characteristic of the Toledo government was that it focused on re-establishing democracy in the country and strengthening the foundations for sustained economic growth. An important factor is that this was a one-term presidency as defined by the constitution. This and the economic growth paradigm have reduced the incentive to increase social spending. Nevertheless, President Toledo increased per student

[3] This report was drafted in 2005, before Toledo's term ended in 2006. Alan Garcia was elected president on June 5, 2006.

spending on education significantly in 2001–05 by raising teachers' salaries more than 75 percent in nominal terms and by more than 25 percent in real terms. During the Toledo presidency the teachers' union, Sindicato Unitario de Trabajadores en la Educación del Perú **(**SUTEP), was much more active than during the 1990s, when President Fujimori completely ignored them in promulgating his education policies. SUTEP organized a national strike in 2003 that lasted nearly 2 months.[4] Because of the salary increases, however, it appears that teacher morale increased[5] and the government was able to restore some order to the education system (e.g., there have been no strikes in 2 years) without the repression that marked the Fujimori regime. Thus, President Toledo focused on improving the material conditions for teachers, and, at least in the first 2 years of his presidency (under his first Minister of Education, Nicolas Lynch), attempted to improve the quality of new teaching hires. Toward the end of President Toledo's term in office the government had begun to consider reforms of the teaching career ladder. Secondary education continued to expand, and, with decentralization, there were spontaneous departmental programs of secondary education expansion in rural areas. The World Bank loan and counterpart funds are pumping considerable spending into rural primary schools. Even so, the Toledo government developed no systematic plan to improve Peru's very poor quality primary and secondary education system, nor did it implement any strategies to increase the low levels of student achievement in primary schools.

3. World Bank Support for Expanding and Improving Primary Education

The initial history of World Bank support for Peruvian education mirrors that of many other Latin American countries. Loans for primary education in Peru started in the mid-1980s, following loans for technical and vocational education in the 1970s and loans for tertiary education in the 1960s. During the 1970s and 1980s, the World Bank supported education development in Peru through two projects (Loan 949-PE for US$24 million and Loan 2465-PE for $27 million). The first project (Loan 949-PE, signed in 1973), assisted the government in introducing work-oriented curricula into upper and lower secondary education. Thirty-five schools were built with 31,000 student places. Following efforts to solve project implementation problems (weak administration of the project unit, delays in

[4] SUTEP is increasingly questioned because its leaders are all members of a communist party called *Patria Roja* (Red Homeland). Controlling SUTEP is important because it gets to appoint the majority of the board of directors of Derrama Magisterial, a teacher organization that receives several hundred thousand dollars a year from dues paid by teachers from their salaries. The proposal from the Ministry of Education, backed by much of the press, is toward reforming the election process within SUTEP to make each teacher accountable for one vote (currently, the system of election is through delegates). If this takes place, it is likely that SUTEP will change its leaders and traditional orientation.

[5] Teacher morale has not been helped by the low Program for International Student Assessment results. The press tends to blame the teachers and poor teaching for the low results.

defining the postsecondary vocational curricula, and bureaucratic procedures blocking the use of funds allocated for technical assistance), the project was completed in 1982. In 1984, a loan to improve and expand primary education was approved, with the goal of supporting the first 3-year phase of a 10-year education program designed to (a) provide sufficient and adequate student places for school-age children, (b) improve the quality of primary education, and (c) improve primary education management. The loan became effective in June 1985; less than 2 years later (during the presidency of Alan Garcia) the Bank suspended disbursements to Peru. By that date, fewer than 15 percent of classroom construction targets and less than 4 percent of the planned textbook production had been realized. The project outcome was rated as unsatisfactory even though another 25 percent of classroom construction and slightly more than 25 percent of textbook distribution targets were realized with alternative financing in the years 1987–91. Institution building under the project was negligible, and the completion report deemed that "project benefits were surely not sustained."

It was clear to the Bank in the early 1990s that Peru's educational system had deteriorated significantly during the previous decade. With the support of the World Bank and other international agencies, Minister of Education Alberto Varillas developed a diagnostic of Peruvian education in 1993. The diagnostic consisted of a global report and 16 reports on specific areas, and called for actions to improve educational quality, efficiency, and equity (Ministerio de Educación, Banco Mundial, et al., 1993). That report led to the design of the Primary Education Quality Project (MECEP) project. The report pointed to key issues of instructional materials, teacher training, public school autonomy and accountability, school infrastructure, and bilingual-intercultural education (EBI). Together, the first four issues became the basis for the broad 1994 MECEP loan in the amount of US$146.4 million (with a government contribution of US$152.2).[6] The project's four components were divided among (a) improving educational quality, especially through teaching and learning conditions (curriculum, textbooks, teacher training); (b) modernizing education administration by strengthening public school management and improving the planning, monitoring, and management capacity of central, departmental, and local authorities (assessment and decentralization); and (c) improving school infrastructure. The decentralization focus of the modernization of education administration component was revised before the loan was signed in December 1995 (eliminating the proposed school autonomy models), and again in 1997 (when decentralization meant modernization of central-level agencies in the departments of Lima and Callao). The project closed in 2001 with satisfactory ratings, but disbursed somewhat less than anticipated due to cancellations (the final loan amount was $122 million and the estimated counterpart contribution $147.1 million). Although not initially contemplated in the project design, school

[6] Although EBI was to have been covered by the government (in accordance with an agreement laid out in the MECEP Staff Appraisal Report) Ministry of Education efforts in this area met with mixed results. Until 1996, the EBI agenda was carried forth by various NGO pilot projects; lessons from these experiences will be reflected in Ministry of Education efforts and scaled up under the World Bank–financed Rural Education Project.

infrastructure became the project's largest component (nearly half of project funds). This was the direct result of President Fujimori's insistence on school construction as the project's main goal. To ensure that school buildings did not take priority over "soft" investments, Bank staff set specific yearly targets for textbooks and training. Achievement of these targets triggered the release of funds for the construction component.

Meanwhile, growing awareness developed around the need for a rural schools project based on small-scale rural education projects that were being supported by other international donors. Conversations began as early as 1998 for a project in rural areas, and the Bank financed a second diagnostic in 1999, *Peru: Education at the Crossroads*. It, too, emphasized the low quality of Peruvian education, particularly for children from low-income and rural families, and made specific recommendations for increasing equity in the system and improving teaching. Nonetheless, despite widespread recognition of needs for quality improvements, especially in the mountainous (*sierra*) region, Bank staff opted to wait until the volatile political situation of the late 1990s was resolved before committing to an ambitious new project for the sector.

The new millennium brought with it the end of the Fujimori government and in July 2001, a new president, Alejandro Toledo. Beginning in 2001, the Bank signed a series of programmatic structural adjustment loans, designed to transfer funds directly to the Ministry of Finance in exchange for a broad array of social sector policy reforms (including health, education, and social protection). Each of the Programmatic Social Reform Loans (PSRLs), I–IV, was signed in the amount of US$100 million (except for PSRL III, in the amount of US$150 million). The first loan, signed in April 2001, was designed to assist the government in safeguarding critical social expenditures during a difficult fiscal adjustment and political transition period. Through the PSRLs the Bank financed the following policy reforms and actions:

- Publication of both international (UNESCO/LLECE) and national assessment results
- Establishment of monitoring and supervision systems including creation of a payroll system to track the problem of ghost teachers and compare teaching responsibilities with payroll amounts
- Piloting of a program of local control in the distribution of salary incentives for rural teachers
- Guaranteeing budgetary allocations for counterpart funds for finalizing MECP
- Development of a monitoring and evaluation system designed to provide transparency of information during the decentralization process.

In 2004, a Technical Assistance Loan in the amount of US$7.8 million was signed to support the development of an accountability system for decentralization in the social sectors, particularly with regards to improved monitoring and evaluation activities.

The long-awaited Rural Education Project (PEAR) finally came to fruition in 2003, when the first phase PEAR Adaptable Program Loan (APL) was signed in the amount of US$52.5 million (with a government contribution of US$41.7 million of which

US$12.2 million would be cofinanced by the IDB). The total program amount of the 10-year, three-phase APL is expected to be US$347.2, of which US$172.5 is a World Bank loan. Project components include (a) expanding access for rural children, (b) improving quality in rural primary school, and (c) reforming teacher policy and education management. Expansion of access under the first project component focuses on both preschool and secondary education. For preschool education, the project will employ both formal and nonformal strategies, including deploying trainers to homes and community centers in rural areas to provide services to some 68,000 children. The strategy for secondary education in rural areas is one of distance education using cost-effective information and communications technologies in areas that lack traditional "brick-and-mortar" secondary schools. The second component focuses on the quality of teaching and learning in primary schools in rural areas through continuous professional development for teachers, distribution of multigrade and bilingual instructional materials, and classroom rehabilitation. Finally, the third component includes support for the Ministry of Education in its effort to implement a new teacher career plan and performance evaluation system, reform of education management, funding of school improvement projects, assessment activities conducted by the Unidad de Medición de la Calidad Educativa (UMC, or Quality Measurement Unit), research and evaluation activities related to the UMC, and project management activities.

As detailed in the "lessons learned" section of the Rural Education Project Appraisal Document (PAD), project activities build upon international experience such as EDURURAL and FUNDESCOLA in Brazil, *Escuela Nueva* in Colombia, and EDUCO in El Salvador as well as experience under the MECEP and PSRL projects in Peru. The PAD also states that a valuable source of information during project preparation was the sector report "Peruvian Education at a Crossroads: Challenges and Opportunities for the 21st Century" (World Bank 1999), which highlighted the decision Peru faced in either maintaining the low-level equilibrium to continue much as it was, or initiating a major effort to consolidate equity and improve quality. The PEAR, it is hoped, is evidence of Peru's choice to take the latter path.

These loans represent significant amounts of money in the context of Peruvian educational spending. The $300 million primary education loan and counterpart funds in 1995–2000 represented about 5–6 percent of the total education budget for those 5 years and almost 20 percent of the total budget for primary education. The rural education loan now underway also represents a significant fraction of the money going to rural primary education. Thus, how those funds were and are spent is important, given the generally low spending per student in primary education. Even more crucial, the World Bank funding and the required matching money from the Peruvian treasury was and is essentially all the funding for reforms in primary education.

4. Summary of Recent Educational Changes in the Country

As described above, the Fujimori government inherited a seriously underfunded educational system characterized by stagnating primary enrollment growth. Enrollment was affected by, among other things, terrorist activity in rural areas. By 1993, the Fujimori government had created the conditions (increased spending per pupil and reduction of the Sendero Luminoso threat in the countryside) whereby primary enrollment began increasing. After 3 years of leveling off in the early 1990s, secondary enrollment also began to grow rapidly again by 1993.

There was widespread recognition in the 1990s and early 2000s in Peru that the educational system had serious quality problems. In addition to the two diagnostics discussed in the previous section, in 2001, Marcial Rubio, Minister of Education to Interim President Paniagua, called for a national discussion on education (*Puertas Abiertas*, or Open Doors). The resulting document presented eight objectives for Peruvian education, including decentralizing the educational system, providing access to a quality education, giving all Peruvians the information they needed to understand and evaluate progress in education, investing more and more effectively in education, and bringing higher education up to international standards (Ministerio de Educación. 2002).

The diagnostics did result in some changes in educational policies, in the capacity of the Peruvian government to effect change, and in educational delivery, but they did not produce the sustained, comprehensive, visionary reforms needed to put Peruvian education on the road to significantly higher quality and greater equity. A more systematic response to the diagnostics was severely hampered throughout this period by a high turnover of education ministers (seven ministers of education from July 1990 to June1995); a corresponding turnover in ministry staff, and a continued shortage of public resources dedicated to education.[7]

This section documents these changes in the education sector since 1990, highlighting five key areas: government policies and capacity, government delivery of education services, the output and outcomes of these policies and their implementation, household demand for education, and an analysis of the success of these reform strategies.

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[7] Rapid turnover of ministers of education in Peru has become almost a historic tradition. Perhaps it could be explained by a combination of two factors: (a) If ministers of education are not assigned significantly more funding and prestige within the cabinet they are perceived as failures sooner rather than later and thus removed by the president; (b) education has often been a sector controlled by the political party of the president, and thus high-level and low-level positions are frequently assigned to followers who are not prepared for the job (this includes several vice ministers and a few ministers in the past 15 years). In this context ministers are often prone to scandals and are not surrounded by the best advisors. This, again, results in the minister eventually becoming unpopular and removed from office.

Government policies and capacity related to primary education

School construction

The Fujimori administration's goals for education are perhaps best described through the president's program to build new schools or renovate existing schools, which he started in 1993. At one point he managed to inaugurate one school daily. This is one of the keys behind his popularity; teachers and parents appreciated the new buildings. Many of our interviewees claimed that since President Fujimori did not have an organized political party behind him, he used school inaugurations as mass political meetings in local areas. A major critique of the school construction program is that the buildings were shoddily built and that many subsequently collapsed or needed major repairs. President Fujimori insisted that the World Bank funds from the loan initiated in 1995 be earmarked entirely for school construction with Bank-required Peruvian counterpart funds allocated to teacher training and teaching/learning materials.

Teacher training

The World Bank and the Ministry of Education developed a program to train teachers to implement the new curriculum that was developed during the second half of the 1990s. This program, Plan Nacional de Capacitacion Docente, or PLANCAD, which had the support of the Bank, was a major effort that included almost all primary school teachers throughout the country. The emphasis of the training was on constructivist methods of teaching. There was also a program to train school principals in administrative issues, PLANCGED, which was more limited in coverage than PLANCAD. The training was carried out by nongovernmental organizations (NGOs) that were organized, in some cases, specifically to respond to the PLANCAD. The decision to subcontract to NGOs was based, according to our interviewees, on the lack of capacity in the Ministry of Education to undertake such a project. To our knowledge there have been no adequate empirical evaluations of these programs (i.e., with an experimental design or equivalent). Nevertheless, most of our interviewees claimed that pedagogy in primary education has improved compared with the frontal approach that was prevalent in the early 1990s.

Teacher evaluations

Three large national evaluations for teachers were undertaken in the second half of the 1990s that helped to regulate the distribution of permanent (nombrado) teaching jobs (temporary, untenured teachers are called contratados). Each evaluation was exclusively based on multiple-choice questions (i.e., teacher performance was not evaluated). These tests had several flaws, including no studies on their validity, but they were an important first step toward standardized evaluation of teachers. In 2001, President Toledo's new Minister of Education, Nicolas Lynch, called for radical changes in the teacher career plan (and career ladder), which had traditionally been based credentials and years of teaching experience. He set up a national evaluation as the first step toward

meritocracy (President Fujimori had developed several similar evaluations in the 1990s).[8] The 2001 evaluation proceeded in three stages: (a) an evaluation of a teacher's portfolio, (b) a personal interview by peers and parents, and (c) a written (multiple choice) test for those who passed the first two stages.[9] Although radical factions in the teachers' union opposed the evaluation, it went forward. However, based on exam results, the Ministry of Education was able to fill only 23,000 of the 32,000 available teaching posts. The other 9,000 positions became a political football and were distributed to teachers on the basis of their political connections. Even so, this was a major reform in a system in which there is a vast surplus of teaching graduates relative to available teaching positions. The evaluation has not been applied since 2002, however, and it did not play a role in the new World Bank rural education loan.

National standardized evaluations of student achievement

As part of the MECEP project, the Ministry of Education in 1995 established an office to evaluate student achievement, called UMC (Unidad de Medición de la Calidad Educativa), in the Ministry of Education. This office carried out national evaluations in 1996 and 1998; it also performed the international evaluation developed by UNESCO Santiago (LLECE), in 1997.[10] The two national evaluations were developed using a norms model, so that the tests were designed to produce national averages of around 50 percent of the maximum possible score. Thus, the results were not appropriate to answer the question, "how much do the students know," but only to produce relative scores by groups (e.g., results by departments, urban versus rural, boys versus girls, and the like). Under the interim and Toledo governments, the UMC carried out two more evaluations in 2001 and 2004, and participated in the OECD's Programme for International Student Assessment (PISA) evaluation of 15-year-olds. The 2001 UMC evaluation was the first based on a criterion-referenced model, which would test students' knowledge of major contents of the curriculum and set up a minimum passing score. PISA was administered in 2002, and the results appeared a year later. These results were highlighted by the press and prompted Prime Minister Beatriz Boza in mid-2003 to declare an education emergency and call for immediate action. Thus, over the past 10 years, Peru has built considerable capacity in the Ministry of Education to

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[8] The World Bank report (1999) had also discussed the concept of meritocracy for Peru.

[9] The test was never validated as measuring teacher knowledge relevant to teaching better. If such evaluations were to be used in the future they would need to be developed on the basis of testing standards that had meaning in terms of desired criteria.

[10] The Bank insisted in 1998 that the UMC hire an external advisory unit. After a selection process a team from GRADE, a private research center in Lima, was hired. The team from GRADE worked to get the UMC up to international standards by hiring consultants who had worked on TIMSS (Trends in International Mathematics and Science Study) or other evaluations, and who had reviewed country reports and academic literature related to school achievement. This arrangement was renewed twice, ending in 2001, after the evaluation model had been changed to be criterion-referenced, and a series of publications had been released. The same evaluation model is being used today by the UMC and the publications have also continued. This is an example of how the Bank pushed for what the team regards as a positive association between a government and a private institution, which could be used as a referent for similar initiatives in the future.

evaluate its educational system. However, the capacity for understanding how to interpret the results or use them to improve education lags far behind.

Textbook distribution

During President Fujimori's second term (as part of the MECEP project), the Ministry of Education began to distribute textbooks for children in elementary schools. These texts were distributed to students in a few grades in mathematics and language only. Distribution of texts has become an important tradition at the Ministry that continues until today.

Progress on key institutional reforms: payroll and teacher career plans

One of the key achievements of the Ministry of Education (and supported under the PSRL) was the cleaning of the roster of teachers and administrative personnel so that undue payments were eliminated. Efforts are also underway to establish a new national teacher career plan law, which clearly delineates rights, responsibilities, benefits, and punishments for teacher. The law is being debated among professionals and is expected to reach Congress in late 2006.

National Council for Education

Minister of Education Nicolas Lynch, under President Toledo, also established the National Council for Education (CNE), largely in response to pressure from civil society institutions such as Foro Educativo.[11] Most members of the CNE are distinguished professionals with considerable experience in Peruvian education. The CNE represents a new direction in stimulating and shaping educational reform. It may provide leadership that could transcend ministerial changes.

New general education law

After long deliberations, and mostly due to the efforts of Congresswoman Gloria Helfer, the National Law for Education was passed by Congress in July 2003. The law includes initiatives such as the creation of an institute to evaluate student achievement at the basic level (IPEACE). This institute does not exist yet; it requires a specific law that would regulate its functioning and a budget. It is likely that the UMC would leave the Ministry of Education once this institute is functional. The law also created the Institutional Educational Councils (CEIs) to be formed at each school. School principals would preside over their local CEIs. CEIs would include representatives of teachers, parents, and students and tasked to take action on school-related issues. The CEIs have little room for decision-making given the centrality of the Peruvian education system, but decentralization is expected to change this eventually.

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[11] *Foro Educativo* is a civil society institution consisting of about 80 specialists in education nationwide. Foro has produced several public announcements with recommendations for education and organized national and international conferences. Its Web site is www.foroeducativo.org.pe.

Delivery of educational services

It has been difficult to enlist teachers to take an active role in implementing educational reforms in Peru because of their low salaries and low morale. Teacher salaries in the public sector reached their lowest point in 1990, but they doubled in 1991–95 in real terms. Salaries flattened out again between 1995 and 2001 (Saavedra, 2004). President Toledo has also increased teacher pay substantially over the past 4 years. Sigfredo Chiroque (2005) reported that since 2001, President Toledo raised nominal teacher salaries by 78.2 percent. By the end of 2005, the average salary for public teachers were expected to be 1005 nuevos soles (approximately US$309), up from 650 soles in 1999 (World Bank 1999, p. 53). Chiroque estimates that real salaries have increased 25 percent from 2001 to 2005.

There have been other achievements in improving the delivery of primary education services.

- The Fujimori regime built many new schools. Even though the quality of construction of these schools was often below par and, according to our interviewees, now require major repair and maintenance, they did provide many more places for primary and secondary students.
- Free textbooks and workbooks are now generally available to primary school students.
- Samples of students are now evaluated periodically to measure the progress of educational quality at both the primary and secondary levels.
- In-service training has been improved and, according to many of our informants, classroom pedagogy has undergone at least some change toward an interactive and participative approach.
- Decentralization is moving forward, albeit slowly.

That said, however, the Peruvian government has generally not been nearly as effective as it should have been in implementing the policies and programs it formulated to improve the educational system. Listed here are some examples.

Textbooks

In 1998, thanks to the World Bank loan, textbooks began to be distributed universally in some grades. Since 2003, almost all students should have access to a textbook, given that they are regularly delivered to schools (Reaño and Valdivia, 2005). However, the delivery indicator of coverage does not guarantee classroom availability of textbooks and their proper use. There is anecdotal evidence that teachers and sometimes principals do not distribute the national textbooks to students, but rather (under pressure from publishers) urge parents to buy different books; each textbook sold results in a cash payment to teachers. Ethnographic research has also suggested that teachers use the textbooks infrequently and sometimes adapt the textbooks to what they think is important for students (Ames, 2002). In that adaptation the pedagogical objectives of the national curriculum are lost (Eguren et al., 2003).

Teacher hiring and preservice training

Several attempts have been made, the latest in 2002, to control the quality of new hires by examining teacher competencies in a competition designed to recruit the best of the generally poorly trained applicant pool of young people aspiring to be teachers. This effort has not been sustained. In addition, it is widely recognized that teacher preservice training in Peru is generally of very poor quality. A number of the hundreds of unregulated teacher training colleges have been recently closed by the government, but there has been no systematic attempt to set standards for teacher preservice training or to implement those standards.

Use of examination results

The Ministry of Education's UMC unit has evaluated primary and secondary students regularly since 1996. The unit has been highly productive, publishing 29 bulletins and 11 working papers. However, the dissemination and use of these has not been particularly widespread, and the government has done little, if anything, to use the results of these evaluations to develop strategies for improving educational delivery or even to mobilize support among the population for educational improvement. In part, this has resulted from poor capacity in the ministry for understanding and using the empirical results produced by the UMC, but in part it results from bureaucratic inertia and because of a general lack of evaluative policy culture in Peruvian education circles. The first evaluation, in 1996, was even withheld from publication by the Fujimori regime because it was believed (incorrectly) to be unfavorable to the government. The results of UNESCO's LLECE evaluation were also initially unauthorized for publication by the Fujimori regime but later released when the transition government took office (Ministerio de Educación y GRADE, 2001). The PISA results had a bigger impact on Peruvian educational politics, but even the strong reaction to those results has not translated into a systematic discussion of how to improve Peruvian schools.

Teacher absenteeism

Teachers are often absent from school, especially those working in poorest and remote areas, where, respectively, 15 percent and 20 percent of teachers are regularly absent. Contract teachers are absent more often than permanent teachers (Alcazar et al., 2004).

In sum, there has been very loose coupling between reforms (curriculum change, teacher in-service training, textbook distribution, student performance evaluation) and the improvement of educational delivery. The organization for implementing change or even enforcing existing curriculum and teaching methods, including the use of textbooks and teacher attendance, is poor. Although the decentralization reform may improve the incentives at the local level for implementing attempts to improve schooling, this will depend increasingly on the capacity and motivation of local officials to do so. It will also reduce the pressure even further on the central government to take responsibility for educational improvement and may result in even greater regional disparities.

Outputs and outcomes

Increase in access

The brief review of Peruvian education over the past 15 years and other, more detailed reviews (Días et al., 2001) suggest that the most important educational output during this period was the increase in enrollment at all levels (restoring the rate of earlier increases) to the point at which universal primary education has been almost attained and a relatively high percentage of Peruvian youth (16–18 years old) complete secondary education (64 percent in urban areas and 50 percent overall). As shown in Figures 1 and 3, at least part of the long decline in per-pupil spending in education has been arrested, initially under President Fujimori, disproportionately in the form of school construction, and under President Toledo, in the form of higher teacher salaries. School construction in the 1990s helped to increase primary enrollment and completion (to almost universality) and the continued expansion of secondary schooling.

Yet, despite this increased spending, there is no evidence that the quality of primary education has been improved from its very low level. Neither is there any evidence—as this report will discuss in greater detail below—that the investment in construction, teacher training and textbooks in the 1990s, or the attempts to hire teachers based on merit, or any of the other (minimal) changes in educational organization promulgated in the past 4 years have had any effect on the quality of primary education.

Thus, at the beginning of the 1990s, the emphasis of the reform was more on access than on quality[12] through extensive policies of school construction.[13] From 1985 to 2003, net enrollment rates in primary education rose from 79.1 percent to 92.5 percent (Reaño and Valdivia, 2005). The most dramatic change has been the inclusion of rural and poor students (net enrollment rates have risen from 68.9 percent in 1985 to 90 percent in 2003 among rural students), although slight differences still exist in 2003 between urban and rural students (94 percent versus 90 percent) and non-poor versus extremely poor students (also 94 percent versus 90 percent).

Spending per student in primary education increased in the 1990s and has continued to increase in the period 2002–05, but has only reached levels that are still 20 percent below spending per primary school student in the mid-1970s (Figure 3). Almost 80 percent of the public expenditure in education in 2003 went to salaries and wages. Money for primary schooling is spent primarily on the lowest-income families, because in Peru, families in the upper quintile of the economic scale tend to send their children

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[12] According to our interviews the first phase of the reform (and Bank support) was focused on setting the basis for change (infrastructure). The second phase introduced quality issues (i.e., curriculum reform and teacher training).

[13] In our interviews, there was a consensus on the need at that time for more schools but consensus does not exist about its priority. Also, there was consensus in terms of the political use by President Fujimori of those policies, but no consensus exists on the quality of the schools that were constructed. Some of our interviewees said that some schools were very poorly constructed; others said the proportion of bad schools is not significant.

to private primary schools (World Bank 1999, p. 21). However, the money within the primary school sector is distributed unequally among regions of the country: departments with a higher proportion of poor families get less educational funding (Saavedra and Suárez, 2002).

Repetition and dropout rates have decreased somewhat, from 12.1 percent and 4.8 percent in 1992 and 1993, respectively, to 8.5 percent and 3.9 percent in 2001 and 2002, respectively. For that reason, completion rates[14] have also improved, although they are still low: from 54 percent in 1985 to 73 percent in 2003. The proportion of students over age (i.e., students in a grade lower than the grade that corresponds to their age) has also decreased in primary education, from 52 percent in 1993 to 39 percent in 2002 (Reaño and Valdivia, 2005).

Despite universal access to primary education, gaps between groups are still significant. While the completion rate for pupils aged 11–13 years is 83 percent and 87 percent in urban settings and for nonpoor students, respectively, it is only 59 percent and 54 percent for rural and extremely poor students, respectively (Reaño and Valdivia, 2005).

Achievement levels in Peruvian education

Internal efficiency indicators do not necessarily indicate the quality of human capital being prepared in the system. Especially in countries such as Peru, where teacher content knowledge may be low and expectations in most schools of how much students are supposed to learn in a year of schooling is also low, the level of student learning may not be very great.

Achievement results in national Peruvian evaluation tests are, indeed, very low.[15] In 2001, in sixth grade language and mathematics, for example, only 8 percent and 7 percent of the students, respectively, passed at the proficiency level.[16] Students in private schools scored higher than those in public schools (uncorrected for selection bias),[17] but the larger gaps are between native language bilingual schools and the rest (Espinosa, et al., 2004). In fourth grade, almost nine out of 10 students in *quechua* bilingual schools scored below the basic level.

Inequalities among groups are important in national achievement test results, but the Peruvian results on PISA confirm that the achievement problem is generalized and not

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[14] Considering as the graduation rate the proportion of the population between 11 and 13 years that concluded primary school.

[15] This inconsistency between high coverage and low learning produces a dangerous situation: The system produces individuals who think they are educated but they are not. See Abadzi, Crouch and others, 2005.

[16] There are three levels: below basic, basic, and proficient (the latter is what the Ministry of Education would consider the "mastery" level).

[17] When student socioeconomic background and some school characteristics are controlled for, there is no significant difference between private and primary public school student scores (Ministerio de Educacion, UMC, 2004). See also Abadzi, Crouch and others, 2005.

just a problem of low-income, rural, or indigenous language–speaking students.[18] The results suggest that the majority of Peruvian students are concentrated at the two lowest PISA levels in language achievement. Almost 80 percent of test takers (15-year-olds) have problems in reading simple texts, and 54 percent of Peruvian students scored below the most basic level of reading. Fewer than 1 percent of Peruvian students were at the highest level of performance (see http://www.pisa.oecd.org). PISA also shows that even the very highest achievers (i.e., those in the highest socioeconomic class) in Peru are scoring far below their counterparts in other Latin American countries that participated in PISA—Argentina, Chile, and Mexico. Because of average social class differences, it would be questionable to compare the average Peruvian PISA score with scores in these other countries. But it is fair to compare the results for the top of the achievement distribution in these countries—students likely to come from families with similar human and social capital resources. For example, in mathematics and science, the results obtained by the top 5 percent of Peruvian students (almost all in private schools), are below the mean of students in OECD countries, and below the top 25 percent of students from Argentina, Chile and Mexico (Caro, 2004; Asmad et al., 2005).

Similarly, on the LLECE test (1996–97), when the results were adjusted for social classes differences, Peruvian third and fourth graders scored in the bottom five of 12 Latin American countries in language (higher than the Dominican Republic and Honduras, and about the same as Bolivia and Venezuela) and in the bottom three in math (higher only than the Dominican Republic and about the same as Venezuela). As in the case of PISA, Peruvian pupils whose parents have a high level of education scored lower than their counterparts in most other Latin American countries (Willms and Somers, 2001 Figures 2a and 2b).

These test results do not indicate the degree to which Peruvian students' achievement may have changed in the period 1996–2001. Given the nature of the scaling on UMC evaluations, it is difficult to measure such changes, but discussions with UMC personnel suggest that the changes are small, if any. In one sense, this may be a positive result, because achievement scores could have fallen in the 5 years between the 1996 and the 2001 evaluation.

Thus, there is no evidence that the quality of primary education increased or fell in the period 1990–2005—this despite a major investment (using World Bank funding) in improving the pedagogy in Peruvian classrooms. But there is a great deal of evidence that the level of learning in Peruvian primary schools is extremely low even when compared with other Latin American countries. There is also evidence that the level of language achievement (but not mathematics) is much lower in rural primary schools than urban schools once socioeconomic differences and some school factors are accounted for. There is also evidence that pupils in bilingual schools score much lower than students in monolingual Spanish schools.

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[18] According to Abadzi, Crouch and others (2005) the PISA results are probably related to the reading problems in the first two grades, and they primarily have to do with the general lack of standards about what children should be able to do.

Labor market outcomes associated with education

Although educational quality may be low in Peru, this alone may not reduce the demand by Peruvians for more education or the social value of investing in higher levels of schooling for Peruvian youth. This depends in large part on the economic payoff to investing in more schooling. The payoff may be reduced by poor-quality education, but the private and social returns to staying longer in school may still be attractive for individuals and for society as a whole.

Peruvian researchers have estimated the rate of return to schooling in Peru for 1997 and have also estimated how those rates may have changed from the mid-1980s until the late 1990s (World Bank 1999, Table 2 and Figure 24). Figure 6 shows that the wage premium for urban workers with secondary education compared to urban workers who completed primary schooling fell sharply between the estimate for 1985 and the estimate for 1991, then rose steadily between 1991 and 1997. Similar declines and increases were estimated for the premium of completed primary education over no education (although this premium was probably greatly overestimated in the 1990s, because by 1997, only 2.3 percent of the sample of urban workers had no education, so it almost certainly represent a very unusual comparison group) and for workers with non-university higher education compared to those having only secondary education. The highest wage premium, and the one that increased the most in the 1990s, was for university graduates compared to secondary school graduates.

Table 3 presents the estimated private and social rates of return to different levels of schooling in 1997 based on the incomes of urban workers. The high rates of return for urban males with primary education compared to those having no education are almost certainly an aberration in a country where most urban workers have attended school. Those results aside, the returns for workers with lower levels of primary and secondary education in 1997 were not particularly high. Given that the premium for these levels of schooling were even lower in 1991 and 1994 (Figure 6), it could be argued that the rates of return were even lower in the early 1990s and that probably, thanks to growth in per capita income, they are somewhat higher in 2005 than in 1997. This would be consistent with the increased growth of secondary education enrollment since 1998 (Figure 3).

The most interesting result in Table 3 is that the rates of return for a university education are high and have probably been rising much more rapidly than the return for a secondary and non-university higher education since the early 1990s (Figure 6). Consistent with these results, enrollment in university leveled off in the 1980s and began rising again in the 1990s. Yet, given the lower rates for a non-university higher education, it is difficult to understand why enrollment in non-university higher education is rising more rapidly than it is in university education. One explanation is that there are barriers to university entry—examinations are required for entrance into the public universities, and tuition is relatively high in the private universities. Another explanation is that institutional changes (liberalization) in the supply of more non-university tertiary institutions has allowed their expansion with little regulation, bringing many people into non-university courses who otherwise might have entered

lower-ranked universities. In any case, relatively high and rising rates of return mean that there will be continued pressure to expand university enrollment.

The higher rates of return for investment in a university education also suggest that there is pressure (and economic justification) for increasing spending on expanding higher education rather than investing in improving the quality of primary and secondary education. Indeed, as shown in Figure 5, the Peruvian government has been increasing the proportion of the budget dedicated to higher education. From an equity standpoint, however, the opposite case could be made: improving the quality of lower levels of schooling would most benefit groups aspiring to attain higher levels of schooling, but for whom the way is now blocked by very low quality schooling at the primary and secondary levels.

Table 3. Urban rates of return for public and private education, 1997 (percent)

	Females		Males	
Level of education	Private	Public	Private	Public
Primary education	5.9	5.1	37.8	26.3
Secondary education	10.4	7.4	7.2	6.1
Nonuniversity tertiary education	12.1	10.4	9.4	8.2
University education	13.9	12.4	12.1	11.1

Source: World Bank, 1999, Table 2.

There is also an argument to be made for improving the quality of primary and secondary education in terms of supplying higher-quality skilled labor into new (and expanding) sectors of production, such as export agriculture. A recent study of asparagus production in Peru (between 1985 and 1995, Peru became the world's largest exporter of asparagus) showed that a very high fraction of the workers in the asparagus sector were secondary school graduates, but that there was no government strategy even now to promote expansion of export agriculture through publicly funded education or training programs (Carnoy et al., 2004).

Household demand for education

One of the potential drivers for improvements in Peruvian education is the high value people place on it. A 1998 study interviewed a random sample of nearly 500 heads of families in Lima regarding the importance attributed to education (Ansión et al., 1998). The results show that when asked what they considered to be the most important ingredients of success, education ranked first, followed by effort, family, personal contacts, luck, and good appearance. Parents perceive private schools as being of better quality (this is no surprise given the achievement results mentioned above). The public perceives larger schools as better than smaller; and 70 percent of those interviewed with school-age children expected that their children would obtain a university degree. The results also show relatively few differences regarding gender preferences. Overall, it seems that mothers are more likely to make important decisions (such as which school the child should attend) and supervise homework.

In early 2005, the University of Lima interviewed a random sample of 563 adults in Lima to evaluate education (*Diario El Peruano, 2005*). Only 9.1 percent said that education was very good or good, 38 percent said it was bad, and 52 percent had a neutral evaluation. In contrast, 64.6 percent said that the quality of private schools was good or very good. Similarly, 12.4 percent said that the quality of teachers was very good or good; 24 percent said it was bad or very bad, and 63 percent had a neutral evaluation. When the interviewees were given options, they identified the greatest problem in Peruvian education to be the lack of an educational policy (22.4 percent).

The National Evaluation of Achievement of 1998 (Ansión et al. 1998) included several questions about students' and families' background and aspirations. These instruments were administered to a random sample nationally, but only in urban areas. The results show that close to 70 percent of the students in the public schools expect to complete a university education, and an additional 20 to 24 percent expect to complete a technical education. Expectations were related to parental education (the higher the education of the parents the higher the expectation for the child) and educational achievement (positive association), but there were no major differences between expectations for boys and girls.

Further confirmation about the importance attributed to education in Peru comes from the investments Peruvians are willing to make. Saavedra and Melzi estimated that Peruvians invest private monies in education representing around 1.9 percent of GDP. The World Bank (1999) estimated private investments of 2 percent of GDP based on household surveys in 1994 and 1997. At that time this investment was higher than the OECD average (1.3 percent), higher than in Argentina and Mexico, but lower than in Chile or Colombia. As expected, the analysis showed high inequality in private expenditures in education, even when private schools were excluded from the analysis. However, elasticity estimates made in that report show that all income groups consider educational expenditures a necessity (low elasticity for educational spending) and that implicitly, all these groups value education highly. The World Bank report (1999) suggested that more public funding should be targeted at lower-income populations participating in education.

Several experts in Peru believe the demand for education needs to be better informed. By this they mean that parents often do not demand better quality because they do not know specifically what to ask for. Parents form parent associations (known as APAFA), but they do not have a say in the running of the schools (e.g., in appointing the director or teachers). Recently, CEIs have been established; CEIs are school councils formed by teachers, parents, and students under the direction of the principal. Whether this means more involvement of parents in school affairs remains to be seen. Until now the only evident protests from parents are when complaints about teachers or a principal are vehemently raised, usually for sexual misconduct or stealing money assigned to them for a specific activity by the APAFA. In these cases parents take over the school and the education authorities react, usually by reassigning the suspect to another school (a teacher who has a permanent contract with the government is very hard to fire).

Finally, the mission team's visit to six semiurban and rural public primary schools in Peru included anecdotal conversations with students and parents regarding their expectations for schooling attainment and success. Without exception, parents indicated that they expected their children to complete primary school successfully. All parents also stated that they hoped that their children would complete secondary school, even those in rural areas (our rural sample of schools had reasonable access to secondary schools, within a half-hour drive, so they are clearly not representative of areas that are more difficult to access). None of the parents indicated any obstacles to completion of either primary or secondary school, with the exception of transportation costs involved in sending their children to more distant secondary schools. Student opinions were very similar to those of their parents. Respondents were relatively conservative in their expectations and hopes; interestingly, not one person interviewed said they wished their child would attend university. A more detailed accounting of these school visits is provided in Annex F.

In this context, are current strategies for reform likely to work?

The foregoing analysis suggests that Peruvians are willing to spend money on education and the payoff for education is high, particularly for university education, and that Peruvians will continue to press for more education for their children and for better quality education (i.e., their willingness to invest in private education if they can afford it is an indicator of desiring a higher-quality education). The key issue, then, is whether the Peruvian government and reformers will be able to help supply higher-quality education in both public and private schools.

Reforms in the delivery of education in Peru the 1990s (as in most countries) were delivered on the basis of loans and special projects. The question is whether those projects helped to improve the quality of the delivery of education. According to our interviews and the research available, serious problems in the delivery of primary education continue to exist, and they continue to exist in a context of very low levels of learning throughout the system and particularly low levels of learning among low-income children.

According to educational specialists, the important training programs of the 1990s (especially PLANCAD) gave too much emphasis to teaching methods but not to the content of teaching (Cuenca, 2001). Teachers were trained more in methods than in content, even though according to some specialists, these two dimensions were integrated in the curriculum. Research showed no difference between those trained by PLANCAD and those not in the content of teaching and teachers' use of time. They did, however, find that PLANCAD trained teachers were more active in the classroom than others and they had better classroom climates (Hunt, 2004).

The content of instruction was not included in the training programs financed by the World Bank. As Ricardo Cuenca pointed out, some of the trainers were called "methodologists" (Cuenca, 2001). As a result of the training programs, teachers probably know more about how to teach but not about what to teach. Santiago Cueto and colleagues found that the majority of mathematics teachers in his sample did not

make cognitively challenging demands on their students (most of the exercises were for mechanistic reasoning instead of more complex reasoning), nor did they assess their pupils' performance in the classroom. At the same time, Cueto et al. (2005) also show that opportunities to learn are unequally distributed between multiple teacher and multigrade (*polidocentes* and *multigrado*) schools at the school level and between students' socioeconomic status at the individual level.[19]

Some specialists and some of our interviewees said that the training programs in the late 1990s did not explicitly attempt to change the content of teaching, particularly the content knowledge of teachers. This could be one of the reasons why there were problems in the delivery of the new curriculum despite the extensive pedagogical training provided.

However, other specialists argue that there may be another reason for the failure to improve quality in the late 1990s: the effectiveness of in-service training is probably very limited in the context of low teacher professional status and low incentives to produce higher achievement among students. This is especially important if we consider the loss of prestige of the teaching career over the past 30 years. Most teachers may be unmotivated and have low expectations of themselves due to their low salaries,[20] low expectations of their students, and lack of professional status (Ministerio de Educación and UNESCO,2002). Most teachers have been trained in low-quality training institutions, so teaching graduates may not have the level of knowledge required to deliver lessons that are somewhat demanding and of reasonable quality.[21] In-service training cannot do much to overcome low levels of content knowledge and low motivation stemming from low salaries and low professional status. Peruvian teachers may not be prepared to manage the complexities of a more demanding curriculum—one that requires not only better pedagogical approaches but also a reasonable level of content knowledge.

Another problem with the teacher training policies in Peru was related to the capacities of the implementing agencies (*entes ejecutores—EE)* that were contracted specifically to undertake the nationwide training.[22] These EEs were selected on the basis of bidding documentation rather than through observation of their real abilities to train masses of teachers (Cuenca, 2001). As researchers observed ex-post, the success of the training process was based on the quality of the trainers employed by each EE. The problem was

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[19] See Cueto et al., 2004. The results of the national evaluation of 2001 have also shown that a teacher's management of the contents of the curriculum and opportunities to learn are two variables significantly associated with student achievement. See Ministerio de Educación , UMC (2004).

[20] This in spite of 78 percent increases in teacher salaries since 2001. However, the salary is still around US$300 per month, still a very modest amount money. See Chiroque (2005).

[21] At least according the results of the teacher's evaluation in 2002 and several descriptive studies.

[22] According to our interviews the decision to hire EE was made because of low capacity at the Ministry of Education to deliver in-service training. Some of our interviewees told us that this was a positive decision in terms of stimulating national-level civil society participation in enacting educational policies. Others said that the decision had negative consequences, primarily weakening capacity building inside the Ministry of Education.

that there was too much heterogeneity among the EEs. Still, this strategy allowed the Ministry of Education to work with most teachers nationwide in a few years.

The delivery of better education in the 1990s also faced obstacles inherent in the poor quality of organization and administration in the education sector. Several well-designed projects had problems because of the rapid turnover of officials and programs; the lack of coordination between different offices inside the Ministry of Education; and also between the national, regional, and local levels of educational administration. According to the *Instituto Apoyo*, there was considerable organizational disarray in the administration—disarray that may increase as parallel organizations are generated by the decentralization process (Instituto Apoyo, 2002).

Such organizational difficulties are accentuated by a high turnover of education ministers and are also related to a lack or absence of accountability in the system. No one is responsible for results, and therefore there has been little pressure for changing the situation. Policies and programs have not been accountable, and at the regional level, the directors of UGEL (las Unidades de Gestión Educativa Local, or the previous USES) can do almost whatever they want.[23] At the school level the principal cannot intervene with ineffective teachers because he or she does not have that kind of decision-making power.[24]

However, a few important changes have contributed to improved administrative processes. The first is what our interviewees called the modernization of the sector (via computers and Internet access). The computerization of the Ministry of Education has had a major effect on administrative capacity, but information systems are still highly underutilized. Another recent important change is the rationalization of the *plazas docentes* (teaching positions) mentioned above; namely, cleaning up the central administrative payroll of excess and ghost positions. According to the Ministry of Education, this saves it 32 million soles (about US$10 million) annually.

5. The World Bank Contribution to Sectoral Changes

This section assesses the relevance and effectiveness of World Bank assistance, the efficiency and sustainability of changes supported by the Bank, and the counterfactual (i.e., whether these changes would have occurred in the absence of Bank support). Bank "assistance" is defined as policy dialogue, lending (via both investment and structural

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[23] Directors of UGEL (or ex-USES) have been questioned in most cases for their lack of commitment and capabilities, but also for corruption.

[24] Bringing autonomy to the school (e.g., for expelling low-quality teachers) is one the policies that has not been implemented until now despite several attempts. Other important changes in the administration have occurred, such as the participation of more students and parents in the school administration to collectively observe the process of schooling at the local level. But for those interviewees who support autonomy this is only a partial change.

adjustment loans) and nonlending services, especially economic and education sector work.

Relevance and efficacy/impact of Bank assistance

In the early 1990s, primary education in Peru was so poor that almost any infusion of funds and any attempt to improve the system were viewed as positive contributions. International educational production studies posited that the highest yield and most cost-effective inputs were in-service training for teachers and staff, and textbooks (Lockheed and Verspoor, 1991). In addition, the 1993 research-based assessment of the education sector recommended investment in primary school infrastructure, more attention to bilingual education, and greater school autonomy. Furthermore, educational researchers have generally argued for many years for the effectiveness of "constructivist" pedagogy. Thus, in terms of *possible* reforms the Bank could have supported in primary education in Peru, the MECEP reform and the first education project in 1995 drew from rather broadly held conceptions of effective reforms.

A series of PSRL loans in 2001–03 and a second major project emanated from another research-based diagnostic (World Bank 1999) that focused on teaching as a profession in Peru, including teacher training and teacher incentives, on greater equity in the use of resources especially between urban and rural areas, on raising quality, and on greater accountability. The 1999 diagnostic made a few recommendations for educational reforms based on experience in other countries. However, more generally, the 1999 report represents a serious attempt to propose reforms relevant to Peruvian educational conditions. The PSRLs and the rural education project followed these recommendations closely.

Each of the two Bank projects and PSRLs implemented during this period (1990–2005) has generally been based on recommendations from detailed research-based diagnostics. These diagnostics were keys to shaping the direction of the projects and helped to build consensus around the challenges and potential solutions for the MECEP project in the 1990s and the rural education project. The activities outlined in the MECEP and PSRL projects seemed appropriate to education sector conditions in the country at the time, and usually focused on areas where the Bank could contribute with extensive experience and technical assistance; for example, in textbook distribution, teacher training, teacher incentive pilots in rural areas, and distance education in rural areas.

Although the design of the MECEP project was relevant to the needs identified in the diagnostic, as highlighted in the OED review, the institutional development component was overly ambitious, especially given the volatile nature of the political context and the lack of specific project measures to help the ministry develop and build consensus around proposed reforms of school governance (especially autonomy) and administration (e.g., decentralization reforms). Although neither school autonomy nor regional decentralization was implemented under the MECEP design, some aspects of the original design would appear both in later projects (such as the rural project) and through independent Ministry of Education actions, such as the new teacher hiring process, which was implemented at the beginning of the Toledo presidency under

Minister Lynch. The reforms proposed by Minister Lynch gave substantial autonomy to schools in screening new teachers.

There are three important caveats to the overall positive assessment of the relevance of Bank project activities. The first is the inclusion of the construction component in the MECEP project, which was not originally seen as a priority in the sector diagnostic. The Fujimori government, however, had threatened not to have a project at all unless the construction component was included; in exchange for guaranteeing advances in other areas, Bank staff included school infrastructure. In hindsight, there was considerable need for physical school improvements, although these likely would have occurred even without an MECEP project.

The second caveat is the low level of institutional capacity building in project activities. The Bank did help modernize the Ministry of Education through financing the technical assistance, hardware, and software to install information systems for payroll and record keeping, and the Bank financed the technical assistance to make the ministry more cost efficient through the elimination of many superfluous payroll positions. The Bank also supported the ministry to develop and sustain the Quality Measurement Unit (i.e., the UMC), which has done excellent work in achievement measurement and analysis over the past 10 years. Yet, at the same time, the Bank-created and Bank-financed Project Management Unit in the ministry has had little effect on training people in other parts of the ministry or in departmental offices, or installing management systems that become permanently part of the ministry's mode of operation. In some cases, the Bank has clashed with ministers over who should be paid by the Bank in the ministry, and in general, there has not been a great deal of communication between the Bank personnel in the ministry and the rest of the staff, who earn lower salaries and, for that reason, have a much lower professional status.

One of the main problems in this regard has not been under the Bank's control—the almost constant change of education ministers in the past 15 years. It is telling that the implementation of the MECEP project and PLANCAD is largely due to one minister, Domingo Palermo, who held the job for 3 years during the Fujimori regime. However, even though this was out of the Bank's control, it is also apparently a fact of political life in Peru that government ministers change often. Below, under "lessons learned," it will be argued that under such conditions, new arrangements must be devised in which capacity is spread more systematically and widely in the ministry and departmental education offices so that not only Bank-financed employees are relied on to conceive and carry out reforms.

The third caveat concerns the absence of evaluation and monitoring of project activities and impact. Ex-post evaluations of project impact have not occurred, even though data are or could have been available for assessing the effect of textbooks and teacher training on student achievement over the 4-year period, 1996–2001. There is some indication that test scores for primary school children have remained relatively constant throughout the period, and this at a very low level compared with other large Latin American countries. However, this indication is not based on strict comparisons of like items on tests at the fourth grade level, for example, which would have been possible if

Bank or Bank-financed Ministry of Education staff had built project evaluation into the Bank project. The Bank also never wrote into the project that UMC prepare comparative reports of 1996, 1998, and 2001 results for, say, fourth grade. If urban public primary test scores have remained approximately the same, this could be interpreted as a positive result, because more children were enrolled into urban schools during this period. On the other hand, one could argue that a large investment in textbooks and teacher education (about 6 percent of the total primary education budget over the 5 years) should have produced some gains. If it did not, those results should at least be assessed and discussed. In the same vein, there is no evidence to support the assertion that changing teacher pedagogy the PLANCAD program—as a specific reform of classroom practices—helped to improve student achievement. In the absence of further evaluation, we do not know whether teachers changed their practice. We do know that thousands of teachers received training of varying quality from a variety of agencies contracted by the Ministry of Education.

Each of the PSRLs were highly relevant in establishing key administrative and legislative benchmarks for improvements within the education sector as well as protecting key social sector antipoverty measures from budgetary cuts during the transition period. Highly relevant measures include laying the administrative groundwork for the rural education project, reforming the payroll system, and creating additional transparency within the Ministry of Education budget system.

The Rural Education Project may be doing too much (i.e., some have suggested that it is spread too thin across a variety of activities).[25] Some elements are being evaluated carefully using comparison groups. But it does not appear that an evaluation component using UMC data has been built into the overall effort to improve the quality of rural education, although the new UMC tests are more amenable to such an evaluation. A recent progress report on this project shows some major problems, especially the lack of an implementation strategy, the lack of an overall monitoring and evaluation plan, and a communications strategy aimed mostly at parents, teachers, and administrative personnel linked with the project. However, recent developments suggest that these may be overcome (for instance, a request for proposals for a baseline evaluation has been issued and soon will be assigned, and a draft of an implementation strategy plan was recently developed).[26] The project in its first phase is expected to end in December 2007, but due to the slow pace of this program at the beginning, it should be extended beyond this date.

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[25] One goal of the project is to build a distance secondary education network in rural areas. Because of decentralization to departments and local areas, however, a spontaneous movement has developed to use money dispersed by the central government to local areas to build rural secondary schools. The Bank has been pressured by the Ministry of Education to alter the terms of the loan agreement to shift money from distance secondary education to regular secondary education. Given the very low costs per pupil in Peruvian secondary education, this would seem to make sense. Indeed, it probably made sense in the first place to focus on expanding access by increasing regular secondary education in rural areas, although the least accessible areas might not benefit first under such a plan.

[26] A World Bank mission is expected in mid-July 2006 to discuss progress in these areas.

Efficiency and sustainability of changes supported by the Bank

In the absence of any evaluation of the cost-effectiveness of the World Bank projects, we can only provide an assessment of the efficiency of project activities relative to other options. It is impossible to do more than conjecture about the efficiency of the design of the projects relative to other alternatives for implementation. Table 4 provides a summary of both the Implementation Completion Report and OED ratings for each of the investment and sector adjustment projects implemented from 1990 to 2005, which provide some insight into the Bank's own assessment of project efficiency and sustainability; all projects are rated as satisfactory for project outcome and sustainability.

The approach to teacher training taken under the MECEP project was likely considerably more efficient than the alternative—internal hiring and implementation by the Ministry of Education. The decision to contract out the training of teachers under the auspices of PLANCAD proved the only viable alternative, although the quality of the training has been subject to criticism (not founded on research). Concern over the criteria for selecting the training agencies (which, in accordance with bidding standards, relied solely on documentation rather than demonstration of training techniques) led some interviewees to question the capacity of the implementing agencies to actually change teacher behavior in the classroom.

Table 4. Summary of evaluations of education lending in Peru

Activity	Project Characteristic	Implementation Completion Report	OED Evaluation Summary
Primary Education Quality Project (MECEP)	Outcome	Satisfactory	Satisfactory
	Institutional Development	Modest	Modest
	Sustainability	Likely	Likely
	Bank Performance	Satisfactory	Satisfactory
	Borrower Performance	Satisfactory	Satisfactory
PSRL I	Outcome	Satisfactory	Still needed
	Institutional Development	Modest	
	Sustainability	Likely	
	Bank Performance	Satisfactory	
	Borrower Performance	Satisfactory	
PSRL II	Outcome	Satisfactory	Satisfactory
	Institutional Development	Modest	Modest
	Sustainability	Likely	Likely
	Bank Performance	Satisfactory	Satisfactory
	Borrower Performance	Satisfactory	Satisfactory
PSRL III	Outcome	Satisfactory	Still needed
	Institutional Development	Substantial	
	Sustainability	Likely	
	Bank Performance	Satisfactory	
	Borrower Performance	Satisfactory	
PSRL IV	(not yet evaluated)		

In terms of sustainability of project activities, the ultimate test of sustainability is the incorporation of project activities into the regularly funded activities of the Ministry of Education (of course this test only applies for those loan activities that require continuation; that is, textbooks, teacher in-service training, and student assessment). With the exception of school materials (particularly textbooks), the activities of the MECEP project have continued at best on a limited basis beyond the project timeline with the support of Ministry of Education budget. For example, it is unlikely that the ministry would close the UMC even if the Bank decided not to continue funding it, and under the new General Law for Education the UMC should become a new institute. The Congress has yet to provide the funding for implementing the General Law for Education, however. Until then, continued operation of the UMC is guaranteed only through additional loan support (under the Rural Education Project). The Ministry of Education provides teacher in-service training but at a much reduced level, and PLANCAD was not continued.

Counterfactual: Did the Bank make a difference?

The question posed by the counterfactual is whether in the absence of World Bank support for Peru's primary education system during the last 15 years Peru would have achieved similar results. The broad-brush answer is, probably not; a considerable share of the advances in Peru's education system would not have occurred without World Bank support. After all, the Bank made possible through its loans an approximately 6 percent annual increase in the education budget. The real question is whether the advances that occurred (school construction, curriculum changes, teacher training, distribution of textbooks, student evaluation, and the present changes in rural education) have had a significant effect on improving urban and rural primary schooling. The broad answer to this second, and probably more important part of the counterfactual, is that in terms of providing more access to primary schooling, there is little doubt that the Bank projects made and are continuing to make a difference. Nonetheless, both parts of the counterfactual analysis vary by project component, with some activities likely to have been implemented by the Peruvian government even in the absence of World Bank financing and some components, even when implemented by either the Bank or the Peruvian government, not making much difference. A response to the counterfactual question is thus better divided among projects and their key components, as shown in the following.

Infrastructure

It is likely, given the goals of the Fujimori government to improve school buildings, that the infrastructure component would have been completed, even in the absence of World Bank support. By the early 1990s, it was apparent that both construction of new schools and the rehabilitation of existing schools were necessary as a result of neglect throughout the previous decade. By the mid-1990s, demand for education at the primary level was assured, with demand for secondary education well established and increasing, generating a need for additional school places at both levels. Nonetheless, it is unlikely that any government could have expanded the physical plant of the education system so quickly without external support and without severely harming the quality of

the system or drastically cutting teacher and staff salaries. Did school construction make a difference in educational access or educational quality? It probably did, although there are no evaluation findings to substantiate this.

Curriculum, teachers and training

It is likely that changes in the curriculum would have transpired in the absence of Bank support, as this was something that occurred largely within the Ministry of Education. However, teacher reform probably would not have gotten underway (the new Teachers Law) without the push given by the PSRL and its cleaning up of the payroll, creating more objective and transparent procedures, and rationalization of teacher contracts. The training component, implemented through PLANCAD, would likely not have occurred without Bank support, because the Ministry of Education would probably not have attempted to conduct its own in-house training programs on such a scale. The implementation of PLANCAD with Bank support almost certainly had some effect on teaching practice, although it is unclear how much (see above). Whether the existence of PLANCAD had any significant effect on student achievement is also unclear, although all indications suggest it did not.

Institutional modernization

In the absence of Bank support it is unlikely that the ministry's evaluation agency (UMC) would have been created. The UMC is a highly successful unit, but its impact on educational decision-making in the ministry or anywhere else in the educational system is minimal, primarily because there has been little support—financial or otherwise—to train ministry personnel to use the results in planning or decision-making. The results of the PISA test (conducted and analyzed by the UMC) did have widespread impact in Peru, particularly in drawing attention to the low level of achievement in the nation's school system, but not to the point of developing policy strategies for improving the schools.

Reducing waste in public administration

Reform of the payroll system to eliminate "ghost" teachers, accomplished under the auspices of the PSRL projects, is unlikely to have occurred without World Bank pressure and support. According to the Ministry of Education, the implementation of this project has produced major savings in the ministry's budget.

Expanding rural primary access

Eventually, the Ministry of Education would have expanded rural primary access and the completion rate would also have risen without Bank intervention. The main question is how long this would have taken. The main impact of Bank support has been to speed up educational incorporation of school-age youth into rural primary education. In some instances, it appears that local areas are moving ahead of the Bank-supported project in increasing access to regular secondary education. In those cases, it could be argued that access is increasing just as quickly without Bank intervention.

Improving the quality of rural primary education

The Ministry of Education and local areas would almost certainly not have engaged in pilot programs attempting to improve teacher attendance and more generally to improve teaching in rural schools. However, other agencies such as the British Department for International Development, or the U.S. Agency for International Development, or Germany's international technical cooperation agency, GTZ, are attempting to improve rural education, although not with the resources associated with the World Bank project. A number of evaluations are currently underway to assess the effect of the pilot programs in rural areas concerning teacher pay incentives, so in the near future, we will know the potential impact of scaling up these pilots. Whether they are scaled up will probably also depend on Bank support.

6. Lessons Learned from Bank Assistance to Primary Education

Tracking progress from design and implementation through outcomes

The best method for evaluating the effect of a particular intervention on student outcomes is an experimental design in which students are randomly assigned to the treatment and compared with an untreated control group. Because it is often difficult to undertake a randomized field trial, researchers try to make reasonably unbiased estimates of the effects of different factors on improved learning outcomes by collecting data on achievement gains for the same pupils over time, some treated and others not, and attempting to correct for observed and unobserved differences among students to estimate the effects of the treatment on outcomes. In Peru, neither experimental nor longitudinal data on students are available, although current pilot projects in rural areas are collecting data that may allow researchers to make such estimates. Unfortunately, there have been no outcomes evaluations of earlier Bank projects aimed at improving student learning.

Is there anything we can say about the effects of the earlier project from existing data?

The UMC has estimated cross-section production functions using a measure of achievement at a single point in time (fourth grade, for example). The 2001 results suggest, for example, that an approximate measure of teacher average subject knowledge in a school or grade has a positive effect on student outcomes, as does the average social class of students in the school. Our own observations suggest that a main problem of investing in, say, improved teacher pedagogy or textbook distribution, is that there is no mechanism in place for assuring that these improvements are implemented at the classroom level, or, if implemented, to what degree and in what way they are implemented. In Peru, a fundamental problem is that the level of teacher preparation in subject knowledge and expectations by teachers of their students—especially low-income students—seems extraordinarily low. Teaching teachers how to

engage in better pedagogical practice may have a big effect in classrooms where teachers have reasonably high subject content knowledge and have high expectations of students but are not particularly good pedagogues. Yet, when the first two elements are missing, the effect of better pedagogy is necessarily limited. The effect of textbook distribution runs into similar problems of implementation. In Peru, the issue is complicated by publishers' offering commissions to teachers to force parents to buy texts not distributed by the government, or simply the unwillingness of teachers to allow students to take books home. Without an administrative supervisory or incentive structure that can enforce implementation, it is unlikely that we could know whether any factors shown to work on a small scale would work on a large scale. *In other words, much of the learning outcome effects of such large-scale interventions depend fundamentally on the capacity of personnel to see that the interventions are actually implemented*. Even if they were implemented properly, there is little evidence that their effect on student achievement would be large. Thus, the main question is: What would it take to significantly raise the quality of education in a country such as Peru? The answer is not simple, and the myriad suggestions in diagnostics such as *Peru: Education at the Crossroads* (World Bank 1999) are largely untested in the form of a causal model.

Trade-offs between quantitative expansion and quality improvement and factors influencing them

In Peru, the main mechanism for raising the "quality" of the labor force has been through expanding the number of years that students stay in school. This expansion has been accomplished by allowing teacher salaries to fall in the 1970s and 1980s and then to stay relatively low. In the first Bank project, about one-half the total money went largely to quantitative expansion through school construction and the other half went to school improvement through PLANCAD and textbook distribution. We know that quantitative expansion occurred, but we have no evidence that quality improved as a result of the intervention or that it declined despite the intervention. The problem with a significant improvement in the average quality of schooling that almost never discussed is its potentially very high cost, and therefore, relatively low rate of return. On the other hand, the cost of quantitative expansion of the system has been measured and shows a reasonably high rate of return (especially at the university level in Peru). Also, expanding the system downward (into preschool education)—at least in other countries—also shows a high rate of return. Most of the pressure for quantitative expansion has come from the government, although the Bank has actively supported quantitative expansion in rural primary and secondary schools. Quality improvement pressure has generally come from the Bank and other international lending agencies. For rebalance to occur, it has to become evident that quality improvement has a high payoff relative to high costs. To show this, researchers have to show not only that new inputs have a significant and reasonably large effect on student outcomes but that an increase in student outcomes for a given year of schooling has economic and social effects that improve the lives of individuals.

Successful efforts to improve the monitoring and evaluation

Bank support was instrumental in the creation of the UMC—the measurement agency—in the Ministry of Education and this unit has done a good job of measuring Peruvian students' achievement outcomes. However, as noted, the use of these data to improve policy decision-making is minimal. More communication between the evaluation and pedagogical units inside the Ministry of Education is needed. There still exists a wide gulf between those who evaluate and those who implement. For example, some educators more involved in in-classroom evaluation do not pay much attention to large-scale assessment findings and this has impeded fuller use of the data produced by the UMC. PISA had some effect at least in the design of the emergency response programs, perhaps because PISA compared results in Peru with those of other countries, and it suggested that Peru's future labor force could be less competitive.

Ownership and the political process of policy and program formulation

The 1995 primary school construction program was certainly formulated and owned by the Fujimori regime, and probably by President Fujimori himself. It benefited him personally by legitimizing his power and increasing his popularity. Local residents where schools were built also benefited, and in cases where schools did not exist before or were in poor condition, the children in schools also benefited. In terms of the current rural education project, undoubtedly rural children benefit from that expansion and probably from the more successful attempts to increase the days and hours that rural teachers actually teach in school. Both World Bank primary education projects and the PSRLs were the result of long negotiations, made longer by the rapid turnover of education ministers. Our interviews and a review of the literature show clearly that rural education is a high priority in Peru and is perceived as such by key players who have or are likely to have an important role in Peruvian education. Thus the support given by the Bank to rural education in Peru was a highly appropriate. Furthermore, the emphasis on rural education is likely to be continued by the government beyond the current loan. Furthermore, in recent months the COMPFE, the ministerial office in charge of the program, has changed its director and hired new consultants who are likely to suggest revisions and to improve the implementation of the program. This is an indication of the importance given to the program by the current administration.

Working with partners for reform: donor coordination

Since about 2000, the World Bank has stepped up cooperative interactions with the Inter-American Development Bank (IDB), largely due to positive relations between the education task managers. This relationship has helped both the IDB and the World Bank—the largest donors in education in Peru—to eliminate any overlap in project activities and gain additional leverage with education ministry and government officials. Due to regular communication between the two task managers, it is very difficult for the government to play one donor agency off the other, or ask one agency to fund an activity that another will not. Coordination with other donor agencies is also present, for example with DfID on strengthening school councils and USAID on multigrade teaching practices, but this serves primarily to eliminate overlap in project

activities within the same region or district. Further sharing of project experience and perhaps research costs for evaluation of promising initiatives would serve to incorporate the lessons learned into new strategies for education reform and assistance.

The need for a coherent vision for improving primary education

The Bank has had to operate in a context in which there is no systemic national vision for developing the primary educational system. This has been a major obstacle to agreement of what the goals of Bank-financed projects should be. There have been attempts to develop versions of visions, but these have generally been short-lived and never fully implemented. Perhaps the curriculum reform of the second half of the 1990s or the ideas about meritocracy for teachers would qualify as such partial visions, but they were not fully implemented. The *Consejo Nacional de Educacion* is currently preparing an overall plan for the development of Peruvian education, which should be ready within the next few months. This plan may have enough legitimacy to serve as the basis for a new strategy to develop primary schooling. It would have been useful to develop such a vision years ago.

Low capacity and high turnover of administrative staff

Despite administrative modernization, capacity remains low in the Ministry of Education and departmental offices. This has made implementation of Bank projects or of any educational reforms difficult. This is partly due to a lack of continuity of administrative staff at the Ministry of Education or in the leading positions at the decentralized offices. For the past 15 years the Ministry of Education has had a new minister almost every year. The administrative personnel below the ministerial level also have had no stability and are hired or fired depending on who serves as minister. A major reform has resulted in placing all senior personnel on contract (no permanent civil service), so that anyone can be removed at any time. This has the advantage of great flexibility, but it also has the disadvantage that all personnel can be changed at all times and in practice they are, so little expertise develops. There is need for further reform that allows for at least some good professionals to have civil service careers within the administrative personnel at the Ministry of Education and other administrative dependencies.

Low level of investment in education

As Table 1 shows, spending per pupil in Peru is extraordinarily low. This gives Bank-supported projects a relatively large share of the primary education budget, and places added responsibility on the Bank (and the Ministry of Education) to wisely choose how Bank financing is used. Several key policy actors have called in the past few years for an increase in government investment in education. The General Law for Education approved in 2003 establishes that the government's budget for education should be equivalent to 6 percent of GDP. The *Acuerdo Nacional* (National Agreement), an organization of representatives from major political parties and civil associations that develops agreements on major state policies, has confirmed this goal. Critics of the initiative to increase spending on education argue that because the education sector has

not developed a systematic plan for the use of additional funding, it should not receive more money. But additional government financial effort in a country that spends so little on education and has such a low-quality primary and secondary school system is clearly a fundamental issue and needs to be addressed. If a good national plan for education were developed, the chances to increase funding would increase; yet, it is also the case that International Monetary Fund benchmarks for Peru give legitimacy to the Ministry of Finance placing tight controls on increases in social spending in the name of promoting sustained economic growth.

Increasing inequity? Parents and out-of-pocket expenses

One way to raise more money for primary education is to increase the private contribution for schooling either through promoting private schooling or by allowing parents to contribute to their public schools. Both practices exist in Peru; they contribute pto greater inequality in educational access, and they may actually contribute to a lower average level of quality in the public system. The new General Law for Education states that public education is free, yet several studies suggest that this is hardly the case. Saavedra and Melzi (1998) estimated that in the late 1990s the government invested 2.8 percent of GDP in education, while families invested an additional 1.9 percent. Most of this came in the form of paying for private education, but in public education alone the figure is 0.8 percent of GDP. Currently, parents in public schools are asked to pay 48 nuevos soles (around US$15) annually for the parental association (APAFA). Inducing parents to spend private funds to augment public financing allows the public educational system to gain access to more resources, draws on private demand for better education, and has advantages over pushing parents with more resources to send their children to private schools. Thus, it is very tempting for the government to push for greater private funding for primary schooling. But it also has disadvantages because, like educational systems that are socially stratified into public and private education, shared financing appears to increase inequality of access to quality education and increases stratification within the system.

Teacher salaries, hiring, preservice training, and career ladders

The Bank supported a teacher in-service program in the 1990s, but it has only begun to address the much more general issue of attracting higher capacity and better-trained teachers and administrators into the system. Teacher pay and incentives are major problems in Peru (it is part of a general problem of recruiting bright people into public sector jobs) and needs to be more forcefully addressed by the Bank. Most teachers are contracted to work about 30 hours per week, and some secondary school teachers are contracted to work 40 hours per week (note these are not full hours, but units of 45 minutes each). Thus, except for vacations, teaching tends to be a full-time job – at least on paper, but given the 45 minute hour and lax supervision, teachers are able to moonlight. Teachers' salaries decreased substantially from the early 1970s until the early 1990s, when they began to increase. According to a study by Saavedra and Chong (1999), teachers' relative position eroded by 30 percent in 1986–92, but earnings by other professionals fell by 16 percent in 1992–96, so that in 1986–96, teachers' earnings declined by 10 percent compared with those of other professionals. In the 1970–90

period, a study by the Instituto Nacional de Estadística e Informática shows that average teacher salaries lost more than the private sector as a whole, but fared much better than the administrative staff in the public sector in general and better than nurses (World Bank, 1999, p. 54). Thus, teachers have fared poorly compared with workers in the private sector, although they have done better than many other public sector workers. This still means that it would be difficult to convince bright young people to go into teaching and public sector work (Saavedra 2004).[27] All teachers have received proportional raises in 2002, 2003, and 2004. The raises have been based on academic degrees and location of the school where the teacher works, and are intended to correct the overall low level of salaries, not to develop a new teacher pay structure. Currently, a teacher's salary increases primarily with years of experience, and those increases are small. There are no incentives for performing well or disincentives for not performing well, because teachers are not evaluated by their performance in classrooms, and no broad accountability system exists anywhere in the educational system.[28] This has resulted in a career that is attractive to many people who do not mind a relatively low-paying but quite secure government job. Because there are three times as many individuals applying for teaching jobs than available positions (personal communication with Nicolas Lynch), the attempt in the first years of the Toledo administration to select teachers through a systematic evaluation of their subject knowledge and potential teaching skills should have been become a permanent practice. Yet even that reform toward meritocracy would have had only a minor effect on teaching capacity if the average quality of preservice training in Peru remains as low as it is currently. The system also lacks incentives for the better teachers to serve as an example to other teachers. This would require redefining the teacher career ladder to provide possibilities for recognizing professional excellence.[29]

Lack of flexibility to accommodate students' needs

The educational system in Peru could be described as unaccommodating. It provides few avenues for attending to the specific needs of groups of students such as those who are handicapped (there are only a few dozen special education schools in Peru, most in urban areas), who live in a household where an indigenous language is spoken (most are

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[27] Saavedra and Chong (1999) also recently estimated that the hourly income of teachers in Peru is similar to that of professionals with similar levels of education and experience. But overall, Saavedra concludes that a teaching career in the public system lacks incentives for improving performance.

[28] Stimulated by the Bank, the Ministry of Education started a pilot program in 2002 for teacher incentives in rural areas. That year teachers who worked in remote rural areas received a monetary incentive at the end of the school year, without prior announcement (this would not qualify as an incentives program). In 2003 and 2004, a program was designed, with assistance from GRADE (a private research center) to give monetary incentives for teachers who met attendance goals. Initial evaluations suggest that the program was effective in raising teacher attendance, in part because parents monitored teacher attendance. In 2005, the program was changed to include preparation of a project for the school, the number of meetings with the school's CEI, and an evaluation of the performance of students at the beginning and end of the school year (each component would contribute to an overall evaluation score for teachers).

[29] Hugo Diaz, one of the experts interviewed for this report, is preparing a proposal to change the structural definition of a teachers' career. The proposal was expected to be submitted to Congress later in 2005.

educated in Spanish), who have a learning disability (there are no special programs for children who fail at school and there are no psychologists at public schools), and who are talented (they must go through the regular system taking the same courses as everybody else). Nor is there any attempt to provide compensatory education for low-income children. Schools and administrative procedures are planned at the national level to be the same (e.g., all children use the same textbooks). If, for example, the primary school curriculum were demanding and teaching and other resources were made available so that all children could complete such a demanding curriculum, this would be a positive feature of a high-quality system. However, Peru's public primary education curriculum is not particularly demanding, and the quality teaching and other resources are distributed unfavorably for lower-income pupils (particularly those in rural areas but also among departments). Thus, it is likely that lower-income students have fewer opportunities to learn an already rudimentary set of academic skills. This characteristic is probably at the core of the inequalities of the public education system in Peru, which tends to increase initial inequalities associated to socioeconomic status, not decrease them.[30]

7. Conclusions

What does the Peru case teach us about reform strategies in primary education?

Peru's history of progress in primary education is typical of developing countries in some ways and very atypical in others. Peru has been able to bring a great number of its children into primary education even in poor rural areas, and completion rates for primary schooling (and secondary school attendance) are rather high even for marginalized urban and rural youth. This makes it somewhat atypical for a lower middle-income country. It is also atypical in the financial effort it has expended to accomplish these goals. Peru spends relatively little on its primary education system. Its costs per pupil are among the lowest in Latin America, and its teachers are paid among the lowest in the region relative to per capita income and compared with other professionals.

Nevertheless, Peru is typical of countries investing so little per pupil in public primary education (Central American countries, for example) that its students score very low on international achievement tests, both at the primary level (LLECE) and in middle school (PISA) even when adjusted for socioeconomic class differences. Like these other countries, Peru's educational system is caught in a vicious circle. For the past 30 years,

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[30] Cueto et al. (2004) shows that students grouped in classrooms of relatively lower socioeconomic status tend to progress less in school than their peers in relatively higher socioeconomic groups. The comparisons were made in public schools only, with mathematics achievement measures taken at the beginning and end of the school year.

Peru has pauperized the schooling system in order to expand enrollment without increasing the nation's financial commitment to education. Quality has been low for at least 10 years, according to testing that began in the mid-1990s, but low achievement levels probably preceded these measurements for another 15 years before that. This means that the average teacher and school administrator today is not only teaching in a system with low achievement levels but is the *product* of an educational system with low levels of learning. Their experience generates low expectations for their students and low subject knowledge. Combined, these form major barriers to raising the level of learning in their classrooms. Furthermore, low salaries are likely to attract a particular kind of person into teaching: one who is willing to settle for a low-paying but secure job with some possibilities to work at a second job and during extended vacations. In such as system there is no incentive for excellence.

Peru is also typical of most developing countries in that the teaching supervision system and teacher and school accountability systems are essentially nonexistent. It is also the case that teacher preservice training is not under the direct control of the government, so it is not directly accountable to the Ministry of Education. Preservice training quality therefore varies widely, and hundreds of institutions, public and private, exist to train teachers. There was a screening in 2002 for more than 30,000 teaching positions, but that has not become a permanent fixture of teacher selection. The current practice, as in many countries, is that teachers are prepared in autonomous postsecondary institutions, are appointed to teaching positions on the basis of unclear criteria, are expected to enter teaching with little or no supervision, and to then teach the required curriculum in their classroom with little or no accountability for delivering the curriculum or for student results. On the demand side, parents do not know what standards of quality to require from teachers and schools. It seems that parents, who went through this weak system themselves, have some notion of quality standards (they prefer private to public schooling). But as everywhere in the world, the main goal of parents is more years of schooling for their children and getting access to better relative quality is a means to that end. Parents' demands on local schools seem to be focused on issues related to accessibility (e.g., build a school), materials (e.g., purchase computers or provide the school with a soccer field), or fights against corruption among teachers. But there is much less focus on the learning progress of students (despite the highly visible results from the PISA tests), perhaps due to a lack of clarity on what factors produce higher student achievement.

Finally, Peru shares with most countries a fundamental lack of capacity for managing a massive and widely dispersed primary education system, one more reason for the quality of educational services being so low. In addition, this lack of capacity is distributed unevenly, which results in even poorer delivery of services in some regions than in others. Any talk of decentralization that does not take account of the uneven distribution of management capacity risks creating even greater inequality of student outcomes.

These underlying conditions suggest that improving teacher capacity and the governance of primary (and secondary) education are crucial to improving the quality of education in Peru. The case of Peru suggests that management capacity building, from

the Ministry of Education to school to classroom, should be a priority for governments and for agencies provided external funding for primary education in developing countries. Capacity for educational policy-making is not the only issue; the challenge is both creating adequate policies and building the capacity to implement them, including supervision systems, accountability systems, and training systems—teacher preservice training, teachers' mentoring during their first year in the classroom, and teacher career-long professional development.

Development effectiveness of Bank support

The Bank's experience in Peru is instructive for lending in other countries with low levels of public financing committed to education—a low level partially spurred by Ministry of Finance bias against social (public) spending as a tool of economic development (often with support by agencies like the IMF). It is also very instructive as an example of the difficulty of promoting educational improvement in conditions of rapid turnover of education ministers, lack of management depth in the Ministry of Education, low capacity for managing scaled up implementation of reforms, and low levels of teacher content knowledge.

The Bank strategy under such conditions seems to have been to invest in projects that emphasized successful delivery of educational inputs rather than the delivery of educational outcomes. In the 1996 urban primary education loan, MECEP focused on three inputs—improved buildings, textbook distribution and improved classroom pedagogy. In theory, the delivery of these inputs should produce higher student outcomes, but this is not what the Bank emphasized.

Under programs that emphasize input delivery, managers are considered successful if they repair buildings and deliver textbooks or train teachers. In a Latin American country it should be expected that projects could go to the level of outcomes: delivering textbooks that are used in instruction, and changing teacher and management behaviors. It appears that the project took the less demanding road and focused on the inputs, but not on outcomes: actual textbook use, teacher behavior in the classroom, or improved student learning.

The Bank's strategy implicitly assumed that if textbooks arrive at the school, teachers and students would use them effectively, and that if teachers learned better teaching techniques, they would utilize them effectively. Although there was slippage in textbook distribution and some teacher corruption in taking commissions from competing publishers to not use the free textbooks, the presence of textbooks and exercise books probably contributed positively to pupils' learning. But a greater emphasis on the effectiveness of textbook use would have had to include considerable investment in management capacity. Teachers did apparently use at least some of what they learned in the PLANCAD courses, and as evidenced through our teacher interviews, teachers who took the courses considered them valuable. Contract teachers who were not eligible for the courses also wanted very much to take them. But even though investing in such inputs is a correct strategy, the question is whether without supportive investments in supervision and content knowledge their yield is high enough

to justify spending considerable sums on them (particularly the much more expensive pedagogical training part). It does not appear that the yield on pedagogical improvement was very high in the context of teachers' low content knowledge, but an emphasis on outcomes may have forced a more effective investment strategy.

The emphasis of the Rural Education Project (2003) is also on delivery educational inputs, such as expanded access, nonformal preschools run by community groups, and direct access to distance secondary education, all based on programming by a central core of experts. A few components do focus on outcomes, such as pilot community incentive programs to improve rural teacher attendance and teacher accountability, but not on learning outcomes.

Limiting the emphasis in the two Bank-supported projects mostly to improved delivery of educational inputs may have been a prudent choice, given the general country context of low management capacity. However, low management capacity, especially at the school level, tended to undermine the extent to which the improved inputs could be translated into better learning outcomes. In the long term, educational improvement will depend on the ability of projects to influence both educational inputs and management capacity, and harnessing both to improve teacher behaviors and student learning.

Improving the effectiveness of future Bank support efforts

If a main barrier to better primary education is poor educational management at all levels, why then has the Bank not invested far more in better educational management? In Peru, the Bank has invested in a number of efforts to improve management. This report has discussed in detail the Bank's creation of the UMC in the Ministry of Education, a considerable success story, as well as ministry information systems, reducing superfluous (and ghost) employees, efforts in rural areas to ensure that teachers show up by giving control over their pay to community organizations, and efforts to improve management in departments as part of the transition to decentralized control of the educational system at the departmental level. On the other hand, the Bank has not gone nearly far enough to help the ministry manage its all too-decentralized and unregulated teacher education system, its centralized but highly unregulated teacher hiring system, and its largely unsupervised teaching force.

The experience of the Bank-financed school improvement projects over the past 15 years suggest that the only real solution to Peru's low level of student performance is to continue investing over a long period of time in a combination of complementary and reinforcing inputs. The investment should work toward raising academic expectations and the capacity to meet them high enough that real improvement in students' academic performance occurs. This means investing in new inputs such as quality early childhood education (as in the rural project) and school libraries, which are management-intensive investments. It also means following up projects such as the MECEP to build on previous investments in textbooks and training with other investments such as supporting the development of management skills in Ministry of Education counterparts, supporting the systematic training of school administrators in better school management (including supervisory skills and personnel management), and supporting

strengthening departmental management of local educational systems. Ultimately, the Bank should follow up by treating PLANCAD teachers as classroom managers and support their training to raise expectations, to motivate their students to meet those higher expectations, and to give teachers adequate content knowledge so that they can help students over the higher bar. Although moving on to rural education was important for equity reasons, unless there is further attention to urban education, including financing for better school management, earlier improvements, such as they are, could slip back.

With constant changes in education ministers, it is admittedly difficult to maintain continuity in reform efforts. The Bank has been fairly successful in Peru despite this difficulty because of the skilled personnel in the local office of the Bank, and because the Bank's education sector specialist has been in place for 10 years. Thus, the Bank has been an important part of the institutional memory for reform, and has, by being firm in not changing the shape of its loan agreements once signed, been able to get most of what it wanted in loan agreements and implementation. This is not always a good thing, but for the most part, keeping the implementation of agreements on course has worked reasonably well.

On the other hand, the Bank has not been as successful in helping develop a large number of good policy strategists and effective implementers throughout the Ministry of Education and in local departments and schools. For example, the use of the UMC for policy purposes has also fallen far short of what could have been achieved with more resources, particularly for dissemination and education of stakeholders in the use of data and results to make better decisions; the large investment in in-service teacher training could be followed with better integrating the training with the use of government-provided textbooks and the national curriculum; and the in-service school administrator training could also be followed up by better integration with the implementation of recent reforms. The Bank should be more aware of the longer-term nature of successful educational reforms, particularly in a country in which the educational system requires long-term improvements in quality.

Figure 1. Peru: Real GDP and GDP/capita (1997 soles) and Real Public Spending on Education/Student (1997 soles), 1970-2003 (Indices)

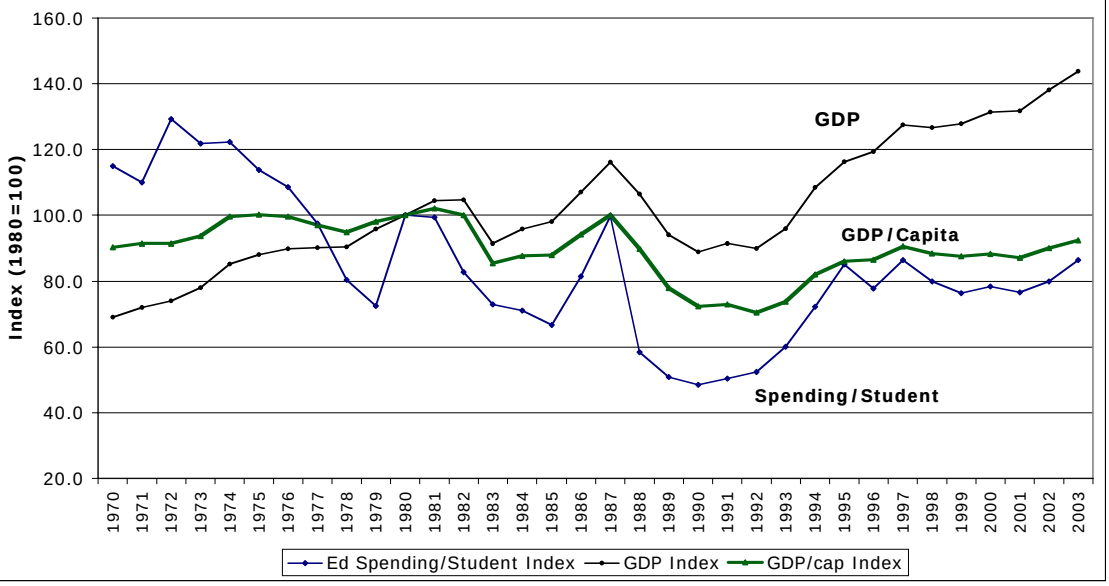


Figure 2. Peru: Primary Enrollment and Spending/Pupil (1997 soles), 1970-2003 (Index)

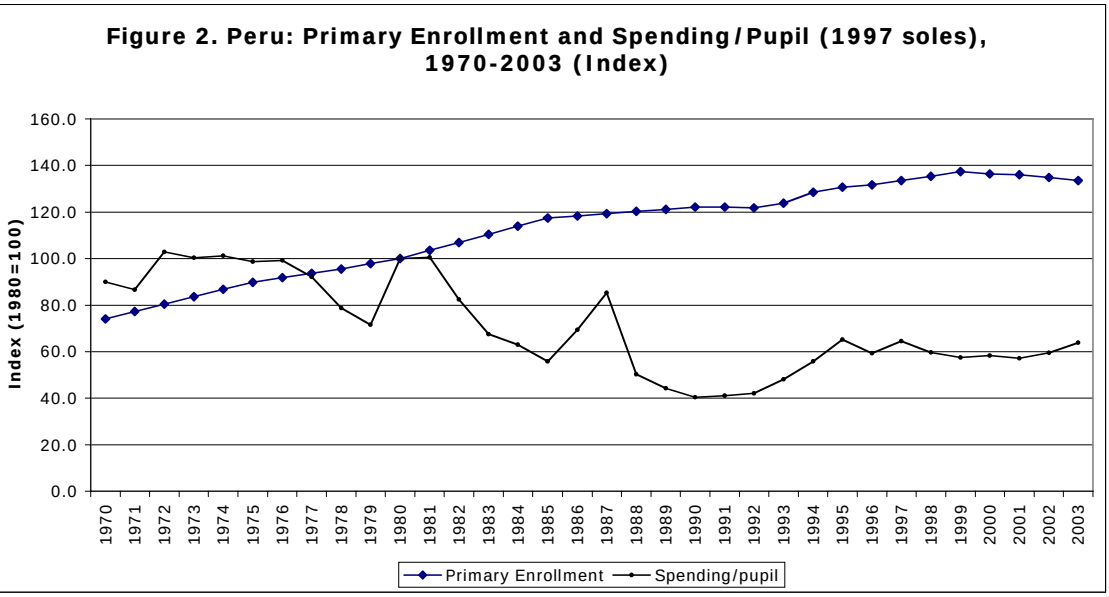


Figure 3. Peru: Secondary Education Enrollment and Spending/Pupil (1997 soles), 1970-2003 (Index)

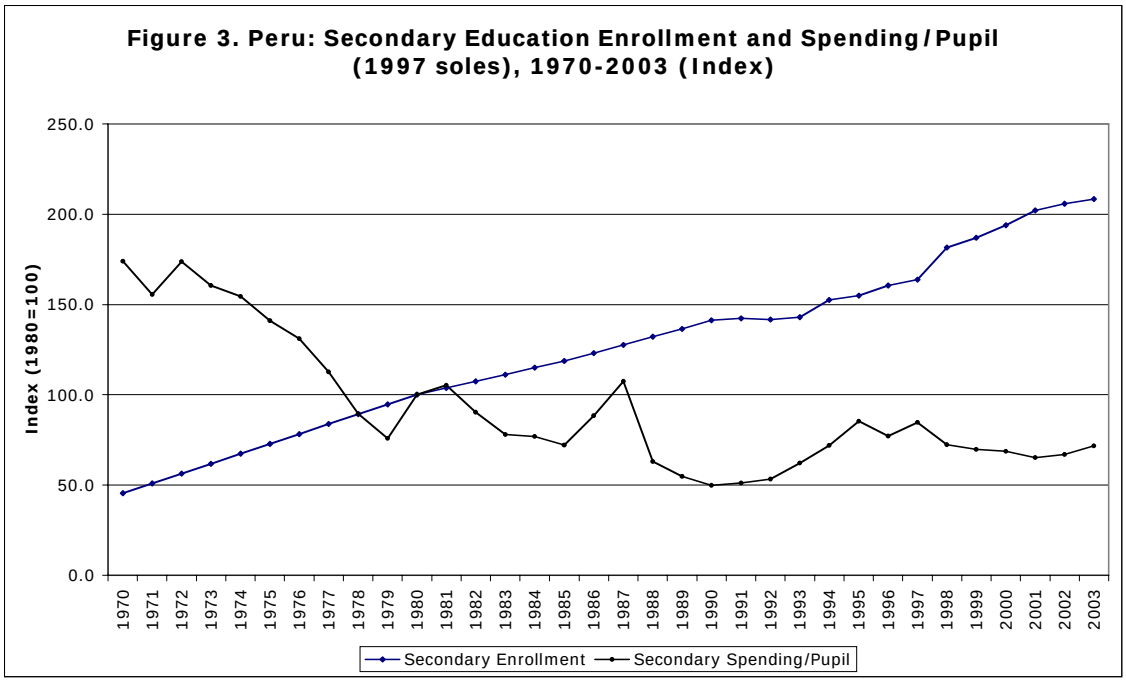
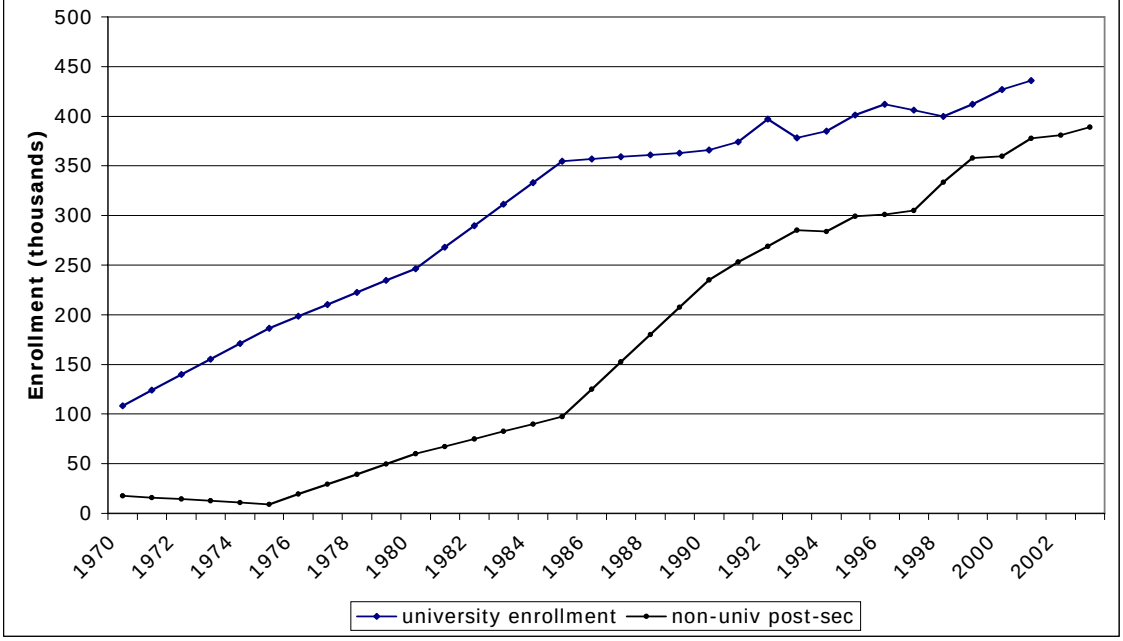


Figure 4. Peru: Public and Private University and Non-University Post-Secondary Enrollment, 1970-2003



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ANNEX A. TIMELINE OF KEY EVENTS AND DEVELOPMENT ASSISTANCE

Year	National Event	Regional/Provincial Event	Primary Education Development	Bi/Multilateral Agency Event
1990	Alberto Fujimori elected president			
1991				
1992	Fujimori closes down the Congress and calls for new elections for it. Abimal Guzmán, head of the Shining Path (terrorist group), is captured.			
1993			*Diagnóstico General de la Educación*, a report funded by a broad consortium of donors and NGOs, highlights key issues for improving education sector.	
1994				
1995	Alberto Fujimori reelected		National curriculum for primary is gradually revised following a constructivist orientation. Texts and teacher training are supposed to follow this same orientation.	
1996			First national evaluation of achievement is carried out (norms-based).	GTZ begins PROFORMA project, DM 9 million
1997			Peru participates in international evaluation of student achievement organized by UNESCO but results are not published.	MECEP signed with IDB in the amount of US$95.4 millio
1998			Second national evaluation of student achievement is carried out (norms-based).	DFID Institutional Strengthening project signed in the amount of US$2 million GTZ begins PLANCAD project, DM 18 million
Year	National Event	Regional/Provincial Event	Primary Education Development	Bi/Multilateral Agency Event
1999				
2000	Alberto Fujimori elected again; scandal of corruption in his government erupts and he flees the country. Valentin Paniagua assumes interim Presidency.			
2001	Alejandro Toledo elected President.		Third evaluation of student achievement is carried out (criterion-based). National Council of Education is formed. Results from UNESCO evaluation are published, which show poor achievement by third and fourth grade students.	MECEP II signed with IDB in the amount of US$87 million
2002		For the first time democratic elections are held for Regional Presidents in 25		

		regions. These are elected for 3-year periods.		
2003		Regional presidents assume office in January.	PISA results are released for Peru. Education is declared in a state of emergency. New General Law of Education is passed by Congress.	DFID Rural Education pr signed in the amount of US$900,000
2004	Peru starts negotiations to sign a free-trade agreement with the US (expected to be signed by 2006).		Fourth national evaluation of student achievement (criterion-based)	
2005			The law of *Carrera Publica Magisterial* (Teacher Career Law) is being discussed. National Project of Education has been released	

ANNEX C. TRENDS IN PUBLIC EXPENDITURE FOR EDUCATION (IN MILLIONS OF NUEVOS SOLES)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GDP 1/	82.010	83.760	83.401	87.375	98.577	107.039	109.709	117.214	116.453	117.507	120.825	121.132 *	127.007 *	132.153 *
GDP 2/	6.790	32.937	52.061	80.010	109.316	132.599	149.780	171.375	195.000 *	174.221	185.143	187.251	198.437	210.542
Total Government Expenditure (TGE) 2/	1.137	4.437	7.695	12.476	16.380	19.792	20.737	29.201	29.524	32.916	34.442	33.562	34.642	36.637
Total Education Expenditure (TEE) 2/	151	737	1.228	2.081	3.081	4.189	4.291	5.150	5.590	4.920	5.179	5.185	5.469	6.040
Recurrent 3/										4.297	4.676	4.852	5.137	4.980
Salaries & Wages 3/										3.836	4.188	4.327	4.569	4.381
Goods & Services 3/										461	488	525	568	599
Investment 3/										623	503	333	332	307
% of Public Expenditure for Primary Education 4/	33,10	32,60	32,10	31,70	31,70	30,80	30,30	29,90	29,50	29,10	28,70	28,30	27,90	27,46
% of Current Public Expenditure for Primary Education 5/	17,88	17,37	17,18	19,26	18,17	18,03	17,83	19,04						
Expenditure per student (primary) 3/ PPP (dollars)				146								317		361
TEE as % of GDP 2/	2,22	2,24	2,36	2,60	2,82	3,16	2,86	3,01	2,87	2,82	2,80	2,77	2,76	2,87
TEE as % of TGE 2/	13,27	16,62	15,96	16,68	18,81	21,16	20,69	17,64	18,93	14,95	15,04	15,45	15,79	16,49

* Preliminar

1/ Source: Banco Central de Reserva del Perú "Memoria 2003". (1994 prices)

2/ Source: World Bank (1998) La educación en una encrucijada: Retos y Oportunidades parael siglo XXI"; and Germán Reaño and Patricia Valdivia (2004) "Indicadores de la Educación. Perú 2004".

3/ Source: Unidad de Estadistica Educativa. Department of Education. Perú (2005) "Indicadores de la Educación. Perú 2004"

4/ Source: UNESCO. *Statistical Yearbook*, various years.

5/ Source: "Costos y Financiamiento de la Educación Pública. Una propuesta para la educación básica en el Perú" Gorriti, Miranda y Pacheco (1999).

ANNEX D. TRENDS IN MAJOR PRIMARY EDUCATION DEVELOPMENT INDICATORS

D.1. Data on Primary Enrollments, Completion and wastage

Year	School-age Population 1/	Primary School Enrollment (Pub & Pri) 2/	Gross Enrollment Ratio 3/	Net Enrollment Ratio 3/	Graduation Rate 4/ 5/	Graduation Boys 4/ 5/	Graduation Girls 4/ 5/	% in Private Schools 2/	Approval rate 4/ 6/
1985	3,026,922	n.a.	81.4	79.1	53.9	55.8	51.8	n.a.	n.a.
1990	3,241,926	3,857,136	n.a.	n.a.	n.a.	n.a.	n.a.	11.83	n.a.
1991	3,271,054	3,858,780	n.a.	n.a.	n.a.	n.a.	n.a.	12.19	n.a.
1992	3,298,235	3,854,350	n.a.	n.a.	n.a.	n.a.	n.a.	12.29	87.90
1993	3,325,143	3,914,350	88.00	86.2	n.a.	n.a.	n.a.	12.33	n.a.
1994	3,353,445	4,063,025	94.70	93.80	56.4	58.3	54.3	11.98	n.a.
1995	3,384,812	4,132,321	n.a.	n.a.	n.a.	n.a.	n.a.	12.08	n.a.
1996	3,422,303	4,160,753	n.a.	n.a.	n.a.	n.a.	n.a.	11.74	n.a.
1997	3,464,798	4,164,284	n.a.	n.a.	n.a.	n.a.	n.a.	11.97	n.a.
1998	3,507,722	4,224,678	94.90	90.60	55.9	55.7	56.1	13.08	91.60
1999	3,546,485	4,282,819	96.90	94.60	n.a.	n.a.	n.a.	12.64	n.a.
2000	3,576,508	4,268,813	n.a.	n.a.	n.a.	n.a.	n.a.	12.98	n.a.
2001	3,597,477	4,254,384	n.a.	n.a.	n.a.	n.a.	n.a.	13.44	n.a.
2002	3,612,449	4,220,072	n.a.	n.a.	n.a.	n.a.	n.a.	13.73	91.50
2003	3,621,894	4,187,229	96.10	92.50	72.5	71.9	73.2	14.38	n.a.
2004	3,626,273	4,119,597	n.a.	n.a.	n.a.	n.a.	n.a.	14.21	n.a.

Note: The school-age population for primary education are the children between 6 and 11 years old.
1/ Source: Instituto Nacional de Estadística e Informática-INEI (2002) Boletín Nº 15 "Perú: Estimaciones y proyecciones de población total, urbana calendario y edades simples 1970-2025"
2/ Source: Department of Education (2004) "Cifras de la Educación 1998-2003" and Department of Education "Peru: Matrícula según niveles y/o m 1990-2002" and the web site of the Department of Education www.minedu.gob.pe
3/ The information for the years 1985, 1994, 1998 and 2003 comes from the paper "Indicadores de la Educación. Perú 2004" Department of Educa The information for the years 1993 and 1999 comes from "La educación peruana a inicios del nuevo siglo" written by Cesar Guadalupe et al. (2002
4/ Unidad de Estadistica Educativa. Department of Education. Perú (2005) "Indicadores de la Educación. Perú 2004"
5/ The graduation rate is the percentage of children between 11 and 13 years old who finished primary education.
6/ The approval (failure) rate is the percentage of students enrolled in one year that passed (failed) that school year. In other words, this is not an inter-anual rate.

D.2. Breakdown of Net Enrollment Ratio by time period and group 1/

	1985	1994	1998	2003
Girls	78.1	93.9	89.8	92.1
Boys	80	93.7	91.5	93
Urban	86.7	95	91.4	94.3
Rural	68.9	92	89.9	90.2
No poor	83.9	95.1	92.2	93.9
poor	80.5	95.2	90.7	93.4
very poor	66.1	90.3	88.1	90

1/ Source: Unidad de Estadística Educativa. Department of Education. Perú. (2005) "Indicadores de la Educación. Perú 2004"

D.3. Learning Outcome by time period and group

	1998 (CRECER Evaluation)							
	4to				6to			
	Mathematics		Language		Mathematics		Language	
	average	s.e.	average	s.e.	average	s.e.	average	s.e.
By departments								
Amazonas	293	(06.6)	290	(05.1)	288	(05.0)	283	(06.1)
Ancash	296	(08.7)	296	(07.5)	303	(10.7)	297	(08.0)
Apurímac	257	(06.5)	258	(05.0)	261	(04.6)	251	(05.2)
Arequipa	327	(06.2)	321	(06.1)	317	(06.0)	319	(07.0)
Ayacucho	263	(07.8)	270	(05.0)	275	(06.3)	273	(06.3)
Cajamarca	293	(07.9)	283	(07.2)	295	(09.5)	286	(08.6)
Callao	318	(07.5)	327	(07.3)	315	(06.6)	326	(06.6)
Cusco	291	(08.0)	279	(07.2)	290	(06.6)	283	(07.5)
Huancavelica	293	(05.4)	274	(04.4)	283	(07.1)	275	(07.6)
Huánuco	288	(06.1)	283	(04.4)	270	(04.6)	272	(05.7)
Ica	294	(05.1)	292	(03.9)	294	(05.7)	290	(04.8)
Junín	302	(06.3)	299	(06.1)	307	(06.0)	300	(05.6)
La Libertad	308	(09.8)	311	(07.6)	298	(07.2)	299	(06.3)
Lambayeque	300	(06.9)	302	(06.1)	301	(08.0)	294	(08.1)
Lima	312	(02.7)	314	(03.0)	313	(03.1)	317	(02.8)
Loreto	263	(05.4)	266	(04.2)	267	(05.2)	279	(05.9)
Madre de Dios	272	(09.3)	275	(06.7)	267	(03.9)	273	(06.8)
Moquegua	309	(05.0)	315	(06.5)	304	(05.8)	314	(05.3)
Pasco	287	(08.6)	280	(06.5)	292	(08.1)	279	(06.9)
Piura	291	(07.5)	294	(06.2)	295	(06.9)	295	(05.7)
Puno	281	(09.0)	272	(06.3)	277	(08.1)	267	(08.3)
San Martín	270	(05.8)	273	(05.0)	268	(05.9)	266	(05.9)
Tacna	308	(05.4)	308	(06.3)	305	(05.6)	312	(04.8)
Tumbes	292	(08.3)	290	(05.9)	277	(05.8)	277	(05.0)
Ucayali	268	(04.9)	274	(05.2)	263	(03.7)	272	(04.8)
By type of school								
Public Schools	293	(1.5)*	291	(1.4)*	292	(1.5)*	292	(1.5)*
Non-public schools	336	(4.0)*	343	(3.8)*	342	(3.8)*	341	(3.6)*

* Significant differences (p value < 0.05)

Note 1: The evaluation is representative for urban "polidocentes" schools.

Note 2: The results of the evaluation carried out in 1998 can be found in Department of Education (2000) Boletín 5/6 *Crecer.*

	2001 (National Evaluation)							
	4to				6to			
	Mathematics		Language		Mathematics		Language	
	average	s.e.	average	s.e.	average	s.e.	average	s.e.
National Average	300		300		500		500	
By region								
Coast	332*		332*		n.a.		n.a.	
Highlands	287*		284*		n.a.		n.a.	
Rainforest	278*		283*		n.a.		n.a.	
By area								
Urban: Lima and Callao	321.7	(3.83)*	325.9	(3.59)*	511.9	(2.48)*	511.4	(2.37)*
Urban: Provinces	294.3	(3.06)*	299.1	(2.51)*	493.8	(2.02)*	494.8	(1.41)*
Rural	267.1	(3.56)*	262.2	(2.86)*	474.7	(2.42)*	478.4	(1.66)*
By type of school								
Public Schools	288.5	(2.11)*	289.7	(1.79)*	491.3	(1.37)*	492.9	(1.02)*
Non-public schools	360.5	(5.10)*	355.3	(3.26)*	541.7	(4.15)*	534.5	(2.89)*
By language of the school								
No bilingual schools	271.8	(4.06)	266.5	(3.27)	478.7	(2.65)	480.3	(1.86)
Bilingual schools: Quechua	259.3	(4.43)	234.5	(3.31)	468	(3.27)	474.6	(2.11)
Bilingual schools: Aimara	241.9	(5.84)	252.2	(4.65)	450.8	(4.87)	467	(2.61)
Other bilingual schools	237.9	(9.10)	238.5	(6.90)	444.5	(8.28)	463.4	(4.23)

* Significant differences (p value < 0.05)

Note 1: The evaluation is representative at a national level.

Note 2: The National average and the results of the evaluation by area, type of school (public, non-public) and language of the school can be found in Giuliana Espinosa and Alberto Torreblanca (2003) "Cómo rinden los estudiantes peruanos en Comunicación y Matemática: Resultados de la Evaluación Nacional 2001. Informe Descriptivo". The results of the evaluation by region can be found in Daniel Caro et al (2004) "Factores asociados al rendimiento estudiantil"

Note 3: The differences in the results of Mathematics and Language by language of the school are all significant except for the ones between "Aimara" and "Other EBI" for both the fourth and the sixth grade of primary education. The difference between "Aimara" and "Other bilingual schools" in the fourth grade of primary education in the area of Language is not significant either.

D.4. Results of the National Evaluation (2001), by language of the school

		Multigrade not bilingual schools			Multigrade bilingual schools (quechua)			Multigrade bilingual schools (aimara)			Mult. bilingual schools (other native languages)		
		Below basic	Basic	Sufficient	Below basic	Basic	Sufficient	Below basic	Basic	Sufficient	Below basic	Basic	Sufficient
4th grade of primary education	Comprensión de textos verbales	79.31	7.91	12.77	98.01	1.72	0.27	87.23	4.30	8.47	90.81	3.44	5.75
	Comprensión de textos ícono-verbales	75.23	12.00	12.77	95.09	4.64	0.27	84.26	8.49	7.24	87.80	6.46	5.75
	Reflexión sobre la lengua	84.59	15.37	0.04	99.01	0.99	0.00	90.68	9.32	0.00	93.23	6.77	0.00
6th grade of primary education	Comprensión de textos verbales	92.83	5.91	1.26	98.39	1.61	0.00	99.83	0.17	0.00	97.89	2.11	0.00
	Comprensión de textos ícono-verbales	89.32	8.13	2.55	95.36	4.46	0.18	98.77	1.23	0.00	96.22	3.78	0.00
	Reflexión sobre la lengua	96.16	3.68	0.16	99.30	0.70	0.00	99.83	0.17	0.00	100.00	0.00	0.00

Source: Giuliana Espinosa and Alberto Torreblanca (2003) “Cómo rinden los estudiantes peruanos en Comunicación y Matemática: Resultados de la Evaluación Nacional 2001. Informe descriptivo”

ANNEX E. LIST OF INTERVIEWEES AND SCHOOL VISITS

The authors wish to acknowledge the support of the following individuals in sharing both their time and insight into the developments within the Peruvian Education System.

Name	Institution and Position	Period
Olmedo Auris	Teacher Union Representative	1972-present
Roland Baecker	GTZ, PROEDUCA Director	2002-present
	PLANCAD Director	1998-2001
Livia Benavides	World Bank Operations Specialist and Task Manager for Rural Project	1994-present
Gustavo Cabrera	Coordinator for International Projects (PCU), MED	2005
Dante Córdova	Minister of Education	1995
Hugo Diaz	Member of National Education Council	2001-present
Giuliana Espinoza	Director of the Unit of Quality Measurement (UMC), MED	2001-present
Jorge Ferradas	PCU Director for MECEP	1998-2001
José Rodríguez	UMC Director	1998-2002
Gloria Helfer	Minister of Education	1990
	Congresswoman, Member of Education Committee	2001-present
Susan Kolodin	IDB Task Manager	2000-present
Nicolas Lynch	Minister of Education	2001-2002
Carlos Malpica	Minister of Education	2003
Liliana Miranda	UMC Analyst, MED	2004-present
Ricardo Morales	President of National Education Council	2001-present
Enrique Prochazka	Director of Strategic Planning	Present
Armando Ruiz	National Director of Adult and Literacy Education, MED	??
Javier Soto	Minister of Education	2004-present
Juana Scarsi	National Director of Secondary and Technical Education	2005-present
Juan Fernando Vega	Secretary of Strategic Planning, MED	1994-2001
Idel Vexler	Vice Minister of Education	2004-present

School Location and Description	Interviewees
School One: semi-urban, high poverty, offers primary and secondary school in two shifts	Principal, 3 teachers, 2 parents (including APAFA director), 1 student
School Two: semi-urban, high poverty NGO-managed primary school in one shift	Principal, multiple teacher focus group, 2 students
School Three: Rural/Agriculture area, Multi-grade school (Two classes for Grades 1-6) with Preschool	Preschool Teacher, 2 parents (including APAFA director), 1 student
School Four: Rural/Agriculture area, Multi-grade school (Three classes for Grades 1-6) with Preschool	Principal (also teaches 5 and 6), 2 teachers in focus group, 2 students in focus group, 1 parent
School Five: semi-urban, agriculture area, 220 primary students, high school in afternoon shift	Principal, Vice-Principal, 2 parents (including APAFA director), 3 teachers in group, 2 students
UGEL (Local Ministry Office), urban, located in medium size town, responsible for approx. 30 urban, 30 semi-urban and 35 rural schools	2 mid-level civil service professionals in focus group

ANNEX F: SUMMARY OF OBSERVATIONS FROM SCHOOL VISITS

Objectives To complement the interviews and document review strategies employed for completing this report, the mission team visited schools to gain a better understanding of the impact of World Bank assistance in primary education in Peru. The main objective of the visits was to get a sense of the depth, significance and understanding *within the schools* of the education projects funded by the World Bank and to gain an understanding of what a Peruvian school looks and "feels" like. Given the short time frame (three days), the school visits were not meant to be representative of the universe of schools in Peru nor comprehensive within each school. Visits to each school were only about three hours in duration, enough time for interviews with key personnel, parents, students and a brief tour of the facilities.

Methodology Historically, World Bank projects in Peru have focused direct school improvement efforts (e.g. school rehabilitation) on rural and suburban schools, rather than those in the capital of Lima and large cities. To gain an in-depth understanding of the impact of these project activities on rural and suburban schools, the team elected to visit five schools in outlying areas: two in a suburb of the capital city of Lima, two in small coastal towns and a final school in an agricultural town. All schools were within several hours drive of Lima. Schools were selected by the Peruvian team members from a list of schools provided by the Ministry of Education. Due to poor means of communication in the schools (absence of a telephone in most cases), we were unable to contact the school principals in advance; rather, we visited schools with a letter from a Ministry official authorizing our visit. In each school the principal was asked to participate in a relatively brief visit by World Bank education consultants for the purpose of understanding the situation of public schools in Peru. No school declined to participate. The principal, two teachers, at least one parent and one student were interviewed in each location. In the agricultural town we also interviewed two staff members in the regional UGEL office (local administrative arm of the Ministry).

In order to structure the conversations with school staff and community members, we developed an interview protocol (found at the end of this annex) based on four main areas for discussion: inputs, processes, outputs and outcomes. *Inputs* are those physical and human resources that comprise the school and its facilities, including textbooks, materials, and number of teachers. To catalog school inputs we used both observation (tally of number of computers, desks, etc.) and interviews. The next segment of interest is *processes*, or how things work at the school, including support from the local council and school inspectorate, support within the school, and the role of the community in school operations. *Outputs* are the immediate results of World Bank or Ministry project investments (books, materials, etc.). Finally, *outcomes* are the long-term results of the projects. Without a control group it is difficult to separate out what outcomes might have occurred in the absence of World Bank support. For this reason the discussion with parents and students focuses on their perceptions of changes in the school as well as expectations for future prospects for the education of the child. All interviewees were guaranteed anonymity for both themselves and their school.

Observations from Schools

The following pages provide a description of observed school inputs, processes, outputs and outcomes. Schools are numbered by the order in which they were visited, one through five. Observations are based on interviews, notes and pictures taken in the schools. Comments and conclusions are not meant to be representative of the universe of Peruvian schools, but rather provide insight into the situation of the schools in the communities we visited.

Inputs School One, like the town that surrounds it, is located on an enormous sand dune, about an hour from the city center of Lima. Built just six years ago, the modular classrooms appear to be made of scrap metal, with tin roofs, no lighting and few windows, creating a stifling atmosphere within the dimly lit interior. Students, most of who were at least partially in uniform, were seated at ministry-issued desks as teachers used the blackboard to convey the day's lesson. In most classrooms, few students possessed textbooks or workbooks, though most had at least a notebook on their desks in which they copied the lesson. A parent stated that in spite of the presence of workbooks delivered by the Ministry of Education, teachers had asked parents to purchase a different set of books, arguing that the free materials were not adequate. Few teaching and learning materials were in use or could be found in classroom cupboards or bookshelves. Construction of cistern-sourced toilets was underway to replace the school's pit toilets.

A short distance away on the same sand dune lies School Two, managed by a groups of nuns and their NGO. Teachers are hired on a contract basis, but paid through the Ministry of Education, allowing the school principal to hire and fire at will. We entered the school after classes had been dismissed to find the teachers reviewing the draft of legislation for the proposed teacher career plan in the well-equipped library. Maps, books, didactic posters, games and other materials lined the walls of the library, with more materials evident in each classroom. Classrooms were clean and well-lit, and each had a list of students and their attendance record posted near the door. Both preschool and primary school grades were offered, with vacancies going to each incoming class of students on a first come-first serve basis. We were impressed by the quality of the physical plant of the school, especially in comparison to that of School One, just around the corner.

School Three is a small rural school located in an agricultural hamlet some 20 minutes inland (by car) from a coastal town on the Pacific. The old one room school now houses the preschool class, while a Fujimori-era building provides space for grades 1-6 in two classrooms. The preschool class was in session with some 20 children working with blocks and other games in a modestly equipped classroom. Due to a conflict between the teachers and parents, the primary school was closed and we were unable to observe a class or assess the school's material inputs. Parents and their students waited in the sun for the local magistrate to appear to hear their complaints, including teachers who were frequently absent but who continued to receive their paychecks. The head of the parent association alleged that the teachers had been hired because of their family connections to the principal, were not certified, and were not teaching their children how to read. Those who could afford it were sending their children by bus to the larger town, at a cost of 1 sol each way (about US$0.30). In the interim, some twenty primary school children were not attending classes.

School Four also lies in a small agricultural center, about thirty minutes by car from a larger coastal town. The school, operating primary grades in a morning shift only, was using about half of the school buildings it had at its disposal, with the remaining classrooms used for storage and a preschool room. Like the previous school, the facilities had been upgraded under the Fujimori administration, which chose to build an additional four classroom buildings rather than refurbish the older (currently unused) facility. Desks and school furniture varied in age and quality, while few school materials lined the cupboards or walls. Students collected a ministry-issued school snack of milk and a roll on their way out the door when they were excused for the day.

Located about 30 minutes from the city center by car, School Five was at one time surrounded by farmland, though growth of the surrounding town changed its classification to semi-urban. Serving 220 primary students in the morning shift (a high school shift of 520 students started in the afternoon), the school site is the largest we visited. The school has a grass soccer pitch which they rent for additional revenue to local teams. Several renovation projects managed by the school were ongoing, including refurbishment of student bathrooms and a small kitchen for a cooking

class. This was the only school we visited with computers available for student use, approximately ten terminals (not connected to the internet) in a converted classroom with reinforced security (bars on windows and doors).

Processes According to school staff, support from district management (UGEL) appears to be primarily limited to the delivery of materials. This does not guarantee the use of these materials (textbooks, workbooks, etc.) in the classroom. In at least two schools we noticed textbooks stacked up in a classroom or principal's office in their original plastic wrap, despite the fact that classes had begun months earlier. Interviewees also mentioned the role of district offices in training for teachers throughout the school year. Both teachers and parents mentioned that teachers should be trained prior to the beginning of classes so as to cause fewer disruptions: many school days were lost due to teacher training and seminars, which according to one parent left her child at home (and reduced her ability to work). Training also proved to be detrimental to schools in poorer areas, at least in terms of staff losses: one parent reported that as soon as teachers were certified they departed for better schools. One school mentioned assistance from the UGEL for improvements to the physical plant of the school, especially resources for painting classrooms and the school's exterior. Another group of teachers laughed at the idea that the UGEL would visit to provide teaching support: "The only time they come is when they need paperwork."

From the perspective of teachers, district and school management provided little pedagogical support and focused instead on the bureaucratic aspects of school processes. Teachers complained of long bureaucratic delays in dealings with the ministry, especially for picking up their paychecks. Teachers at the NGO-managed school reported that collecting paychecks took at minimum three days, as the office was only open for a few hours per day and checks were issued only at the end of the month. Only one teacher, a preschool instructor in a small rural school, mentioned regular supervisory visits from the UGEL offices. Prior suggestions from that supervisor had included suggestions for repairs to the physical plant of the classroom and incorporation of local materials into class lessons. In only one school did both the principal and teachers comment on classroom observations made by the principal on a regular basis. Both teachers and school principals typically traveled significant distances to get to the schools; in only one case did a teacher report living in the community.

Parent involvement differs widely between schools, but in general we found parents both available for interviews and interested in school affairs. In School One, we interviewed a leader of the parent association, APAFA, who happened to be at the school with her son. She suggested creating a small training program for parents to teach them how to better support

their children in school. Her APAFA group funded a small scholarship of 45 soles to extremely poor students for books, uniforms and materials. In contrast, problems in School Three with alleged cronyism in teacher hiring had caused the parent organization to protest with the UGEL and municipal authorities and close down the school. Parents in this school reported filing "lots of paperwork" with the UGEL to attempt to resolve the problem prior to shutting down the school in protest. A teacher in the same school accused the parent organization of nepotism in its intended hire for the teaching position.

In most schools the relationship between APAFA and the school was characterized as cooperative. Most APAFA organizations collected between 5 and 20 soles from each family at the beginning of the school year. Those parents who were unable to pay would typically provide in-kind contributions or labor (examples included sweeping classrooms or painting the school). The APAFA at the largest school ran a small kiosk with drinks and snacks and used the profits from sales to buy computers and hire an outside English teacher for several hours a week. A recent change in legislation had enabled parents to have greater control over these funds, requiring principals and teaching staff to submit a proposal for how the money would be spent. The school council laws (CEI—*Consejos Educativos Institucionales*), enacted recently by the ministry and entitling a council of parents, teachers and administrators to greater decision making and management responsibilities, were mentioned only in one school. Parents described the changes as "on paper only" and characterized the current system as having little coordination with the school principal. They expected improvements to be made under the new CEI system, but were not sure when those changes would occur.

Outputs Historically, World Bank efforts have focused on school materials, curriculum development, teacher training and school infrastructure improvements. Though we did expect them to, no interviewees mentioned the World Bank in describing the source of any infrastructure or material improvements; rather, respondents were likely to describe the source new desks or books as "the Government" and sometimes, "the Ministry." As stated above, materials found in schools were not always in use in the classroom. Physical improvements to school infrastructure occurred to a large extent under the Fujimori regime; since that time few resources were available for maintenance.

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of

Several teachers mentioned their participation in PLANCAD under the MECEP project, though many excluded teachers noted that only the *nombrados* (permanent appointed teachers) had been allowed to participate. Participants commented on their improved ability to pass on information to students and maintain student interest with the active teaching methods imparted to them through the program. According to one group of teachers, PLANCAD taught them to teach students in groups and encourage students to solve problems together. Teachers also criticized the approach as too lengthy in terms of conveying information and more likely than the traditional method to result in discipline problems in the classroom. These teachers preferred the traditional method of teaching which allowed them to maintain student attention on the topic throughout the lesson. One teacher stated: “the so-called ‘rights of the child’ only means less discipline.”

Outcomes When asked about the relationship of inputs, processes and project outputs to student outcomes, both principals and teachers reported that mitigating household factors prevented the children from learning more. Several schools cited serious problems with student behavior, attitudes and home life as factors which contribute to low levels of learning and poor completion rates. In one classroom, a teacher reported that 80 percent of her students came from single parent homes. Principals reported problems with nutrition and broken homes, leading to low attendance and high drop out rates. When asked what schools do to follow up with the truant students, staff indicated they did not have the time or resources to track down non-attending students. Nonetheless, most schooling staff expected all but a few students to graduate from primary school. Participation in secondary school was highly probable, though not guaranteed. Factors such as economic means and student work were key to explaining why some students might not enroll in, or fail to complete, secondary school.

Parent expectations for schooling completion centered on the hope that their child would graduate from secondary school. One parent said he would like his daughter to complete university, but he could not provide the funds. Many parents had not completed high school themselves, with the most common explanation being lack of financial means. When asked how she knew if her child was learning, one mother reported that grade passing was her primary indicator of her child’s success. As long as her child achieved more than she had, she would be happy with his progress. She saw no reason for a child not to finish primary school, and if they failed to do so it was the fault of the parents.

Parents reported sending their children to school to do better than themselves, to be respectful, and to learn to read and write. Parents defined a good school as one which taught students well, had good infrastructure, science labs and computers, and counted on well-

prepared teachers. Bad schools were those that did not have adequate materials and had problems with student behavior. Several parents interviewed were not willing to classify their schools as bad (despite the lack of infrastructure they had cited as indicative of a good school), but were also reluctant to say they were good. Other parents thought their child's school was good, and all found them to be relatively close to their homes (such that access was not a problem). One parent said her child's school was okay, and was making progress to improve. Students indicated an interest in completing secondary schooling and did not see any obstacles or mitigating factors that would prevent them from doing so. Learning to read and write and getting a better job were the main reasons students gave for attending school.

Household outlays for education include uniforms, notebooks, materials and sometimes transportation. Prices varied greatly, but most parents estimated spending roughly 60-100 soles on uniforms (including shoes). School materials (pencils, paper, etc.) could total as much as 100 soles, especially if parents were asked to buy books. In the school where the ministry books were defined as "not adequate" by teachers, a parent reported the replacement books would set her back 80 soles. (At the time of our visit, 1 US$ was equal to about 3 soles).

In sum, we found modestly equipped schools (every student had a desk and at least some materials) even in somewhat isolated areas with multi-grade classrooms. In this mostly random selection of schools we found two serious problems, including one school that was not using the textbooks supplied by the ministry (it was later reported to us that in these cases teachers and principals often receive a kickback from publishers). A second school was shut down due to conflicts over hiring practices and teacher absences. Overall, the physical plant of school facilities was not good. Although buildings appeared to be in reasonable conditions (no obvious water damage, cracks or structural damage), classrooms were all too frequently dirty and play areas littered. On the other hand, we also found teachers and school staff passionate about their students, parents hopeful for student success, and students determined to learn. School staff consistently had lower expectations for student achievement and attainment than did students and parents, an observation that may be demonstrative of the resignation to mediocrity we found in the system as a whole. Thus there appears to be a willingness to perform, but low expectations on the part of the system that such performance can actually occur.

ANNEX G: PERU SCHOOL VISIT INSTRUMENT (FOUR LEVELS: INPUTS, PROCESS, OUTPUTS, OUTCOMES)

Input Level: Observation Checklist for School and Classroom Characteristics

School Level	Classroom Level (visit one or two)
• Number/Category of Staff • Number of Teachers/Grade/Discipline • Number of Students and Grade/Age Range of Students • Number of Classrooms • Teacher Lounge (Resource Materials, National Curriculum Guides) • Library and Computer Rooms (Number of Books, Terminals, Access) • Bathrooms (Cleanliness) • Cleanliness/Security	• Student work on the walls • Student attendance logs • Audio-visual equipment (blackboard, overhead) • Alignment of Desks • Number of Students • Reading books/Didactic Materials • Textbooks on desks • Cleanliness

Process Level: School Operations/Support/Supervision

Interviewees	Characteristics	Process Questions
School Principal Lower Grade Teacher Upper Grade Teacher	• Age • Gender • Pre-service training • Experience (Years) • Experience in School • Residence in District	• Support and Supervision from district management • Support and Supervision from Principal (Teacher attendance logs?) • Support and Supervision from Curriculum/Pedagogical Director • Interaction with community/parent involvement • Curriculum/School Development Plan/Objective • Characterize role of school in community

Outputs Level: School Relationship to WB Project (Principal and Teacher Interviews)

• Curriculum Changes • Assessment Participation • Reform/Rehabilitation of Building	• In-Service Teacher Training • Teaching/Learning Materials • School Feeding Program

Outcomes Level: Community Understanding of Schooling Outcomes

Interviewees	Characteristics	Outcomes Questions
Parent Student	• Age • Gender • Experience in School • Distance to school from home (minutes) • Education Level	• Characterize any changes in school in recent years • Reason for attending school • Hopes for level of education attainment • Expected level of attainment (& mitigating factors) • A good school is one that . . .(1 important char.) • A bad school is one that . . .(1 important char.) • Characterize your school on these characteristics • Summary of costs: transportation, materials, uniforms.