



Innovations in Decentralization and Active Schools

AprenDes

AprenDes-PERU

**REPORT ON YEAR 1
APRENDES PERFORMANCE MONITORING PLAN
Revised February 2005**

Academy for Educational Development

February 2005

USAID Associate Award No. 527-A-00-03-00120-00
AED Project No: 2926-11

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January 12, 2005 (revised 2-17-04)

Executive Summary

Performance Monitoring Results AprenDes – Year 1 (2004)

Introduction

This document summarizes the results obtained by the AprenDes project in 2004, the project's first year of implementation. It provides the principal findings on program performance from a baseline in May 2004 to the end of the school year (late October 2004). Progress on a number of project objectives related to decentralized school- and regional-based educational decision-making, teacher professional development and student academic achievement in rural multigrade schools is examined. The findings in the document are based principally on a report of GRADE, the external evaluation contractor, entitled *Informe final de Resultados en Pruebas de Rendimiento, proyecto AprenDes*. The findings of GRADE have been reanalyzed where appropriate to provide a full understanding of the progress made in meeting project objectives and are complimented by the findings of AprenDes evaluation personnel, who monitored project performance indicators related to national education policies during the year.

Major Findings

AprenDes was highly successful in implementing all components of the project during the first year of implementation. On indicators of process and impact the project had consistently higher results throughout the year than the comparison group. In two areas related to incorporation of local assessments into the national education decentralization process and the establishment of student governments that are contributing to community development, the AprenDes project exceeded projections for the four-year life of project.

AprenDes students had consistently higher achievement in Communication and Mathematics throughout the 2004 school year than similar students in comparison schools. AprenDes students maintained between 2 to 29 average point advantages at the end of the school year in all subjects depending on the grade level studied. First grade students had average gains 3.4% higher than comparison groups.

Participation in the AprenDes program had a significant effect on student achievement at both the third- and sixth grade-level. When possible intervening variables, such as age, sex, mother's education level and socio-economic status, program, pretest score, type of school, teacher experience and teacher salary were controlled, participation in the AprenDes program had a significant effect on achievement in third grade mathematics and communication, and sixth grade communication.

The AprenDes program was equally effective for males and females. No significant differences by gender were found and the achievement advantages for AprenDes were similar for boys and girls in all subjects.

Student age was a significant factor in low achievement, especially in sixth grade.

Older students had relatively lower scores in sixth grade, suggesting the importance of special emphasis in the learning of over age students in higher grades.

AprenDes was highly successful in establishing student governments with diverse memberships that were engaged in community actions. By the end of the 2004 school year, student governments had been established in all of the AprenDes schools of the sample and more than three-fourths of these school governments had a diverse membership and were involved in community development activities.

AprenDes had mixed results in the implementation of active learning strategies during the 2004 school year. The project had generally higher levels of implementation of active learning strategies during the year than comparison groups. However, there was a slight decrease in the degree of implementation on the indicators over time. Such results are generally attributable to a lack of teacher confidence owing to insufficient follow-up.

AprenDes supported activities informed national policy and led to policy refinements related to the decentralization process. AprenDes provided technical assistance to Regional Education Directorate, which led to the approval of the Regional Council of Education, and funding for curriculum diversification, teacher training, and citizen participation through school councils. In addition, AprenDes worked closely with the *Consejo Nacional de Educación* (National Education Council), to inform the Ministry of the results of regional assessments. Seventy-one percent of the actions, rather than the projected 33% were incorporated into Ministry policy efforts.

Regionally, AprenDes contributed to increased local initiatives and to increased civil participation in school operations. The project worked with all 10 provincial educational administrative Units (*Unidad de Gestión Educativa Local-UGEL*) through quarterly meetings to provide orientation, collaborate with technical specialists of these units on training activities, and support the participation of local authorities international observation tours. In addition, the project provided technical assistance to schools in the development of school operation plans. These activities resulted in a higher percentage of actions than expected among local authorities and schools. For example, 36% of AprenDes school councils rather than the predicted 20% were found to be developing actions related to institutional education plan.

Principal Recommendations

Continue to implement program components that have resulted in positive programmatic and policy outcomes. These include technical assistance and knowledge building for local and national authorities, support to civil society participation in school operations, support for diverse, action-oriented student governments, and emphasis on basic competencies in mathematics and communication at all grade levels.

Increase focus on learning needs of overage students. Ideally the components of modular learning and flexible promotion should help to eliminate overage students in project schools. However, in the short run, a special study or review of the characteristics of overage students in the external evaluation contractor database can contribute to developing strategies to better serving the needs of such students. In addition, the analysis of internal efficiency of project schools should be completed as soon as data are available to inform strategies for addressing the needs of overage students.

Review training and support procedures for teacher professional development in active learning methodologies. As necessary, strengthen follow up to encourage teaching strategies that foster student expression of opinions in class, use of small group teaching contexts, and use of learning materials.

Consult with GRADE to revise projections on indicators in light of 2004 results and to refine formats for projecting progress on academic achievement indicators. This revision should include determining levels of mastery so that percentages of students obtaining mastery in mathematics and communication can be reported as well as mean test scores, and recalculation of projections where higher than expected first year progress has been made.

Performance Monitoring Results AprenDes – Year 1 (2004)

I. Introduction

This document describes the progress made on the performance indicators for the AprenDes project during 2004, the first year of project implementation. The information comes primarily from the work of the external evaluation contractor, GRADE, a Peruvian NGO with an excellent reputation in educational research and evaluation. GRADE's work had two purposes. First, the evaluation results will inform the implementation of AprenDes interventions. The results complement those of other monitoring and evaluation efforts conducted by the project to fine-tune the development of its educational program for rural multigrade schools. Second, the baseline and final evaluations conducted by GRADE served to establish baseline indicators for measuring project results. As it is envisioned that such monitoring of results will take place on a yearly basis, the 2004 work provides a basis for systematic monitoring of performance over time. Thus, this work contributes to the measurement of final project results (Baseline indicators and projections of change over time from the Project Monitoring Plan are found in Attachment A). The findings of GRADE were complimented by the efforts of AprenDes evaluation personnel, who monitored project performance indicators related to national education policies during the year.

This document was produced by AprenDes evaluation staff, which extrapolated the results from the final report on GRADE's work, which was completed at the end of January 2005. The current report includes final 2004 results on all indicators with the exception of completion, which owing to a remedial recuperation period for students that takes place in January/February of the following year, are not available until March, when final statistics are sent to the UGELs (*Unidad de Gestión Local*).

II. Background

The objective of the AprenDes project is to improve the performance of Peruvian primary school students. AprenDes promotes effective decentralization policies that increase the participation of local stakeholders in decision-making about educational quality. The project focuses on rural multigrade schools where—because of poverty and isolation—children are at a disadvantage and have had little academic success in school. Increased academic success is being accomplished through the development of model interventions that strengthen the management capacity of local schools and promote participatory active learning methodologies in schools and communities. The products of this work are the implementation of decentralization policies and pedagogical changes in primary schools and classrooms of the San Martín region, changes that will lead to greater academic success for individual girls and boys.

The project is designed to address priority needs of education in Peru, particularly in relation to educational decentralization policies and participatory management practices in rural schools. The project is assisting the *Consejo Nacional de Educación* to develop

recommendations on successful decentralization practices applicable to the Peruvian reality, especially poor rural schools. Policy recommendations are being conveyed to the Ministry of Education through multiple channels for incorporation into the national policy dialogue on decentralization.

In collaboration with the Ministry of Education, regional education officers, and school-level staff and constituencies, the project is transforming traditional schools into “active school communities” that exemplify the use of active learning methodologies in the classroom and the active participation of parents and communities in classroom learning activities, school life, outreach, and management. These methodologies are designed to increase girls’ and boys’ academic achievement and leadership, their capacity to be proactive in managing and resolving social conflict, and their ability to identify means to create a democratic society. Active learning methodologies are particularly effective in increasing girls’ school participation—including enrollment, completion, academic achievement, and ability to actively contribute to development.

During its first year, the project focused on 70 schools in all provinces of the department, with the aim of having the greatest impact on the primary school system across the entire region. The selected schools serve as the basis for project work, thereby facilitating later expansion to 70 “sister” schools in a network and eventually affecting all multigrade schools in San Martín. The goal is to have a demonstrable effect on the development of decentralized local management of quality basic education, which the government can build on as it initiates its nation-wide decentralization of the education system in 2005.

III. Results

A. SO Indicators of Performance

Strategic Objective 6: Local Management of Quality Basic Education Programs Implemented in Selected Geographic Areas

Performance Indicator #1:

- MOE policies related to decentralized local management implemented in selected regions.

Indicator Definition/Measure:

- Number of MOE policies found in the recently completed *Ley General de Educación* (“Ley”) of the new education decentralization law implemented in San Martín.

AprenDes has held seminars and provided technical assistance to the Regional Education Directorate over the course of 2004. These efforts have focused on the approval of the Regional Council of Education, as called for in the new education decentralization law, and in assisting the Council and the Regional Directorate in developing a proposal for action in education that was submitted as part of the funding the request. The proposal has been approved and is third in terms of funding priorities. The areas of action in the proposal relate to curriculum diversification, teacher training, and citizen participation

through the *Consejo Educativo Institucional* (Institutional Education Council). In addition, AprenDes is working closely with the *Consejo Nacional de Educación* (National Education Council), which was created under the law to provide independent policy support to the Ministry. Table 1 shows the areas of the new education decentralization law in which AprenDes is working.

As can be seen in the table, the support of AprenDes in providing regional seminars, technical assistance in the design of the Profile, and fact-finding tours to other countries in Latin America (El Salvador and Nicaragua) in the process of decentralization has contributed to four major MOE policy areas for decentralized local management being implemented during 2004. In addition, the AprenDes has supported actions of the Decentralization Committee of the National Education Council. These actions will be discussed under Intermediate Result 1: Performance Indicator #1.

**Table 1: Ministry Policies Related to Decentralized Local Management
Implemented in Selected Regions**

Targeted Areas of the Law	Regional Action
Universalization, quality and equity <u>Universalization</u> – Intercultural, decentralized focus assuring equal opportunities and satisfactory achievement for all students. <u>Education Quality</u> – Guidelines on the goals of Peruvian education, basic curriculum that can be refined to meet local needs; set minimum investment per student; ongoing training of teachers; education as a public service career; adequate school infrastructure; research and development of innovations; harmonious institutional and human relationships <u>Equity</u> – compensatory policies; education projects to overcome inequities; assignment of resources to at-risk areas; measures to retain those at greatest risk; inclusive education curriculum; scholarships; literacy programs as needed; incentives to encourage teachers to work with socially vulnerable; bilingual intercultural education offered throughout the system.	Profile of the Regional Education Project approved and funded to carry out actions in curriculum diversification and teacher training.
Structure of the Educational System Flexible to adapt to country's diverse needs; collaboration among State, civil society, business and the media to assure relevance of services; MOE responsible for national curriculum and regional/local institutions for adaptations.	
The Education Community Representatives including students, teachers, parents, community members, directors, will be members of the Institutional Education Council and will be responsible for the Institutional Education Project	Profile of the Regional Education Project approved and funded to carry out actions in citizen participation through the Institutional Education Council.
System Administration Regional Education Participatory Council will develop and implement and monitor the Regional Education Project; Institutional Education Councils will have the same function at the local level	Government of San Martín approves the creation of the Regional Education Council through a consultative process.
National Education Council An autonomous body to participate in the formulation, implementation, and monitoring of the National Education Plan and provide input to medium and long-term planning.	Council formed and engaged in regional assessments that are providing input to the educational decentralization process.

Source: AprenDes Project Monitoring Records, November 2004

In relation to the projections made in the performance monitoring plan, AprenDes is on target. Table 2 shows that the project is half way to the eight MOE policies related to decentralized local management implemented in San Martín.

Table 2: Performance Data Projections: Number of MOE Policies in the “Ley General de Educación” Implemented in San Martín

Year	Planned	Actual
2004	2	4
2005	2	
2006	2	
2007	2	

Performance Indicator #2

Primary school completion rate in San Martín intervention schools

No data are available for this indicator as school records on promotion, repetition, and dropout will not be available until March 2005, owing to a remedial recuperation period for students that takes place in January/February of the following year. Calculations of cohort completion for 2004 require the end of year data on promotion, repetition, dropout and completion rates.

Table 3: Performance Data Projections: Primary School Completion rate in San Martín Intervention Schools

Year	Planned	Actual
2004	2%	NA
2005	3%	
2006	2%	
2007	2%	

B. Intermediate Result 1 Indicators of Performance

Intermediate Result 1: Policies implemented to promote decentralized management of quality basic education programs

Performance Indicator #1:

- Number of recommendations for reforms to promote educational decentralization with the Ministry of Education generated by the *Consejo Nacional de Educación* (National Education Council - CNE).

The National Education Council of Peru (*Consejo Nacional de Educación*) began its actions in 2003 in helping to create the National Education Project: A Shared Vision for Peruvian Education in 2015, through dialogue with key actors in six representative regions of the country. At the same time, the Council initiated a process of formulating policy proposals on topics that the group considered fundamental for educational reform: early infancy; professional development of teachers; educational finance; decentralization; and educational quality and equity. AprenDes provides financial support and technical assistance to the Council.

As can be seen in Table 4, the Council has made recommendations to the Ministry through five principal actions: the written opinion of the Council on the regulations for the Education Decentralization Law; A Proposal for Reciprocal Commitments in Education; Pronouncement on the 2005 education budget; Studies to Support Decentralization; and Regional Dialogues. A number of recommendations have been included in each action and several have resulted in Ministry actions in response.

Table 4: National Council Recommendations Made to MOE

Council Action	Recommendations to MOE	MOE Response
Opinion on Regulations	Greater detail	Rewrite of document
Proposal for Commitments	National mobilization for quality in integral communication	Formation of support group Creation of national reading council (PROMOLIBRO) Law to fund local education initiatives (<i>Fondo Nacional para el Desarrollo de la Educación Peruana</i>) Emergency program emphasizing reading/writing
	Strategy for teacher professional development- merit pay increases	Commission of experts designing law for public service career in teaching Development of law on Accreditation, Certification and Evaluation of teachers
	Annual Education Budget increases	Proposal that budget is increase to 6% of GNP
	Decrease corruption	Campaign against corruption Congressional anti-corruption decree
Pronouncement on 2005 budget -Coordination of key individuals supporting budget increase in newspapers on August 24, 2004		Minister and Vice Minister proclaimed the expectation of increased funding for education
Decentralization Studies	Four studies: Commitment of actors in 8 regions; implications of the new law; decentralized financing and the National Education Project; and mechanisms to transfer resources	No response as studies in progress
Regional dialogues	Dialogues with local leaders in 13 regions	No response as action still underway

Source: AprenDes Project Monitoring Records, November 2004

In relation to the projections made in the performance monitoring plan, AprenDes is on target. Table 5 shows that the Council has carried out five distinct broad actions, which have produced a number of recommendations. These are slightly over half of the eight actions projected for the life of project. If actions having responses are considered, then three actions have had direct responses from the Ministry.

**Table 5: Performance Data Projections: National Education Council
Recommendations made to MOE**

Year	Planned	Actual
2004	3 actions	5 actions
2005	2 actions	
2006	2 actions	
2007	1 action	

Performance Indicator #2

- Assessments of successful local education decentralization efforts incorporated into Ministry of Education planning and policy

In addition to the actions in favor of decentralization with basis in local reality initiated by the Council, there have been two actions that have resulted from efforts in San Martín that have been incorporated by the Ministry. These are San Martín's proposal for Institutional Education Councils to broaden their participation and for San Martín to be declared a pilot area. The region has proposed that Councils not to be formed solely from members of a local Educational Network (*Red Educativa*), given the limited possibilities of these networks of fulfilling that function in their current state of development. The Ministry response has been to issue a Manual for Institutional Education Councils, which states the Council can be broadened to include appropriate local community members.

San Martín has initiated, through meetings with MOE representatives, a proposal to be declared a pilot area for the Education Decentralization effort. The Ministry and the Regional government are currently working on the procedures for such an agreement.

The National Council of Education had three of five assessments of successful local education decentralization efforts incorporated to some degree in MOE planning and policy. This 60% is again higher than the first year projections shown in Table 6. If the two local assessments engaged in by AprenDes with the Regional authorities and incorporated in MOE planning are included, a total of five of seven assessments have had an impact on MOE decentralization plans. This percentage (71%) is reflected in the table.

**Table 6: Performance Data Projections: Assessments of Successful Local Education
Decentralization Efforts Incorporated into MOE planning and policy**

Year	Planned	Actual
2004	33%	71%
2005	40%	
2006	43%	
2007		

Performance Indicator #3:

- School councils participating in school operations

Indicator Definition/Measure

- Percentage of project schools with *consejos educativos institucionales, CEIs* (school councils) developing *proyectos educativos institucionales, PEIs* (school operative projects)

It was assumed that, as time is needed to form councils and encourage regular meetings before actual participation in planning takes place, no councils would be active at the baseline collected in May of 2004. Thus, data were collected on the number of councils formed, councils that had developed work plans, and the frequency of meetings, as well as those that were actually developing a school operative project (*proyecto educativo institucional-PEI*). As can be seen from Table 7, AprenDes had a larger percentage of schools with councils (*consejos educativos institucionales-CEI*), a larger percentage of councils that had work plans, and a larger percentage of councils that reported meeting and could discuss meeting agenda than comparison schools, throughout the year. In addition, the difference between AprenDes and Comparison schools generally grew during the year.

Table 7: Change in School Council Performance during 2004 – AprenDes and Comparison Schools

Indicator	Baseline			End of Year			
	AprenDes (n=25)	Comparison (n=50)	Difference	AprenDes	Comparison	Difference	Change In Difference
School Council Formed	56%	46%	10%	76%	62%	14%	2%
Council with Workplan	28%	16%	12%	32%	18%	14%	2%
Council holds Meetings	56%	44%	12%	60%	22%	38%	26%
Council Develops PEI	24%	08%	16%	36%	08%	28%	12%

Source: Cueto et al *Informe final: Evaluación de impacto del primer año del proyecto AprenDes*, GRADE, January 2005, Lima.

In terms of the development of the school operations plan, data had been collected through open-ended questions, rather than explicitly asking about the PEI. As this type of planning was a new concept, the PEI itself wasn't mentioned in open-ended responses. Thus, in the GRADE final report, the number of school councils developing a PEI was recorded as zero. However, respondents in answering the open-ended questions described activities, many of which were part of the requirements of the PEI. Thus, the AprenDes evaluation team consulted an expert of PEI development who reviewed

response categories and identified those that were activities required under the PEI. As there were multiple categories, that category which was identified most often by both the AprenDes schools and by the comparison group in the most recent meeting (“implementation of materials and improvement of areas”) was used for consistency in measuring progress. As can be seen in Table 7, 24% of AprenDes schools had councils working in these school development planning activities early in the year. By the end of the year, this percentage had increased to 36%, while no change was found in the comparisons group. Thus, while an increase of 12% in AprenDes schools was found over the course of the year, this was slightly below the projected levels.

Table 8: Performance Data Projections: School Councils Participating in School Operations

Year	Planned	Actual
2004	20%	12%
2005	40%	
2006	50%	
2007	60%	

C. Intermediate Result 1.1: Indicators of Performance

Intermediate Result 1.1: Institutional capacities improved to support and manage local education services

Performance Indicator:

- Local authorities (mayors, provincial directors, local council members, UGEL [provincial education directorate] directors) understand and support decentralization process

Indicator Definition/Measure:

- Percentage of local authorities demonstrating knowledge of MOE regulations on educational decentralization and carrying out actions prescribed therein

AprenDes worked with the Regional Directorate, and the Regional Government providing technical assistance in the development of Regional Education Project (*Proyecto Educativo Regional*) and gathering information from regional organizations. The project has worked with all 10 provincial educational administrative Units (*Unidad de Gestión Educativa Local-UGEL*) through quarterly meetings to provide orientation on project activities and coordinate activities. Technical specialists of these units have worked with the project in training and other implementation activities. A number of the local authorities have participated in project-sponsored international observation tours designed to build knowledge about active learning programs and create international networks to further dialogue.

As AprenDes activities gained a wider scope over the year, more local authorities were involved. Thus, the sample of authorities interviewed expanded from 43 individuals at

the baseline to 56 at the end of the year.

Table 9: Local Authorities with Knowledge of National Education Decentralization Policies and Supporting Policies with Actions

Indicator	Baseline (n=43)	End of Year (n=56)
Average percentage of authorities showing knowledge across all national educational policies	71%	75%
Percent of authorities showing knowledge of national decentralization policies	84%	82%
Average percentage of authorities engaged in actions to further all national educational policies	37%	38%
Percent of authorities engaged in actions to further national decentralization policies	26 %	21 %

Source: Cueto et al *Informe final: Evaluación de impacto del primer año del proyecto Aprender, GRADE*, January 2005, Lima.

Results for all authorities shown in Table 9, were compared to those for only authorities who responded at the baseline and the end of the year. Similar tendencies were found with both groups. This suggests that the slight decreases in actions related to decentralization is not the result of new individuals being added to the sample but rather to completion of an activity that was underway early in the year. However, as such an assumption cannot be verified, the lower percentage was used for reporting purposes.

Table 10: Performance Data Projections: Local Authorities Understand and Support Decentralization Process

Year	Planned	Actual
2004	20%	21%
2005	40%	
2006	45%	
2007	50%	

D. Intermediate Result 2: Indicator of Performance

Intermediate Result 2: Local basic education programs in selected communities improved.

Performance Indicator:

- Student mastery of subject matter

Indicator Definition/Measure:

- Percentage change in mean reading scores
- Percentage change in students demonstrating mastery of the curriculum

Tests in communication skills (*comunicación integral*) were administered to a representative sample of male and female students in first, third and sixth grade of AprenDes schools and comparison schools in May and November of 2004. In addition, tests in mathematics achievement were administered to the same students in third and sixth grade. Tests were administered at the start of the school year in order to monitor gains and to establish a baseline on which to monitor progress in subsequent years.

1. First Grade

Table 11 presents the overall results of the pre-reading test administered to students in AprenDes schools, “sister” schools, which will enter the AprenDes program in 2005, and other comparison school not yet scheduled to enter the program. Table 11 is the summary of 24 comparisons on individual items. In those comparisons, AprenDes students had higher percentage of correct responses on 20 of the 24 items. Similarly, when the increment of change was examined, AprenDes first were higher on 15 of the 24 comparisons. This is reflected in the table in that AprenDes has higher total average post-test scores on each of the five dimensions and has a higher increment of change on four of the five overall comparisons. When all dimensions are totaled, AprenDes has a higher mean average percentage correct across all dimensions (29.9 versus 24.7) and a higher mean average percentage of change from the beginning of the school year. While the percentages are not statistically significant the consistency of the results demonstrate the positive impact of AprenDes.

Table 11: First Grade Student Achievement in Reading: Average Percent Correct on Each Dimension and Total Correct

Periods	May		November		Change	
Dimensions	AprenDes	Comparison	AprenDes	Comparison	AprenDes	Comparison
ID Vowels/Consonants	57.8+	48.2+	67.5+	58.5+	9.8	10.3
Initial Writing	17.9	16.8	59.1+	48.8+	41.2+	32.0+
Initial Reading	11.9	10.0	40.9	33.8	29.0	23.7
Written Concepts	27.7	22.6	40.6	33.5	12.9	10.9
Total Pre-reading	12.5	10.6	29.9	24.7	17.5	14.1

Note: “Comparison” includes both Sister and Control schools; +significant at $p \leq .1$; *significant at $p \leq .05$;

**significant at $p \leq .01$

Source: Cueto et al. *Informe final de Resultados en Pruebas de Rendimiento, proyecto AprenDes*, GRADE, December 2004, Lima.

AprenDes also had a higher percentage of students who qualified to take the reading comprehension test for first grade (28% versus 24% for Sister schools and 19% for comparison schools). On the actual tests no significant differences were found, as the screen process limited the test sample to children with similar skills.

Given the importance of first grade reading to the Regional authorities and to the Ministry of Education's *plan de emergencia*, (emergency plan), first grade progress was chosen for the reporting indicator in year 1. As can be seen from Table 12, AprenDes surpassed its projections for 2004 on this indicator.

Table 12: Performance Data Projections: Percentage Change in Mean Reading Score

Year	Planned	Actual
2004	1%	3.4%
2005	1%	
2006	3%	
2007	5%	

2. Third Grade

As shown in Tables 13 and 14, AprenDes third grade students demonstrated higher achievement in both Mathematics and Communication. AprenDes students had an average end-of year scores that ranged between 18 and 29 points higher than those of their peers in non-AprenDes schools on all comparisons in Mathematics. Similarly, AprenDes students showed average mean differences of between 10 and 29 points in Communication.

AprenDes students also showed significant learning gains in both subjects during the year. However, these gains were not significantly different from those found in comparison schools. Thus, multivariate analysis was used to control for possible intervening variables. These variables included both individual student factors, such as age, sex, mother's education level and socio-economic status, as well as school and teacher level factors, such as program (AprenDes or comparison), pretest score, type of school (one teacher, two teachers, three teachers), teacher experience and teacher salary. As shown in the tables, the effect of program, when a school was AprenDes, had a significant effect on student achievement in both subjects (Documentation of the multivariate analyses is found in Attachment C). No differences by gender were found either within or across programs.

Table 13: Third Grade Student Achievement in Mathematics

Program		
	End of Year Score	AprenDes Program Effect
AprenDes	321.1*	39.5**
Sister Schools	291.3	
Control Group	302.4	

+significant at $p \leq .1$; *significant at $p \leq .05$; **significant at $p \leq .01$

Source: Cueto et al. *Informe final: Evaluación de impacto del primer año del proyecto AprenDes*, GRADE, January 2005, Lima.

Table 14: Third Grade Student Achievement in Communication

Program		
	End of Year Score	AprenDes Program Effect
AprenDes	327.2*	34.8**
Sister Schools	297.9	
Control Group	317.3	

+significant at $p \leq .1$; *significant at $p \leq .05$; **significant at $p \leq .01$

Source: Cueto et al. *Informe final: Evaluación de impacto del primer año del proyecto AprenDes*, GRADE, January 2005, Lima.

Sixth Grade

As can be seen in Tables 15 and 16, the similar tendencies were found for sixth grade performance in terms of mathematics and communication achievement. AprenDes students had higher achievement early in the year and this advantage was maintained over the course of the year. Differences favoring AprenDes were almost 13 points in mathematics and over 20 points in Communication. However, in mathematics the difference with the comparison groups was not significant. In communication, significant differences in achievement were maintained through the year. There was no difference in results by gender and program effects were found to be significant in communication and tending toward significance in mathematics.

Table 15: Sixth Grade Student Achievement in Mathematics

Program		
	End of Year Score	AprenDes Program Effect
AprenDes	513.3	17.9+
Sister Schools	500.4	
Control Group	500.4	

+significant at $p \leq .1$; *significant at $p \leq .05$; **significant at $p \leq .01$

Source: Cueto et al. *Informe final: Evaluación de impacto del primer año del proyecto AprenDes*, GRADE, January 2005, Lima.

Table 16: Sixth Grade Student Achievement in Communication

Program		
	End of Year Score	AprenDes Program Effect
AprenDes	523.9*	22.9*
Sister Schools	503.0	
Control Group	502.0	

+significant at $p \leq .01$; *significant at $p \leq .05$; **significant at $p \leq .01$

Source: Cueto et al. *Informe final: Evaluación de impacto del primer año del proyecto AprenDes*, GRADE, January 2005, Lima.

AprenDes students had significantly higher achievement in Communication and Mathematics throughout the 2004 school year than similar students in comparison

schools. This achievement was related to participation in the AprenDes project when other intervening variables were controlled. When other variables were controlled, there was a general effect for age, with older children in sixth grade tending to have lower scores across schools

E. Intermediate Result 2.1: Indicator of Performance

Intermediate Result 2.1: Effective teaching and appropriate materials combined to support learning

Performance Indicator

- Teachers use active learning methods appropriately

Indicator Definition/Measure

Percentage change in a teaching quality index consisting of 1) number of boys and girls expressing their opinion in class; 2) use of small group methodology; 3) use of education materials by students; 4) number of parents reviewing student performance) aggregated across sample classrooms, expressed as a value between 0 (minimum) and 1 (maximum).

In the original AprenDes performance monitoring plan, it had been determined that use of libraries would be included in the teaching quality index because of the library's importance in the AprenDes instructional process. However, information on the library was collected by asking school directors if children used the library, rather than asking the percentage of students that used the library. Therefore, no common denominator exists to include these data with other index measures. Thus, use of materials by students, obtained by GRADE through structured observations has been substituted for the original measure.

Table 17: Change in Teachers Use of Active Learning Methodologies – AprenDes and Comparison Schools

Indicator	Baseline			End of Year			
	AprenDes (n=25)	Comparison (n=50)	Difference	AprenDes	Comparison	Difference	Change In Difference
Percent of Student Opinions in Teacher-Student Interaction	35%	34%	1%	32%	41%	-9%	-8%
Percent of Small Group Activity	41%	19%	20%	45%	24%	21%	1%
Percent of Students	72%	48%	24%	68%	57%	11%	-13%

Using Materials							
Percent of parents Reviewing Student Progress	47%	41%	6%	47%	45%	1%	-5%
Index of Active Learning	49%	35%	13%	49%	42%	7%	-6%

Source: Cueto et al *Informe final: Evaluación de impacto del primer año del proyecto AprenDes*, GRADE, January 2005, Lima.

As can be seen from Table 17, AprenDes classrooms began the school year with favorable differences on all of the measures of active learning. However, although this favorable difference was maintained on three of the four indicators, percentages decreased on two of the four and remained constant on the fourth indicator. In the comparison groups, on the other hand, there were gains on all indicators. Such results are often common in the first year of educational innovation in the classroom. Generally a decrease in the use of innovative teaching strategies is caused by teacher lack of confidence owing to insufficient follow-up. Teachers begin the year with confidence in the new approaches but if may regress to traditional methods, if not given sufficient reinforcement. This would seem to be the case with AprenDes, as teachers, in general continued to use the methods more than the comparison groups but decreased in their overall usage.

Table 18: Performance Data Projections: Teachers Use Active Learning Methods Appropriately – AprenDes and Comparison

Year	Planned	Actual
2004	10%	-6%
2005	10%	
2006	10%	
2007	60%	

E. Intermediate Result 2.2: Indicators of Performance

Intermediate Result 2.2: Democratic behaviors and valuing diversity practiced by students, parents, and teachers

Performance Indicator #1

- Student governments (*Municipios escolares*) formed and carrying out student initiatives in project schools

Indicator Definition/Measure

- Percentage of all project schools with student governments that have a diversity of members in terms of age, sex, ethnicity, and length of residence in the area, and which have organized initiatives

- Percentage of all project schools with student governments that are carrying out projects related to community development and healthy life styles

As shown in Table 19, AprenDes was able to establish student governments in a majority of its schools even early in the school year. This is different than the comparison schools, where through the year, student governments were only established in 10% of the schools. By the end of the year, student governments were established in all of the AprenDes schools in the sample. Seventy-nine percent of these student governments had female members, members from lower grades, and members from different provinces than that in which the school was located. The percentage of schools carrying out community development activities also increased as more AprenDes student governments were established. Early in the year only 20% of student governments were engaged in community development activities, whereas by the end of the year the figure was 80%. In the comparison group, on the other hand, almost all of the schools with student governments carried out such activities but governments only existed in five schools. The activities undertaken by the student governments were generally awareness campaigns about the environment and health, community beautifying efforts, and care of community natural resources.

Table 19: Change in Schools with Student Governments – AprenDes and Comparison Schools

Indicator	Baseline			End of Year			
	AprenDes (n=25)	Comparison (n=50)	Difference	AprenDes	Comparison	Difference AprenDes	Difference Comparison
Percent of all Schools with Student Governments	64%	10%	54%	100%	10%	36%	0%
Percent of all Schools with Diverse Representation in Governments	44%	6%	38%	79%	8%	35%	2%
Percent of all Schools with Governments Carrying out Community Projects	20%	8%	12%	80%	8%	60%	0%

Source: Cueto et al *Informe final: Evaluación de impacto del primer año del proyecto AprenDes*, GRADE, January 2005, Lima.

It was assumed that some time would be needed to organize democratic selection of student governments that would ensure diverse representation. Thus, projections for the first year were set at 20% of the total number of AprenDes schools. However, there was great interest in this component of the program among teachers and students and it developed more rapidly than expected. As can be seen from Table 20, AprenDes reached the projection for the four-year life of the project in the first year.

Table 20: Performance Data Projections: AprenDes Schools with Diverse Student Governments

Year	Planned	Actual
2004	20%	79%
2005	35%	
2006	50%	
2007	70%	

As with diverse representation, community involvement among AprenDes student governments proceeded more rapidly than projected. Again, as can be seen from Table 21, the life of project projections were surpassed in the first year of implementation.

Table 21: Performance Data Projections: AprenDes Schools with Student Governments Engaged in Community Actions

Year	Planned	Actual
2004	10%	80%
2005	20%	
2006	30%	
2007	50%	

IV. Conclusions and Recommendations

A. Conclusions

1. General

AprenDes was highly successful in implementing all components of the project during the first year of implementation. On indicators of process and impact the project had consistently higher results throughout the year than the comparison group. In two areas related to incorporation of local assessments into the national education decentralization process and the establishment of diverse student governments that contribute to community development, the AprenDes exceeded projections for the four-year life of project.

2. Student Achievement

AprenDes students had consistently higher achievement in Communication and Mathematics throughout the 2004 school year than similar students in comparison schools. AprenDes students maintained between 2 to 29 average point advantages at the end of the school year in all subjects depending on the grade level studied. First grade students had average gains 3.4% higher than comparison groups.

Participation in the AprenDes program had a significant effect on student achievement at both the third- and sixth grade-level. When possible intervening variables, such as age, sex, mother's education level and socio-economic status, program, pretest score, type of school, teacher experience and teacher salary were controlled, participation in the AprenDes program had a significant effect on achievement in third grade mathematics and communication, and sixth grade communication, when compared individually to "sister" schools and comparison schools.

The AprenDes program was equally effective for males and females. No significant differences by gender were found and the achievement advantages for AprenDes were similar for boys and girls in all subjects.

Student age was a significant factor in low achievement, especially in sixth grade. Older students had relatively lower scores in sixth grade, suggesting the importance of special emphasis in the learning of over age students in higher grades.

3. Policy Support

AprenDes supported activities informed national policy and led to policy refinements related to the decentralization process. AprenDes held seminars and provided technical assistance to Regional Education Directorate, which led to the approval of the Regional Council of Education, and to the Council obtaining funding for

curriculum diversification, teacher training, and citizen participation. In addition, AprenDes worked closely with the *Consejo Nacional de Educación* (National Education Council), to inform the Ministry of the results of regional assessments. Seventy-one percent of the actions, rather than the projected 33% were incorporated into Ministry policy efforts.

Regionally AprenDes contributed to increased local initiatives and to increased civil participation in school operations. The project worked with all 10 provincial educational administrative Units (*Unidad de Gestión Educativa Local-UGEL*) through quarterly meetings to provide orientation on project activities and coordinate activities, technical specialists of these units participated in AprenDes training, and a number of the local authorities participated in project-sponsored international observation tours. In addition, the project provided technical assistance to schools in the development of school operation plans. These activities resulted in a higher percentage of actions than expected among local authorities and schools.

4. Active Learning Methodologies

AprenDes was highly successful in establishing student governments with diverse memberships that were engaged in community actions. By the end of the 2004 school year, student governments had been established in all of the AprenDes schools in the sample. An average of 79% of these schools had members that were female, that were in the lower grades, and that were not from the province in which the school was located. Eighty percent of the school governments were involved in community development activities.

AprenDes had mixed results in the implementation of active learning strategies during the 2004 school year. The project maintained a favorable difference on three of the four indicators of active learning throughout the school year. However, there was a decrease in the degree of implementation on two of the four and the fourth remained constant. In the comparison groups, on the other hand, there were gains on all indicators. Such results are generally attributable to a lack of teacher confidence owing to insufficient follow-up.

5. Monitoring of AprenDes Progress

Results on 2004 indicators showed that adjustments in measures and projections are needed in some cases. In student achievement, while the results presented positive trends for the AprenDes project, the complexity of the data analysis meant that the results do not lend themselves to the reporting formats originally proposed in the Project Monitoring Plan. On several indicators, such as civil participation in school operations, active learning methodologies, and policy support, assumptions used to make original projections were found to be inaccurate.

Change in internal efficiency is an important indicator and first year findings are important to the refinement of project implementation strategies. Given the

difficulties found for overage students, it is important to determine student progress through primary school in order to develop interventions to improve efficiency, where necessary.

B. Recommendations

Continue to implement program components that have resulted in positive programmatic and policy outcomes. These include technical assistance and knowledge building for local and national authorities, support to civil society participation in school operations, support for diverse, action-oriented student governments, and emphasis on basic competencies in mathematics and communication at all grade levels.

Increase focus on learning needs of overage students. Ideally the components of modular learning and flexible promotion should help to eliminate overage students in project schools. However, in the short run, a special study or review of the characteristics of overage students in the external evaluation contractor database can contribute to developing strategies to better serving the needs of such students.

Review training and support procedures for teacher professional development in active learning methodologies. As necessary, strengthen follow up to encourage teaching strategies that foster student expression of opinions in class, use of small group teaching contexts, and use of learning materials.

Through consultation with GRADE, revise projections on indicators in light of 2004 results and refine formats for projecting progress on academic achievement indicators. This revision should include determining levels of mastery so that percentages of students obtaining mastery in mathematics and communication can be reported as well as mean test scores, and recalculation of projections where higher than expected first year progress has been made.

Complete the analysis of change in internal efficiency as soon as data are available. The difficulties found for overage students, suggest that it is important to track changes in student progress through primary school. Thus, a baseline should be established as soon as possible.

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ATTACHMENT A: SUMMARY OF 2004 INDICATORS

AID INDICATORS – APRENDES PROJECT

Indicator	Weight	Baseline Year Data	FY 2002 Target	FY 2002 Actual	FY 2003 Target	FY 2003 Actual	FY 2004 Target	FY 2004 Actual	FY 2004 Change from Baseline	FY 2005 Target	FY 2005 Actual	FY 2006 Target
% of school councils in USAID-financed schools conducting school planning	4	2004 24%	0	0	0	0	20%	36%	12%			
% change in mean scores of standardized tests	4	2004 12..5	0	0	0	0	5%*	29.9	17.4 (3.4** over comparison)			
% change in a teaching quality index for active learning methodologies	3	2004 49%					30%***	49%	0 (-6 in relation to comparison)			
Number of MOE policies found in the recently completed <i>Ley General de Educación (Ley General)</i> of the new education decentralization law implemented in San Martín		0					2	4	4			
% of children who complete primary school in the normal primary cycle							2%	NA	NA			
Number of recommendations for reforms to promote educational decentralization with the Ministry of Education generated by the <i>Consejo Nacional de Educación</i> (National Education Council - CNE)		0					3 actions	5 actions	5			
Percentage of CNE-recommended reforms that are incorporated into ministry planning and policy documents		0					33%	71%	71%			
Percentage of local authorities demonstrating knowledge of MOE regulations		26%					20%	21%	-5%			

on educational decentralization and carrying out actions prescribed therein												
Percentage of all project schools with student governments that have a diversity of members in terms of age, sex, ethnicity, and length of residence in the area, and which have organized initiatives		44%					20%	79%	35%			
Percentage of all project schools with student governments that are carrying out projects related to community development and healthy life styles		20%					10%	80%	60%			

*Target in ApreDes USAID approved PMP (July 2004) is 1%

**Target for FY2004 was first grade given Ministry focus on reading in this grade.

However in multivariate analyses there were also significant program effects on student achievement in communications in third grade and sixth in ApreDes schools

***Target in ApreDes USAID approved PMP is 10%