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Report No: 19431

PERFORMANCE AUDIT REPORT

DOMINICAN REPUBLIC

**PRIMARY EDUCATION DEVELOPMENT PROJECT
(LOAN 3351-DO)**

June 14, 1999

*Sector and Thematic Evaluations Group
Operations Evaluation Department*

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Currency Equivalents (annual averages)

Currency Unit = Pesos (DR\$)

DR\$ 1.00 = US\$
US\$ 1.00 = 15DR\$

Abbreviations and Acronyms

ICR	Implementation Completion Report
IDB	Interamerican Development Bank
OED	Operations Evaluation Department
PAR	Performance Audit Report
PCU	Project Coordination Unit
PIU	Project Implementation Unit
SAR	Staff Appraisal Report
SEEC	State Secretariat (Ministry) for Education and Culture
UNDP	United Nations Development Programme

Fiscal Year

Government of the Dominican Republic: January 1 - December 31

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June 14, 1999

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

**SUBJECT: Performance Audit Report on the Dominican Republic
Primary Education Development Project (Loan 3351-DO)**

The Dominican Republic Primary Education Development Project supported by Loan 3351-DO for US\$15 million was approved in 1991. The eight-year project was completed, with the loan fully disbursed, on February 7, 1997, nearly 18 months before the original scheduled closing.

The project had three objectives: (a) to improve the quality of education, (b) to increase enrollment of children from low-income families, and (c) to strengthen resource management. The design had several innovative features. School repairs were carried out by parents' associations, extensive teacher training was carried out that gave participants university credit, a school nutrition component was expanded, curricula and textbooks were developed, a test development facility was established, and monitoring studies were carried out.

Several favorable conditions came together during project implementation, creating a unique *interaction of personalities and circumstances*. These were: (a) a national consensus regarding the importance of education, (b) a knowledgeable and active secretary stayed through most of the project implementation period; (c) sectoral salary increases that more than doubled the salaries of teachers and staff, making a teaching career more desirable; and (d) a competent manager (a UNDP advisor) who oversaw implementation was an unusually competent organizer who was able to manage complex organizations effectively and motivate staff. The staff who worked on the project were in agreement about the greater goals and proud of their achievements. With the support and encouragement of the UNDP advisor, they invested considerable personal time in their work and traveled widely in rural areas, thus ensuring the project's success. Thus, the PIU also succeeded in executing—relatively efficiently—innovative components that have proved rather difficult to develop in other parts of the world. Many components achieved more than they set out to do.

The Operations Evaluation Department (OED) rates project outcome as highly satisfactory, institutional development as modest, sustainability as likely, Bank performance as satisfactory, and Borrower performance as highly satisfactory.

Lessons

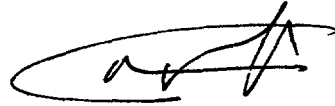
The report demonstrates that interaction of dynamic leadership with personalities and circumstances can lead to unexpectedly good results. The ingredients of successful implementation may be:

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- effective and collaborative management that made quick decisions, then made resources immediately available to staff;
- agreement on goals—in discussions with the mission, staff expressed an understanding of project goals, agreement with them;
- a sense of achievement—giving resources to the PIU staff while praising their performance, expecting outcomes, and giving them some decision-making power, empowered them to do more work than they might otherwise have done. Group dynamics created desire and “mystique” for work;
- relative organizational ease—the country’s educational system had the ability to organize participation down the line, from the PIU staff to rural teachers who attended in-service training (perhaps because informal contacts were easily acceptable to school administrators). Thus, it was possible for inspiration and commonality of purpose to cascade. The small size of the country and relatively easy road access facilitated organization;
- a linkage of achievement with desired teacher salaries.

How important was each characteristic and what would be the minimum or critical number and interaction of such characteristics to produce highly satisfactory project outcomes? More needs to be learned. The Bank should study effective leaders, people who are able to motivate staff and to create esprit de corps. Their characteristics should be analyzed, and efforts should be made to train more to be like them. The model developed in the Dominican Republic might give insights on how to motivate staff in low-income countries to perform feats of implementation.

Attachment

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Contents

Principal Ratings and Key Staff Responsibilities.....	iii
Preface.....	v
1. Introduction.....	1
2. Project Objectives and Components.....	2
3. Implementation Experience.....	3
Component 1: Educational Development.....	3
Curriculum Development and Textbook Production.....	3
Teacher Training.....	4
School Nutrition.....	5
National Examination.....	6
Community Participation—School Repairs.....	7
Component 2: Management Development.....	8
4. Results.....	10
Monitoring and Evaluation.....	10
Institutional Development.....	11
Sustainability.....	11
Bank Performance.....	11
Borrower Performance.....	12
5. Issues and Recommendations.....	12
Many Immigrant Children Grow up Illiterate.....	12
Poor Students Lack Textbooks.....	12
Teachers Must Maximize Classroom Learning.....	13
School Buildings Must Facilitate Learning.....	13
Lessons.....	13
 Annexes	
A. Basic Data Sheet.....	15
B. Reporte de Alumnos de 8º Grado de Educación Básica.....	17

Principal Ratings

	<i>ICR</i>	<i>PAR</i>
Outcome	Highly satisfactory	Highly satisfactory
Sustainability	Likely	Likely
Institutional Development	Partial	Modest
Borrower Performance	Highly satisfactory	Highly satisfactory
Bank Performance	Satisfactory	Satisfactory

Key Staff Responsibilities

	<i>Task Manager</i>	<i>Division Chief</i>	<i>Country Director</i>
Appraisal	Bernardo Kugler	Robert Drysdale	Ping Loh
Midterm	Eleanor Schreiber	Jacques van der Gaag	Edilberto Segura
Completion	Eleanor Schreiber	Jamil Salmi	Orsalia Kalantzopoulos

PREFACE

This is a Performance Audit Report (PAR) on the Primary Education Development Project (Loan 3351-DO), which was approved on December 13, 1991, for US\$15 million. The eight-year project was completed, with the loan fully disbursed, on February 7, 1997, nearly 18 months before the original scheduled closing.

The purpose of the audit was to study the effectiveness of a project that was substantially directed at strengthening classroom instruction and community participation. The Operations Evaluation Department (OED) found it important to study the effects of the Bank's advice and the country's considerable commitment to quality education.

The PAR is based on the following sources: the Implementation Completion Report (ICR), issued as Report 18074, dated June 24, 1998; the Staff Appraisal Report (SAR); the Credit Agreement for the project; and the project files, particularly the supervision reports. An OED mission visited the Dominican Republic in December 1998 to collect other pertinent information. Many thanks are owed to government officials and researchers for their cooperation.

Following customary OED procedures, copies of the draft PAR were sent to the relevant government officials for their review and comments but none were received.

1. Introduction

1.1 In the late 1980s, the educational system of the Dominican Republic was characterized by low quality, poor efficiency, and unequal access. Expenditure on education had fallen to a low of 1.3 percent of GDP by 1988, and teacher earnings were extremely low. Recognizing the serious problems in the sector, a broadly representative group was formed by the government, the private sector, and civil society representatives. A national consensus developed: education had to improve substantially in quality and equity. Many consultations with groups of stakeholders resulted in a 10-year plan to be implemented in 1991–2000.

1.2 The Jomtien Education for All Conference took place as the plan was being elaborated, and Dominican representatives actively participated in various workshops. The goals of the conference reinforced the goals of the national plan. In subsequent years, the 10-year plan was mentioned often in educational circles, and it has served as an orientation point for the population.

1.3 To implement the 10-year plan, the government requested the help of the World Bank and the Interamerican Development Bank (IDB). Two parallel projects were formed simultaneously, with two separate implementation units. The World Bank focused on instructional aspects, while the IDB focused on the provision of educational materials and rehabilitation of school facilities.¹

2. Project Objectives and Components

2.1 Total project cost was US\$17 million, of which the Bank financed US\$15 million. The project had three objectives: (a) to improve the quality of education, (b) to increase enrollment of children from low-income families, and (c) to strengthen resource management.

2.2 *An education development component* was designed to (a) upgrade skills in key subject areas and teaching methods for some 600 teacher training staff of normal schools and universities and related in-service training for 10,000 public primary school teachers; (b) provide training and transportation for about 750 regional, district, and school administrators and supervisors to introduce improved and regular technical supervision for primary school teachers; and (c) initiate a system for maintenance of primary school facilities based largely on community inputs of labor and government financing of materials.

2.3 *A management development component* was designed to (a) strengthen management information, planning, and monitoring for primary education based on school planning criteria and socioeconomic indicators; (b) support selected studies on issues related to the future development and financing of basic education; (c) introduce a student assessment system to

1. This report focuses on the World Bank project, which was completed in 1997. The IDB project had not been completed at the time of the audit mission, but the report discusses areas (e.g., curricula, textbooks, teacher training) that affected project outcomes.

measure and monitor achievement in language, mathematics, science, and social science; and (d) strengthen the capacity of the State Secretariat for Education and Culture (SEEC) to support improved community contributions to school materials distribution, school maintenance, and school nutrition in public primary schools.

2.4 The performance of earlier projects implemented in the Dominican Republic (Loan 234-DO and Loan 1142-DO) had been modest. They had disbursed slowly over many years, and had strained the implementation capacity of the SEEC. So, the new project had an eight-year disbursement period. A project implementation unit (PIU), which employed technical and administrative consultants, assisted with project management, and the United Nations Development Programme (UNDP) was contracted to manage procurement of all services. To overcome counterpart fund limitations and capacity weaknesses, Government contribution to the project was limited to about 12 percent of the total cost.

2.5 Expectations were modest, but the outcome was surprising.

3. Implementation Experience

3.1 Several favorable conditions came together during project implementation, creating a unique *interaction of personalities and circumstances*. These were:

- **a national consensus** regarding the importance of education; implementation of the 10-year plan was widely considered a necessity.
- **political will**; a knowledgeable and active secretary stayed through most of the project implementation period.
- **sectoral salary increases**; during the life of the project, the government more than doubled the salaries of teachers and staff. (Percentage of GDP for education had increased from .9 percent in 1991 to 1.9 in 1994 to 2.9 percent by 1998.) A teaching career therefore became more desirable, and it was possible to develop the skills of teachers and staff who had previously been demoralized.
- **a competent manager**; the UNDP advisor who oversaw implementation was an unusually competent organizer who was able to manage complex organizations effectively and motivate staff. Specifically, the advisor:
 - worked harmoniously with the secretary and the PIU director;
 - had control of the project funds and authority to disburse outside the usual government channels, allowing him to release resources quickly and as needed to carry out various tasks;
 - allowed staff to take action as they best saw fit, but they had to justify their decisions to him and keep him closely informed of progress;
 - demanded long hours from the staff, who often had to attend impromptu meetings during holidays; but he also praised them for achievements.

3.2 The staff who worked on the project were in agreement about the greater goals and proud of their achievements. With the support and encouragement of the UNDP advisor, they invested considerable personal time in their work and traveled widely in rural areas, thus ensuring the project's success.

3.3 With management support and team spirit, the PIU also succeeded in executing—relatively efficiently—innovative components that have proved rather difficult to develop in other parts of the world. (See below.) Many components achieved more than they set out to do. A follow-on project, the Second Basic Educational Development Project (Loan 3951-DO), is continuing the implementation.

3.4 The UNDP advisor left nearly at the end of his term, after being unable to work as closely with a next secretary. After his departure, the usual public sector disbursement procedures prevailed. Disbursements took longer, and the project slowed. Nevertheless, all components had already been either completed or planned, and completion took place 18 months ahead of schedule.

Component 1: Educational Development

Curriculum Development and Textbook Production

3.5 Curricula were developed simultaneously for grades 1 through 8, surpassing expectations at appraisal, which envisaged fewer grades. The curricula were developed through consultation with groups of stakeholders, a process that lasted two years. The stakeholders were able to articulate the skills that students had to acquire in schools. The summaries of the consultations constituted the curricular “proposals” that were issued in teacher guides. Textbooks were developed on the basis of these curricular guides.

3.6 The SEEC could have used some of the many existing Spanish-language textbooks, but chose to have new ones written, because some staff believed that all knowledge is bound to context and therefore must be developed separately for every country. The exercise may have been unnecessarily long and complicated for subjects that have been developed hundreds of times in Latin America, but it helped build ownership of the curricula.

3.7 The curriculum writers resorted to some innovative solutions. For example, in the upper basic grades, the new curricula call for teaching French and English, but there were very few trained teachers in these areas. With the help of the French embassy, the SEEC developed audiovisual aids to help teachers learn at the same time as students. (Results in classrooms have not yet been evaluated.)

3.8 Textbooks previously had been distributed free, an expensive and wasteful exercise. (Workbooks had to be purchased at cost). To improve cost recovery, books were sold through the project very cheaply (25–30 pesos each) to parents in schools and at a much higher price (about 70 pesos each) in bookstores. Since some private schools also use these books, the SEEC expects to subsidize books for poorer students through sales to middle-class students.

3.9 However, serious delays occur in textbook distribution. The audit mission found the higher grades (e.g. grade 6-8) studying without many of the necessary books. On some occasions, the books had arrived at the regional centers and had not been transported to schools, since teachers and principals were responsible for carrying them at their own expense. More significant

was the *lack of books for poorer students*. The mission found several students in each classroom visited who could not afford to buy the assigned books. Not surprisingly, the students who lacked books were also often the ones reportedly having lower achievement. Ironically, principals often had books in their offices that these students could use, but they were not permitted to hand them out without a payment!

Teacher Training

3.10 Before the project, most basic-education teachers had 12 grades of schooling, having graduated either from a regular secondary school or from a teacher training (normal) school. Very few had university degrees. Low salaries promoted absenteeism and were a disincentive to study further.

3.11 On several occasions, the SEEC had given short-term teacher training seminars, but with limited results. Rather than repeat that unsuccessful experience, SEEC staff designed a program that would motivate teachers to attend and learn. The World Bank project undertook the training of those who had completed normal school, while the IDB (for unclear reasons) developed a different program for those who had completed regular secondary school. The World Bank program had the following characteristics:

- It enabled students to work towards a college degree, offering credit hours corresponding to the first two years of higher education. The four largest universities offered the courses and the credits. Those completing the program were eligible for salary increases. If they completed a bachelor's degree on their own or through scholarships, they were eligible for further promotions. Thus, students could get in-service training while working toward a socially desirable goal. (School administrators were trained through a separate program that was developed with the help of Mexican and Canadian universities.)
- The universities designed and implemented the program, carried out over two years; it included subject matter, educational theory, and supervised teaching during the school year. Teachers could attend Saturdays and during the summer at one of 62 centers, and professors dropped into their classes during the week.
- The course messages were strengthened through educational radio. Thirty-two lessons were developed and recorded by the project. National and private radio stations broadcast the transmissions for about two years, two to three times a week. Teachers listened to the lessons, which they later discussed in Saturday class. The transmissions were also followed by the public and were played over radio loudspeakers in some stores.

3.12 Because of the program's monetary and educational incentives, demand was greater than expected. Two cohorts of about 10,000 teachers and supervisors completed it, and dropout rates were low. Interest and dedication were considerable. Families helped those with children participate, communities fed teachers who had to attend summer sessions, and there was a camaraderie and an esprit de corps among teachers during training. Nearly all teachers interviewed by the mission had participated in the program and had very positive comments about it. Most were also continuing their studies for a bachelor's degree. The teachers were also better prepared to implement the new curriculum. Thus, the project succeeded in substantially improving the educational level for about 25 percent of the country's basic education teachers and facilitating a large-scale reform.

3.13 The corresponding program financed by IDB for secondary school graduates who had become teachers used different methodology and materials and did not include supervised teaching, which those students particularly needed. Also, it used the staff of all 26 universities of the country, despite concerns about the quality of some trainers. After the end of the first World Bank project, the two modalities were integrated and applied in the second project. For unclear reasons, the educational radio transmissions were discontinued.

3.14 Since students teachers passed the courses, they probably improved their knowledge of subject matter and child development. However, there is much room for improvement of classroom management and instructional practices. The classrooms visited by the mission were not organized to maximize students' time on task. Often, teachers worked with two students while the others were unattended. There was frequent dictation and copying of material that was already in the book. Sometimes, students did not understand the material they were copying and could not explain it. Teachers (who were always at the front of the class) called on those who sat nearest them and were willing to answer. Questions focused on facts and secondary issues rather than comprehension. Very likely, their education professors were not knowledgeable or experienced enough to guide teachers in changing behaviors that would improve information processing by students.

School Nutrition

3.15 School nutrition has been a controversial subject worldwide. School meals may stimulate attendance and improve attention in class, but they often do not significantly improve students' nutritional status. School nutrition programs tend to be expensive, difficult to administer, and prone to corruption and theft. In the Dominican Republic, concern about child malnutrition had been considerable, so there were several earlier school feeding programs. CARE had one of the more notable programs.

3.16 After CARE discontinued its presence in the country, the World Bank project agreed to continue the feeding program if nutritional needs and program effects were studied. Indeed, several studies were carried out on the program's administration as well as on children's needs. A micronutrient study showed the need for iodine, iron, fluoride, and vitamin A supplementation, while another showed the importance of reducing the parasite load for students and teachers.² A detailed study was done on what students should eat. The goal was to give students nutritional foods, such as beans, with about 800 calories and including 24 grams of protein. After much discussion, recipes were developed for nutritional muffins that would be offered, along with milk, by local suppliers. For remote areas, the SEEC offered money to parents' associations, so that communities would cook for students.

2. Soriano, Gregorio y Marcos Espinal. 1993. Primer Censo Nacional de Talla en Escolares de Primer Grado de Primaria, República Dominicana, Santo Domingo: Secretaría de Estado de Educación, Bellas Artes y Cultos y PNUD.

Cuevas, Roberto y Fernando Paz. Propuesta de un Modelo de Administración para el Programa de Alimentación Escolar. (DELTA Plan, Guatemala). Secretaría de Estado de Educación, Bellas Artes y Cultos y PNUD.

Soriano, Gregorio. 1993. Encuesta Nacional Sobre Déficit de Micronutrientes en Niños de 1–14 Años. Santo Domingo: Secretaría de Estado de Educación, Bellas Artes y Cultos y PNUD.

Vargas, Alexis. Hacia una Reformulación del Programa de Alimentación Escolar. República Dominicana, Plan Decenal de Educación. PNUD y Secretaría de Estado de Educación, Bellas Artes, y Culto.

3.17 The Bank's project supported a program to cover about 100,000 students close to the Haitian border. However, the government that came into power in 1996, increased its budget and used it as a means of income transfer. Some groups of mothers established small supplier shops, thus obtaining a source of income and (in rural areas) a clientele for their household products. In 1997, the nutrition program was expanded to cover about 60 percent of the country and to offer about 843,000 portions of food per day. SEEC staff were quite enthusiastic about it, and several mentioned its motivating effects on students.

3.18 However, the depth of the nutrition studies and detailed prescriptions for the program were not evident during the OED field visits for this government-financed follow-on program (which is only financed by the government). Nutrition supplementation had been reduced to a snack, whose quality and quantity of food seen in schools seemed low. In peri-urban areas, students were getting white bread buns. In other areas the mission found small muffins and biscuits (one per student) that might indeed have nutritional value if developed according to existing norms. The milk was reportedly too sweet for students, and seemed watered. It was in bags that in some areas were thin and broke easily, spilling their contents on classroom floors. Apparently, students were getting less than the initially planned 800 calories and 24 grams of protein. And calories seemed to come from white bread and refined sugar. This type of diet is ill advised because it raises insulin levels abruptly and creates unhealthy eating habits. School officials expressed their approval of the concept and its management, but invariably expressed their disapproval of the school food. A few said that two bananas would be more nutritious than the current fare and expressed concern about the special interests that may benefit from the program. (OED could not verify inappropriate involvement by commercial interests.)

3.19 In 1997, school lunches reportedly accounted for about 10 percent of the education budget. The political appeal of this program may have resulted in money being spread too thinly, thus reducing student benefits to insignificance. Other school nutrition benefits also have been slow to come. Students were deparasitized once, but there was no follow-up. Salt was iodized in the country, but students did not get extra iron or vitamin A, as planned.

3.20 All Dominican officials interviewed on this matter believed that the program should continue. If it does it should at least fulfill its nutritional goals. Although the Bank does not finance it, it should engage the government in policy discussions to ensure efficient utilization of the funds and delivery of quality nutrition.

National Examinations

3.21 Until the 1980s, the Dominican Republic had a system of essay examinations to determine promotion and certification. Their validity was low, scoring was cumbersome, and the questions frequently leaked before the exam. The examinations were eventually abandoned, but students thus lost a motivation for study and preparation. To monitor learning and provide feedback at the local level in order to improve the quality of instruction, national examinations were re-established. They were initially meant only to monitor learning on a sample basis, but soon they were used again to determine promotions for all students.

3.22 The examinations were developed mainly by educational researchers. They were familiar with psychometric principles, but no expert in test development was locally available. The instruments developed were multiple-choice norm-referenced achievement tests in Spanish, mathematics, social studies, and science for grades 3, 6, and 8. (For determining whether students

master enough instructional objectives for promotion, criterion-referenced tests would be appropriate, but those are statistically more difficult to develop and require statistical expertise.)

3.23 Despite some mistakes and a lack of specific expertise, the project staff carried out very noteworthy work. To obtain items for the tests, they traveled to schools around the country and held half-day workshops. They taught teachers how to write multiple-choice tests, asked them to write several questions according to the emphasis given in class, collected them, and then used the best. The result mainly tested information rather than the higher levels of cognitive development (comprehension, application, analysis, synthesis, evaluation). Nevertheless, the test reflected actual instruction to students. Item analysis and elimination of unsuitable items often took place after rather than before the examinations, and the examinations were not equivalent from one year to the next. Reliability was reportedly a modest 0.85. On the other hand, there was considerable expertise in computerizing the examinations. As a result of trial-and-error and dedication, a testing unit was established in the Dominican Republic with the institutional capacity to collect tests, carry out statistical analyses, and publish results by student, class, school, and region.

3.24 The tests were developed to facilitate feedback. In addition to scores, students received computerized analysis of their strengths and weaknesses as well as suggestions on specific areas for improving performance. (See Exhibit A, page 27.) This specificity was unique, and had a great deal of appeal. Some parents were known to frame their children's reports and hang them on the wall.

3.25 Perhaps the most valuable contribution of the examinations was that they succeeded in energizing students and teachers and motivated them to prepare without creating high levels of family stress. Unlike some countries where student livelihoods depend on examination outcomes, Dominican examinations count only for 30 percent of the grade. They determine promotion or failure only in marginal cases. Nevertheless, Saturday clinics sprang up in most schools, where teachers reviewed the material of years past and prepared students. They were typically paid small amounts by the students. Because the examinations were not high-stakes, they did not generate a need for private coaching classes, which are problematic in many countries that have examinations systems.

3.26 Eventually, the national examinations became controversial. Although research by project staff showed that students were motivated but not extremely stressed by testing, some educators and sociologists expressed concerns about anxiety. One year the examinations were stolen, and on some occasions, irregularities occurred. After the project ended, staff could not get the resources to carry them out as they did earlier. Also, the exams have not been used systematically for the main purpose they were created, that is for school- and class-level feedback to improve instruction. Nevertheless, what was achieved is impressive and probably unprecedented. Given the importance of feedback and study to increase learning outcomes, and it is hoped that this function and its institutional development will be maintained.

Community Participation—School Repairs

3.27 The project experimented with community participation. It worked with about 5,000 parent associations, which were expected to:

- participate in the administration of the national examinations;

- supervise the distribution of school lunches (and in some communities cook them);
- raise funds for school activities; and
- repair schools.

3.28 Project staff found that some communities were better prepared to do these tasks than others. Rural schools have greater participation, but with lower levels of literacy, parents may be able to do less. Participants are mainly mothers.

3.29 Maintenance seems to have been the most successful parent task. About 560 schools were repaired with parent participation, exceeding the initial target of 375. The project financed materials, which parents bought locally. Checks were issued to local hardware stores, and parents were given authorization to receive the materials along with some money to transport them. Typically, fathers and other male relatives made repairs on Sundays. School principals reported to the audit mission that it was relatively easy to find local knowledge, since many people were bricklayers, carpenters, or plumbers. PIU staff reported that repairs were acceptable, though often not of the best quality. In many or possibly most schools, parents or community organizations (such as the Lions club) have proved reliable partners in the maintenance of buildings.

3.30 The principle behind involving the community in these activities was not primarily financial savings but the raising of consciousness—the awareness that buildings must be kept in good order and that parents must know and be involved in the functioning of the school. Carrying this a step further, the follow-on project has the philosophy that parents should also benefit from schools. An objective of the second project is to form a “school for parents,” in which information and discussions will be given about raising healthy and productive children. Supervisors especially assigned to this task have started visiting schools to organize the parents’ meetings. It is too early to predict the outcome of this approach, but it is one more innovative initiative of the government’s strategy.

Component 2: Management Development

3.31 The project made considerable progress in mapping schools and developing a management information system. The government now has at its disposal detailed information about each enrollment and inputs in each school, along with physical information and pictures. The physical information proved very useful when several schools were damaged by hurricane Georges, creating the need for urgent repairs. The government is still unable to track the enrollment and performance of every student, but clear progress has been made toward this goal.

3.32 The country had considerable capacity for computer programming and use, and the project obtained competent technical assistance. The ability to find systems analysts and persons knowledgeable about computers greatly helped with every component.

Project Activities

<i>Components/ Subcomponents</i>	<i>Activities</i>	<i>Target Achievement</i>	<i>Outputs</i>	<i>Outcomes</i>
A. Educational development				
Skills upgrading	Skills upgrading for teacher trainers	600 trainers	Trainers working effectively	Improved teacher level
	In-service training for primary school teachers	10,000 teachers	10,000+	Improved teacher level
	Prepare and carry out materials and radio broadcasts for teacher training	30 staff months	32 lessons of widely listened broadcasting	Effective but discontinued at project completion
	Consultant services for supervision system, materials preparation	20 staff months	Modules, guides effectively developed	Satisfactory work, impact unknown
	Finance motorcycles for supervisors	350	About 350 through salary deductions	A number reportedly sold or stolen
	Training and transportation for administrators	750 administrators	Courses completed	Effectiveness unknown
Maintain school buildings	SEEC give materials for repairs Parent associations give labor	About 2,000 classrooms, or 375 schools	About 2,000 classrooms, 579 schools	Schools in better physical condition
	More complex repairs by local youth in vocational programs	none	Unknown	Unknown
	Develop maintenance manual	Maintenance manual	Developed	Unknown if was used
Improve and expand nutrition program	Evaluate nutrition program	Cost-effectiveness assessment	Various studies carried out	Program expanded, not improved
	Provide food and micronutrients	265,000 peri-urban children, 100,000 rural	Expanded to 860,000 rations daily; income generation and transfer	Some micronutrients in muffins, but breakfast quality otherwise poor
	Deparasitization	Relieve parasitic load	Was done once, information also given	Students must be deparasitized regularly
B. Management development				
Strengthen school planning	Carry out school mapping	Computerized mapping and school information	Information easy to obtain	Most repairs and expansions done based on actual data
	Install computers	Installed	Computer use extensive	Staff gets information fast
	MIS technical assistance	12 staff months	Satisfactory	School reports probably improved
Introduce student assessment	Achievement assessment in Spanish, math, social studies, science, gr. 3, 6, 8	Tests used for promotions	Grades 4, 6, 8 were included Content reliability low, about .85	Study for tests reportedly improved achievement, promotions
	Assessment training	4,500 teachers	About 4,500 teachers	Teachers prepared test items, got

Components/ Subcomponents	Activities	Target Achievement	Outputs	Outcomes
				involved
	Test preparation consultants	12 staff months	Amount unknown	Although simple, tests effectively assessed achievement
	Study tours	8 staff weeks	Studied other models	Synthesized an effective model
Obtain community contributions to schools	Establishment of parent associations for each school	Textbook distribution, maintenance, nutrition	5,026 formed	Can provide maintenance, some fund raising, food distribution
	Textbook rental and cost recovery	Implemented	Books printed, sold at schools for less	Students who can't pay don't get books!
	Technical assistance for program planning	6 staff months	Completed	Planning satisfactory
Conduct studies on development and financing of basic education	Teacher training	Conduct study	Study conducted	Effects uncertain
	Student assessment	Conduct study	Study conducted	Students may study more
	Learning deficiencies	Conduct study	Study conducted	Results unknown
	Repetition, dropout	Conduct study	Study conducted	Results unknown
	Nutrition (same as above)	Conduct study	Studies conducted	Effect uncertain, school nutrition poor

4. Results

4.1 The project clearly achieved its objectives. It significantly contributed to developing and implementing sector policies, especially to expanding capacity in primary education. It carried out innovative and difficult components, such as educational radio, nutrition, community participation, learning assessments, in-service teacher training, and school nutrition.

4.2 One project benefit was to be an increase in enrollments and a decrease the dropout rate. According to SEEC reports, enrollments in grades 1–8 rose by 9 percent, repetition declined from 14.5 percent in 1991 to 7 percent in 1996, dropouts decreased from 22 percent in 1991 to 13 percent in 1996, and the average promotion rate rose from 64 percent in 1991 to 80 percent in 1996. Data collected earlier may not be very reliable (ICR, p. 2), but the SEEC reports suggest that schools have become more efficient.

4.3 The follow-up of some components (such as school nutrition) could have been more satisfactory. But the capacity to exceed targets, to carry out innovative activities, and to develop what staff called “mystique of work” (*mística del trabajo*) happens rarely. For these reasons, the outcome of the project is rated as highly satisfactory.

Monitoring and Evaluation

4.4 Evaluation was not emphasized in the initial project documents, but several monitoring activities were carried out. A notable example is an impact evaluation study of teacher training. The SEEC has the capacity to carry out relatively sophisticated evaluations when resources are

available. Greater emphasis on evaluation was placed on the follow-on project, but lack of resources has made it difficult to carry out activities.

Institutional Development

4.5 Project achievements aside, institutional development was rated as modest. Implementation decisions were largely made by the PIU and consultants rather than by SEEC staff. The higher salaries initially paid by the PIU contributed to some flight of staff from the secretariat to the PIU. When the Bank-funded project ended, most staff were let go. Therefore, at the end of the project, the SEEC had not been strengthened. In some respects, there has been a trade-off between project implementation efficiency and long-term institutional development.

4.6 The SEEC is implementing the follow-on Bank-financed project through a combined IDB-World Bank project coordination unit (PCU). Currently, the Secretariat cannot make decisions or finance needed activities rapidly enough, so implementation staff experience difficulties and delays in receiving materials and support. However, staff with high expectations from the previous project put pressure on the administration to give them the inputs they need.

Sustainability

4.7 The sustainability of the outcomes is rated as likely. Buildings, curricula, textbooks, and teacher training will probably have a sustained effect on the ability to provide education in the Dominican Republic. On the other hand, some innovative components, like educational radio, were cancelled or severely weakened at the end of the project and thus were not sustainable.

4.8 Sustainability may also be facilitated because staff have memories of how effective leadership and group dynamics could bring about change. In the future they might be more likely to expect outcome-oriented leadership and respond to it favorably.

Bank Performance

4.9 Bank performance is rated as satisfactory. The Bank appraised the project efficiently and supported the government in its efforts to find effective modes of teacher training and community participation.

4.10 Nevertheless, the Bank did not pay much attention to the instructional aspects of the project. Except for one retiree on a single mission, no educator was involved in the project's appraisal or supervision. Similarly, IDB had no educator involved in supervision. Also, the Bank supervised sporadically; partly because the UNDP advisor closely controlled the project and the project was going well, only five supervision missions took place. SEEC staff report that the Bank made few field visits to monitor implementation at the school level and paid little attention to the instructional details of the project. Issues related to the duplication of training efforts and effectiveness of teacher trainers in terms of bringing about behavioral changes could have been dealt with much earlier if specialized donor staff had supervised more frequently.

4.11 The implementation of a program by two development banks created some unforeseen logistical problems. While the Bank relied on UNDP for implementation assistance, IDB has a resident mission and implementation support in the country that did not always interface with UNDP. Differing procurement and monitoring procedures meant that two different implementation units had to be set up. Financing was parallel on items that to some extent

overlapped. The two implementation units often did not communicate. The result was duplication of some work and use of different standards, as in school repairs. Bank PIU staff saw the IDB program as more mechanistic and less coherent with educational objectives. Collaboration between the two organizations was limited, and joint supervisions did not take place, as one may have expected. Sometimes, the government received different or conflicting recommendations, as in the case of teacher training. To strengthen collaboration and to avoid duplication, the follow-on project has joint supervisions and a joint implementation unit.

Borrower Performance

4.12 Borrower performance was highly satisfactory. During project negotiations, the government insisted on including innovative components and then carried them out, exceeding expected targets. Groups of Dominican educators worked hard and developed thoughtful processes to resolve problems in curriculum, teacher training, and examinations. Financially, the project seems well managed, and funds appear to have been spent for the intended purposes.

5. Issues and Recommendations

5.1 The following issues and problems were found during the audit mission:

Many Immigrant Children Grow up Illiterate

5.2 The project helped increase enrollment rates, and authorities accept all children who want to enroll in school. However, they do not actively seek to enroll out-of-school children. A significant portion of the population may still be out of school, including many poor Haitian workers in the country (legal and illegal). Statistics are lacking about the size of the out-of-school population, but clearly a generation of such children is growing up illiterate in the Dominican Republic. Active measures must be taken to bring them to school and keep them there. In some instances, bilingual education may be needed for the Creole-speaking children. If these children are not integrated in the Dominican school system, they may suffer as adults the social problems that the country is trying hard to combat. The Bank, which has not yet actively engaged in a dialogue on this issue, might lead donors' policy discussions on it.

Poor Students Lack Textbooks

5.3 Poor students who cannot pay for textbooks go through the school year without them. During class, they may share with other students, but they cannot do homework in the evening. The poorest of the poor are the ones who most need the books and the ones least able to pay for them.

5.4 The government must find ways to offer textbooks and workbooks to the poorest students. This could be achieved through donations to a fund, local fund-raising, or assigning a certain percentage of books in poor areas for the poorest students. Whatever the methodology, it is imperative that the children who cannot afford books get them.

Teachers Must Maximize Classroom Learning

5.5 Teachers who have received in-service training still are unable to organize instruction so that students spend maximal time on learning tasks. Furthermore, instruction still heavily emphasizes memorizing material that many students do not understand.

5.6 Teachers' methodological skills may improve with frequent supervision by knowledgeable supervisors. OED recommends that in-service training place much more emphasis on the acquisition of classroom organization skills to maximize learning. "Direct instruction" methods involving very structure activities have shown to be very beneficial for poor populations and may benefit Dominican children.

School Buildings Must Facilitate Learning

5.7 Many older rural schools lack doors and walls between classes. Noise in one class interferes with other students' attention, lowering effectiveness and time on task. Most of these can be remodeled to raise walls, but money and attention are needed. Unfortunately, schools have traditionally functioned without walls, and such layouts are considered normal. To facilitate the performance of the poorer students, it is important that suitable repairs be made to such schools, so that they can concentrate on the instructional material.

5.8 Remote schools are more likely to have cumulative problems, including low-quality construction. Extra time and effort should be taken to supervise those sites and to optimize instruction in them.

5.9 As the country's population increases in this small island, more school space will be needed. Project schools are typically one-story buildings. Yet, in future years, many will need a second floor, and foundations will not be able to sustain such additions. It is important that schools be built with foundations strong enough to support two or three floors for future expansion.

5.10 As mentioned earlier, future dialogue and activities might also focus on the following issues:

- Fulfilling the nutritional goals of the school nutrition program;
- Avoiding paying different salaries to project and non-project staff.

Lessons

5.10 The report demonstrates that interaction of dynamic leadership with personalities and circumstances can lead to unexpectedly good results. The ingredients of successful implementation may be:

- effective and collaborative management that made quick decisions, then made resources immediately available to staff;
- agreement on goals—in discussions with the mission, staff expressed an understanding of project goals, agreement with them;

- a sense of achievement—giving resources to the PIU staff while praising their performance, expecting outcomes, and giving them some decision-making power, empowered them to do more work than they might otherwise have done. Group dynamics created desire and “mystique” for work;
- relative organizational ease—the country’s educational system had the ability to organize participation down the line, from the PIU staff to rural teachers who attended in-service training (perhaps because informal contacts were easily acceptable to school administrators). Thus, it was possible for inspiration and commonality of purpose to cascade. The small size of the country and relatively easy road access facilitated organization;
- a linkage of achievement with desired teacher salary increases.

5.11 How important was each characteristic and what would be the minimum or critical number and interaction of such characteristics to produce highly satisfactory project outcomes? Though there is a lot of literature in this subject, more needs to be learned. The Bank should study effective leaders in projects of borrower countries, people who are able to motivate staff and to create esprit de corps. Their characteristics should be analyzed, and efforts should be made to train more to be like them. The model developed in the Dominican Republic might give insights on how to motivate staff in low-income countries to perform feats of implementation.

5.12 School feeding programs may have benefits for students, but their political popularity may result in compromising nutritional goals. Governments and donors must ascertain that the quality and availability of school meals is safeguarded.

5.13 Project implementation units should not pay staff more than other government agencies, because the best staff are attracted, and the institutional strength of government agencies ultimately suffers. This lesson has often been repeated in the previous decade, when salary supplements in PIUs created short-term rewards and long-term institutional losses. Loss of implementation capacity after the primary education development project illustrates one more time why this practice should be abandoned.

Basic Data Sheet

PRIMARY EDUCATION DEVELOPMENT PROJECT (LOAN 3351-DR)

Key Project Data

	<i>Appraisal estimate</i>	<i>Actual or current estimate</i>	<i>Actual as % of appraisal estimate</i>
Total project costs (US\$)	30.0	30.0	100
Loan amount (US\$)	15.0	15.0	0
Date physical components completed: February 7, 1997			

Cumulative Estimated and Actual Disbursements (US\$ million)

	<i>FY92</i>	<i>FY93</i>	<i>FY94</i>	<i>FY95</i>	<i>FY96</i>	<i>FY97</i>	<i>FY98</i>
Appraisal estimate	0.80	2.20	5.0	8.8	12.0	14.0	0
Actual	1.8	5.6	10.8	13.9	15.0	15.0	15.0
Actual as % of estimate	12	36	71	92	99	100	
Date of final disbursement: February 7, 1997							

Project Dates

<i>Steps in project cycle</i>	<i>Original</i>	<i>Actual</i>
Identification		09/12/88
Preparation		Through 11/26/90
Appraisal	December 1990	12/05/90
Negotiations		04/29/91
Board presentation		06/20/91
Signing		12/13/91
Effectiveness	October 1991	07/22/92
Midterm Review		01/15/95
Project Completion		12/15/96
Loan Closing		02/07/97

Staff Inputs (staff weeks)

<i>Stage of project cycle</i>	<i>Weeks</i>	<i>US\$(000)</i>
Preparation	82.8	192,102
Appraisal	22.8	47,996
Negotiations	6.3	18,437
Supervision	52.8	131,976
Midterm Review	*	
Completion	5.3	12,873
Total	172.2	403,384

* Midterm review conducted in Washington. Data are incorporated in regular supervision.

Mission Data

Stage of project cycle	Date (month/year)	No. of Staff in fields	Duration of mission (# of days)	Specializations represented ^a	Performance rating ^b		Types of problems ^c
					Implement- ation status	Development objectives	
Identification	N/A*						
Preparation	N/A*						
Appraisal	N/A*						
Supervision							
I	Feb. 1992	2	5	OS	1	1	
II	July 1993	1	14	OS	2	1	
III	March 1994	6	5	EC, OS, ES	1	1	
IV	Jan. 1996	1	5	OS	1	2	M
V	Oct. 1996	1	5	OS	1	2	M
Completion	Feb. 1997	1	10	ES	1	1	

N/A = No data available

a. EC = Economist; ES = Education Specialist; OS = Operation Specialist

b. Ratings: 1/HS = No problem; 2/S = Moderate problems

c. M = Management performance

Other Project Data

Previous and Subsequent Projects

Credit title	Loan No.	Amount US\$ million	Year of approval	Status
Follow-on Project				
Second Basic Education Development Project	3951-DO	36.4	1995	Under implementation

213 de la sección A Del 4º Grado del Centro 00008529 CAROL MORGAN
Del Sector Privado Urbana Maternal Básica del Distrito Escolar 04-05 Santo Domingo

Resultados descriptivos

La programación de CARLOS en LENGUA CASTELLANA fue muy alta en Pruebas Nacionales. Su resultado es muy superior al de sus compañeros de aula, y es muy superior al promedio de estudiantes de escuelas parecidas a la suya. Es una calificación muy superior a la de los demás estudiantes de 4to grado del país. Su destreza en el manejo de conceptos normativos, morfométricos y del significado de las palabras y de las expresiones leídas es excelente. Demostró una capacidad al escribir para desarrollar conceptos y reconocimiento de las técnicas de comunicación, así como lo que puede estar en un escrito, los párrafos, para realizar una carta; y también sus propias ideas. Su dominio de ortografía y la de la escritura es muy bueno en el uso de ciertas letras, como son la *ll* y *erre* y otras, es excelente. Menciona que su nivel de comprensión en lo que respecta a las expresiones negativas es el reconocimiento de la diferencia y el hecho con las palabras y de los sentimientos y actitudes que es evidente.

El resultado en MATEMÁTICA también era calificación alta. Este es un resultado igual al de los demás alumnos de 4to grado, y igual al observado por los estudiantes de escuelas similares y superior al de los estudiantes del país. Muestra una habilidad suficiente para interpretar los de conceptos sobre números naturales, fracciones comunes y decimales, divisores, número orden y geometría propia del grado. Su capacidad mostrada para leer y escribir números naturales hasta el mil y entender el valor de posición de una cifra en números naturales y decimales, es excelente. Al como en algo bajo su habilidad para realizar operaciones de suma, resta, multiplicación, división y potencias de números naturales y fracciones comunes y decimales y su percepción indica una habilidad excelente. Para la resolución de problemas aplicados conocimientos sobre operaciones con números naturales y fracciones comunes y decimales, así como para hallar perímetros y áreas de figuras geométricas, a veces que es excelente para identificar modelos del Sistema Métrico y otros sistemas de unidades de medida, y para interpretar gráficas sencillas.

En CIENCIAS SOCIALES obtuvo una calificación normal. Este resultado es igual al observado por sus compañeros, igual al de estudiantes de escuelas semejantes, y igual al promedio de estudiantes de los estudiantes de 4to grado del país. Su capacidad para reconocer su origen, y el de la comunidad, sus derechos y deberes, como también la importancia de la escuela y de las responsabilidades es apropiada. Logra una puntuación alta pero baja en estudio Identifica las características de la geografía de su provincia, municipios e importancia de las salinas. La capacidad demostrada para distinguir los factores geográficos, es apropiada. Muestra una destreza buena al identificar lo que respecta al relieve, los recursos naturales, y las de economía, clima, principales actividades y a las diferencias políticas de los regímenes del país, a la vez que es algo bajo su capacidad para conocer nuestra independencia y sus principales hechos históricos del pueblo dominicano.

Presenta una calificación normal en CIENCIAS NATURALES. Esto lo coloca en una posición igual a la de sus compañeros. Es un resultado igual al observado por los estudiantes de escuelas parecidas, y igual al promedio general de la clase. Su habilidad en el conocimiento de los procesos y conceptos científicos, los experimentos y funciones que sirven de base para la comprensión de las Ciencias Naturales es alta pero baja. Su puntuación en biología es la capacidad de explicación de los recursos naturales, es beneficiosa que expone los valores que los destruyen. La puntuación lograda en cuanto a conservación del agua, muestra relación con la motivación, en lo que concierne a su formación, relación con el estudiante y a la estructura de los órganos, que muestra interés en la higiene de su proceso es algo baja. Es apropiada su capacidad para distinguir la relación entre la estructura y el funcionamiento de los órganos que muestra interés en las funciones de relación de los seres vivos y la habilidad para el reconocimiento de las propiedades, características y variaciones de la materia y la energía, como fuente de vida, es apropiada.

RECOMENDACIONES PARA MEJORAR LOS ESTUDIOS SOBRE LA BASE DE LOS RESULTADOS DE LAS PRUEBAS

En MATEMÁTICA

Realizar ejercicios de suma, resta, multiplicación, división sobre todo con números sin números como en problemas naturales. Preparar tablas de multiplicar hasta el doce.

En LENGUA CASTELLANA

Comenzar con los padres y amigos, y profesores, acerca de las funciones de los estudiantes y gobernadores provinciales. Hacer un mapa de la provincia y ubicar los municipios, y uno del país para identificar las provincias.

Buscar en el libro y subir a los nombres de las personas importantes de nuestro pasado. Dibujar los Padres de la Patria y escribir lo que hizo cada uno de ellos.

Unir a las padres y maestros que le enseñen y le enseñen sobre la Independencia Nacional.

En CIENCIAS NATURALES

Debería tratar de realizar estos trabajos donde se identifiquen los procesos científicos básicos observados, medir, clasificar, como otros. Tratar de explicar los conceptos científicos en la vida diaria.

Hacer una lista de los órganos, animales y estructuras que intervienen en la nutrición de plantas y de animales. Repasar en la librería las funciones de la mano, haciendo una descripción de ellas una. Hacer una lista de las medidas higiénicas relacionadas con la nutrición.

Buscar en el libro y escribir por lo que el camino a la energía eléctrica y de transformación de la energía y de la materia, hacer una lista de todas las que se conocen y luego y consultas con la librería. Revisar un libro, periódico o libro y recorta todas las máquinas que encuentran en ella, clasificándolas en el lugar y completando las etapas múltiples simples y complejas, indicando que se puedan dar.

Realizado bajo la gestión del
D. José Andrés Aguirre Siquieros,
Secretario de Estado de Educación Pública, México, D.F.

PLAN DECENAL EN ACCION