

CLASSROOM CONSTRUCTIONAID and other donor experience

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This memorandum is based on discussions with Dr. Adrian Verspoor, World Bank Education Office, Dr. Nassim Mehedff, Inter-American Development Bank Project Analysis Office, Education Division, Betty Facey, AID engineer in Honduras, a review of AID project experience, and relevant documentation.

Introduction

Is classroom construction a good vehicle for development? The object of this memorandum is to present an overview of development agencies experience in classroom construction in developing countries. Issues deal with the rationale for classroom construction, the scope and depth of construction, the successes and failures, and lessons learned.

Rationale for construction

The rationale for classroom construction is simple. The host country usually does not have enough classroom space to accommodate an increase in the number of students, particularly females. In order to increase the percentage of school-age children in schools, educational facilities must be built. This is fundamental. It must be done either before or as teachers are being trained and material and equipment are being purchased. Classroom construction has rarely operated in a vacuum. The procurement of materials and equipment for classrooms has usually been a part of projects. Teacher training has also been linked with classroom construction projects. The combination of construction, material and equipment procurement, and training serve to improve the accessibility and often the quality of education.

New construction and rehabilitation of old facilities reduce overcrowding, encourage parents to send their children to school, or improve the quality of education through better facilities. Construction includes site planning, funding, arranging for labor to build the facilities, either government, contractor, and/or local self-help. Other reasons for classroom construction include rural development and employment generation, resettlement of refugees or displaced people, or reconstruction after a disaster.

Scope and depth of construction

Design used to be a major issue. UNICEF and UNESCO as well as others have done a lot in the way of structural design. It is important to choose the appropriate design for the climate and terrain of the area. If cultural habits, building techniques, and climate are ignored, then project success is doubtful.

The major problem is producing a large number of low cost structures. It is simple to construct a small number of classrooms at low cost. It is another thing to build on a massive scale.

World Bank experience

The World Bank has done many projects in the area of classroom construction. Most of them have been relatively small. Many of their early projects were too fancy and detailed in structural design and were thus unsuccessful. Even simply designed structures were over-designed for the skills of LDC workers.

Designs which called for skilled labor in any quantity were impossible to carry out due to the lack of skilled personnel. These projects were not replicable. Even if a pilot project was successful, it could not be carried out on a large scale. In order to have an effect on the education of a country, education efforts must be carried out on a large scale.

Once designs were simplified, adequate for the situation, and simple for local people to build, the Bank's small projects have generally been successful, although at times too expensive. However, when projects were expanded into large scale ones, they were not successful or were prohibitively expensive. Imported materials or even prefabricated sections were not usually practical or cost-effective. Prefabricated units can be practical but the appropriate design must be chosen. A 'one-type fits all' view does not work. Transportation costs cause imported materials and sometimes prefabricated units to be too expensive. This is particularly true for remote areas or areas of difficult terrain, e.g. Peru or Nepal. The use of local labor and local materials for construction has been found to be the least expensive and the most efficient use of funding.

This makes management an important issue. Management is a second key problem. Generally, the government controls the building process through its Ministry of Education or Ministry of Reconstruction or Public Works. In countries with large bureaucracies, ministries will actually construct classrooms through their own state enterprises. Governments are often inefficient vehicles for classroom construction.

Dr. Verspoor commented that civil servants are usually capable of supervising a contract once let, but they are nervous working with villagers. They are nervous working with small contractors. Nor do civil servants want to take responsibility for construction. They do not want to be responsible should the roof cave in or the walls of the classroom collapse. Administrative red-tape can cause excessive delays in construction. Dr. Verspoor noted that the administrative procedures are often a problem for a bureaucracy like the the World Bank as well.

What can be done? Dr. Verspoor mentioned a recent Bank initiative in Senegal where a contract was let to a private firm for classroom construction. The project asked partnerships of architects and contractors to offer competitive bids for classroom construction which met certain performance specifications. No design or cost was specified.

Bids were submitted with unique or standard designs built using imported materials, prefabricated units, or local materials and labor. A small local contractor was awarded the project, not to build the classrooms, but to manage their construction by local labor using local materials, providing supervision and control of the purse strings. This meant payment would be on time, a critical factor when contracting.

The project, a pilot to build 86 classrooms, operated as a fixed amount reimbursement (FAR) where the villagers were told what to do and how to do it, provided with supervision and the necessary beginning materials and equipment but not paid until certain accomplishments had been made according to specifications. Local villagers were keen to be hired and village leaders insisted no outsiders be employed. This created employment and infused cash into the village economy as a side benefit. The project has recently been completed and was successful. The FAR mechanism worked well as long as it was closely supervised by the government and by the contractor. A large scale project will be considered in the future. The Bank is interested in seeing whether the project will be able to move from the small scale to the large, using other contractors in the country unfamiliar with the particular technique.

International Development Bank

The Inter-American Development Bank has focused most of their construction activities at the secondary-technical and university levels. Examining Bank experience in secondary-technical classroom construction, the following lessons were drawn out by their Operations Evaluation Office:

Project goals were to expand enrollment and to improve the quality of instruction. The construction of facilities and the purchase of equipment met the quantitative goals of the project. These were generally financed by a loan. Qualitative goals were to be met by additional teacher training.

Projections of demand for educational services, a main criteria for expansion or construction of facilities, anticipated a greater than actual demand, resulting in underutilized facilities. Buildings were over-designed for their intended functions, and recurrent costs (particularly for maintenance) were not adequately considered in project design.

In most cases, projects took longer (by 67%), cost more (48% of counterpart funds), and/or accomplished less than planned. Cost overruns were often a result of changes made to the project after execution had begun. Not all delays were negative however. A 5 year delay in one project, resulted in a more suitable project as project designers adjusted to meet the requirements of the revised national education policy.

Given the general lack of analysis of design alternatives and the typically poor quality of data to work with, the relatively successful projects were those with flexible designs permitting changes at low cost once execution was underway.

Simply designed buildings were easier to maintain than architecturally sophisticated ones. Designs need to be simple, account for local climatic conditions, reduce the need for periodic repairs to structures. Particular care should be taken with foundations and roofs as these were found to cause the greatest problems. Items requiring routine maintenance such as fixtures and equipment, etc. must be standardized and replacements widely available.

AID experience

AID's experience has been varied. The majority of projects have dealt with new construction rather than renovation and repair. Project size has been between 6 or 7 classrooms to as many as 6,595 classrooms in Egypt, or 25,000 classrooms in Vietnam. More projects have been done in Latin America than in the other geographical regions put together, (Vietnam being a unique case). Near East experience has mainly been in small projects, except for Jordan Valley development in the 1970's and now Egypt in the 1980's. Asian projects varied more, from one secondary school built in South Korea to extensive building efforts in the Philippines. Africa generally has had small scale projects, except for a war reconstruction project in Zimbabwe. Latin American experience is considerable. Projects have occurred in 13 countries, much of it related to disaster relief, such as hurricanes, earthquakes, and war.

The Latin America Bureau has had the bulk of experience in renovation and repair, (Bolivia, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Paraguay, Caribbean, Grenada). The other bureaus have had experience in Pakistan, Zimbabwe, Nigeria, and Burkina Faso. New construction has sometimes served as a substitute for renovation, with new schools replacing existing facilities rather than adding to educational capacities. This is not, in itself, a negative result, however, it was not the project goal. Renovation and repair is very difficult to do because there is no clear end. When does one stop making improvements? Usually, one stops when the money runs out.

Evaluation experience

Has all of this activity been useful? For the most part, yes. Project experience has varied, but has generally been successful regarding outputs. Evaluations vary as to the amount of detail they provide on classroom construction. Often, in area development projects where classroom construction has been a minor part, evaluators have not mentioned classroom construction specifically, only whether project outputs were successfully completed or not. Projects that focus specifically on education as the project goal remain the major source of data for construction experience. Since large scale classroom construction projects are the most difficult to accomplish successfully, it is most instructive to look at these projects. Examples will be taken from different projects to highlight difficulties. A closer look will be taken at problems and successes in Honduras, as a typical example.

Problems which are irritations in small scale projects become unmanageable in large scale projects.

Management problems

Common problems in classroom construction projects often revolve around shortages of qualified people to supervise or build classrooms.

- * Inadequate supervision by the Ministry of Public Works in Jordan allowed contractors to avoid following established standards, resulting in faulty construction. Construction booms often strain the abilities of local contractors causing them to overextend. (School Construction - 2780190)
- * Poor management in the Philippines caused a 60% failure in outputs. (Provincial Development - 4920236.02)
- * In Guatemala, only 55% of planned construction was carried out. (Elementary School Expansion - 5200192.01, .02)
- * In Panama, management difficulties in the Ministry of Education delayed construction. Community participation was only 45% of what was planned. (Education Sector Loan - 5250179)
- * In Paraguay, inadequate analysis of both the contractors qualifications and the rural areas in which they were to build resulted in costly construction changes and contractor failures. (School Construction - 5260095.01)
- * In El Salvador, understaffing of the implementing agency led to inadequate supervision of the project. This, combined with time pressures and inexperience among the supervisory firms, led to design and construction flaws. A more rigorous selection process for choosing supervision and construction firms was recommended in the evaluation of September, 1985. (Rural Primary School Expansion - 5190190).

Financial concerns

Financial considerations often have hampered project success. AID has used different funding options including FAR, and Economic Support Funds (ESF) with varying success.

- * There were problems with FAR in Egypt (2630066), and Honduras (5220167). ESF funds were used to finish construction for the Honduras project.
- * FAR was an effective mechanism in El Salvador (5190190), once modified to include a Loan Working Capital Fund which provided the government with sufficient funds to implement the project. Targets were lowered due to security problems rather than funding problems.
- * It was impossible to link Philippines school construction to the ESF funds which were to finance their construction (4920342).
- * Inflation or a lack of sufficient funds were cited as a major factor in the reduction of project outputs in Ecuador (5180027), Guatemala (52000192), Honduras (5220167, 5220076), Laos (4390064), Jordan (2780190).
- * Contractors in Jordan had difficulties obtaining contracting bonds due to limited financial services, a common problem in developing countries (2780205).

Social and political concerns

Social and political pressures often force politicians to decide to build classrooms.

- * This occurred in Panama, creating loan management problems (5250145).
- * Honduras emphasized construction at the expense of teacher training and equipment procurement during a hurricane reconstruction project (5220133.01). Teacher training and equipment procurement were picked up in a follow-on project.
- * The most common rural development sub-project cited in El Salvador's large rural development project (5190094.03) was primary school construction.
- * In Bolivia, evaluators expressed concern that social pressure caused schools to be built before economic infrastructure such as roads and irrigation systems (5110499). They felt that the project might not meet economic goals as a result.

Successes

Many projects, despite problems, were successful. Projects increase accessibility and often increase enrollments. Accessibility often encourages enrollment, particularly for females.

- * The massive Egypt project, (2630139), running from FY 81-88 had 1,141 classrooms completed by the end of 1984 with an additional 3,430 begun. Careful planning and collaboration kept construction on schedule despite staff shortages and contractor/government differences. Construction reduced overcrowding and enrollment trends went up. Local classrooms encouraged parents to send their daughters as well as their sons to school. In many countries, daughters are not allowed to go a long distance for school.
- * In Jordan, despite reduced goals, classroom construction encouraged enrollment (2780190). The Ministry of Education reduced the number of buildings it needed to rent for classroom space. Evaluators felt that more effective education was created by increasing the student/space ratio, decreasing the teacher/student ratios, and replacing overcrowded, poorly lit schools with spacious buildings designed for teaching.
- * Attendance at new schools in Guatemala increased over 40% beyond traditional schools (5200192). Enrollment increased by 4,400.
- * The Dominican Republic successfully built 1,055 classrooms (5170119).
- * Ecuador built 2,762 classrooms as well as prefabricated 1,276 steel classrooms (5180027).
- * In Laos, classrooms increased by nearly 600 for both nationals and refugees (4390064).

Continuing need

- * Despite having constructed 756 primary classrooms and 380 secondary classrooms, Panama ended up with a deficit of 1,500 classrooms due to increased enrollments (5250145).
- * Some classrooms built for primary use were turned into secondary classrooms due to pressing need in Jordan (2780190). Double shifting is still common even after the project ended.
- * Egypt expanded their project emphasis from Grades 1-6 to Grades 1-9 because it was clear that a secondary classroom shortage was looming (2630139). This points up the need which still exists for classroom construction.

Focus on Honduras

The program in Honduras has been well developed. There have been a number of successful projects with classroom construction despite problems. The problems experienced by Honduras are experienced in all countries.

* From 1967-1976, one project (5220076) was to build 20 secondary schools with 453 classrooms. Lack of proper cost estimates caused the Ministry of Education to select very costly school construction plans, requiring a cutback to 16 schools.

* There were several Hurricane Fifi school reconstruction projects from 1975 or 1976 to 1980 or 1981, (5220116, 522013301), building a total of 335 classrooms based on the nucleus system, with smaller satellite schools surrounding a large, centralized school. CARE was contracted to build or repair small schools of six classrooms or under. Private firms were contracted for the larger schools. Construction was superior to previous structures. Unfortunately, construction was delayed by heavy rains and insufficient funding for simultaneous construction of all building. There were some problems with CARE, later corrected, over the contract and excessive fees. Minor inadequacies in construction were corrected as well.

* A small project from 1981-1984, (5220189), built 7 classrooms to expand agricultural and vocational technical education, primary education for orphans.

* A large project from 1980-1986, (5220167), is currently targetting 2,100 classrooms for construction and 700 classrooms for renovation in rural areas. It had financial difficulty and implementation was behind schedule. The Ministry of Education had problems meeting FAR requirements. Of 977 construction or renovation starts by September 1983, only 165 were accepted by the mission, some rejected for minor defects. As a result, the mission did not advance additional funds and construction stopped. The Government of Honduras agreed to provide funds from ESF money. Evaluators felt that the project problems were primarily due to inefficiency in the Ministry of Education.

In order to complete project goals, the mission contracted private firms to speed up construction. As of October 1985, only two years later, 1530 of 2,100 classrooms have been constructed and 535 of 700 have been renovated. These goals have been accomplished despite problems encountered.

Options for construction

Dominican Republic experience

One option for construction which appears to have a great deal of potential is a combination of private contractors hiring local labor and the use of local materials along the lines of the World Bank Senegal project or an AID project in the Dominican Republic. The government worker in the field has no incentive to do well. He will have a job next year regardless whether the school gets built well, poorly, or not at all. A contractor has a good incentive. If he does well, he makes a profit. If he does poorly, he will lose money and reputation. This was the idea behind the rescue of a project in the Dominican Republic.

The project, the integrated project for educational development, was three years into a four year project without a single classroom having been built. The money earmarked for school construction was going to be deobligated if nothing were done. The mission redesigned the project and compressed four years of classroom construction into nine months.

The mission hired people in whom they had confidence, trained them quickly and put them into the implementing agency as short-term contractors so as to have oversight. Anger toward the higher paid contractors was anticipated but did not appear since they only had a one year contract. A team was put together to put the various pieces together. It consisted of an engineer to look at the land, an attorney to draft the legal documents, a sociologist to understand community needs and expectations, and an educator to look at the people and decide on the number of classrooms needed in the area. This took some lead time.

315 schools were to be built, totalling some 1,400 classrooms. The mission decided to build roughly 100 every three months to complete the project. Contractors were invited to apply for pre-qualification and between 200-300 applied. Qualified candidates numbered 45 and were divided into categories according to how much business they could handle, Category A for up to \$150,000, Category B for up to \$200,000, etc. The mission hired a total of nine field supervisors for the construction contracts. Each was trained in two months and would be on hand to supervise each contract.

Schools were planned in the nucleus pattern with each six-grade central school surrounded by approximately five, two-room, three-grade satellite schools. The clustered schools were attractive to contractors and aided construction. Plans for the schools were hung on the walls of the office and contractors were able to come in and look at the plans. The design for every school was the same. The cost for each school was priced out to the last cent from the ground up with land donated by each community. The foundations, extras such as retaining walls, and transportation were left open. Soil surveys were not done for reasons of cost. A \$10,000 soil survey for a \$5,000 school was too expensive.

A list of the available contracts for the first 100 of schools at fixed prices was published in the paper. The price included the cost of a cluster of schools from the ground up, the cost of normal foundations, a 10% profit, labor and benefits. The contract could be added to for unusual grading, retaining walls, or special transportation costs for rough terrain, such as jeep or mule transport. Contractors had two weeks to decide whether they wanted to take the job or not. They could look at the specific plans, visit the sites, do their figures and decide whether they could make a profit on the amount offered. They could sign in the log book for a particular contract and automatically received a number.

When the two weeks were up, a lottery was held for each contract between those who had signed up for it. There were some objections by mission lawyers that the lottery did not get the best price, however, there was no corruption. Past experience had shown that unrealistically low bids were tendered when both the contractor and the mission knew that classrooms could not be built for that price. Unfortunately, since the law states that AID must accept the lowest bid, it was awarded to the low bidder. As soon as it was awarded the contractor would begin trying to get more money for construction. Often he would get it, at other times, he would not complete the contract, leaving the project in disarray, not meeting its targets.

The lottery, or 'sorteo' was a fair system. It allowed the mission to decide on the distribution of contracts to prequalified contractors. It assured that if good work was done, a profit would be made and the contractor would live to work another day. If poor work was done, the contractor would not be allowed to continue with new contracts. There was no corruption in this system, since no low bids were offered for a price at which classrooms could not be built. At the time contracts were awarded, each contractor met his field supervisor. Given one week to begin, contractors had to obtain completion bonds, building materials and have their laborers ready. No bid bonds were necessary.

Each contract lasted 90 days. For the first time in the Dominican Republic, fines were applied for late construction. If work was very late or poorly done, contractors were dropped from the approved list. A bonus was awarded if construction was completed satisfactorily before the 90 days were up. That contractor was guaranteed a new contract in the next round of construction. Phased construction allowed technical resources to be utilized to maximum potential but not overextended. In resource-poor countries, resources can be quickly exhausted by large construction efforts.

Work kept progressing, fueled by monthly progress payments. With a supervisor on hand in the field and another in the implementing agency, it was easy to know a contract's progress. Contractors were paid within five days after progress reports were submitted. The report was on one sheet of paper with carbons, required six signatures, the contractor, supervisors in the field and in the implementing agency, the AID mission and the AID comptroller. It took only a day or two to process. The rapidity of this procedure was the key to success. It encouraged payment on time.

The Dominican Republic project was a success because the mission was flexible and willing to explore other mechanisms to achieve their goals.

Self-help construction

Self-help construction has been a popular method of construction. Self-help takes much longer and at times can cost more money than private contractors in the long run. There are sometimes 'hidden costs', such as supervision which is absorbed by the Ministry of Education. Quality of construction can be a problem, but the bigger problem is time. A recent project in El Salvador (5190190), found that there was a difficulty in the local communities' ability to work within the construction deadlines.

An engineer working in Latin America commented that the people are "self-helped to death." With self-help projects in irrigation, rural roads, housing, and schools, there is no time to plant crops. The El Salvador project evaluation suggested that community labor be directed toward classroom maintenance rather than construction itself.

Government construction

Governments sometimes take responsibility for building classrooms. Management has already been cited as a problem. Corruption or lack of incentive are also problems. Some governments do build schools despite these problems although not always in the best manner.

- * In Ecuador, prefabrication as a method of construction produced sturdy, good looking schools. Unfortunately, the design used for the colder highlands was the same one used for the hot, humid, Amazon region and the coastal areas and was totally inappropriate. Prefabrication tends to be expensive for remote areas or areas of difficult terrain.
- * The Egyptian project appears to be going well with large numbers of classrooms constructed. This is an Egyptian generated project with AID providing additional support. The government has moved to contracting with private firms with positive results.

PVO's

Private Voluntary Organizations (PVO) are sometimes used in classroom construction. Their work is generally good quality, though it can be more expensive and takes a longer time to finish. PVO's are often limited in their capacity for construction.

CARE was contracted after Hurricane Fifi to manage the reconstruction of schools in Honduras. This was a regular contract, not an OPG or a PVO agreement. CARE hired a carpenter and supervisor for each school and bought the materials. Each town donated a number of workmen to work a specified number of hours a week. This method worked but was slower. CARE was limited by its ability to only handle the construction of thirty schools at one time.

This memorandum has addressed the question of whether classroom construction is a good vehicle for development. Classroom construction provides the base necessary to expand enrollments and to improve education. As was mentioned earlier, there is a constituency for educational improvements. The construction of classrooms is a highly visible sign of commitment by the government for the welfare of its people. It often provides needed employment and infuses cash into the local economy. In some areas, e.g. Jordan, construction encouraged the private sector to develop in the area due to government show of interest.

Classroom construction is needed. However, it ought to be carefully planned so that large scale, low cost projects are a reality. Careful design selection, construction and contracting methods must be chosen. Use of local materials and local labor under supervision of a private firm should be considered. This seems to be the most successful method in recent projects. Often, government ministries handle this activity. It could be performed more efficiently by the private sector through letting contracts on the basis of meeting performance specifications at the lowest cost or contracting for a specific design at a fixed price.

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Spreadsheet of AID Funded Projects for Primary and Secondary Classroom Construction

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This spreadsheet was produced after reviewing 161 projects with an education construction component in them. The 84 projects chosen are sorted by region and then by project number

The information covers:

- Country Name
- Project Number
- Years of the Project
- Quantity of construction
- Whether the construction was new or rehabilitation
- Whether construction was the result of a disaster or war
- Other donor participation, when noted in the project abstract
- Reasons for construction, if noted

Additional notes:

Under the YR field:

- P = pending
- T = terminated
- 80-84 = Fiscal years
- nd = no date

Under the Numbers field for quantity of construction -

- n/a = none available
- s = school
- c = classrooms
- multi = multipurpose rooms
- hs = jr. high and/or high school

Numbers with just an 's' or a 'c' are primary schools or classrooms

Secondary schools or classrooms are indicated by 'hs'.

If the numbers are separated by a slash, e.g. 24s/52c, this means that 24 schools were built containing a total of 52 classrooms

If the numbers are on separate lines, then they are separate construction efforts.

Under Donors: WB = World Bank.

Under Reasons: Prim. = primary

ed. = education

Construction unless otherwise noted, is rural.

This is not an exhaustive list of all AID projects. However, these charts contain all of the figures that could be located in AID's Development Information System. Some projects do not have dates or did not specify the number of classrooms and schools to be constructed. The database begins with projects that were active in 1973.

<u>Country</u>	<u>Proj#</u>	<u>Yr</u>	<u>Numbers</u>	<u>New</u>	<u>Rehab</u>	<u>Disaster</u>	<u>Donors</u>	<u>Reasons</u>
<u>Near East</u>								
Italy	14500i	84-87	12s/290c	x				earthquake
Portugal	1500004	76-79	19s	x			WB	rural Voc. Ed., building, employment, support econ.
	1500018	77-82	18s	x				employment, support econ.
Yugoslavia	1580210	P	n/a	x		x		earthquake
Egypt	2630066	78-86	9s	x				community development
	2630139	81-88	/6595c	x				meet human needs, amend. '83 added more regions.
Oman	2720103	83-87	48s/606c 29s added	x		x		war, help teachers & students, employment
Syria	2760035	79-83	94s/692c	x				rural development, encourage female ed., use local materials
Jordan	2780183	75-80	/170c	x			WB,FRG	valley development
	2780190	76-80	23s/690c	x				reduce overcrowding, encourage female ed., non-formal ed., adult ed.
	2780205	78-82						same as previous project
	2780221	78-82	22s/233c	x				village development
	2780232	80-84	14s	x				urban development in highlands
Yemen, N.	2790033	75-79	n/a	x				self-help community development via small loans and grants to stimulate activity
West Bank	298015503	79-84	7s	x				self-help rural development

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<u>Country</u>	<u>Proj#</u>	<u>Yr</u>	<u>Numbers</u>	<u>New</u>	<u>Rehab</u>	<u>Disaster</u>	<u>Donors</u>	<u>Reasons</u>
<u>Asia</u>								
Afghanistan	3060142	75-79	115s	x				rural development, encourage female ed., employment
	3060150	78-78	n/a	x				follow-up to proj# 3060142
Sri Lanka	3830042	77-82	/620c	x			WB, UK, Dutch, Canada	mahaweli ganga river basin development
Pakistan	3910410	P	/675c	x				nationwide educational improvement, alternative, low-cost construction
			/20c-fed.	x				
			/300c added on		x			
	3910485	83-88	30s	x				area development to encourage cessation of poppy cultivation,
			35s		x			self-help, AID helps with imported materials, rural and urban
Laos	439006402	63-76	n/a	x				expand primary system into secondary system
	439006404	63-76	6hs	x				votech ed. at secondary level
Korea, S.	4890695	72-77	1hs	x				typhoon, build typhoon resistant buildings
Philippines	492023602	68-76	6000 pupils	x		x		bicol river basin development
	4920310	78-85	n/a					typhoon resistant, use ESF, rural squatter community development by U.S.
	4920342	80-83T	1035s/3150c	x				bases, Amend. '85 funds secondary school nationwide
	4920374	82-87	1300s/4200c	x				war, area assistance to those affected by border war, refugee assistance
Thailand	4930327	81-83	n/a	x		x	UNICEF Japan, FRG	
Vietnam	7300319	67-73	/21-25000c	x				prim. ed. sector expansion., 3000-3500c pa
	7300365	67-76	/4-4500c hs	x				secondary ed. expansion

<u>Country</u>	<u>Proj#</u>	<u>Yr</u>	<u>Numbers</u>	<u>New</u>	<u>Rehab</u>	<u>Disaster</u>	<u>Donors</u>	<u>Reasons</u>
<u>Latin America</u>								
Bolivia	5110456	nd	220s	x	x			rural ed.
	5110477							same as 5110456
	5110499	78-85	362s	x				self-help rural development
Colombia	514016501	71-75	/4000c	x				rural ed., adult ed.
			30s	x				experimental schools, later secondary uses
	514016505	71-75	19hs	x				secondary school development
	514018001	74-77	/2000c	x				education sector improvement
			38s	x				RDC-Rural Development Centers-votech,
			100hs		x			serve satellite primary & secondary
	514018002	74-77	12s		x			schools
			30hs		x			renovation or additions
Dom. Rep.	5170119	78-84	/654c	x				education sector improvement
			/572multi c	x				
			283s	x				
			87 libraries	x				
	5170172	84-89	/803c	x				follow-on to 5170119
			/343multi c	x				serves 390 communities, RD
Ecuador	5180007	78-82T	lhs		x			votech hs.
	518002701	66-77	609s/3000c	x				primary ed. improvement
			lhs	x				
			lhs		x			
			ls	x				demonstration school
	5180046	84-87	52s	x				rebuild, hurricane and floods
			519s		x			repair, hurricane and floods
					x			

<u>Country</u>	<u>Proj#</u>	<u>Yr</u>	<u>Numbers</u>	<u>New</u>	<u>Rehab</u>	<u>Disaster</u>	<u>Donors</u>	<u>Reasons</u>
El Salvador	519007102	67-76	n/a	x				secondary, institutional TV ed.
	519009403	66-88	n/a	x				community self-help
	519019002	79-84	/600c	x				new schools and add-ons
	5190295	85-89	/400c	x		x		war, build new classrooms
Guatemala	520019202	68-76	/2400c		x	x		war, repaired or restored
			/1056c add	x				expand schools
			75s	x				50 6-grade, 25 4-grade
		50hs	x				votech & adult ed.	
	520019801	70-77	/650c	x				new urban schools and add-ons to existing
5200242	77-83	4s pilot						demonstration schools, transfer grant
		73s	x		x		portion of #5200192 to this proj.	
		1hs	x		x		earthquake, regional/satellite concept	
Honduras	522000004	nd	32s		x	x		regional-urban
			TA	x				rural/remote-satellite
			20hs/453c	x				TA for implementing school construction
	5220076	67-76	n/a	x			build new and expand existing	
	5220116	75-80	n/a	x		x	hurricane reconstruction	
	522013301	76-81	54s central	x		x	hurricane reconstruction	
		270s satell.	x		x		hurricane reconstruction, total 335c	
5220167	80-86	/2100c	x			rural ed.		
5220189	81-84	/7c	x					
Nicaragua	5240063	66-73	114s/684c	x				expand votech/agr, prim. ed. for orphans
	524009002	73-76	n/a	x				urban/semi-urban, self-help, local
		materials and labor						primary, experimental, urban, votech
524011505	78-83	400s/1600c	x				schools built.	
	/530c			x			rural ed.	

<u>Country</u>	<u>Proj#</u>	<u>Yr</u>	<u>Numbers</u>	<u>New</u>	<u>Rehab</u>	<u>Disaster</u>	<u>Donors</u>	<u>Reasons</u>
Panama	5250145	71-76	2hs	x				for training teachers
			/634c	x			phase 1 of Panama educ. plan	
			/175c hs	x				
Paraguay	525017901	75-82	33hs	x	x			phase 2 of Panama educ. plan
	526009501	68-78	120s	x				ed. development, add votech
			3s regional	x				
Jamaica	5260507	77-79	1hs		x			votech
	532000902	75-83	6s		x			self-help, rural ed.
	532000903	75-83	2hs	x				agr. votech
Caribbean	538002903	79-85	1hs		x			
		79-83	TA	x	x			TA in construction & rehab
	5380030	79-83	7s	x				employment generation
				16s		x		
	5380045	81-81	10s	x				area development projects
Grenada	5430008	84-86	1hs	x				
			6hs		x			expanded
			20s		x	x		war repairs

<u>Country</u>	<u>Proj#</u>	<u>Yr</u>	<u>Numbers</u>	<u>New</u>	<u>Rehab</u>	<u>Disaster</u>	<u>Donors</u>	<u>Reasons</u>
<u>Africa</u>								
Zimbabwe	6130202	P	n/a	x	x	x		war repair and reconstruction
	6130206	nd	684s	x		x		war reconstruction, use ESF
Kenya	615HG05	nd	n/a	x				urban development, both primary and secondary schools will be constructed
Uganda	6170011	62-75	1hs	x				female ed.
Nigeria	6200735	64-77	1hs		x			expand votech ed.
Sahel	6250955	84-89	/9c	x				resettlement due to dam construction
Cape Verde	6550008	78-85	60s/100c	x				remote rural ed.
Chad	677000501	78-81	27wkshp ctrs	x				votech expansion at prim. level, adult ed.
	6770021	78-79	5s/30c	x				pvo construction, rural ed.
	6770035	78-79						same as 6770021
Senegal	6850226	79-84T	1s/6c	x				replace old one in AID built housing project
Burkina F.	686023103	78-86	9s		x			rural ed.
OSARAC	6900102	77-80	2hs	x				to expand school facilities for refugees
Rwanda	696010901	79-86	30hs	x				tech. and votech.
	696010902	79-86	1hs	x				expand, female ed.
Afr. Reg.	698042209	79-82	/22c	x		x		war, Tanzanian refugees

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