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Schools in Honduras

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B • R • I • D • G • E • S
Basic Research and Implementation in DevelopinG Education Systems

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Why Do Children Repeat Grades? A Study of Rural Primary Schools in Honduras

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Foreword

This report examines the variety of factors that contribute to grade repetition and dropping out in rural primary schools in Honduras. The particular combination of factors that contribute to repetition and therefore to dropping out, will vary from country to country, but the general pattern of relationships may be widespread. There are strong parallels between the specific findings from this study, and those reported in previous studies around the world.

Failure in schools is generally observed in two forms, repetition and dropping out. Some children spend more than one year in the same grade — these are the repeaters. Among repeaters, some leave school — these are the dropouts. Another form of failure in schools, often not measured by planners and policymakers, is students' failure to learn.

It is common to assign the cause of failure to the students themselves. This is a mistake. The students' failure to learn is a failure of the school, and to attribute failure to the students themselves is to blame the victim, and to lose sight of the purpose of schools. The failure of children to learn what is expected of them is a failure of the school to teach effectively.

We should not be surprised that teachers and school administrators seldom assign the failure of the school to themselves. In many circumstances teaching is a difficult task. The vast majority of teachers work long hours under hard conditions, and for salaries that are lower than those for others with similar levels of education. Schools contend with all the distractions of the world outside that offers tangible and immediate gratification instead of the unpersuasive promise that learning how to add and subtract will enrich one's life.

Persons with good intentions often confuse the quality of their efforts with the intensity of their commitment. Teachers work hard in the application of their skills. They have little or no energy at the end of the day to question and assess the effectiveness of their own actions. Failure of children to learn is assigned to children's lack of motivation, poor health, lack of support from parents, and so on.

The school's failure can be assigned to two major kinds of factors. Children fail to learn when they are not taught the content of the tests. Children also fail to learn when teaching methods are inappropriate to their level and style of learning.

There is a growing body of research that demonstrates that "opportunity to learn" is one of the major factors explaining levels of learning. This research indicates that teachers often fail to teach the curriculum. In lower primary grades, for example, it is common for teachers to spend too little time drilling and practicing fundamentals. Many teachers find little gratification in the teaching of writing or simple mathematics. Teaching of reading requires great patience as children learn at different rates.

The students' failure to learn is a failure of the school, and to attribute failure to the students themselves is to blame the victim, and to lose sight of the purpose of schools.

Teaching methods may be inappropriate because the general model of teaching learned in the teacher training institute does not match the reality of the classroom. Teacher training programs may do a better job of preparing teachers for jobs in urban schools or for work with children from educated families. Often there is little or no supervised practice teaching. Teachers often comment on how poorly prepared they are for what really happens in classrooms.

The work of teaching is made more difficult when classes are large and multigrade. Students learn at different rates, respond to different kinds of subject matter, require different kinds of incentives and

Schools contend with all the distractions of the world outside that offers tangible and immediate gratification instead of the unpersuasive promise that learning how to add and subtract will enrich one's life.

feedback. In this sense, students in the same classroom are at different learning levels. Teachers who lack training for diverse classrooms, and do not have requisite instructional aids, teach students at only one level. The pace and scope of one-level teaching addresses the needs of some students (it could be the slowest, the average, or the best students), while ignoring the needs of the others students. A well-trained teacher, supplied with materials, can manage a complex class, putting students at one level to work on their own while teaching directly to students at another level. Many teachers are not well trained and have few materials. This majority falls back on a one-level approach, unable to respond to the diverse needs of the whole class.

Sometimes teachers may adhere to the curriculum, but the external evaluation does not assess what was emphasized. Examinations are at best a narrow sample of the rich experience of school. The requirements of test construction make it difficult to include questions that get at the more subtle and complex kinds of learning that takes place in school. Tests generally measure only low level cognitive skills, while the central objectives in the primary grades are value formation and socialization.

The total amount of learning that tests measure, is a joint product of how quickly students learn and how long they spend trying to learn what the tests measure. The pace at which students learn depends on the learning ability that children bring to school and the appropriateness (to the content and to the children's abilities and interests) of teaching methods. Time available for learning is conditioned by teacher and student absenteeism, as well as by curriculum coverage.

The kinds of findings that are extracted from the results of this study, and others, will disappoint those looking for a simple solution to problems of school failure. Because teacher behavior is complex, and can vary according to the situation, no one variable used to measure these factors stands out as predominant. We can only explain significant differences in learning measures by inclusion of a number of variables. As a consequence, any given variable may appear in one study but not in another. When focusing on specific measures or variables, there may seem to be little consistency across studies. If, on the other hand, one recognizes that is it **combinations of factors** that are important for learning, and that there is no single best combination, then it makes sense to look at all the different variables that seem to make a difference for learning. From this kind of analysis we can extract some general principles to assist policymakers in deciding how to improve primary schools.

The study reported here was intended to help policymakers in Honduras develop some broad strategies for the improvement of rural primary schools. Emphasis was on illustrating broad principles to increase understanding and acceptance of results by decision makers. To that end, a balance was struck between the demands of scientific rigor and the concerns of the policymakers. Compromises are seldom fully satisfying, however, and persons in each endeavor may find cause to criticize this study. From the perspective of the BRIDGES Project, the relevant question is whether this kind of research is an effective way to increase the information available to and used by policymakers in education.

Noel McGinn
June 4, 1992

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Executive Summary

This report is based on a study that identified the major factors associated with grade repetition in primary schools in Honduras. This report suggests actions that the Ministry of Education might take to reduce repetition.

Central Argument of the Study

Repetition is a serious problem in Honduras. It wastes scarce resources and is the major reason why students abandon school before finishing the primary cycle. Reducing repetition will reduce desertion and increase funds for improving the quality of education. This assumption is based on the following logic:

- Demand for education is high and increasing. Parents put a high value on schooling and recognize that it improves future opportunities for their children.
- Repeating grades increases class sizes, reduces the quality of education, and contributes to further failure.
- Children repeat grades because they do not learn enough in one year to satisfy the standards of teachers or the expectations of parents.
- Children finally desert school after several experiences of failure and repetition, and when parents no longer believe children can be educated (usually around 10 years of age) and put them to work.
- The major factors that contribute to repetition are those linked to learning in school.

Methodology

Preparation for the study began in November 1990 through interviews with Ministry officials, school directors, and teachers in both Tegucigalpa and rural areas. The researchers examined statistical records of the Ministry and saw that repetition was most severe in rural areas (where most schools are located). They also used this examination to select 4 departments in which to carry out the study. Questionnaires and interviews were designed with Ministry collaboration and field tested.

Data collection was carried out in March 1991 on a set of 40 schools in the selected departments. Half of the schools were randomly chosen from a list of schools with the highest rates of repetition, and half were chosen from a list of schools with the lowest rates of repetition.

On visiting the schools, interviewers used school registers to take down information about all the children who were enrolled in the 1st and 3rd grade during the 1990 school year. This procedure identified 1,894 students from 1990. Most (88%) of these students were enrolled in the same school in March 1991 as in 1990. About 6% were enrolled in another school. About 6% had abandoned school. About 25% of the students who were in the same school were absent the day the interviewers visited.

Reducing repetition will reduce desertion and increase funds for improving the quality of education.

The 1,255 students attending the sample schools that day were interviewed and given a Spanish test designed by the Ministry. The 65 teachers in those schools who had been responsible for the 1st and 3rd grades in 1990 were interviewed. The interviewers randomly chose about half (640) of the students and accompanied them to their homes where they interviewed their mothers and fathers.

Major Findings of the Study

Repeating does not solve the problem of teaching students skills they didn't learn the first time around. Students who repeat grades are more likely to repeat (again) than students who have not repeated grades.

The factors that contribute to repeating are not removed by making the student repeat.

Low academic achievement is the main cause of repetition. Low marks are the single most important factor leading to repetition. Most students repeat because they do not learn as much as the teacher would like.

Teachers are inconsistent in their application of Ministry rules which govern marks and failure. Not all students are promoted, even though all of their final grades are above the Ministry minimum of 60. Some schools follow the Ministry rule, others do not.

Student learning of Spanish and mathematics is given more importance in evaluation than learning of science or social studies. Final grades in Spanish and mathematics are much more important for determining whether a child is failed or promoted than grades in social sciences or natural sciences.

There is wide variation across schools and students in the amount of time provided for learning. Schools vary in both the length of the actual school day and the number of actual school days per year.

Teachers are absent an average of 15 days per year. In addition, students miss school because of illness and other reasons.

The number of hours that students attended school ranged from 170 to 1,800 hours per year; averaging 900 hours, which is equivalent to 150 six-hour school days.

Some students are failed on the basis of low attendance, even though their grades are above the minimum of 60. For most students, however, there is a clear relationship between attendance and learning. The more days in school, the higher the grades.

Teacher expectations, which contribute to learning, are affected by the family of the child. The more teachers think students are capable of learning, the more students learn and the less they repeat. Teachers who set high expectations for their students and make their expectations known, have students who learn more.

Teachers hold higher expectations for students who are from families with literate parents; live in larger and better constructed houses; and are clean, well-dressed, and wear shoes.

The impact of a textbook on learning is affected by the use of other supplies. The impact of textbook coverage on learning is greatest in single grade classrooms, and in classrooms where the teacher has materials such as chalk and writing paper.

Multigrade classrooms contribute to failure. Students in classrooms that include more than one grade learn less and are more likely to repeat than students in single grade classrooms.

Participation in some kind of preschool is associated with better marks. Attendance at a kindergarten, or at school prior to entering 1st grade, makes a small contribution to learning in the 1st grade.

Parents usually accept the school's decision. Parents have an idea of what children should learn in school. In addition, they are guided by the marks that teachers give to their children.

This report includes a series of **recommendations**. The most important of these are:

- **Increase in-service training of teachers in classroom management, including techniques for multigrade classrooms.**
- **Develop instructional materials that permit teachers to provide differentiated instruction.**
- **Increase the number of teachers in small schools to reduce the number of multigrade classrooms.**
- **Improve the ability of teachers to identify students with learning difficulties and establish remedial programs to reduce the failure rate of these students.**
- **Provide training to encourage teachers to raise their expectations for all students.**
- **Provide preschool experiences that improve students' learning capacity.**
- **Continue to carry out research that identifies problems that can be resolved by ministry action.**

Section I: Introduction

Honduras, like many countries in the world, has not allocated enough resources to give all of its children the kind of education to which they are entitled and which would contribute to the future development of the country. On the other hand, the government of Honduras seeks to extract the maximum benefit possible from what education it can provide. To this end the Ministry of Education, with the assistance of the United States Agency for International Development, commissioned Project BRIDGES to carry out a small study on causes of repetition and dropping out in rural primary schools. This report describes the methodology and findings of that study and the policy recommendations that follow from them.

The study was motivated by several concerns:

- The United States Agency for International Development (USAID) requested an assessment of the factors that account for a high rate of dropout from primary schools in Honduras. USAID was considering extending support to primary education, and was looking for clues about which kinds of programmatic interventions would have most positive impact.

- The BRIDGES Project, run by the Harvard Institute for International Development (HIID) Education Group, wanted to test a method for carrying out applied policy research under the constraints of a relatively low budget and limited time. Specifically, the Project wanted to see if it could do research in a few months' time that would support concrete policy recommendations.

- In our assessment for USAID, we sought to carry out a study that would generate policy recommendations within a relatively short period of time, cost relatively little, be managed by local researchers, and help develop the capacity for policy research in the Ministry of Education.

- In addition, we hoped that this research would contribute to current discussion about how much importance ministries of education should give to repetition. To do this we had to find answers to these questions:
  —How much repetition is there?
  —Should repetition be understood as a failure of the education system, and an indicator of low efficiency, or as a rational decision by students and parents seeking to maximize returns from schooling?

Official reports of repeater rates may minimize the seriousness of the repetition problem.

Conclusions from Previous Studies on Repetition and Dropouts

Background

Every academic year, some students are enrolled in the same grade of primary school that they were in the year before. These children are called repeaters. Repetition is high in many, but not all, countries. Table 1 shows wide variations in repetition rates by grade. This variation is evidence that the phenomenon is not "natural" to education, but instead is a result of policies and practices.

There are at least three patterns in this set of countries. Some countries (e.g., Colombia, which is typical of much of Latin America) have high rates in the early grades and declining rates in the higher grades. Other countries (e.g., Gambia) have relatively high rates in all grades with the highest rates in the terminal year. This is found in countries that use an entrance examination to limit access to the

... the information on total number of repeaters by grades which each school sent to the Ministry of Education did not match what parents and the school registers showed. Instead, the number of repeaters was lower.

Table 1. Official Repetition Rates in Primary Grades for Various Countries (In Annual Percentages)

Country	Year	Grade 1	2	3	4	5	6
Algeria	1989	6%	6%	6%	6%	6%	10%
Botswana	1990	1	1	1	11	1	2
Burundi	1987	14	14	15	18	26	31
Chad	1989	38	32	33	27	26	37
Colombia	1989	18	12	10	8	5	na
Cuba	1988	–	13	3	9	9	2
Egypt	1986	–	5	–	5	–	7
Gambia	1988	14	11	11	13	17	37
India	1986	4	3	4	5	4	na
Iraq	1988	14	14	12	14	27	18
Jamaica	1989	3	2	2	2	7	na
Madagascar	1989	44	30	30	25	33	na
Morocco	1988	15	15	24	16	12	22
Philippines	1989	4	2	2	1	1	1
Turkey	1989	13	7	7	4	3	na
Zimbabwe	1984	1	1	1	0	0	0

na= not available for 6th grade
– =automatic promotion

Source: UNESCO Statistical Yearbook, 1991

next highest level. Still other countries (e.g., Zimbabwe) have very low rates in all grades.

Each year some students who have not yet completed the primary cycle drop out of school. In Latin America this figure is about 8% of enrollment in 1st and 2nd grades, declining to slightly more than 1% by the 5th grade. Most students who repeat do so in the 1st grade, and almost all of those students who drop out have repeated the 1st or 2nd grade. Very few students leave school permanently without first having repeated a grade. Again, there is considerable variation across countries in completion or dropout rates for primary schools.

While some countries like Algeria, Egypt, and Korea have more than 90% of the children complete the primary cycle, in other countries like Guatemala, Haiti and Mali, less than 40% of the children complete the cycle. This is illustrated in Table 2. Notice also that the percentage of children who complete the primary cycle is independent of the population size of the country or of the relative wealth, as reflected in the per capita income.

Table 2. Offical Completion Rates for Primary School for Various Countries

Country	Population 1988 (millions)	GNP 1988 per Capita	Completion Rates (%)
Algeria	23.81	$ 2,450	90.2
Botswana	1.16	$ 1,030	89.3
Burkina Faso	8.55	$ 210	73.8
Burundi	5.15	$ 230	86.7
Central African Rep.	2.79	$ 390	16.9
Congo, People's Rep.	2.10	$ 930	70.7
Costa Rica	2.67	$ 1,690	80.5
Egypt, Arab Rep.	51.45	$ 640	93.4
Ethiopia	46.14	$ 120	49.6
Greece	10.03	$ 4,790	98.5
Guatemala	8.69	$ 900	35.5
Haiti	6.25	$ 380	32.1
Korea, Rep. of	42.59	$ 3,550	99
Lesotho	1.67	$ 420	51.7
Malawi	8.16	$ 160	46.3
Mali	7.99	$ 220	39.6
Mauritius	1.05	$ 1,810	95.9
Mexico	83.59	$ 1,770	71.4
Morocco	23.92	$ 830	68.9
Panama	2.32	$ 2,130	81.6
Rwanda	6.66	$ 320	61.7
Senegal	7.15	$ 630	82.9
Syrian Arab Rep.	11.67	$ 1,670	93.4
Tanzania	24.74	$ 160	80.8
Tugo	3.36	$ 370	59.2
Tunisia	7.80	$ 1,230	77.1
Turkey	53.77	$ 1,280	95.9
Uruguay	3.00	$ 2,510	85.9
Venezuela	18.76	$ 3,250	73.1
Zambia	7.49	$ 300	80.1

Sources: World Bank Tables 1990 and UNESCO 1990.

Because dropout rates are calculated as a residual (Previous Year's Enrollment – Number of Students Promoted – Number of Students Repeating = Dropouts), underreporting of repeaters overestimates dropout rates. The conventional method of estimating repeaters is by asking teachers to report the number of repeaters in their classes. Schiefelbein (1991) offers four reasons why official statistics in many cases underreport the number of children repeating:

- Some teachers assign passing grades to students, but those students in fact repeat grades.
- Students who leave school before the end of the academic year are reported as dropouts; many

... If all children completed primary school in 6 instead of 9.9 years, per pupil expenditures per year could be increased by more than 60% with no increase in total funding.

of these students repeat the same grade the following year.

- Teachers often do not have the documentation or the time to identify students who were in the same grade the year before, and not all students report themselves a repeaters when asked.

- In the 1st grade, there is often no way for teachers to determine whether a student has attended another school the previous year.

Official reports of repeater rates may, therefore, minimize the seriousness of the repetition problem. This phenomenon was investigated in Honduras by Cuadra (1989), who assessed alternative methods for estimating repetition and dropout rates. Cuadra reconstructed the academic history of students by interviewing parents and by using school records in which children are registered by name. He also applied a calculation algorithm which used official enrollment data aggregated by age and grade for two consecutive years. This is referred to as the Age/Grade method.

Cuadra found that parents' reports of their children's academic history closely matched school records. When parents said that a child was repeating in a given year, school records for the individual child reported the same. But the information on total number of repeaters by grades which each school sent to the Ministry of Education did not match what parents and the school registers showed. Instead, the number of repeaters was lower.

Application of the calculation algorithm produced rates close to those obtained from parent interviews and school registers. Both estimations of repetition rates differed greatly from the Ministry of Education's statistics, as shown in Table 3.

Table 3. Comparison of Estimates of Repetition Rates in the First Grade for Honduras

Year	Grade/Repetition Method (MOE)	Age/Grade Method
1979	27.3%	51.8%
1980	26.7	54.1
1981	26.1	57.6
1982	28.0	50.1
1983	27.3	50.7
1984	27.3	51.7

Source: Cuadra, 1989

Rates of repetition and dropouts are often used by planners and analysts as measures of the internal efficiency of an education system (Windham, 1989). A system is considered perfectly efficient when all students spend only one year in each grade and all students finish the cycle.

Table 4 shows the variations between countries in the average number of years it takes a student to complete the primary cycle and the number of years in the primary school system.

Table 4. Variations in the Average Number of Years toComplete Primary School, 1985

Country	# of Years In Primary School System	Avg. # of Years It Takes A Student To Complete Primary School
Algeria	6	6.6
Botswana	7	7.7
Burkina Fuso	6	9
Burundi	6	8.4
Congo, People's Rep.	6	10.8
Costa Rica	6	7.8
Egypt, Arab Rep.	6	6.6
Ethiopia	6	8.4
Guatemala	6	10.2
Haiti	6	10.2
Korea, Rep. of	6	6
Lesotho	7	12.6
Malawi	8	14.4
Mali	6	15
Mexico	6	7.8
Morocco	5	7.5
Nicaragua	6	17.4
Panama	6	7.2
Rwanda	8	12
Senegal	6	7.8
Syrian Arab Rep.	6	6.6
Tanzania	7	7.7
Togo	6	13.2
Turkey	5	5.5
Uruguay	6	7.2
Zambia	7	7.7

Source: World Bank Tables, 1990; Unesco, 1990.

There are countries in which, on average, it takes students about the same number of years to complete the primary cycle as is necessary to do it, they include Algeria, Egypt, Korea, Turkey, and Zambia. Others need many more, for example in Guatemala and

If both repetition and dropping out can be explained by poor achievement, both could be reduced by remedial programs.

Haiti students spend more than 10 years, on average, to complete the primary cycle of 6 grades. In Nicaragua, students spend 17 years on average to complete 6 grades of primary school.

In Latin America, about 70% of all students eventually complete the primary cycle, but many (about 44%) of them repeat three or more times. As a consequence, the average graduate spends 9.9 instead of 6 years in school. The average student, on the other hand, spends almost 7 years in school but only completes the 4th grade.

The cost of repetition is very high. In 1986 approximately 20 million children in Latin America repeated a grade in primary school. The cost of providing a second year of schooling for the same grade is estimated to be about US$3 billion, assuming a cost per student of US$161 (Schiefelbein and Heikinnen, 1991). In addition, repetition has a social and personal cost, as it narrows future opportunities for the students who repeat.

Review of Previous Research

Concern about high repetition is not new, nor is it confined to Latin America or Honduras. Holmes (1989) reports a study on repetition carried out in New York City in 1904. By the 1960s it was possible to compile a large number of studies on the causes and consequences of repetition and dropouts in developing countries (Peirne, Kinsey and McGinn, 1972).

The events of the past decade have sharply increased interest in how to improve the internal efficiency of the education system. The choice by some governments to reduce spending on education in response to heavy foreign debt has reduced both access to schooling and overall quality (Reimers, 1991). Improved internal efficiency would release funds now "wasted" on the education of repeaters. For example, if all children completed primary school in 6 instead of 9.9 years, per pupil expenditures per year could be increased by more than 60% with no increase in total funding.

The recognition of the importance of internal efficiency has led to more research on repetition and dropouts. Muelle (1984) has reviewed 95 studies on internal efficiency in basic education. Muñoz and Lavin de Arrive (1987) has reviewed 105 studies carried out since the late 1960s on access, repetition, and dropouts in Latin America. Schiefelbein (1991) adds more recent studies from Latin America. Holmes (1989) reports on 850 studies in the United States and Great Britain. UNESCO (1984) has reviewed studies of dropouts in Asia and the Pacific.

Factors Associated with Repetition

Repetition most often results when a decision is made that a student's academic abilities at the end of the year are not good enough for that student to benefit from the next highest grade. In some cases, the teacher makes the decision that a child should repeat. In other cases, parents may request that the child repeat a grade even though the teacher has promoted the child. In both cases, the assumption is that repeating the grade will help the child learn the knowledge, skills, and attitudes needed to learn effectively in the next grade.[1]

Schiefelbein (1991) points out that in some cases, repetition occurs solely because there is no higher grade for the student to attend. In Honduras, in other parts of Latin America, and in other regions of the world, many schools are incomplete; that is, they do not have all the grades in the primary cycle. If the closest school with the next highest grade is some distance away or is not admitting students, the student may remain in the current school. In these cases, the assumption is that repeating a grade is better than no schooling at all.

Factors Associated with Dropouts

The lack of a higher grade to attend also increases the number of dropouts. Students who cannot complete the cycle because there is no higher grade to attend are counted as dropouts.

But the primary reason given for dropouts is that students (more likely their families) see less value in continuing in school than in pursuing other activities. In some cases, parents withdraw their children from school even when they are performing well, because they perceive the children's contribution to the household economy (through activities in the home or income producing activities in the job market) as large or larger than what they would expect if the children were to continue in school and work at a later time.

In some societies, parents also calculate the probable impact of education on the marriage possibilities for their children (Anderson, 1988). Girls may be taken out of school when they reach a given age (no matter how many grades they have completed) because to continue at a coeducational school reduces their marriage prospects.

1. In some cases, repetition occurs because the student has failed an examination to enter into the next highest grade, or cycle. See Schwille, et al. (1991), for an African example.

Given the right conditions, the disadvantages of multigrade classrooms could be overcome.

In Honduras, which factors should be taken into account to explain dropouts from the 1st grade where they are most common? First, repeated failure lowers parents' estimate of how far children might go in school. Repeated failure raises the cost of each grade of schooling. The economic benefit of children at their age of entry into school (e.g., 6 years of age) is probably small in all societies. As children get older, however, their possible earnings increase. This is more likely the case in rural, agricultural areas, where relatively young boys and girls can contribute to production. It is also the case in many rural areas that most jobs require little education; the return from further schooling is less than in urban areas where persons at all levels of education find employment. Therefore, an additional grade of schooling would, for a rural youth, be less likely to contribute to future earnings than an additional grade of schooling for an urban youth.

Failure In School As A Major Factor

The above analysis indicates that since most dropouts are young, failure in school is the main cause of dropping out rather than economic opportunities outside of school. Students are pushed out, rather than pulled out of school. We would expect, therefore, that most children who pass, stay in school and are not taken out of school by their parents.

When children are failed, the most common policy is to require them to repeat. As noted above, parents and teachers assume that repetition of a grade will provide the student with the knowledge, skills, and attitudes needed for success in higher grades. Is this assumption valid? Grissom and Shepard (1989) examined studies in the United States that followed high school students who had failed and repeated one or more grades. In one study, two-thirds of the dropouts had repeated one or more grades compared to 3% of the graduates. In another study, 50% of the high school dropouts had repeated a grade in school, which was in most cases the 1st grade. In another study, repeating grades in primary school was the single strongest predictor of dropping out of high school.

The question remains whether dropping out can be attributed to having repeated or to having failed—that is, to low achievement in general. If both repetition and dropping out can be explained by poor achievement, both could be reduced by remedial programs. Grissom and Shepard show that even when achievement is taken into account, repetition contributes to dropping out, since the fact of having to repeat a grade lowers self-esteem and alienates students from their peer group (Magendzo and Toledo, 1990).

In Latin America, studies of dropouts focus on the primary cycle, but the conclusions are similar. Bravo and Morales (1983) followed a group of 696 students from their enrollment in 1st grade. They concluded that repeating is the first step on the path to dropping out. Muñoz (1979) states that dropping out is a consequence of "lagging behind" in school. Lembert (1985) and Arancibia and Maltes (1989) show that children perform better in school when mothers have high expectations for them. Repeating a grade lowers mothers' expectations for their children and contributes to eventually dropping out. Teachers also have lower expectations for students who are identified as repeaters (Bonamigo y Pennafirme, 1980); teachers spend more time working with those students for whom they have higher expectations (Muñoz, 1979).

Critics of policies of failure and repetition argue that teachers and parents are not good judges of the future learning ability of the child, especially in the early grades when the rate at which learning occurs varies considerably among children. As a consequence,

> Students are retained in rather arbitrary and inconsistent ways, and those flunked are more likely to be poor, males and minorities...(House, 1989, p. 209).

Repetition does not always have negative effects. Schwille, et al. (1991) describes how students in Burundi, who fail the 7th grade entrance examination the first time, do better on the examination after having repeated the 6th grade, than those children who have not repeated. The gain from repeating may be more practice in French (the language of the examination), more learning of the subjects that the examinations cover, or physical maturation. In any event, this form of repeating does not have the same stigma as repeating the 1st grade.

Automatic Promotion as an Alternative to Repetition

If repeating is not good for students, does it follow that students who fail should be promoted to the next grade? A major argument for this policy, called automatic promotion (sometimes social promotion), is that it increases the number of years low achieving

students spend in school before dropping out, thereby increasing their total learning (UNESCO, 1984). Automatic promotion also clears the backlog of repeaters in 1st and 2nd grade, and so creates space for new students.

Chile has a policy to promote all children, irrespective of grades, up to the 4th grade. Egypt and El Salvador have a policy to promote automatically in 1st, 3rd, and 5th grades. Children who fail in 2nd and 4th grades are supposed to repeat only once and are then promoted or dropped from the system. Since 1987, Colombia has had a policy of automatic promotion for students in grades 1 through 4 for urban schools. (The Colombian primary cycle has 5 grades.) Most rural school students are under a flexible promotion policy which allows students to move to the next grade any time they complete the requirements for the present grade. The Escuela Nueva (Schiefelbein, 1990) uses programmed instructional material to allow students to learn at their own pace.

Flexible promotion differs from automatic promotion in that the former requires that students successfully complete modules or units of instruction. Promotion is therefore not by grade, but by curriculum units. A flexible promotion policy needs to insure the availability of a curriculum divided into units of instruction, strategies of individualized instruction supported by programmed instructional materials, and teachers trained as managers of learning, rather than as sources of knowledge. In principle, there would be no advantage to separating students by grade, nor any disadvantage in combining small groups of students at different levels in the same classroom. Given the right conditions, the disadvantages of multigrade classrooms could be overcome.

The above policies of promotion do not represent practices, because in each country, even according to official statistics, more children repeat each grade than is expected according to the policy.

Under what circumstances might a discrepancy between policy and practice, occur? If a policy of automatic promotion is implemented with no attempt to eliminate the factors associated with school failure, learning problems in the early grades may be passed on and reduce teaching efficiency in the upper grades. Automatic promotion by itself increases the range of different abilities among children, making the teacher's task more difficult. Upper grade teachers are likely to communicate their difficulties to teachers in lower grades who, in support of their colleagues, subvert the policy by seeking ways to repeat students whom the teachers feel have not acquired the level of knowledge and skills required for successful work in the next grade.

Faced with increasing numbers of illiterate primary school graduates, Panama and Puerto Rico reversed a policy of automatic promotion (Muñoz y Lavin de Arrive, 1987). Colombia is currently considering revising or eliminating its policy because of teacher opposition and evidence that the policy is not being followed. Ellwein and Glass (1989) describe the efforts of one U.S. school district to "raise standards" by eliminating automatic promotion in kindergartens and grades 2, 5, and 7. Internal efficiency can look as if it were improving when automatic promotion is instituted, but a real improvement requires attention to the causes of low learning in school.

Factors Associated with Failure in School

The factor most commonly associated with failure in school is the income level, socioeconomic status, or social class of a child's family. Children from poor families are failed more frequently. The relationship between income level and failure is partly a result of poor health and fewer opportunities for learning in poor families. In the upper grades, when a child reaches the age at which children are expected to enter the labor force, poor families also have to choose between keeping their child in school and putting him/her to work to help support the family.

In addition, the relationship between family income and student failure also results from teacher expectations for children from poor families. Muñoz and Lavin de Arrive (1987) summarize research from Latin America as follows:

- Overall, educational factors are more important in determining achievement than is the income level of the family.
- Poor children from stable and supportive families do better in school than poor children from less stable and unsupportive families.
- The nutritional state of a child affects learning, but most school feeding programs have too small an impact to offset the long-term effects of poverty.
- Poor children receive a lower quality of school than do children from wealthier families.

- Within the classroom, teachers spend more instructional time with wealthier children than they do with poor children.

- Factors such as class size and amount of teacher training have little relationship to student achievement.

- The most "effective" teachers are those who have higher expectations for student achievement.

- Teachers are more likely to fail poor children even when their achievement matches that of children from wealthier families.

- There are few studies on specific teacher behaviors that contribute to student achievement.

Programs in Response to Failure

Three kinds of strategies are identified as responses to school failure: preventive programs, compensatory programs, and programs to involve the community in the educational process. Programs to improve the health and nutritional status of poor children can be effective but are expensive given the large proportion of poor children. Compensatory programs work with students who have learning problems; these are effective in reducing failure, especially when the school program and calendar are adapted to the characteristics of the students and their communities. This works best through programs of integrated rural development, nuclear schools, and microplanning (school mapping). More active community involvement in the instructional process, especially at the preschool age, not only stimulates the child's intellectual development but also generates positive relationships between teachers, families, and students that result in greater achievement.

Section II: The Research Design

Conceptual Framework

The following conclusions were drawn from reading previous studies on dropout and repetition. They are stated as a series of propositions, not all of which have been validated through research, and not all of which were tested in this study.

- Whether or not a student repeats the same grade is the result of a decision made by parents, a teacher, or both.

- Both the decision to promote a student, or the decision to have him/her repeat the same grade is based on a belief that the student will continue to learn.

The information that teachers use to decide about a student includes objective knowledge about a student's learning capacity and subjective perceptions.

- The decision that results in a student dropping out is based on a belief that a student cannot continue to learn, or that it is not worthwhile for the student to do so.

- The information that teachers use to decide about a student includes objective knowledge about a student's learning capacity and subjective perceptions.

- The information parents use to decide comes principally from the student's experience in school and sometimes directly from the teacher.

- The parents' judgment about the value or worth of continued study depends on their perception of how many grades the child can be expected to complete, the expected improvement in family or student income and well-being from continued education, and the costs of providing schooling. These costs include both the direct costs that parents incur for books, materials, clothing, transportation, and food; and the opportunity costs of income or work foregone because the child is at school instead of working.

- The teacher is the major source of information that parents have about the number of grades the child can be expected to complete in school.

- The marks teachers give students are interpreted by parents as an indication of the student's learning capacity and the number of grades s/he can be expected to complete. A teacher's decision to make a child repeat is therefore seen by parents as an indication that their child's learning capacity is lower than that of other children.

- The opportunity cost of schooling increases as children grow older, particularly as they approach puberty. A parent may allow a young child, but not an older child, to repeat several times before deciding to remove the child from school.

- Promoting a student who is seen by parents as having a low learning capacity (because of poor marks) lowers the parents' confidence in school quality, and therefore in the worth of continued schooling. Other factors that lower parent confidence in school quality include teacher absenteeism, a poor physical facility, and lack of instructional materials.

Designing the Study

The study was designed and carried out by a team of researchers from the Ministry of Education in Honduras and the Harvard Institute for International Development at Harvard University. Members of the team made initial contact in February 1990.

Research Questions. Based on our reading of prior research we expected to find that actual and perceived failure are the major factors leading to repetition in primary schools in Honduras. The study was designed to test this hypothesis and to identify those factors that contribute to failure that can be affected by Ministry of Education policies.

Sample. Repetition occurs in almost all schools in Honduras, but is more common in rural schools. Most schools in Honduras are rural, as is shown in Table 5. As a result, a decision was made with the Ministry of Education to limit this study to examining repetition and dropouts in rural schools.

Table 5. Enrollments and Repetition Rates For Urban and Rural Schools, Honduras 1988

	Grade					
	1	2	3	4	5	6
Urban						
Enrollment	84,021	67,114	61,197	53,709	46,412	40,355
Repeaters	20.6%	12.3%	10.6%	8.0%	5.8%	2.0%
Rural						
Enrollment	173,972	113,394	86,127	62,331	50,300	39,328
Repeaters	22.6%	13.8%	9.9%	6.3%	4.2%	1.6%

Source: Ministry of Education

The size of the sample was limited for two reasons. First, we believed that it would be important to obtain information not only from students and their teachers, but also from parents. The resources available for the study were not sufficient for a large sample of both groups. Second, the study was not designed to provide an accurate population estimate of rates of repetition and dropouts. This had already been done using official enrollment statistics (Cuadra, 1989).

We did, however, want to assess as wide a range as possible of the factors that affect repetition. We decided, therefore, to randomly select a group of rural schools from those that, according to the Ministry statistics, had high repetition rates, and from those that had low repetition rates. These schools were selected randomly from the 4 (of 21) departments of Honduras that had the highest overall repetition rates. A total of 40 rural schools were selected.

The units of analysis for the study were:

- all students who had been enrolled in the 1st or 3rd grade in 1990;
- the teachers of those students; and
- the parents of approximately half those students.

Instruments. The specific content of the research instruments was decided after interviews with top officials at the Ministry of Education about the factors that contribute most to repetition. (Details of those interviews are presented in the Results section.)

The study instruments included:

- A Spanish test developed as part of another USAID-funded education project. We used this as a general measure of academic ability, rather than as a measure of mastery in the curriculum, because the content of the test is not closely related to the content taught by teachers in the sample.
- A questionnaire to be administered in group form to the students.
- An interview schedule for teachers of the participating students.
- An interview schedule for parents of the students.

Instruments were developed in Spanish and pretested first among primary teachers in the capital, Tegucigalpa. The revised instruments were then field tested with a group of students and teachers in rural schools outside Tegucigalpa.

Field Procedure

Interviewers were recruited and selected from unemployed teachers in the Tegucigalpa area. The total team included 20 persons. The interviewers were trained in Tegucigalpa and then participated in the field test of the instruments. Teams of 4 interviewers and a supervisor (from the Ministry-Harvard team) were sent to 4 areas, each of which included approximately 10 schools.

Data collection took place during March 1991, shortly after the beginning of the school year. Visits to schools were unannounced and took place on all days of the school week. Interviewers explained the purpose of the study to the school director (who was also a teacher in most schools), administered the test and questionnaire to the students, and interviewed the teacher. There were no refusals, and all schools were in session when the interviewers arrived.

The following procedure was used to identify the repeating students:

- School records were consulted to generate a list of all students in the 1st and 3rd grades during the 1990 school year ending in December. Included in this list were 1,854 students. Of these students, 60% were in the 1st grade in 1990, 40% were in the 3rd grade.

- These lists were compared to the lists of students who were registered in the current school in any grade for the 1991 school year. Teachers were questioned about students not found on the 1991 list. Students who were enrolled in a grade higher than that of the year before (e.g., in 2nd or 4th) were identified as promoted. Students enrolled in the same grade in 1991 and 1990 were defined as repeaters.

- We were able to identify the 1991 status of 1,841 of the students on the 1990 list. (The teachers could not provide information about 12 of the students and 1 had died.) About 66% were promoted, and 23% were repeating. Less than 5% were identified as having left school or deserted, and 6% were known to have transferred to another school. These data are presented in Table 6 below.

Table 6. Status of 1990 Students in 1991

	1st Grade		3rd Grade	
	N	%	N	%
Category:				
Promoted	674	61	537	73
Repeating	331	30	88	12
Transferred	55	5	57	7
Deserted	45	4	54	7
TOTAL	1,105		736	

- There were 1,253 students on this list who were present on the day of the study. In other words, 23% of the registered students who had been in the school in the previous year were said by the teacher to be absent on the day of the study.

- We recorded the marks and attendance of all the students from the 1990 list who were registered in the school in 1991.

- Interviews were given to the 64 teachers of the students who had been in the 1st and 3rd grades in 1990.

- All 1,253 students who were present on the day of the study were given a test on their reading ability in Spanish.

- About half (640) of the 1,253 students were selected randomly, and interviews were carried out with 514 mothers and 136 fathers in their homes.

Section III: Results

Perspectives on Causes of Repetition

We interviewed four groups of persons: officials in the Ministry of Education, school directors, teachers, and parents.

Officials. Interviews were carried out with 7 top officials in the Ministry as part of the study design. The interviews were carried out by members of the Ministry of Education-Harvard University research team in the officials' offices.

The officials agreed that reducing repetition was a high priority for the education system of Honduras. There was less agreement, however, on which factors best accounted for the incidence of repetition. We coded their responses into three major categories, according to where the cause of repetition was located. These categories were: family, resources and policies of the system, and behaviors and attitudes of teachers. All but one of the responses given were coded into one or another of these categories. The number of factors mentioned by each person varied from 2 to 5; there were 23 factors mentioned in total. (See Table 7.)

Poor teaching strategies was the most frequently coded factor. At the same time, characteristics of the education system itself were named as frequently as teachers as a cause of repetition. One official attributed repetition to the low learning capacity of students.

School Directors. We interviewed 40 directors and 2 sub-directors. These people worked in the rural schools in the sample of this study and are described in a following section. Their responses to questions about the causes of repetition were also coded. The directors did not mention the system as a source of the problem, but instead referred to student characteristics. Table 8 presents the percentage distribution of the 42 directors and sub-directors by their responses.

The economic position of the family clearly is, for the school directors, the most important factor affecting repetition. The directors drew a direct connection between the low income of the family and the parents' use of the child to carry out chores around the home or to work for pay outside the home. Student absenteeism was attributed to parental demands on children for work. Unlike the Ministry officials, the school directors (many of whom also teach) infrequently assigned responsibility for repetition to teachers.

Teachers. The 64 teachers in the sample had, during 1990, taught 1st or 3rd grades, or both. In their interviews, they offered two kinds of explanations for repetition, as described in Table 9.

Explanations given by teachers are similar to those given by school directors, except that few teachers made direct reference to poverty.

Parents. The mothers and fathers who were interviewed offered the following reasons for repetition (Table 10). Not all parents provided answers—the percentages refer to the proportion of the 640 parents who gave that answer.

Characteristics of the education system itself were named as frequently as teachers as a cause of repetition.

From the perspective of the conceptual framework, only parents identified a direct cause of repetition—failure to learn what is required. The other explanations given by parents, and by the other groups, are indirect causes of repetition. For example, poor student attendance can lead to failure to learn, which leads to the decision to repeat the year. Teacher absenteeism can reduce student learning.

In all four groups, however, there is little description of the reasons why repetition takes place, the factors that lead up to poor learning, the manner in which absenteeism affects learning and therefore results in repetition, or how working leads to low learning and therefore to repetition. These questions were addressed in a second part of the research.

Factors That Contribute to Repetition

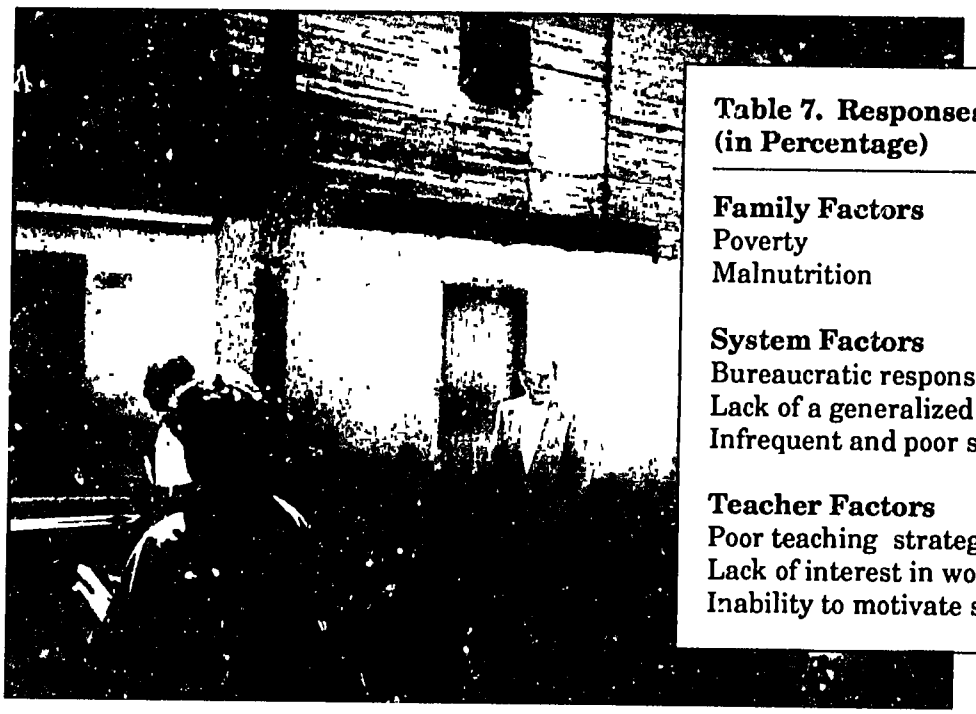


Table 7. Responses of Ministry Officials (in Percentage)

Family Factors	
Poverty	43%
Malnutrition	29%
System Factors	
Bureaucratic responsibilities of teachers	43%
Lack of a generalized evaluation system	29%
Infrequent and poor supervision of teachers	29%
Teacher Factors	
Poor teaching strategies	71%
Lack of interest in work	29%
Inability to motivate students	29%

Table 8. Responses of Rural School Directors (In Percentage)

Family Factors	
Poverty	98%
Use of children in work	80%
Parents' lack of interest in schooling	32%
Student Factors	
Student absenteeism	43%
Low ability to learn	36%
Teacher Factors	
Lack of interest in work	11%

Table 9. Responses of Rural School Teachers (In Percentage)

Family Factors	
Parents' low interest in schooling	53%
Use of children in work	34%
Malnutrition	9%
Poverty	6%
Student Factors	
Student absenteeism	45%
Low ability to learn	21%
Teacher Factors	
Lack of interest in their work	5%

Table 10. Responses of Parents (In Percentages)

Student Factors	
Students do not learn what they should have learned	55%
Student absenteeism	16%
Students' lack of interest in school	5%
Lack of maturity ("very young")	3%
Teacher Factors	
Teacher absenteeism	3%

Teacher Evaluation, Student Learning, and Promotion or Repetition

As noted in earlier sections, repetition of primary grade students results from a decision by the teacher, the parents (and older students), or both the teacher and the parents. The decision of the teacher is based primarily, but not solely, on the level of student learning. This can be seen by comparing the marks assigned with decisions about promotion and repetition.

At the end of the school year teachers give students marks (or grades) from 0 to 100 for each academic subject. By regulation, students with average marks below 60 should not be promoted to the next grade. The teachers also assign marks on the punctuality, spirit of work, and conduct ("morality") of the student. There is little variation across children in these latter marks, and they are not included in the academic average.

Students who are promoted have higher average academic marks than those who repeat. (They also have higher marks on social behavior, but when academic marks are taken into account, the relationship with being promoted or repeating disappears.) As shown in Table 11, the average mark (across the four basic subjects of Spanish, mathematics, science, and social studies) is higher for promoted students than for those repeating (the difference is statistically reliable).

Table 11. Average Marks in Four Major Subjects by Category of Student

	Average of Marks	Standard Deviation	Number of Students
Category:			
Promoted	78.6	8.8	1,153
Repeating	64.1	7.4	350
Transferred	71.9	9.7	63
Deserted	72.0	10.3	59

Spanish marks appear to be the most important in determining whether a student is promoted; the difference in average marks for the two groups is higher for Spanish than for the other subjects. Table 12 shows that promoted students had average marks in Spanish that were 16 points higher than repeating students. The difference in average marks, was 14 points for mathematics, 8 for science, and 7 for social studies.

Table 12. Differences in Marks Between Promoted and Repeating Students (Average Marks in Each Subject)

	Average of Marks	Standard Deviation
SUBJECT Category:		
SPANISH		
Promoted	78.2	9.8
Repeating	62.0	9.3
MATHEMATICS		
Promoted	77.9	9.7
Repeating	63.7	8.4
SCIENCE		
Promoted	79.5	8.6
Repeating	71.4	6.7
SOCIAL STUDIES		
Promoted	79.4	8.5
Repeating	72.2	6.4

Only when marks are very low do they have a decisive effect on whether a student is promoted or repeats. None of the 9 students with an average of less than 50 were promoted. Of the 107 students whose average was between 50 and 60, 8 were promoted.

The average mark for repeating students is above the minimum for being promoted. Of the repeating students, 72% had average final marks above 60. While most students with average marks above 60 are promoted, about 17% repeat.

There is considerable variation from school to school in applying the rule that students with average grades above 60 should be promoted. In school 2 in our sample, all the students had average scores above 60, but 35% were repeating the following year. In school 9, where all students had marks above 60, no students were repeating.

Variations from school to school are reflected in the comments teachers made to the question, "How do you decide which students to pass and which to fail?". Teachers made the following kinds of statements:

> The students I fail are those who don't attend classes.

They are graded on participation and attendance. The most important is to be able to read and write. They have to know how to read and write.

According to the performance that each child attains during the year and according to punctuality and responsibility.

It's based on performance and the control over the evaluation system. The government demands quantity from us so we have to pass students with low performance to the next grade.

I decide by means of the tests I give them, and also by their behavior in class...also I review their tests in Spanish...if they can't read and write they can't pass the grade.

By means of oral and written tests, participation in class, how they treat their classmates, respect.

The fact that students with passing marks are made to repeat indicates that teachers and parents do not rely solely on marks for deciding a student's future. The following is a review of other factors which could influence promotion and repetition.

Student Characteristics Associated with Promotion and Repetition

Gender and Age

There is no difference between promoted and repeating students in terms of their gender. Nor is gender associated with marks.

Students who repeat are slightly younger (0.3 years) than those who are promoted, even though there is no difference in the ages at which the two groups entered 1st grade. On average, both groups entered 1st grade at 6.9 years.

Physical Condition and Nutrition

Persons who point to poverty as a cause of repetition often then suggest that it first affects the health of the child and, through poor health, reduces learning ability. We attempted to assess current and long-term effects of nutrition by measuring the height and weight of the students. There is no difference in the average height and weight of promoted and repeating students. We constructed an index of height as a function of gender and age. There is no difference between promoted and repeating students in terms of height adjusted for age and gender, nor is there a relationship between our height index and average final marks.

We asked students whether they had breakfast the morning of the study, as an indication of whether they ordinarily have breakfast. There is no relationship between answers to this question and whether students are promoted or repeating.

Parents' Education

As shown in Table 13 below, promoted students are more likely than repeating students to have a mother or father who reads.

Table 13. Do the Students' Parents Know How to Read? (Number and Percentage of 'Yes' Answers by Category of Student)

	Mother	Father
Category:		
Promoted	670	607
	71.5%	64.7%
Repeating	184	187
	58.0%	59.0%

The average number of years of schooling that both parents completed is 4.2 for promoted students, and 3.2 for repeating students.

There are no differences between promoted and repeating students in terms of which parents live at home with the student, nor in terms of who has major responsibility for taking care of the student.

Economic Level of the Family

We used four measures for the economic level of the family: quality of the construction materials of the student's home, size of the home by number of rooms, furnishings of the home, and family income. There is a relationship between each of these measures and the status of the student.

- Promoted students live in houses built with brick, cement, or wood more frequently than repeating students (23% vs. 15%) who are more likely to live in houses of mud construction (44% vs. 31%).

Teachers more often state that promoted students are clean, have clothes in good repair, and are wearing shoes.

- The houses of promoted students have more rooms (3.1 vs. 2.7).

- We asked students which of the following were found in their home: radio, television, books, electricity, latrine, and running water. We felt the first three items are indicators of a family's contact with the outside world, and possession of each item is an indicator of a family's wealth and standard of living. Promoted students had more possessions than repeating students. For example, 12% of the promoted students had all 6, compared to 5% of the repeating.

Because these are rural families, we also asked about their possession of animals: chickens, goats, and cows. There is no difference between the two groups in the number or possession of animals. Raising animals makes no discernible difference in the standard of living of rural families.

- We asked the 640 mothers and fathers about the total income of the household. The average income for the families of repeating children is 261 Lempiras a month, compared to 279 Lempiras for families of promoted students.

This difference is not large, but when we took into account the number of persons in the household, the difference becomes clear. Families of promoted students have 1 person less, on average, than families of repeating students. This may explain why repeaters report fewer possessions in their households, although their total family income is almost the same. Another factor that may contribute to the difference in possessions is the fact that 43% of the mothers of promoted students work for money outside the home, compared to 34% of the mothers of repeating students. Other studies have suggested that women are likely to use some of the income they contribute to the family to acquire possessions that raise the cultural level and health of the family.

Family Expenditures on Education

The families of promoted students spend an average of 113.2 Lempiras per year on education. The expenditures of the repeaters' families are 84.4 Lempiras per year. Although proportionately more of the children in the families of promoted students go to school, their expenditure per child on education is significantly higher because their families have fewer children.

Purchase of school uniforms accounts for the major difference in expenditures between the two groups. Promoted students are more likely to have school uniforms and newer uniforms than repeating students. There are no significant differences between the two groups in expenditures for instructional materials, contributions to the school, transport, school lotteries, and other categories.

Physical Appearance of the Student

We asked the interviewers to rate the physical appearance of the students because we expected to find a relationship between physical appearance and success in school. Table 14 presents the results of questions about cleanliness, clothing, and shoes. For each item there are significant differences between the two groups on the ratings given by the interviewers.

Table 14. Rating by Interviewers of the Physical Appearance of a Student

	Clean	Well-dressed	Wearing Shoes
	% Yes	%Yes	%Yes
Category:			
Promoted	84.1	86.6	66.8
Repeating	67.6	71.8	48.2
Cases	999	1,033	777

Interviewers more often state that promoted students are clean, have clothes in good repair, and are wearing shoes. There is no relationship between a teacher's evaluation of the racial characteristics of a student and the student's category (promoted or repeating).

We divided families by economic level using the indicators described above and on page 19. We then looked at the relationship between the student's appearance and the category of the student. There are no differences between promoted and repeating students in terms of physical appearance within each economic level. We interpret this to mean that physical appearance is determined by the economic level of the family. There is no association between racial characteristics and economic level.

Attendance at a Preschool Program

There are several kinds of private, informal schools that offer instruction to children before they reach the age for primary school. These are often called kinders in Honduras although they seldom have teachers or materials that are especially designed for preschool instruction. They may, however, provide some initial instruction in the alphabet and numbers that help children when they reach primary school. Alternatively, they may prepare children for the social discipline of the school.[2]

Children who are too young to enroll in primary school can have another preschool experience, attending primary school as listeners. This experience is most common in rural areas where older children take their younger brothers and sisters to school to relieve parents of their care.

We asked the students if they had attended kindergarten, or if they had been a listener before they enrolled in the 1st grade. About 46% of the 1st and 3rd grade students said they had some preschool experience.

The effect of this experience is observable in the 1st grade, where 50% of the promoted students and 40% of the repeating students say they had attended kinder. The difference between the two groups is larger in the 3rd grade, where 49% of the promoted students, but only 29% of the repeating students, report attendance at kinder.

Attendance at kinder is related to the economic level of the family. Students from families with more possessions (water, electricity, radio, etc.) report having attended kinder more frequently (63%) than children with fewer possessions (37%). Among the students with more possessions, there is no difference in kinder attendance for promoted and repeating students. The same is true for the group at the lower economic level. We interpret this to mean that attendance at kinder by itself has no effect on being a promoted or repeating student.

School Absenteeism

We asked children whether they missed school during the year. Both promoted and repeating students miss some school because of illness, chores at home, bad weather, and other factors. But repeating students are less likely to return to school again before the end of the school year. About 8% of the promoted students said they stopped coming to school even though they were still promoted, while 34% of the repeating students said they had stopped coming.

Repeating students, more than promoted students, justify their absences in terms of work, problems with other children, and parents who don't want them to attend school. The reasons offered by the promoted students more often refer to household chores and sickness.

When we interviewed the parents, we asked them about their children's absences. About 65% of the parents reported some days missed because of illness. The parents of the promoted children, on average, reported 14 school days missed during the year because of sickness, while the parents of the repeating students reported 20 days missed because of sickness. The total number of days missed for other reasons was 13 for promoting students and 19 for repeating students. In other words, the average promoted student missed a total of 27 days during the school year, and the average repeating student missed a total of 39.

There are 180 official school days in Honduras. On average, parents reported their children missed about 16% of the days. This number corresponds roughly with our count of absences on the days of the study.

Closeness to School

Most of the students reported that the school they attend is close to their home. This question may not have been effective. The repeaters told us it takes them, on average, 24.8 minutes to arrive at school, while the promoted students reported it takes them, on average, 18.0 minutes. We interpret this difference, which is statistically significant, to mean that repeating students live farther from the school.

Teacher Characteristics Associated with Promotion and Repetition

The information described in this section comes from our interviews with teachers and the questionnaire given to students.

Academic Expectations for Students

Teachers were given a list of all the 1st (and/or 3rd) grade students they had taught in the previous

2. See Reimers (1992) and Kotliarenco (1986) for a review of the contribution preschool makes to a child's success in primary school in Latin America. See Raudenbush et al. (1991) for a study that shows how preschool experience reduces academic failures in early grades in Thailand. The effect is strongest for poor children.

year. They were asked to comment on the probability that a student would pass the year, and their expectations about how far the student would go in school. Expectations ranged from completion of the current grade to completion of high school and attendance at university, but teachers expected very few students to go beyond 6th grade (Table 15). About 78% of the 1st grade and 88% of the 3rd grade students were expected to reach the 6th grade. The average number of years that 1st grade teachers expected promoted students to complete was 6 years, compared to 5 years for repeating students. In the 3rd grade, promoted students were expected on average to reach the 8th grade, and repeating students the 6th grade. In the 1st grade, promoted and repeating students have an equal chance of their teacher expecting that they will pass the year. In the 3rd grade, on the other hand, 92% of promoted students are judged capable of passing the year, while only 73% of the repeating students are judged capable of passing.

Table 15. Expectations of Teachers About the Highest Grade A Student Will Complete

		1st Grade		3rd Grade
Grade*	Cases**	Cumulative %	Cases	Cumulative %
1	6	.9		
2	21	4.0		
3	57	12.6	20	4.1
4	50	20.0	12	6.5
5	11	21.7	29	12.4
6	463	90.9	308	75.0
9	9	92.2	3	75.6
12	46	99.1	107	97.4
15	4	99.7	12	99.8
16	2	100.0	1	100.0

*Grade refers to the grade a teacher expects a student to complete.
**Cases refers to the total number of children for whom a teacher gave answers.

It is possible that a teacher's judgement about a student is made after a student has succeeded or failed. On the other hand, it is also possible that the teacher's expectations contribute to the student's success or failure. There is a significant, although not large, correlation (r=.34) between the family's economic level (number of possessions) and teacher's expectations. This relationship is stronger than the relationship between a family's economic level and final marks (r=.12), or between a family's economic level and a student's category of repeating or promoted (equivalent r=.15). We interpret this finding to mean that a teacher's evaluation of a student's ability is influenced, in part, by knowledge of the student's economic level (possibly through physical appearance). Further, we think that evaluation of ability is one of the factors that contributes to the decision to promote in cases where marks are borderline (for example, in the 60 to 70 range).

In other words, teachers seem to react to the cultural capital that students bring to the classroom. Students raised in homes with more economic means and better educated parents accumulate more of this capital. They learn language and behaviors which influence the opinion of the teacher about their ability.

The impact of teachers' opinion about student ability is reflected in their behavior toward the students. The students for whom teachers have higher expectations are more likely to report in the lst grade that:

- —the teacher explained when the student did not understand, and
- —the teacher assigned more pages of homework.

In the 3rd grade, the students for whom teachers had higher expectations were less likely to report that the teacher gave them severe punishments. Of the students whom the teachers said would not pass the year, 79% reported that their teacher hit them, compared to 56% of students whose teachers said they would pass. Students for whom teachers had higher expectations also reported receiving more pages of homework, and having more homework corrected by teachers.

Student Rating of Their Teacher's Behavior in the Classroom

We asked students about several kinds of teacher behavior. One set of questions was about instructional practices, such as use of the blackboard, group work, etc. A second question was about how teachers responded when students made mistakes or asked questions of clarification. A third was about how punishment was applied. The following results reflect what individual students say their teachers do.

Instructional Practices. Table 16 reports the types of teacher practices about which we asked students and the frequency with which students reported their use.

Table 16. Use of Instructional Practice by Teachers According to Promoted and Repeating Students (Percentage of Students Who Say Their Teacher Uses the Practice)

	Category: Promoted	Repeating
Instructional Practices:		
Writes on the blackboard	76.4%	59.3%
Assigns work in notebook	75.8	59.5
Reads out loud to students	71.1	50.3
Dictates writing	65.8	43.2
Asks students to respond in chorus	56.3	39.7
Organizes students into work groups	55.4	34.5
Appoints a student to monitor class conduct	41.8	27.9
Appoints a student to teach	38.7	27.2

All the differences between promoted and repeating students are statistically significant. Promoted students report an average of 4.8 practices used by their teachers, while repeating students report an average of 3.4 practices. Even when the same teacher is being described, repeating students report fewer practices than promoted students. The higher the marks of the student, the more practices s/he is likely to report.

We expected to find that some practices would be reported more often by repeating than promoted students. We thought that some practices (e.g., having students respond in chorus) would be less effective than others and therefore would be associated with lower levels of learning. Instead we found that students describe their teachers in terms of a range of activities and that promoted students see their teachers as using a greater variety of practices.

Teacher Responses. Students were asked what the teacher did when students did not understand some aspect of the lesson. The students' descriptions are shown in Table 17.

Warning the student (aconsejar) is the most common response reported by students, while explaining the lesson is the least common response. Once again, there are significant differences between promoted and repeating students in what they report about the teacher's behavior. The promoted students report more practices, 2.7, on average, than repeating students (1.8).

Table 17. Teacher Practices When Students Do Not Understand a Lesson (Percentage of Students Who Say Their Teacher Practices the Activity)

	Category: Promoted	Repeating
Activity:		
Warns me	61.3%	45.5%
Sends me to blackboard	56.7	38.2
Criticizes me	54.4	34.9
Punishes me	51.1	34.31
Explains	42.5	28.3

Punishment. About 62% of the students said that their teacher punishes them. Although there is no relationship between reporting punishment, marks, and being promoted or repeating, there is, however, a relationship between type of punishment and student academic success. The results are presented in Table 18.

Table 18. Frequency of Type of Punishment Reported by Promoted and Repeating Students (Percentage of Students Who Say Their Teacher Practices This Activity)

	Category: Promoted	Repeating
Activity:		
Hitting	61.4%	74.3%
"Duck Squat"	38.7	42.3
"Bawling out"	17.0	25.7
Depriving of recess	7.2	7.1

In total, 827 students reported some type of punishment. "Hitting" refers to using the hand. The "duck squat" requires a student to crouch down with his/her hands between his/her thighs and calves. After a while, this is extremely uncomfortable.

Among children who are punished, the differences between promoted and repeating students are significant for "Hitting", and for "Bawling out." In other words, repeating students are more likely than promoted students to report that their teachers hit them and bawl them out.

Assignment of Homework

Almost all (98%) of the students said that teachers give them homework assignments; 58% said they were given assignments every day. Homework is, therefore, given by all teachers. But promoted and repeating students report differences in homework.

Repeating students are more likely (69% compared to 52% promoted students) to state they are given more homework in Spanish than in other subjects. Promoted students more frequently (40% vs. 27%) report more homework in mathematics. Although there is no relationship between the student's marks and the report of frequency of homework in any one subject, teachers do, however, appear to give more homework in Spanish to those students for whom they have lower expectations, and more homework in mathematics to those for whom they have higher expectations. The teachers of students who report more homework in Spanish expect these students to complete, on average, 6.2 grades of school; the teachers of students who report more homework in mathematics expect students to complete, on average, 7.1 grades of school.

Repeating students more frequently (19% compared to 10% of promoted students) say they have written assignments in their notebooks. On the other hand, of all the students who say they have been given written assignments, 84% of the promoted and 74% of the repeating students claim their assignments were corrected by their teacher. Promoted students also more frequently (51% to 43%) say that someone in their family helps them with the homework.

Factors Associated with Teachers That Are Also Associated with Promotion and Repetition

The previous information described differences between repeating and promoted students. In this section, we look at differences between teachers according to the proportion of students they promote. You will recall that half of the 40 schools in the sample had high rates of repetition (greater than 40% according to official statistics) while the other 20 had low rates (less than 15%). Of the 64 teachers in the sample, 10 had no repeating students, while one teacher made all his students repeat. We divided the teachers into one group of teachers who tended to promote students (with an average repetition rate of 8.3%) and one group of teachers who tended to make students repeat (with an average repetition rate of 38.7%). In the next section these groups are referred to as Promoting Teachers and Repeating Teachers, respectively. Each group had 34 teachers. The following section describes the Personal Characteristics of each group, aspects of their Classroom Situation, and their reports of Instructional Practices.

Personal Characteristics

Teaching Experience. There is no difference between the number of years Promoting and Repeating teachers have been teaching.

Preferred Subject Matter. Repeating teachers are more likely to prefer Spanish as a subject to be taught, and to like mathematics least. Promoting teachers are less extreme in their preferences; more of them express a liking for mathematics. This finding is related to the finding reported in the section called "Assignment of Homework". Promoting teachers are more likely to assign homework in mathematics, and to like teaching that subject than Repeating teachers.

Attitude Toward Repeating. Teachers were almost unanimous in their belief that repeating is good for students since it allows them to learn more and better.

Relationships with the Community. Promoting teachers are more likely than Repeating teachers to live in the community in which the school is located, either during the school year or permanently. The two groups of teachers do not differ in their report of the contribution that parents make to the maintenance of the school.

Classroom Situation

Number of Grades. The 64 teachers in the sample teach in 80 classrooms. Some of the teachers handle several different classrooms simultaneously. In addition, a number of teachers teach more than one grade in the same classroom. Only 38% of the 1st grade teachers in this study teach only one grade; 33% teach two grades, and the rest teach three or more grades. In the 3rd grade the situation is more difficult: 21% teach only 3rd grade; 30% teach two grades, and 49% teach three or more grades.

In the 1st grade, but not in the 3rd grade, Promoting teachers are more likely than Repeating teachers to be responsible for only one grade. Table 19 shows the proportion of students who repeat, according to the number of grades in the classroom.

Controlling for the economic level of the students in a class does not affect this relationship between repeating grades and the number of grades in the

Table 19. Percentage of Repeating Students From Single Grade and Multigrade Classrooms

	% Repeat	Classes
1st Grade:		
1st only	24.7	14
1st and other grades	37.4	25
3rd Grade:		
3rd only	12.9	9
3rd and others grades	14.4	31

classroom. In other words, when 1st grade teachers also teach another grade in the same classroom, more 1st grade students repeat regardless of their family's economic level.

Teacher Attendance. We asked parents about the number of days that teachers missed during the year. On average, according to the parents, teachers miss 15 days during the academic year. Teachers who miss more days are less likely to live in the community, and to be Repeating, rather than Promoting, teachers.

Class Size. Promoting teachers and Repeating teachers tend to have the same number of students in their classes. They have the same number of 1st grade students, but Promoting teachers have more 3rd grade students.

Age Range of Students. There are no differences between Promoting and Repeating teachers in the range of ages of their students.

Other Activities of Teachers. Only 14% of the teachers report receiving some other income besides their salary as teachers. Among this small group, the Repeating teachers report 4.5 times more additional income than do the Promoting teachers.

Instructional Practices

Use of Time. We asked teachers how much time they spend each day on instruction in each of the 4 major subjects (Spanish, mathematics, science, social studies). Promoting teachers spend more time on the major subjects than Repeating teachers.

In the 1st grade, Promoting teachers spend almost 2 hours more per week on mathematics than do Repeating teachers. There are no differences in the amount of time teachers say they spend on the other subjects.

In the 3rd grade, Promoting teachers say they spend more time on all 4 subjects: 1.3 hours per week more on science (4.7 hours compared to 3.4 hours), 1 hour more on social studies and mathematics, and a .5 hour more on Spanish.

Promoting teachers report fewer students arriving late to class: 16% to 21.9%. (This is also related to the distance that students live from the school.)

Schools in Honduras vary in the hour at which they start and end the school day. Most rural schools have one session in the morning and another in the afternoon; students are expected to attend both sessions. Schools vary in the number of hours in their school day. About 5% of the parents reported that the school day has less than 5 hours, and 7% said that the school day is 8 hours or longer. Teachers who teach only one grade have a longer school day (6.6 hours on average) than teachers who teach two or more grades (5.8 hours).

In sum, Promoting teachers spend more time on the major subjects principally because they spend more time in the school than Repeating teachers.

Homework. There is no overall difference in the amount of homework assigned by Promoting and Repeating teachers. In the 1st grade, Promoting teachers assign more homework in science and in social studies than Repeating teachers.

Availability of Instructional Materials. There is no difference between the groups of teachers in availability of instructional materials for students, such as pencils and notebooks. Most teachers (92%) received at least one textbook from the government, and 34% received all of them. The Ministry had not completed distribution of the 3rd grade textbook at the time of the study. Textbook availability, however, is not associated with the number of repeaters in a class.

Most of the teachers report little use of other kinds of instructional materials (workbooks, notebooks, even the blackboard). In fact, most teachers do not have the option to use other instructional materials because they are not available. We found, however, that Promoting teachers were more likely to say that they had chalk, than were Repeating teachers.

Planning of Classes. There is no difference between the groups of teachers in their planning of lessons or familiarity with the curriculum.

Classroom Management. Repeating teachers are more likely to "bawl students out" and to use students as classroom monitors. Promoting teachers, on the other hand, are more likely to ask students to teach the class.

Summary of the First Stage of Analysis

The critical problem facing rural schools is repetition, not dropouts. Dropping out is often a consequence of repeating. Most students who drop out have repeated more than once. For most students the experience of repeating a grade does not resolve whatever factors led to repeating in the first place.

The most important determinant of repeating is failure to achieve the level of learning that teachers and parents consider necessary for the next grade. The low grades that teachers give students are often a signal to parents that their child has not learned enough.

At the same time, the criteria for promotion or repetition are not fixed. Teachers' judgements vary in the marks they give and in the strictness with which they apply the Ministry's rule about passing marks.

Learning in Spanish and in mathematics is more important in determining whether a student is promoted or repeats than learning in science or social studies. Reading and writing is the major factor in the 1st grade, but Spanish is more important than mathematics even in the 3rd grade.

Failure to learn is linked with the opportunity to learn. The opportunity to learn is a function of a student's time in the classroom and a teacher's time on a subject. The time students spend in the classroom varies as a result of both student and teacher absenteeism, but student absenteeism is the more important determinant of learning levels. Some teachers make students who have poor attendance records repeat even though their marks are above the 60% minimum. This probably reflects the teachers' recognition that the level of marks is arbitrary.

Teachers who fail a larger proportion of students spend more time on Spanish than mathematics. These same teachers are more likely to dislike teaching mathematics.

Teachers who have lower expectations of their students, spend relatively more time teaching Spanish than mathematics. Teachers who promote more students spend more time teaching than in other class activities. The more pages of the textbook that the student covers during the year, the greater the likelihood that s/he will be promoted.

A textbook's impact on learning increases when the teacher has instructional materials such as chalk and writing paper.

Time spent on teaching is related to the number of grades the teacher handles in the classroom. The more grades a teacher has to handle, the greater the number of students who repeat 1st and 3rd grade. The absence of instructional materials has more effect in multigrade classrooms.

The economic and educational level of the family affects the likelihood that a student will be promoted or repeat, but this effect is indirect. The family's economic level appears to affect the student's appearance and attendance, which in turn influences the teacher's expectations for the student's academic performance.

Children who have had some kind of preschool experience do better in school and are less likely to repeat or drop out.

Multivariate Analysis

The results reported above were, for the most part, based on the examination of the effects of individual factors on the decision that a child should be promoted or repeat. We have described, however, a linked chain of factors that might be represented roughly as in Figure 1.

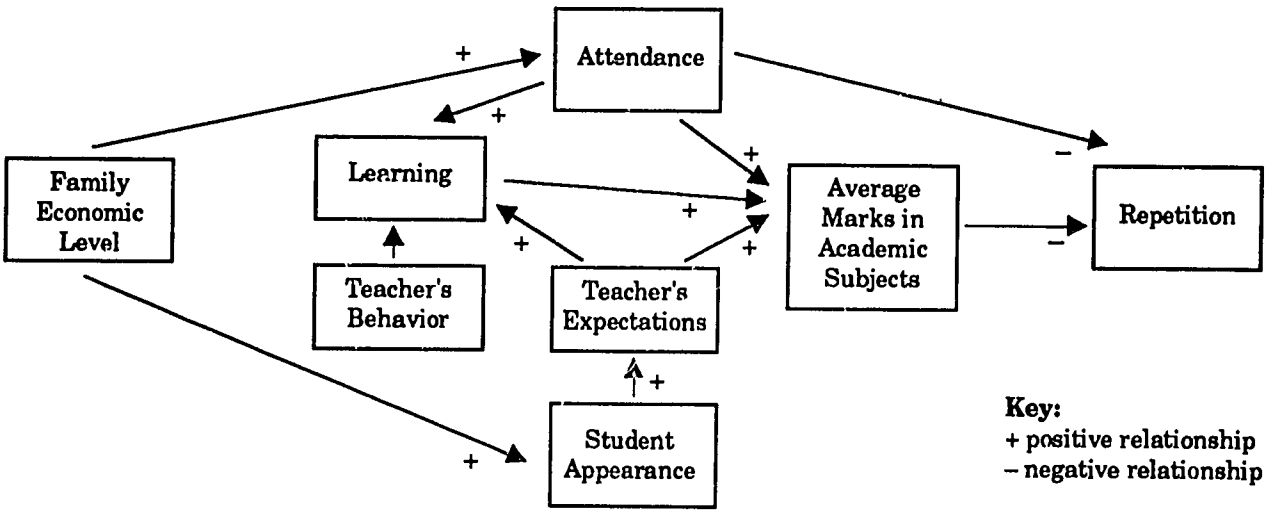
Prior to presenting the conclusions above and in the Executive Summary, we carried out several multivariate analyses. Our objective was primarily to reassure ourselves that the relationships were in the sequence described. For example, we wanted to make sure that the observed relationship of family education and economic level to school success (promotion or repetition) is not direct, but is instead mediated through other variables. We also wanted to emphasize, where possible, the importance of factors like teacher expectations that can be affected by Ministry actions.

Accordingly, we developed continuous and "dummy" variables that would permit us to use multiple regression analysis to construct a path analysis. We conducted these analyses at the level of individual students, grade by grade, and for teachers.[3] The results were as follows:

We can explain about 48% of the variance in the bipolar variable of promoted/repeating for 1st grade and 26% of the variance for 3rd grade.[4] The pattern of relationships of the independent variables is the same for both grades. By far the most important

3. We also used multilevel analysis techniques of the Hierarchical Linear Modelling program. Given the small numbers of students in classes, however, we were unable to generate stable equations beyond two predictors The results matched those reported above.
4. An alternative approach, not available to us at the time of analysis, would have been to use probit or logit techniques, which are designed for dichotomous dependent variables.

Figure 1. Model for Determinants of Repetition



factor (for 1st grade, standardized beta=.56) is the average marks the student received in the previous year. Other independent contributors are the score on the Spanish test (which we take as a measure of general ability in Spanish; beta=.17), the proportion of days attended school (beta=.07), and appearance as rated by the interviewer (beta=.07).

Average marks are best predicted (R^2=.49 for 1st grade, .33 for 3rd) by including the average ratings the teacher gives on punctuality, morality, order, spirit of work, and sociability (beta for 1st grade=.40). These ratings do not enter into the prediction of promotion/repetition, however. Average marks are also accounted for by Spanish ability (beta=.34), the Teacher's Expectations as to how far the child will go in school (beta=.14) and attendance (beta=.09).

In an attempt to assess whether Teacher's Expectations are a consequence of, or a contributor to, marks, we first regressed marks on Expectations, and then Expectations on Marks. In each case, we included an index of the number of possessions in the student's home a a measure of Family's Economic Level, and Appearance. We can account for more of the variance in Expectations than in Marks (R^2=.22 vs. .09 respectively, for 1st grade). Family Economic Level is a more powerful predictor (beta=.35, 1st grade) of Expectations than are Marks, while Expectations are a more powerful predictor of Marks. We interpret this to mean that Family Economic Level influences how teachers think about their students, which in turn influences the marks they assign to them.

Attendance at some kind of preschool is correlated with Marks, but also with Family Economic Level. When we control on the latter, the correlation between preschool and Marks diminishes to almost zero.

None of the questions that we asked students about their teachers' behavior were entered into the equations predicting Promotion/Repetition or Average Marks, when Teacher Expectations were included. In other words, although there are significant bi-variate relationships between students' rating of teacher behavior, and Marks and Repetition, these appear to be the result of their relationship with Teacher Expectations. Teachers react differently to students according to how well they expect them to do in school.[5]

5. Although the multivariate analyses confirm this general explanation of promotion and repetition, they fail to provide specific confirmation for a number of the findings reported above. This lack of confirmation occurs, we believe, because the stringent requirements for regression analysis could not be met with the kind of study that was carried out.

The requirements were not met because several trade-off decisions were made. To meet the requirements of reliability for multiple regression would have required either reducing the number of variables included in the study to a small number (in order to permit enough time to measure them well), or extending the time of the study to permit several rounds of pilot tests of the instruments to insure they would generate reliable information and to include a larger sample. Either of these options would have reduced the impact of the study on the policy discussion about repetition in Honduras.

Section IV: Efforts to Increase the Policy Utility of the Research

The design of this research included 6 steps taken to increase the likelihood that results would have some impact on the policy and practice of public primary schools in Honduras. These steps were:

- **Efforts to maximize the participation of high level officials and teachers when identifying critical variables for research.**

- **Active participation of researchers from the Ministry of Education in all aspects of the research.**

The participation of Ministry researchers was essential to good design and successful implementation.

- **Construction of variables that reflected actions that could be taken by the Ministry of Education or by teachers in classrooms.**

- **Design of a field procedure that could be carried out in a relatively short period of time.**

- **Preparation of a draft report of results before the end of the first semester of the current school year, and dissemination among Ministry officials.**

- **Presentation of the re-drafted report in several versions, constructed for different audiences.**

- **Participation of Officials and Teachers.** Formal interviews and informal discussions with Ministry officials and various teachers were helpful in the identification of those questions about repetition and dropouts most salient in Honduras. The meetings also helped to sensitize officials to the issue of repetition. This is a mythic topic—the problem looms large in many education systems. In the absence of objective research and accurate statistics, opinions about magnitude and causality of repetition have crystallized. We sought to "open up" this issue by introducing, as hypotheses, alternative explanations for the phenomenon. Our contacts with officials also served to insure that this study enjoyed official approval, a fact that made its speedy execution possible.

- **The participation of Ministry researchers was essential to good design and successful implementation.** Participation of Honduran colleagues meant that this study was tailor-made to cover the Ministry's issues, rather than a "one size fits all" design that might resolve general academic issues but not respond to national concerns. We engaged in a mutual exchange of training in special techniques and inside knowledge. The Honduran researchers had been primary classroom teachers; the Harvard researchers brought their experience from similar studies in other countries.

There are costs to this kind of collaborating, and to involving Ministry officials in the design of the study. Each group began with a different perspective; time was required to work out a shared view of the objectives for the study. Fitting this study to national interests meant that some issues drawn from other countries were given secondary attention or ignored. The Honduran researchers had strong skills in qualitative analysis but lacked familiarity with statistical packages that run on microcomputers. The time limit for delivery of final results meant that analysis had to be less sophisticated than is common for academic research.

• **The participation of the Honduran researchers was essential in identifying the factors that could be affected by Ministry actions.**

• **We relied on intensive field procedures.** All data were obtained within a two-week period. This required long days of data gathering and long nights reviewing the day's experience. The study provides a demonstration of how fieldwork can be done quickly and effectively, given proper logistical support and sufficient staff.

• **Our analysis was carried out at the same rapid pace as our fieldwork.** After a general review of the overall conception of the study, the various data sets (students, teachers, parents, supervisors) were divided up among staff. Analysis of data sets proceeded simultaneously with each analyst attempting to find as many significant relationships as possible for her/his data set, without regard for linkages with the other data sets.

Although there were preliminary discussions about findings, there was no systematic comparison until after we had written our reports. We found many points of similarity, and few contradictions across the various reports. We then assigned one person to act as a general editor and pull the various reports together into a single document.

• **The final report of the study was presented in 5 different versions to 5 different audiences in Honduras.** The first presentation was made to high-level officials in the Ministry of Education and the Ministry of Planning. For this presentation, we prepared a 6-page Executive Summary of the report in Spanish, and a synchronized slide show which illustrated the text of the report together with images of the schools in the sample, and of the children, parents, and teachers interviewed. Discussion with the Ministry officials focused on the policy implications of the findings, and the likely political impact of some of the results. Finally, the report was approved by the Minister.

The second presentation was made to a group of 24 supervisors who are responsible for schools in the departments in which the study was carried out. In this meeting, we emphasized engaging supervisors in a discussion of the generalizability of the findings, and the implications for their work. We distributed a 21-page version of the report in Spanish, but paid most attention to short verbal summaries of the findings, and discussion of their meaning.

The third presentation was to the Ministry's Center for Research on Curriculum and Instruction. This Center was responsible for developing the new text book, and for organizing teacher training programs to communicate the new curriculum. We anticipated, and therefore sought to minimize, defensiveness by presenting results as tentative and requiring their confirmation The meeting was held as an all-day workshop to determine the kinds of policy recommendations that should be drawn from the study. The curriculum researchers were not only receptive, but added to our understanding of the situation in rural schools. They appreciated the opportunity to corroborate our findings with their own experiences, and also welcomed the collection of information that they themselves had not been funded to collect. The meeting generated a number of policy recommendations and enthusiasm for further studies of this kind.

The next presentation was to the educational research community of Honduras, the teachers' unions, and the press. For this meeting we had prepared short descriptions of the study; these were used verbatim by the newspapers that ran stories on the study the following day. We appeared briefly on a national news program. At this meeting, as at the previous one, we made it known that there was a long (75-page) version of the study, but distributed it only to persons who made a special request.

The only substantive criticisms of the study were made at this meeting by university researchers. They objected to the small and intentional sample, and to the "quick and dirty" analysis that ignored psychological theory. Although we were not successful in generating enthusiasm among the university researchers for the kind of study we had done, we did establish a collegial relationship with them that may have forestalled a more public opposition to the study.

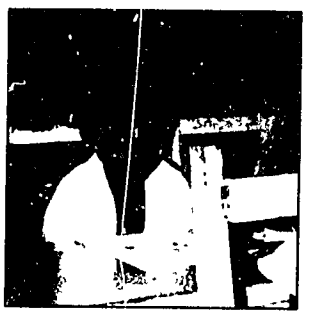
Finally, we met with our sponsors, USAID. For this meeting, we prepared material in English. We spent some time on methodological and analytic details in order to justify the policy recommendations we made. The present version of this study report is the result of well-appreciated careful attention by USAID staff to inconsistencies in the earlier draft.

Section V: Recommendations

The recommendations that follow are consistent with the empirical results of this study, although in some cases we have explicitly gone beyond the study's results. Modest research of the kind described in this report cannot generate a complete package of actions for policy.

• Increase in-service teacher training in classroom management.

Effective use of time is one of the most important ways in which teachers can increase student learning. Other research suggests that learning time can be increased by effectively handling disciplinary problems, and by differential assignment of in-class exercises and homework based on students' abilities. Both techniques are especially important for teachers in multigrade classrooms who have students whose abilities and attention span vary widely (Montero-Sieburth, 1989).



... teachers can learn to set higher standards for all children and help students reach higher levels of learning that confirm their new expectations.

• Develop instructional materials that permit teachers to provide differentiated instruction.

Well-designed instructional materials can substitute for a teacher who must ignore some students in order to attend to others. Good materials that provide "seat work" for students contribute to their learning even when they are not receiving direct instruction from the teacher. Examples of well-designed materials, with a proven record of success in raising achievement levels, are found in Escuela Nueva (Schiefelbein, 1990), and in the Reduced Instructional Time projects (see Thiagarajan and Pasigna, 1986).

The success of these materials depends on teachers' training in classroom management.

• Increase the number of teachers in small schools to reduce the number of multigrade classrooms.

Teacher assignments favor urban schools, which have a student/teacher ratio of 32:1, compared to 41:1 for rural schools.

Increasing the number of rural teachers is especially important for 1st grades, which have larger class sizes and more heterogeneous groups of children. First grade is the "make or break" year because reading ability is critical for all further learning. Learning to read is greatly enhanced by direct contact between the teacher and the individual student.

If new positions can be created in rural primary schools, we recommend that new teachers be assigned so that the 1st grade teacher can teach 1st grade as a single grade class.

School systems can more easily increase the number of teachers in the lower grades if the upper grades are provided with instructional materials that reduce the need for direct instruction by a teacher.

• Improve the ability of teachers to identify students with learning difficulties, and establish remedial programs to reduce their rate of failure.

It is possible to identify which students have problems learning to read by the end of the 1st semester. Teachers may require in-service training in evaluation and assessment, particularly of reading, so that they can identify these students.

We have no research basis for recommending a type of remedial program. The results of the study do suggest, however, that merely requiring students to repeat a grade is insufficient. The results also suggest that promoting students with low grades to the next grade, without remediation, would be resisted by parents.

• **Provide training to encourage teachers to raise expectations for all students.**

The attitudes teachers bring to the classroom are deep-seated and not easily changed. Attitudes, such as not all children are capable of learning enough to reach the 6th, 9th, or 12th grade, are found in the general culture. Their roots may go back to the Colonial period, when schools were intended for a small elite.

It is possible, however, through workshops and other training programs, to increase teachers' awareness of their attitudes toward children. Through greater awareness, teachers can learn to set higher standards for all children and help students reach higher levels of learning that confirm their new expectations.

• **Provide preschool experiences that improve students' learning capacity.**

Programs like Headstart and Sesame Street in the United States contribute greatly to improving the academic history of children who participate in them. They have a strong effect for two reasons. First, the programs provide specific training in the skills that children need to be successful in school, especially in the 1st grade. They provide a child with reading readiness, understanding of numeracy, self-discipline, a longer attention span, and familiarity with the school as a learning site. The second effect of the programs derives from the first effect. Students who are seen to have more ability are given more to learn by their teachers and they **do** learn more. These preschool programs help a child act like a "student," which is appreciated by the teacher that s/he has in later years.

BRIDGES research on preschool in Thailand indicates that, especially for poor children, preschool makes an important contribution (Raudenbush, Kidchanapanish and Kang, 1991). A review of the studies on the effects of preschool in the United States and Latin America further supports this conclusion (Reimers, 1992).

• **Continue to carry out research that identifies problems that can be resolved by ministry action.**

This recommendation is a call for policy studies that provide immediate information about problems and the means to resolve them. Such research should be focused on issues that policy makers have defined. Samples may be relatively small, and analyses may be relatively straightforward. Emphasis should be on indicating promising courses of action, rather than model construction, or precise estimate of population parameters. This kind of research can be carried out by a relatively small research group within a ministry of education. Studies of this kind can also be contracted out by a ministry to universities, or other educational research centers. In the latter case, it is important that a ministry have research staff who can participate in the research design and monitor fieldwork and analysis.

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