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Student Repetition in Cambodia

Causes, Consequences, and Its Relationship to Learning

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READER'S NOTE

The opinions expressed in this document are those of the author and do not necessarily reflect the views of UNICEF/Sida.

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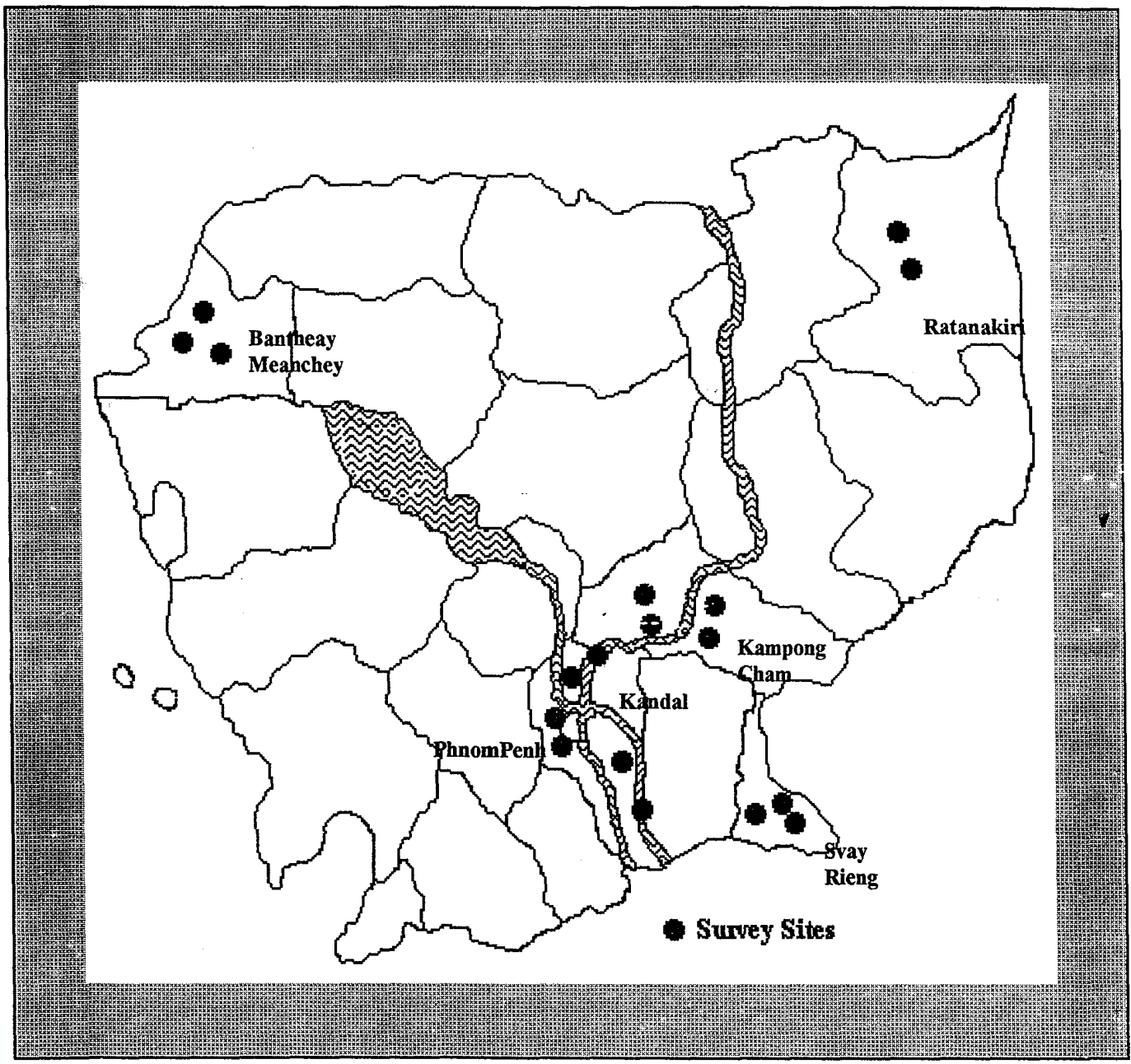
MAP OF CAMBODIA



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Executive Summary

1. Background

The present study was commissioned by UNICEF/Sida in collaboration with the Ministry of Education, Youth, and Sports (MoEYS) in order to inform efforts to formulate effective policies and interventions for reducing student repetition in Cambodian primary schools. The study was conducted by the local NGO called Kampuchean Action for Primary Education (KAPE) during the 5 month period from November, 1999 to March, 2000. In addition to developing a number of recommendations for the Ministry to consider, the study has attempted to provide an empirical basis for better understanding student repetition in Cambodia. A survey encompassing 18 schools in 5 provinces and Phnom Penh provided the primary means for developing such an understanding. The schools selected for this survey provided a range of contrasts along a number of different dimensions including urban/rural areas, minority/majority groups, assisted/unassisted schools, and geographical locations taking in the West, Central Plains, and Northeast.

2. Broad Aims

In addition to the survey results and recommendations presented in this report, the study has also tried to provide a compendium of general information on student repetition both in and outside of Cambodia. A concise portrait of the repetition situation in Cambodia has been provided which describes historical trends, current magnitudes and variations, international comparisons, and factors most related to the occurrence of repetition. Factors relating to class size, availability of blackboards, directors' years of experience, and many others have been identified through statistical analyses of national data provided by the Ministry's Education Management and Information System (EMIS).

The study has also summarized some of the important issues regarding student repetition in the international literature on the subject. These highlights include the most common causes of repetition, problems in the interpretation of data, the effectiveness of repetition as an intervention to promote learning, as well as the connection to dropout and minority languages. Cross-national experiences and various strategies to reduce repetition have also been provided and will hopefully be a useful tool for policymakers. Although it is often difficult to generalize strategies from one context to another, 5 general principles stand out to guide policy formulation. These include the need to prioritize, develop comprehensive strategies, fine tune interventions to each location or group, build policies on consensus, and consider sectoral approaches.

The study also sought to assess the consequences of repetition looking at direct and indirect costs to stakeholders as well as effects on students.

Survey activities sought to investigate a number of important issues. One of these included the development of a prediction model which not only indicated the best predictors of repetition but also their interrelationships. Other research activities undertook to better understand school practices encompassing the internal evaluation of children and the nature of the promotional decision-making process; the effects of technical assistance; and the attitudes of educational stakeholders towards repetition. The study also conducted interviews with repeaters and dropouts to determine attitudes towards life and learning and to see whether these had been negatively affected by their diminutive educational status.

3. Summary of Findings

One of the most interesting findings of the study concerned the identification of repetition predictors through a logistic regression analysis. Those predictors identified included *attendance, times previously repeated, premature enrollment, preschool enrollment,* and *school governance.* While the predictive role of many of these factors may not be surprising, the way in which they were linked with other variables was. In this respect, it was found that *attendance* mediates the effects of a number of other important variables commonly associated with repetition. These include levels of parental education, family income, minority/majority language, and urban/rural residence to name but a few. Students with the best attendance were found to come from households with more highly educated parents and higher incomes. When this finding was considered with another discovery that technically assisted schools are better managed *and* have higher repetition rates, a startling picture begins to emerge. This refers to the very strong possibility that past technical assistance has been most benefiting the children with a lower risk of repeating. High risk children who appear to have lower attendance rates and come from poorer families are not in school enough to benefit from traditional quality inputs such as teacher training, teaching aids, or library services and thus apparently continue to repeat in more disproportionate numbers than their better off counterparts. Unassisted schools on the other hand were found to have weaker evaluation practices, poorer management, *and* higher promotion rates. But more of these promoted students in unassisted schools failed externally administered achievement tests than was true in assisted schools. Thus, technical assistance seems to have exacerbated the differences between high and low risk groups. These findings make a strong argument for diversifying technical assistance to include more than the traditional approaches for improving school quality. This suggests the need for a major initiative to aid high risk children through nontraditional approaches which target out-of-school factors.

The counterintuitive findings relating to the effect of technical assistance on promotion rates raises serious questions about the meaningfulness of repetition data as a valid indicator of educational attainment. Depending on the source, repetition data can have very different meanings. Variability in educational standards will always be a problem in any educational system but it seems that current levels of variability among schools may have reached beyond an acceptable threshold.

As alluded to above, another interesting survey finding related to the differences in evaluation practices in technically assisted and unassisted schools with respect to their level of validity. Technically assisted schools were characterized by significantly better correlational values with external achievement measures than was true of unassisted ones. Among the schools receiving no assistance, evaluation seemed to be least valid in the lowest primary grades, especially Grade 1. Internal marking components (e.g., First Term, Second Term, Yearly, and Monthly) with the highest levels of validity seemed to be those characterized by continuous assessment. These findings suggest the basis for a possible review of grading policy with respect to the way that the information used for promotional decision-making is generated.

Promotional decision-making practices were found to be highly variable with a mix of both creative and arbitrary approaches being employed by the schools surveyed. Several official criteria (such as attendance and behavior) are often ignored by most teachers who appear to be the primary promotional decision-makers in schools. Students with passing marks are sometimes repeated and those with failing marks sometimes promoted. Actual practice clearly seems to be adrift with an acute need for a restatement of documented guidelines to inform the promotional decision-making process.

An investigation of the attitudes of parents, teachers, and school directors showed surprising uniformity on a number of important points. These included attributing the primary *cause* of repetition to families' lack of monetary resources and their failure to value education. Only a noticeable minority of teachers (22%) acknowledged the overriding primacy of poor attendance as a leading cause of repetition. Education stakeholders also seemed to agree that poor infrastructure was the least important cause of repetition and that the best *approaches to reducing it* should stress out-of-school factors. An important point of some divergence in views relates to the *effectiveness* of repetition as an intervention which improves student learning. Although parents seemed to be split in their view as to its effectiveness, those with positive views outnumbered those with negative views by a slight margin. Among teachers and directors, the opposite trends held true with more of both groups having a more negative view. One notable point of uniformity among stakeholder groups was the general consensus that repetition should probably not be abolished as a Ministry policy. Teachers and parents opposed its abolition by a margin of 73% and directors by 61%.

Interviews with repeaters and dropouts were somewhat hampered by social desirability response bias which seems to have pushed students to give socially acceptable responses. Nevertheless, a number of interesting response patterns was still found. For example, when asked to describe their view of life, 56.5% of dropouts used negative words whereas this was true of only 33.4% of repeaters. When using words to describe their view of the school, both groups used positive words by an overwhelmingly large margin (90% among repeaters and 78% among dropouts). From these and similar response patterns, dropouts seemed to have lives tinged by despair by a margin somewhat larger than among students still in school albeit in a repeated status. Another interesting finding was that a majority of repeaters maintained that repeating had helped them "learn more." This was the only tangible evidence the study could generate regarding the question of the effectiveness of repetition; that is, does it improve children's learning.[1]

A review of the consequences of repetition revealed a startling level of added costs to stakeholders, especially to government and households. Based on 1999 data, added costs, both direct and indirect, were estimated to exceed $40,000,000 in the last academic year alone. By requiring a student 14.3 years to complete a primary cycle, costs per graduate were also much inflated. Even if, for the sake of argument, these costs were re-estimated to be half the value found, they would still constitute a staggering amount for Cambodian society to bear. The high cost burden has underlined the urgency to move quickly to stem the waste of scarce resources quickly through such seemingly costless measures as automatic promotion. A dilemma arises, however, between the very real need to reduce the phenomenal economic waste associated with repetition and the need to address the underlying factors which cause it. These causes refer to the fundamental fact that Cambodian children are not learning. The danger of automatic promotion is that it would address outward symptoms but leave the disease dangerously out of sight but still festering beneath the surface. Strategies which acknowledge both these needs are required.

4. Recommendations

Based on the above findings, the following recommendations have been made to the Ministry of Education, Youth, and Sports:

[1] Because of the timing of the study at the beginning of the academic year, it was not possible to determine whether repeaters had actually learned more as a result of repeating by comparing baseline achievement data with end of year data.

Strategy Group 1: Organization and management of interventions

a) Establish a student repetition national taskforce
b) Develop intervention menus aimed at reducing repetition to stimulate local planning
c) Develop district and provincial repetition profiles to inform local planning and problem identification

Strategy Group 2: Systematize, rationalize, and formalize the criteria which guide promotional decision-making

a) Review current promotional decision-making practices in schools which guide promotional decision-making (e.g., many teachers do not consider attendance in their decision-making)
b) Re-issue promotional guidelines in a concise, documented form
c) Consider formal creation of a category of borderline students who may be either repeated or promoted depending on local discretion

Strategy Group 3: Review evaluation practices and grading guidelines used in schools

a) Reconsider the weighting formulae of internal marks to enhance validity
b) Reconsider the weighting formulae for minor subjects in monthly and term marking schemes
c) Review and revise Grade 1 evaluation practices
d) Support cluster-based testing to increase reliability of performance data as well as local accountability

Strategy Group 4: Specific interventions to be considered

a) General options
    - greater enforcement of the age rule for enrollment
    - increasing contact hours for students
    - expanding preschool access for specific groups at high risk
b) Consider automatic promotion as a secondary strategy only
c) Use reduction targets cautiously
d) Set in motion a new round of educational improvement initiatives which stress out-of-school factors including the following:
    - community-based remediation classes which target groups with the highest risk of repeating
    - cross-age peer tutoring
    - community-based attendance tracking systems
    - service referral systems to address the problems causing high absenteeism
    - expanded adult literacy classes to improve parental educational levels
    - need based student scholarship programs
    - attendance incentives

5. Areas for Further Research

a) Assess the effectiveness of repetition to increase student learning and possible differences which may exist by sex
b) Conduct longitudinal studies on students using extensive data from the current study
c) Other possible research activities include investigating the following:
    - The relationship between technical assistance and student repetition

- The effect of the double shift system on student repetition
- The relationship between class size and student repetition
- The relationship between teaching style and educational attainment

PART I:

Background and Overview

1. Introduction

1.1. Purpose and Objectives

The phenomenon of student repetition has been an enduring feature of the educational landscape in Cambodia since the beginning of the reconstruction period in 1979. Student repetition has been particularly endemic in the primary education sector which is the subject of this report. Considerable amounts of resources have been allocated by the government to reduce student repetition, especially during the last decade when many international donors began to help the Ministry of Education, Youth, and Sports (MoEYS) to develop the educational system. Based on the experience of other countries, many large programs have been implemented to improve the educational attainment of students and reduce repetition. These have included the provision of better textbooks, teacher training, distance education, infrastructural development, and school clustering to name but a few.

Many of the above programs, however, have been implemented in the absence of a strong empirical base of information specific to the Cambodian context. To be sure, local and international educators have amassed a wealth of knowledge about strategies that can work to reduce repetition in Cambodia but much of this has been confined to specific contexts or isolated geographical areas. With a few notable exceptions (e.g., UNICEF, 1994; MoEYS-CARE, 1998), systematic investigations of students' educational attainment in the primary grades have been few in number. It is for this reason that the Ministry of Education, Youth, and Sports and UNICEF have commissioned the present study. This study is especially relevant now because the Ministry is currently considering a number of policy changes through which to reduce the very high rate of repetition in primary schools, notably in the lower primary grades. These include the possibility of automatic promotion in certain grades and large scale student remediation to increase learning outside of the classroom. Hopefully, the findings contained in this report will assist Ministry planners and local educators in general in formulating policies and strategies which will be effective and long-lasting.

In agreement with the MoEYS and UNICEF, the formal objectives of the current study have been formulated as follows:

1. *To determine the relationships between primary level repetition and important factors such as socio-economic background of students, the effects of technical assistance, the quality of educational services and evaluation practices, school and cluster management practices; and parents', teachers', and students' perceptions of repetition.*
2. *To identify the socio-economic characteristics and sex of the children most likely to repeat.*
3. *To analyze the consequences of the high degree of student repetition with respect to the effects on students and the efficiency of the educational system.*
4. *To present sound recommendations for long and short term strategies through which to reduce repetition.*

1.2. Scope and Focus

In accordance with the above objectives, the content of this study includes an overview of the repetition phenomenon in Cambodia, a brief survey of repetition issues found in the literature, some interesting lessons learned from other countries with respect to various strategies used to reduce repetition, methodology and research findings of the study, consequences, and recommendations.

Because of the large scope of the repetition problem in Cambodia and constraints in both time and resources, the research activities undertaken as part of this study have taken as their focus the

problem of repetition in the lower primary grades, particularly Grades 1, 2, and 3. This seemed appropriate given that of the 514,363 primary school children who repeated a grade in the 1998-9 academic year, 464,140 or 90.2% were in one of these three grades. Of these, 55.1% were Grade 1 students alone (Education Management and Information System, 1999). It should be noted, however, that the general problem of repetition in all grades is still undertaken by the study in its general overview of the problem and in the examination of province wide reporting but not as a matter of field based empirical inquiry.

The study's research design addresses 5 questions which are described in greater detail below These research questions can be summarized as follows:

1. What factors best predict the likelihood of a student to repeat?
2. Is the evaluation system which determines a student's promotion or repetition valid?
3. Are there any statistically significant differences in repetition in schools which have received technical assistance and those which have not ? and Are there statistically significant differences between urban, semi-urban, and rural schools in terms of their rates of repetition?
4. How do parents', teachers', and directors' attitudes differ with respect to specific issues relating to repetition ?
5. What are the attitudes of repeaters towards life and learning?

In addition to the study of predictive factors associated with the repetition problem in Cambodia, this study has also placed major emphasis on an analysis of the "structural" factors within the educational system which may contribute to high levels of student repetition (cf. Research Question 2). This is to say that repetition may have both "cause-specific" aspects (e.g., socio-economic background of students, overcrowded classrooms, etc.) as well as aspects which stem from the manner in which children are evaluated. Accordingly, the study has tried to investigate this aspect of repetition through an assessment of the concurrent validity of evaluation in selected schools, an examination of the internal reliability of student marks, and an overview of promotional decision-making practices leading to repetition. There are several examples in the research literature on repetition which give a strong basis for placing a high priority on the exploration of the structural factors which seem to prevent children from advancing to the next grade. For example, two major studies in Latin America conducted during the early 90's found no consistent relationship between students' academic performance and being promoted (McGinn, 1992; Schiefelbein and Wolff, 1993). Therefore, a major analysis of the structure of the evaluation system within schools should help to validate the process through which repetition occurs.

Another major theme defining research activities concerns the effectiveness of the development assistance provided since the early 90's with respect to hoped for reductions in student repetition (cf. Research Question 3). This research question has been approached by studying a number of schools which have received such assistance and those which have not. Assistance in this respect is defined mainly in terms of technical inputs such as teacher training, management practices, the provision of teaching aids, and institution building (e.g., cluster school development). The fact that technical assistance provided by different donors varies greatly in both quality and quantity is an important limitation in conducting this kind of analysis. Nevertheless, the bottom line in providing assistance by all donors has been an implicit expectation that repetition rates will decline. This, therefore, seemed to be an appropriate justification for including this analysis in the study's research design. Conclusions in this regard have major implications for recommendations since it has often been assumed that technical inputs such as teacher training are the key to reducing repetition.

The final grouping of research activities in this study has tried to assess the perceptions of teachers, school directors, parents, and children themselves about the repetition phenomenon in Cambodia (cf. Research Questions 4 and 5). Understanding the perceptions of stakeholders is seen as critically important since any policy formulation wishing to address the repetition problem can

only hope to succeed with public support. Stakeholder perceptions have been studied from 3 major perspectives, namely the *effectiveness* of repetition as a policy, the *causes* of repetition, and possible *strategies* through which to reduce repetition. Research findings with respect to perceptions of repetition will surely assist the Ministry in its efforts to enlist public support in reducing the number of children who must repeat grades every year.

A review of policies and interventions frequently employed in other countries is also undertaken in this document. Because it is difficult to generalize from context to context, the most important lessons learned in other countries are summarized as a number of important principles to guide policy formulation. Policies aimed at reducing repetition tend to achieve the most when they match aims to existing resources and local conditions; when they consider the impact of interventions on other subsectors such as secondary or preschool institutions; and when they take into consideration the viewpoints of important stakeholders. Building policies on consensus is an important lesson from many countries (e.g., Honduras, McGinn, 1992) where efforts to reduce repetition (such as automatic promotion) were not successful because local educators and the public did not accept the basic premise of the policy. Given its customary centrality in discussions of repetition, special care has been taken to discuss some of the merits and demerits of automatic promotion as a policy intervention. These include its effectiveness as a means to greatly conserve scarce resources and maximize internal efficiency as well as frequent criticisms that it reduces accountability and lowers educational standards.

This report concludes with a discussion of the consequences of student repetition in Cambodia, some general conclusions, and recommendations to improve promotion rates. Consequences are looked at chiefly in terms of impacts on efficiency and educational effectiveness. Based on unit costs per pupil recently estimated by Bray (1998), it has been possible to estimate both the direct and indirect costs associated with student repetition. These economic costs have been found to be staggering both for government and private households. Although educational research in Cambodia has not been able to determine whether children's learning actually improves as a result of repetition, the study has found that educational effectiveness is greatly compromised by a more than doubling of the number of years required for a student to move through a single primary cycle.

The recommendations provided in this report are based on the some of the approaches used successfully in other countries as well as the empirical findings of the survey itself. The recommendations presented cover a number of policy options (such as creation of a national taskforce to address repetition issues, expansion of preschools, and systematic provision of remedial support to students); the development of intervention menus and local repetition profiles; rationalizing promotional criteria and grading policy; and suggestions for further research.

2. The Scale and Nature of Student Repetition in Cambodia: An Overview

2.1. Definitions and Criteria for Student Repetition

A "repeater" in Cambodia is defined in much the same way as in other countries. According to UNESCO, a repeater is any student "who throughout a given school year remains in the same class and performs the same work as in the previous year" (UNESCO, 1984). The criteria through which countries determine whether a student should repeat a grade or not, however, differ greatly from place to place. In Cambodia, promotion decisions 'officially' occur on the basis of *mastery* of the prescribed curriculum, *attendance,* and *behavior.* In order to be promoted to the next grade, a child *must* have achieved a passing annual average of 5.0, not have been absent more than 30 days, and exhibited proper behavior (subjectively defined by the teacher). These criteria are all weighted equally and are each a necessary criterion for moving on to the next grade. But in actual practice, most teachers in Cambodia seem to place exclusive emphasis on the combined average score in all subjects on monthly, term, and end of year tests, all of which are administered internally (that is, by schools, districts, and provinces).[1] Thus, attendance and behavior have largely become secondary criteria in promotional decision-making and in most cases are superseded if annual averages exceed 5.0.

As in many countries, the marking system in Cambodian schools is characterized by "global averaging" as opposed to other marking systems which require mastery of core subjects in order to pass on to the next grade. Cambodian children receive monthly and term marks in a wide array of subjects during the school year (Table 2.1). For monthly averages, students are graded according to performance in 19 subjects; for term tests, they are evaluated on performance in 12. At the end of the first term, monthly marks are averaged with a score on an end-of-term test in each of the subjects indicated in Table 2.1. Monthly marks and term marks are weighted in an equal proportion of 50-50. At the end of the second term (which is also the end of the year), a similar process occurs with the end-of-term test being replaced with an end-of-year test which according to Ministry guidelines need not necessarily be cumulative in coverage. An average score in all subjects is then computed for the second term much as it is for the first. This overall average score is then multiplied by 2, added with the combined average score from the first term and divided by 3. On a scale of 10, the cut-off point for passing in Cambodia is an overall combined average for all subjects of 5.00. This compares with other cut-off points of 40% in India, 55% in the Netherlands, and 65% in the United States (equivalent to 4.00, 5.50, and 6.50 on the Cambodian marking scale). The intention of this policy is that promotion to the next grade should be contingent upon mastery of at least 50% of "all" the content taught.

But there are questions regarding the degree to which the final averages deriving from this marking system reflect the learning time spent by children in different subjects, especially the core subjects of Khmer and mathematics (Table 2.1). For example, according to the official Ministry curriculum, students are supposed to spend 36.1% of the available study hours learning Khmer. This major subject, however, is weighted at about 31.6% for monthly marking and only 25% for term tests. Similar variation can also be seen in the weighting for mathematics in term tests and the number of actual hours spent in study (8.3% in weighting vs 16.7% in hours allocated). But the widest degree of variation can be found between the study time spent on social studies and its weighting in both monthly and term test schemes. In this respect, only 24.5% of curriculum time is set aside for social studies but it receives a total weighting of 36.8% on monthly evaluations and 58.3% in term tests. Given that much of this weighting is for such subjects as drawing, music, and dance which students usually get very high marks in, there is an inflationary effect on overall marking. This effect will be discussed again in the context of survey findings on concurrent validity.

[1] This assumption is based on focus group discussions conducted in 6 schools in which the majority of teachers stressed the primacy of point score averages over attendance/behavior as the main determinants of whether students are promoted or repeated.

Table 2.1: **Subject Weighting Schemes and Formulae Used in Student Marking**

Subject	Curriculum Weighting	Monthly Mark Weighting	1st Term Test Weighting	2nd Term Test Weighting
1. Listening (kh)	--	5.26%	--	--
2. Speaking (kh)	--	5.26%	--	--
3. Reading (kh)	--	5.26%	8.33%	8.33%
4. Dictation (kh)	--	5.26%	8.33%	8.33%
5. Composition (kh)	--	5.26%	8.33%	8.33%
6. Grammar (kh)	--	5.26%	--	--
Subtotal (kh)	***36.1%***	***31.56%***	***24.99%***	***24.99%***
7. Oral Work (ma)	--	5.26%	--	--
8. Written Work (ma)	--	5.26%	8.33%	8.33%
9. Homework (ma)	--	5.26%	--	--
Subtotal (ma)	***16.7%***	***15.78%***	***8.33%***	***8.33%***
10. Science (om)	***9.4%***	***5.26%***	***8.33%***	***8.33%***
11. Geography (ss)	--	5.26%	8.33%	8.33%
12. History (ss)	--	5.26%	8.33%	8.33%
13. Civics (ss)	--	5.26%	8.33%	8.33%
14. Penmanship (ss)	--	5.26%	8.33%	8.33%
15. Drawing (ss/a)	--	5.26%	8.33%	8.33%
16. Singing/Dance (ss/a)	--	5.26%	8.33%	8.33%
17. Hand Work* (ss/a)	--	5.26%	8.33%	8.33%
Subtotal (ss)	***24.5%***	***36.82%***	***58.31***	***58.31***
18. Foreign Language (om)	***3.3%***	***5.26%***	--	--
19. Sports (om)	***6.7%***	***5.26%***	--	--
20. Special Activity (om)***	***3.3%***	--	--	--
GRAND TOTAL	**100%**	**100%****	**100%****	**100%****
		↓	↓	↓
		A1 **Monthly Average for 1st Term** **&** **A2** **Monthly Average for 2nd Term**	**B** **Average for 1st Term**	**C** **Average for 2nd Term**

Key:
kh: Khmer
ma: Mathematics
ss: Social Studies
a : Arts
om: Other Minor Subjects

Notes:
* Some teachers interpret Hand Work to be School Yard Work
**Total may vary slightly due to rounding
***Not evaluated

$$\textbf{Yearly Average} = \frac{\frac{A1 + B}{2} + \left(\frac{A2 + C}{2}\right)^2}{3}$$

Based on data provided by MoEYS (1999) and Official Grade Books

Compliance with marking guidelines is also open to a wide range of interpretation at the local level. This is partly because the guidelines governing marking schemes are from a circular first issued by the Ministry in 1987 and because considerable drift has occurred since then with respect to the way current guidelines are implemented. For example, the original guidelines state that marks for Grade 1 children need only be recorded during the second term but several of the schools studied reported being encouraged by district and provincial officials to record and average marks from both terms.

Term testing is another area of wide variation found among schools. In some provinces, term tests are set by the Provincial Office of Education while in others they are set by clusters and still others by the individual school or teacher. Teacher set tests, however, seem to be the norm and can range in scope from 2 or 3 questions per subject to as many as 10 or more depending on the teacher. Several members of the Dept. of Primary and Preschools have voiced their concern with current marking practices and believe the Ministry will soon be moving to rationalize grading policy. It should be recognized, however, that there are both advantages and disadvantages with the current system. On the one hand, schools and local educational authorities have received a great deal of *de facto* flexibility to develop a marking system which meets their individual needs, locally defined. An obvious disadvantage is that many schools with poorer management practices may be employing criteria for promotion and repetition derived from a grading policy which has become highly arbitrary in its interpretation. A more thorough discussion of the internal evaluation system in individual schools, however, will be undertaken in a later section (cf. Research Question 2). But it should suffice to say at this point that promotional decisions seem to be occurring with a wide range of variation in individual primary schools with respect to the grading criteria employed.

2.2. The Repetition Situation in Cambodia: Past and Present

Historically, flow rates in Cambodia have always been low with evidence of some recovery occurring during the late 1980s. Reconstructing the number of students flowing through the system during the previous decade, however, is problematic due to the many difficulties facing the educational system at the time owing to civil war and international isolation. Statistics from the 80's are scanty and not always expressed as formal rates of repetition or dropout. Somewhat before the advent of the Paris Accords in 1991, a survey team under the auspices of UNDP tried to assess rates of completion in the primary school system which at that time extended up to Grade 5 (Table 2.2). According to the information compiled which included both students repeating a grade as well as those dropping out, rates of completion of a primary cycle were found to be very low during the middle of the decade but then began to recover towards the end. For the very first cohort of Grade 1 students joining the educational system in 1979, the completion rate was only 9.0% at the end of the primary cycle (1983-4). This compared with a completion rate of 46.9% at the end of the cycle beginning in 1983-4 and 48.7% for the cycle beginning in 1984-5. During the 1990s, however, rates of completion seem to have

Table 2.2: **Rates of Students Progressing from Grades 1 to 5, 1979-80 to 1988-89**

Grade	1979-80	1980-1*	1981-2*	1982-3*	1983-4*	1984-5 *	1985-6	1986-7	1987-8	1988-9
1	100	100	100	100	100	100	100	100	100	100
2	100	40.9	51.9	49.1	47.0	74.9	77.1	96.2	67.2	65.0
3	100	93.5	35.3	32.0	33.8	35.1	58.4	70.5	74.8	51.2
4	100	97.1	81.7	26.6	20.3	30.1	31.6	51.9	63.9	58.1
5	100	95.2	122.7	57.2	9.0	12.5	14.2	27.4	46.9	48.7

*Indicates full cycle of 5 years
Source: UNDP, 1989

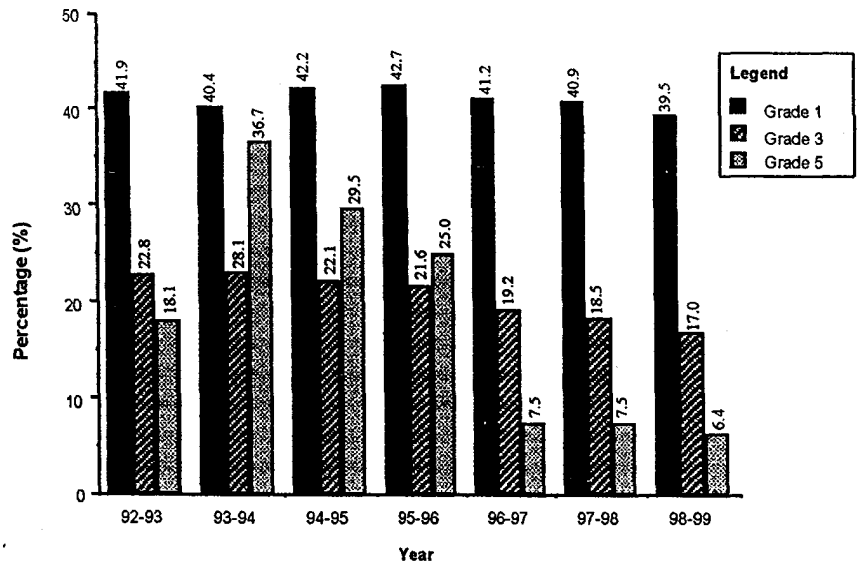
Table 2.3: **Variation in Provincial Repetition Rates by Grade, 1999**

Grade	Repetition Rate Range
1	34-62%
2	20-35%
3	14-26%
4	8-24%
5	0-16%
6	0-12%

Source: EMIS, 1999

stagnated with government reporting survival rates to Grade 5 of only about 45.2% in the 1997-8 academic year (MoEYS, 1999).

Figure 2.1: **Yearly Change in Repetition Rate in Selected Grades, 1992-3 to 1998-9**



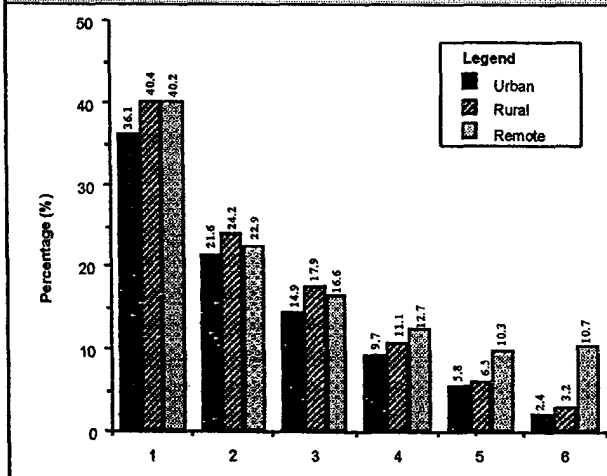
Source: EMIS, 1999

With respect to the magnitude of grade repetition at the present time, one can observe wide variations between grades, regions, and socio-economic settings. The wide range of variation in reported rates of repetition by provinces for individual grades can be seen clearly in Table 2.3. The repetition rate for Grade 1 alone varies within a range of almost 30 percentage points and is nearly 5 times greater than the maximum repetition rate reported for Grade 6. During the current decade, rates of repetition have improved considerably for the higher primary grades due in large measure to the abolition of the externally administered Grade 5 exit examination after the 1995-6 academic year (Figure 2.1). This is a clear example where a policy *can* achieve a reduction in repetition though this must necessarily be distinguished from an increase in educational attainment since the two are not always the same.

But while grade repetition in the higher grades has recently declined, repetition rates in the lower grades have stubbornly remained at a very high level. For Grade 1 especially, these rates have hovered at about 40% since the start of the decade. This situation has persisted in spite of donor investments in the primary education sector averaging about $US14.6 million per year since 1994 (MoEYS, 1999). As noted in Table 2.3, even those provinces with the least malignant rates of student repetition in Grade 1 still evince rates which exceed 30%.

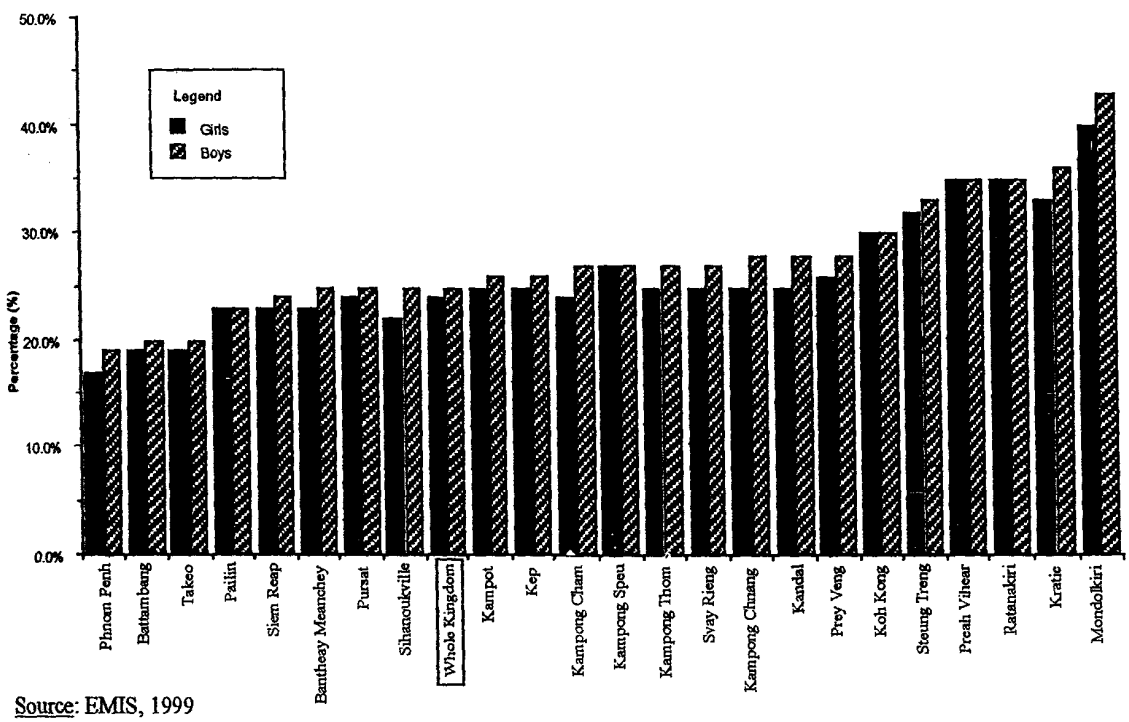
As in many other developing educational systems, repetition rates in Cambodia also vary widely between urban, rural, and remote settings. This variation is highly consistent throughout all primary grades (Figure 2.2). MoEYS defines urban schools in terms of locations in large cities like Phnom Penh and Battambang or provincial and district towns. Remote schools are those which are in locations of "isolation" or where communication is difficult (EMIS, 1999). All other schools are defined as rural. Although there may be wide variation in the way district and provincial educational authorities interpret these definitions, there seems to be enough uniformity to result in distinct patterns of differences among schools in these three settings.

Figure 2.2: **Differences in Repetition by Urban, Rural, and Remote Setting**



Source: EMIS, 1999

Figure 2.3: **Provincial Variation in Total Repetition Rate by Sex for the 1998-9 Academic Year**



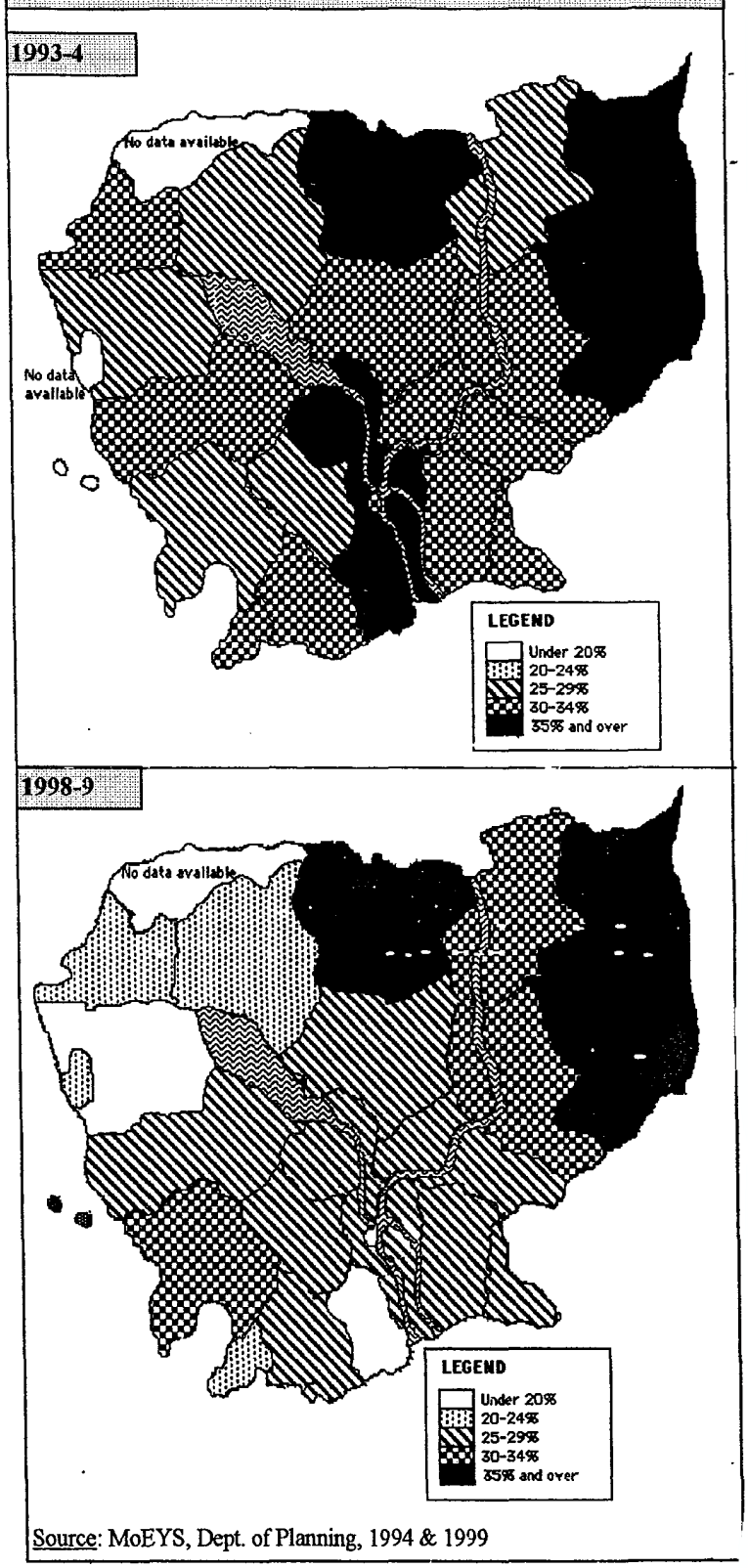
Source: EMIS, 1999

Returning once again to provincial reporting of student repetition, one can see that aggregated national reporting often masks unmistakable differences in educational conditions in different parts of the country. For example, of the 23 provincial and municipal educational authorities in Cambodia, 15 or more than half have repetition rates for boys and girls which exceed the national average (Figure 2.3). And not all of these jurisdictions are remote or sparsely populated but include densely populated provinces such as Kampong Cham and Prey Veng which each comprise approximately 14% and 9% of all primary school enrollment, respectively. The cause of regional variations in repetition rate is not understood clearly although there is considerable cause for speculation that much of the difference arises from differing standards of evaluation within schools, variable attendance by students, and irregularities in reporting. For example, one of the schools included in this study had reported a repetition rate to EMIS of only 1% for Grade 1 for the 1998-9 academic year, but a site visit to the school found an actual repetition rate of over 10%. This was not an isolated incident but was found to be true of several of the schools used in this study, even given its small sample size. Similarly, an investigation of the concurrent validity of the internal evaluation practices in different schools has also indicated wide differences in evaluation practices between schools. These findings are further discussed in a later section.

An often missed fact about repetition in Cambodia is that repetition rates tend to be higher for boys than for girls. This phenomenon is stark in its uniformity. In fact, there is not a *single* province or municipality where boys' overall repetition rate does not exceed that of girls. The cause of this difference between boys and girls is not known. One recent study, however, did note that girls were observed by teachers to participate in class more than boys and that this could possibly account for their higher achievement (MoEYS-CARE, 1998, p. 40). Other possible explanations could include a higher prevalence of discipline problems for boys, the pull of opportunity costs from lost employment, or a lower aptitude for verbal skills in a national curriculum which sets aside more than 36% of class time for language. More systematic investigation of this issue is clearly required.

A discussion of regional differences in overall repetition rate would not be complete without noting some of the remarkable changes which have occurred during the last 5 years. These changes can be seen clearly from the maps in Figure 2.4. Although the remote provinces of the North and Northeast continue to be plagued by total repetition rates of over 35%, several provinces in the West and Central Plains have made notable reductions in their rates of repetition. These provinces include Battambang, Bantheay Meanchey, Takeo, Phnom Penh, and Kandal and to a lesser extent Kampong Cham, Prey Veng, and Svay Rieng. Although the reason for these improvements may be entirely serendipitous, it may also not entirely be a coincidence that these are also the same provinces which have received a lion's share of development assistance during these last 5 years.

Figure 2.4: Historical Change in the Distribution of Total Repetition, 1993-4 & 1998-9



Source: MoEYS, Dept. of Planning, 1994 & 1999

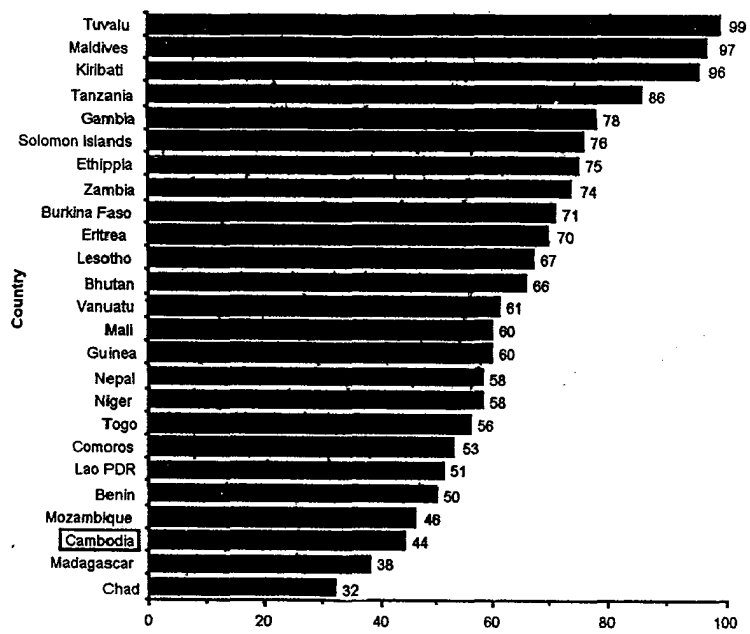
But as noted above, any euphoria from these observations should be tempered by the very high likelihood that much of the reduction in repetition in these provinces has occurred as a result of increases in promotion rates in the higher grades and that repetition in the lower grades continues to be very high. For example, between the years in question, repetition rates in Battambang, Kandal, Kampong Cham, Phnom Penh, and Takeo were found to decrease an average of 31.8% for Grade 5. On the other hand, the same provinces have achieved a reduction in repetition rates for Grade 1 of only 3.4% (on average). Thus, the declines in evidence seem to be due primarily to reductions in higher grade repetition.

2.3. International Comparisons

Comparisons of the internal efficiency of primary education systems in other Least Developed Countries shows Cambodia to have a significantly lower coefficient of efficiency (Figure 2.5). The coefficient of efficiency is a measure of the internal efficiency of an educational system and takes into account both the number of students who must repeat a grade during a primary cycle as well as the number of students who drop out. This statistic is calculated as the ratio between the optimal number of years required for a given student co-

hort to complete a primary cycle if there were no repeaters or dropouts and the actual number of years required by a given cohort to complete the cycle. When an educational system operates at maximum efficiency (i.e., without either repetition or dropout), the coefficient of efficiency would be "1" which means that for every unit of input into the education system, there is a comparable unit of output. By taking the reciprocal of the coefficient of efficiency, one can calculate the input-output ratio which when multiplied by the length of the primary cycle gives the number of years required for a student to complete the cycle. In Cambodia's case, this is equal to 13.6 years based on 1998 data (or 100/44 x 6).[2]

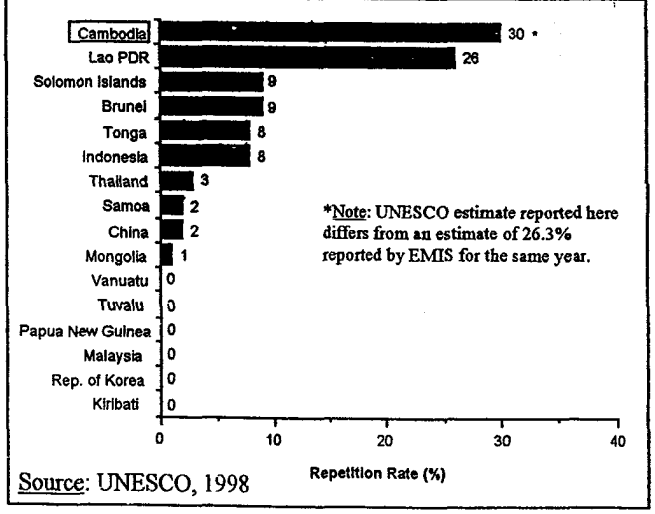
Figure 2.5: **Coefficient of Efficiency among LDCs (Final Primary Grade), 1998**



Source: UNESCO, 1998

Comparisons of the rate of repetition within the East Asia/Pacific region (Figure 2.6) show much the same story with Cambodia and the Lao PDR much ahead of other countries in the region with respect to total repetition rate. These repetition rates, however, do not take into account the fact that several of the countries displayed have policies which prohibit student repetition (e.g., Malaysia) so that conclusions about educational attainment in each of these countries are difficult on the basis of their reported rates of repetition only.

Figure 2.6: **Repetition Rate in the East Asia/Pacific Region, 1998 (Primary Level only)**



Source: UNESCO, 1998

While international comparisons of the nature described above are sometimes useful to get some relative idea of the range of repetition problems in different countries, inferences about educational conditions are usually not possible, or even wise. This is because of the important differences which exist between contexts ranging from the policies governing repetition to different social conditions, examination practices, etc. to say nothing of the reliability of the data reported (see for example the difference in reported estimates between UNESCO and EMIS, Figure 2.6). As an extreme case in point of the dangers of comparison between contexts based on variable repetition rates and coefficients of efficiency, one might take the province of Battambang

[2] An analysis conducted by ADB using 1999 data found a coefficient of efficiency of 42% requiring 14.3 years to complete a primary cycle (cf. *Education Flow Rate & Analysis Projections 1998-2010,* SEIP, Ministry of Education, Youth, & Sports, 1999).

and the US State of Arizona (which abandoned a policy of social promotion in the early 1980s). According to the US Bureau of the Census, the repetition rate in this state for Grade 2 was 20% which coincidentally is the same rate reported by the Province of Battambang among its Grade 2 students in 1998. One would be hard pressed, however, to conclude that educational conditions between schools in these two settings are in any way comparable. Thus, any conclusions about relative educational conditions implied by the comparative repetition data presented in this section should be made with extreme caution.

2.4. What Is Known about Repetition in Cambodia Today ?

Much has been written about student repetition in Cambodia. During the last 10 years especially, great strides have been made by policy makers and local educational practitioners in understanding student repetition in all its various dimensions including its magnitude, possible causes, and regional variations, among others. Due largely to much expanded compilation of data at the national level, it is now possible to systematically look at factors associated with student repetition in the primary grades. For example, using reported national data from all schools, it has been possible to assess the magnitude and direction of relationships between selected factors and student repetition in all provinces. Some of the observed relationships which are statistically significant are presented in Table 2.4. Here, one can see over 20 factors which are inversely or negatively related with student repetition in the primary grades. According to this table, it can be seen that the more schools with 2 shifts, or a high number of classrooms, or with school directors with a secondary education, the lower the rate of repetition reported in those provinces.

Table 2.4: **Factors Negatively Related to Student Repetition at the Primary Level**

Inversely related factors *(in descending order of magnitude)*	**Correlation**
1. Percentage of schools with 2 shifts	-0.70
2. Number of rooms per school	-0.68
3. Number of classes per school	-0.67
4. Percentage of directors with upper secondary education	-0.65
5. Average age of school director	-0.62
6. Number of textbooks per pupil	-0.60
7. Percentage of teachers with lower secondary education	-0.50
8. Number of teachers per school	-0.59
9. Average number of teachers with teacher guides	-0.58
10. Number of staff per school	-0.58
11. Percentage of schools receiving aid from the community	-0.54
12. Percentage of school receiving aid from NGOs	-0.52
13. Percentage of schools with offices	-0.51
14. Percentage of schools with libraries	-0.50
15. Percentage of teachers who are female	-0.48
16. Percentage of nonteaching staff who are female	-0.48
17. Average number of years of service of directors	-0.48
18. Number of female principals (for girls' repetition rate)	-0.41
19. Percentage of teachers with upper secondary education	-0.41
20. Percentage of schools with preschools attached	-0.39 ($p<.06$)

N=23 Provinces; $p<.05$

Based on data reported to EMIS for the 1998-9 academic year.

In conducting such correlation analyses, one must be careful not to necessarily imply cause to a given relationship as there may be other underlying factors which also happen to be related to the factor selected for analysis. For example, the reason that directors' level of education may be inversely related with repetition may stem from the fact that such individuals prefer to seek postings in urban areas where parents tend to be more highly educated and whose children thus perform better academically. Or it may actually be that better educated directors tend to be better able to manage schools in a way which reduces student repetition. Correlation analyses of this nature are often useful for confirming suppositions which are based on practical experience in the field or suggesting areas for experimentation in the way of formulating effective policies. They are also a good spring board to promote discussion where there might be differing interpretations of certain educational conditions. For example, the double shift system has often been looked upon by many local educators with disfavor because it limits the total amount of contact hours for students (Eisemon et al., 1989). But its strong inverse relationship to repetition (-0.70) may suggest that through intensive utilization of physical plant it has helped to relieve overcrowding, thereby reducing repetition in the schools where it is practiced. While this is only speculation, the strong inverse relationship shown certainly makes for an alternative albeit unfavored interpretation of this administrative practice.

The list of other significantly related factors in Table 2.4 suggests that the MoEYS has been on the right track in terms of trying to reduce repetition through improved textbook and teacher guide provision, recruitment of female teachers, encouraging community support to primary schools, and building libraries. Policies to reconsider, however, include mandatory retirement for all directors regardless of performance since years of director service shows a strong correlation with student repetition of -0.48.

Table 2.5: **Factors Positively Related to Student Repetition at Primary Level**

Positively related factors *(in descending order of magnitude)*	**Correlation**
1. Percentage of schools without access to latrines	0.73
2. Percentage of classrooms under repair	0.59
3. Percentage of classrooms without blackboards	0.59
4. Percentage of schools without access to water	0.54
5. Pupil class ratio (Grade 1)*	0.31
6. Pupil class ratio (Grade 4)**	0.20

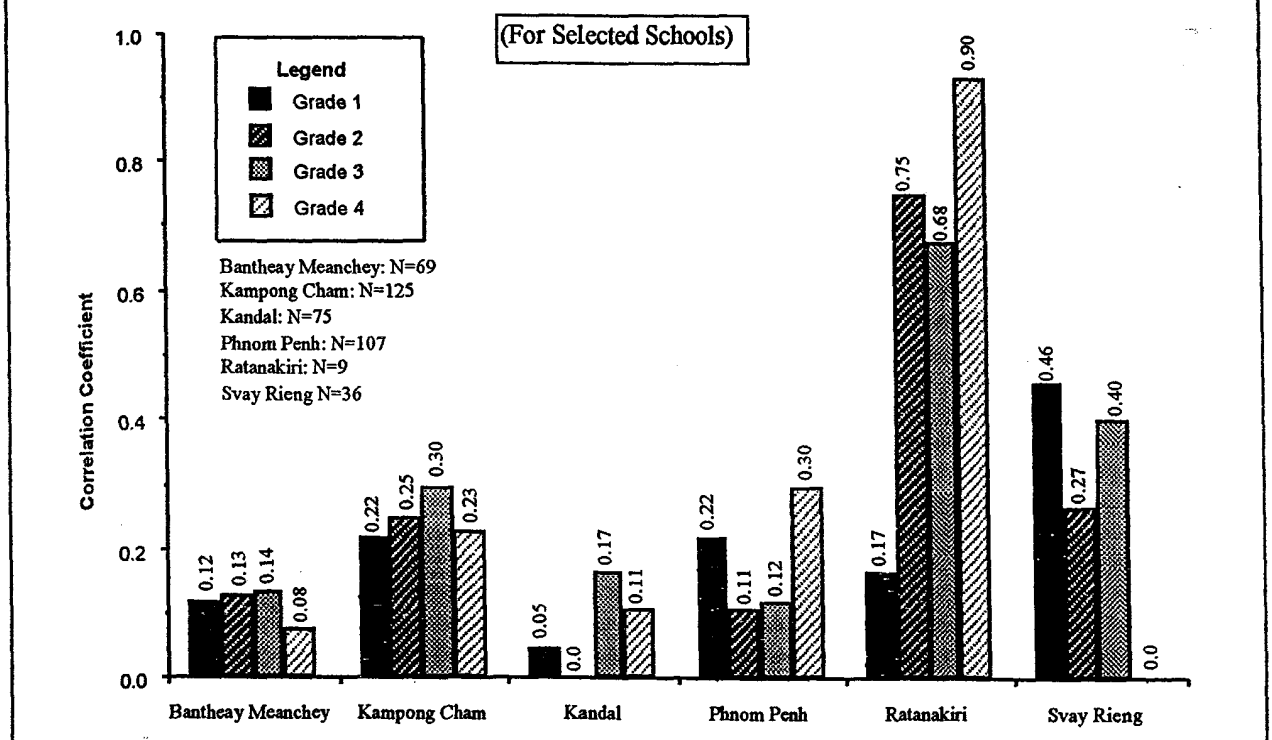
N=23 Provinces; p<.05
* N=421 Schools; p<.01
** N=429 Schools; p<.01

Based on data reported to EMIS for the 1998-9 Academic Year

A list of factors which are positively related to student repetition is presented in Table 2.5. Here, one can see the possible importance of ameliorative measures (e.g., clean drinking water) which are not commonly thought of as effective interventions for student repetition (although they are sometimes mentioned in the literature, e.g., Eisemon, 1997). These measures include the importance of improved sanitation in schools and access to clean water. Presumably, improved sanitation facilities help improve school readiness, reduce sickness, and diminish students' distraction by bodily needs.

Correlations describing the relationship between pupil class ratio and repetition are especially important since these appear to vary in great measure by grade (i.e., 0.31 for Grade 1 vs 0.20 for Grade 4). This finding, based on a survey of over 400 schools in 5 provinces and Phnom Penh, suggests that investments made to reduce class size in the lowest primary grades may yield more cost effective benefits than similar investments in the higher grades, especially given that repetition is so much higher in these grades. This may be due to the fact that students who survive to the higher grade lev-

Figure 2.7: **Provincial Variations in the Correlation between Pupil Class Ratio and Student Repetition**



Based on data reported to EMIS for the 1998-9 Academic Year

Table 2.6: **Factors Showing No Relationship with Student Repetition at Primary Level**

Factors not found to correlate with repetition rate (at $p<.05$)
1. Percentage of total staff which is nonteaching staff
2. Net enrollment rate
3. Gross enrollment rate
4. Percentage of schools located in pagodas
5. Number of classes located in pagodas
6. Years of experience of teachers
7. Average number of buildings in need of repair
8. Teachers' age
9. Percentage of children enrolled in preschools
10. Percentage of teachers without pedagogical training
11. Percentage of children who are overage
12. Percentage of classrooms lacking desks
13. Percentage of classrooms lacking chairs
14. Percentage of classrooms lacking teacher tables
15. Percentage of disadvantaged schools
16. Percentage of schools with Grade 1 only (*vis a vis* Grade 1 rep rate)
17. Percentage of schools with Grades 1-6 (*vis a vis* Grade 6 rep rate)

N=23 provinces

Based on data reported to EMIS for the 1998-9 Academic Year

els have acquired the necessary literacy skills needed to study on their own. The importance of the early acquisition of literacy skills as a possible determinant for successful mastery of the curriculum in the later primary grades has been extensively documented in the literature (e.g., Torres, 1995). Thus, children at lower grade levels who probably have not acquired such literacy skills are likely more dependent on individual interventions by a teacher to facilitate their learning. With class sizes exceeding in many cases 50 or 60 students or more, such interventions must be difficult if not impossible for many lower primary school teachers to provide.

But in assessing where interventions to reduce pupil class ratios might have the most effect, it is important to keep in mind the problem of regional variations. This is illustrated well in the breakdown of rates for the sample of 400 schools studied (Figure 2.7)[3]. Here it can be seen that interventions to reduce the pupil class ratio might have the most effect on student repetition in the lower grades in Svay Rieng and Phnom Penh. However, such efforts might be better directed at the middle primary grades in provinces such as Ratanakiri and Kampong Cham, whereas such efforts may yield fewer benefits in provinces like Kandal and Bantheay Meanchey where pupil class ratio and student repetition correlations do not seem to be statistically significant, at least in those districts which were sampled. Such variations suggest the need for policy makers to make a "map" of repetition which highlights where specific interventions might have the most effect (i.e., based on places where relationships between student repetition and specific factors have been documented empirically). Such "mapping" might take the form of district profiles in which specific factors are correlated with student repetition. Planning in this way could greatly help to facilitate the allocation of scarce resources wisely.

In the survey of nationally reported data by province, several factors were found *not* to correlate significantly with student repetition. These factors are summarized in Table 2.6. Some of these findings are counterintuitive (e.g., average number of years of teacher experience, disadvantaged schools, etc.) and may have more to do with the manner in which certain constructs have been operationalized rather than with the absence of a true relationship with student repetition. For example, it is not clear how the factor "teachers without pedagogical training" was defined in the national data reported by school directors or whether distinctions were made between certain kinds of training (e.g., distance education vs school-based training).

Other reported associations have very useful implications for donors and local NGOs in making decisions regarding the allocation of scarce resources when assisting schools. For example, if a project is faced with the choice of purchasing blackboards or buying student desks and teacher tables (the subject of frequent requests from schools), the analytical data currently available suggests that blackboards are a more effective investment vis a vis reducing student repetition.

[3] This sample included all schools in the following districts: *Kandal* - Kieng Svay and Mukkampol; *Bantheay Meanchey* - O'chrao; *Phnom Penh* - all khans; *Kampong Cham* - Tabong Khmum and Oriang O; *Svay Rieng* - Svay Theap and Svay Rieng Town; and *Ratanakiri* - Banlung.

2.5. The Link between Repetition and Dropout

Although this report focuses primarily on student repetition and not dropout, these two phenomena are irretrievably linked in many ways. For example, the literature has amply demonstrated that frequent repetition among students tends to promote dropout later in the primary cycle. Another issue of special importance, however, for the purpose of this overview is whether students at primary level are made to repeat because they dropped out during the middle of the year only to show up at the end to take the year-end examination which they likely failed; or whether students' intermittent attendance during the year automatically disqualified them for promotion. This question is difficult to answer because of the unreliability of school attendance records of enrolled students (e.g., Kemmerer/, 1999) and the observed variability among schools in the manner in which they make promotional decisions.

A review of national census data by ADB suggests that there are very big differences between the number of children reported to be enrolled in school at the beginning of the school year and parental reports of their children attending school later in the school year (SEIP-MoEYS, 1999). Thus, the phenomenon of 'arrested attendance' (i.e., in-year dropout) during the middle of the year followed by a return to school at year's end to take the annual examination may be feeding the repetition problem and may account for much of the observed repetition. This is because students who dropped out in the middle of the year may be counted once as dropouts and then again as repeaters at the end of the year when examination results are tabulated. With respect to intermittent attendance as an alternative explanation for the observed repetition in the lower primary grades (through automatic disqualification for promotion), the current study has found from its household surveys that some children who missed more than 30 days of school were still promoted to the next grade even though this contradicts official Ministry policy (cf. survey results presented below). When this survey data is considered with teacher reports that point averages have primacy over attendance in making promotional decisions, this makes a strong argument for the case that arrested attendance plays the key role in exacerbating the repetition problem in the primary grades.

SECTION SUMMARY

1. Students in Cambodia are made to repeat on the basis of *point score averages, attendance*, and *behavior* with grade scores being used as the primary criterion in promotional decision-making.
2. Considerable drift has occurred with respect to grading policy and promotional decision-making among schools which suggests the need to revise this policy quickly but in a way which maintains some of the flexibility to which schools have grown accustomed.
3. Student repetition varies greatly with respect to urban/rural settings, among provinces, and by grade and sex.
4. Repetition appears to be greatest in the areas of the North and Northeast, in rural and remote areas, among boys, and in the lowest primary grades.
5. Historically, rates of student repetition have declined greatly in the higher primary grades as a result of the abolition of the Grade 5 exit examination in 1996.
6. The primary education system's level of inefficiency (as defined by its coefficient of efficiency) and rate of repetition rank high when compared with other countries. However, the extent to which this is due to irregularities in reporting, policy differences between settings, and other externalities prevent any firm conclusions.
7. Expanded data collection by the MoEYS in recent years has been able to facilitate a better understanding of the factors most strongly related to student repetition. Analysis has suggested that such factors as intensive utilization of physical plant, low pupil ratios, better educated directors, and improved availability of textbooks, teacher guides, and blackboards may be serving to depress repetition rates in many schools.
8. There is strong evidence to suggest that 'arrested attendance' during the school year (i.e., in-year dropout) may be exacerbating student repetition in the lower primary grades.

3. Literature Survey

3.1. Student Repetition in the World Today: Trends and General Issues

Together with dropout, student repetition represents perhaps the most significant obstacle to providing universalized primary education to all the world's children. Indeed, in spite of greatly expanded enrollments, it has been reported that fewer than 70% of those who enter school in developing countries will actually make it all the way to the end of the primary cycle (Lockheed & Verspoor, 1991). There is wide agreement that student repetition not only denies many children the opportunity of a primary education but also represents a very large financial burden for many countries. In this respect, the financial cost of student repetition around 1995 has been estimated at approximately $6 billion for all regions in the developing world with half of this amount accounted for by Latin America due to its higher per student costs (UNESCO, 1998). This represents a considerable amount of resources which could have been allocated to improving the quality of educational services for students already in school or for those about to enroll.

A big part of the problem in understanding student repetition is that its nature varies so greatly from place to place. For example, in many of the countries of Africa where national exit examinations from the primary cycle are common, repetition rates tend to be highest in the upper primary grades whereas in other contexts such as Latin America, the problem is more serious in the lower primary grades. But the problem reaches even farther than the policy differences between contexts but takes in a range of social and cultural variables which are difficult to assess. This speaks largely to the differences between contexts with respect to the attitudes and perceptions of the stakeholders involved including policy makers, educational administrators, teachers, parents, and students themselves. Developing a rationalized basis for choosing the best solutions for the problem based on empirical research (such as the current research) sometimes do not give the hoped for results because different "populations will react differently to identical stimuli or conditions." (Eisemon, 1997, p. 43). Indeed, education stakeholders in many countries do not even recognize that student repetition is a problem at all but rather an effective strategy through which to enhance children's learning. All of this makes generalizing from one context to another to say nothing of the task of formulating effective policies a slippery road to travel.

3.2 Important Themes in Understanding Student Repetition

Although student repetition as it is treated in the literature is a complex issue characterized by contradictory findings, there are a number of common threads which can help one to make sense of it. These common threads include issues relating to each of the following:

1. *Factors associated with repetition*
2. *Problems of interpretation*
3. *The effectiveness of repetition as a coping mechanism for educational systems*
4. *The relationship with dropout*
5. *The relationship with early acquisition of literacy skills*

3.2.1 Factors Associated with Repetition

Because of the complexity of grade repetition, it is difficult to generalize about the conditions which might be responsible for causing it. Many suspect, however, that the reason for the observed increase in the number of repeaters world wide is in no small part related to the tremendous expansion in enrollment which has occurred in primary education systems during the last ten to twenty years. In many cases, this increased access has benefited to a greater degree the most marginal sectors of society - social groups with lower socio-economic backgrounds, who live in remote and rural areas, and who speak minority tongues. But although the recent expansion in primary education has been matched by increases in physical capacity, number of textbooks, teachers, etc., it has not en-

tailed a commensurate change in traditional pedagogy or teaching approaches such that many of the new enrollees find themselves lacking the prerequisite skills needed to benefit from the educational services available (UNICEF/IBE, 1995). This explanation for the higher rates of repetition in rural and remote areas underlies a large part of the rationale for new learning initiatives involving nontraditional learning approaches. For example, in Cambodia some new education initiatives have tried to address teaching deficiencies in the formal educational system by developing pedagogical approaches which stress psychomotor styles of learning as opposed to traditional academic methods involving verbal and visual abstractions (cf. Ratnaike, 1999).

Specific factors affecting student repetition are usually grouped in two categories: out-of-school (sometimes known as 'demand side') factors and in-school (or 'supply side') factors. Out-of-school factors take in such conditions as those relating to families' socio-economic background; age, nutrition, and health of a child; and school readiness. In-school factors, on the other hand, concern those things relating to available material resources such as buildings, desks, textbooks, teachers; teacher attitudes; and also the policy framework of specific educational systems (Eisemon, 1997).

Table 3.1: **The International Map of Repetition**

HIGHER RATES	LOWER RATES
*Developing nations	*Developed nations
*Rural areas	*Urban areas
*Minority students or those studying in mult-lingual contexts	*Students from mainstream groups or whose mother tongue is the same as the national language
*Students from low socio-economic status groups	*Students from high socio-economic status groups
*Students whose parents have low levels of literacy, especially mothers	*Students whose parents have high levels of literacy, especially mothers
*High absenteeism	*Low absenteeism
*Teachers with low expectations of students	*Teachers with high expectations of students
*Schools with limited contact hours	*Schools with longer contact hours

Adapted from Torres, 1995

There is now considerable evidence that the out-of-school factors most related to student repetition pertain to socio-economic and school readiness variables, especially where the latter refers to congruity between the language of instruction and students' native tongue. This explains the general pattern of repetition observed in rural areas, among children whose parents have low levels of literacy, among minority groups, and where economic needs within families lead to high absenteeism (Table 3.1). Each of these conditions seem to be mediated by socio-economic and school readiness variables in subtle ways. Factors relating to age, gender, and nutritional status on the other hand seem related to repetition in ways which are not always understood. Some research evidence sometimes shows a strong relationship to repetition but other times not.

Among in-school factors, the relational picture is less clear. The remote and rural location of schools tends to lead to high repetition rates through mediating factors such as difficulty in posting competent teachers in those areas and the consequent large class sizes which result (e.g., Carvajal et al., 1993). Torres (1995) has noted, however, that the impact of such in-school factors as textbook availability, pre-schools, and frequency of homework has not been consistent. Part of the explanation for the contradictory findings about some in-school factors associated with repetition possibly relates to the danger of considering factors in isolation. Eisemon (1997) has stressed the importance of considering different conditions in context. For example, the introduction of new textbooks in Vietnam in 1981-2 was actually found to worsen rates of student repetition. A subsequent investigation later found that this was largely due to teachers' reported difficulty in reconciling the new

content of the textbooks with commonly used teaching methods (UNESCO, 1987). Findings such as these highlight the complexity of the conditions in which student repetition occurs and the importance of multi-dimensional analyses.

The observations noted above notwithstanding, some in-school factors do clearly impact on student repetition. These include teacher expectations of students, promotional criteria used by teachers (see below), and the nature of official educational policies. Teachers in many countries have been found to attribute high repetition to conditions outside of the school such as poverty and low educational levels of parents. Such perceptions no doubt have a strong influence on promotional decision-making and may lead to a self-fulfilling prophecy (UNICEF/IBE, 1995). School policies such as multi-grade teaching and double shifts are a double edged sword which promote equity and access to schools but which also complicate teaching and reduce contact hours with students (Eisemon, et al., 1989). The reader should remember, however, that double shifts in Cambodia have been associated inversely with student repetition rates although more systematic investigation of their impact is clearly required.

3.2.2. The Problem of Interpretation

Student repetition is one of the most commonly used indicators of an educational system's efficiency. This is due in large part because information relating to student repetition is relatively more accessible than other kinds of performance data and is amenable to quantitative analysis. Efficiency is in turn often equated with educational attainment. That is, the lower the rate of repetition, the greater the level of educational attainment which is assumed and the higher the efficiency. But these assumptions are not always consistent or on occasion even meaningful. Thus, discussions about repetition can often lead to confusion because people have different reference points as to what it means or implies.

Lockheed and Hanushek (1988) have argued persuasively that "educational efficiency" and "educational effectiveness" are not the same thing. *Efficiency* implies an economic assessment of an educational system's performance such as the rapid progression of students through an educational cycle at minimal cost; *effectiveness* on the other hand implies a more pedagogical assessment of performance focusing on what students learn or attain. Although student repetition is usually considered an indicator of efficiency more than of effectiveness, this interpretation does not always fit with frequently heard pronouncements that lowering repetition means increasing educational attainment. This observation is of considerable relevance at the policy making level as decision-makers look for strategies to reduce repetition and also, they hope, improve educational attainment. But as Lockheed and Hanushek also point out, that which makes education more efficient (e.g., automatic promotion) is not always educationally effective.

***Survey Anecdotes*: Oops.**
A hard-working secretary in one of the schools providing data on internal student marks explained how she computed final averages to determine which students are promoted. This involved adding 1st and 2nd Term scores and dividing by 2. When told that the Ministry policy required multiplying 2nd Term marks by 2, adding this to 1st Term marks, and dividing by 3, she smiled wearily and said, "Here, we divide by 2."

Interpretation of the meaning of repetition statistics is also fraught with potentially very different conclusions because of the variability in the way in which teachers and administrators apply criteria for promotional decision-making. Several studies in Latin America, for example, have found that there is no consistent relationship between repetition and educational achievement (e.g., Schiefelbein & Wolf, 1993). Another major study in Honduras found that many primary school students had not been promoted even though they had attained academic marks which according to government standards entitled them to move on to the next grade (McGinn, 1992). In the Asia region, a survey of repeaters in

China also found that nearly 20% had attained reasonable levels of learning but had not been allowed to proceed to the next grade (UNESCO, 1992).

Although the ostensible purpose of making a student repeat a grade is to provide an additional opportunity for them to learn, the above deviations from conventional definitions of when repetition should be employed greatly complicate the educator's attempt to interpret the meaning of repetition statistics. Once again, one can see that if promotional decisions do not relate to academic achievement, one can not always make conclusions about student learning on the basis of high or low repetition rates. These deviations may also suggest hidden and unsuspected purposes behind repeating students. That is, high repetition may indicate such things as an educational system's regulatory need to screen students for limited places in the higher grades or it may indicate alternative perceptions on the part of teachers as to when and how students should be promoted to the next grade. Eisemon goes so far as to say that some educational systems, especially in Africa, have developed a "culture of repetition" in which student repetition is both functional (locally defined) and desirable (1997). In the Cambodian context, it has been suggested that repetition may serve a functional purpose due to the length of the curriculum and the limited number of hours in the school year; that is, it may take 2 years to get through 1 year of the curriculum (McLaughlin, 1999). All of this argues for the need for clearer criteria for teachers, administrators, and parents when making promotional decisions. This would foster greater fairness for children and help clarify understanding about what exactly is happening in educational systems.

Survey Anecdotes:
The Rate That Never Was

One of the schools involved in the present survey reported a rate of repetition for Grade 1 of 60% in 1998-9. When this rate was shared with an NGO planning to provide support to the school, it emerged that the rate reported to them had only been 40%. When a survey interviewer and a representative from the NGO returned to the school to ask which rate was correct, they received a third rate of 52%.

Even if it were possible to standardize all criteria for promotion and put in place measures for their proper implementation, there would still be the problem of the reliability of data. This poor reliability often stems from poorly trained school personnel who are charged with tabulation of data, the often low priority attached to data collection in resource deprived schools which are barely functional, and especially to the often strong disincentives for accurate reporting. Such disincentives often stem from sanctions imposed by higher level administrators for such things as high repetition rates or student absenteeism. For example, a study of school reform in Burundi found that a policy holding directors accountable for reported rates of repetition in excess of 10% may be contributing to an under-reporting of rates (Prouty et al., 1993). As Cambodia's information management system evolves, inviting increased scrutiny from above, a greater tendency to under-reporting may also occur, giving the false impression that educational effectiveness is improving. Repetition may also be over-reported due to such factors as high enrollment of under-age children (Eisemon, 1997) or the failure to distinguish between students who drop out in the middle of the year but who are then counted as repeaters the following year when they re-enroll in the same grade (Schiefelbein, 1991). Such lapses in accurate reporting which are probably only the tip of the iceberg once again make interpretations of the meaning of the repetition in any given context very difficult.

3.2.3. The Effectiveness of Student Repetition as a Coping Mechanism for Educational Systems

It was stated earlier how surprising it is that given all we know about student repetition, it still persists as a widely used strategy to deal with the problem of poor learning achievement. This observation becomes all the more surprising when it is realized that the vast majority of research on the subject strongly indicates that as a strategy to improve student learning, it has virtually no positive effect. On the contrary, it can even be damaging to student's self-esteem, increase the risk of additional repetition in later grades, and lead to eventual dropout from the school system.

One of the most well-known reviews of the effectiveness of grade repetition as a means to enhance student learning was done by Holmes et al. (1984; 1989). This review was a meta-analysis which looked at the effect sizes between retained and promoted groups of students in over "850 studies" which had been conducted over the years. Of these studies, 62% had looked at effects on academic achievement, 27% at personal adjustment, and 11% at self-concept and attitudes towards school. For the academic achievement studies, Holmes found that the average effect size was negative meaning that repeated groups scored lower than promoted groups. Negative effect sizes were found to be especially strong in the higher grades. With respect to personal adjustment, the results found an average effect size of 0 suggesting that there was no difference between the groups on this variable. But when each of the studies analyzed was weighted equally on this variable, the effect size for repeated groups became negative. Small but negative effect sizes were also found for repeated groups on self-concept and attitudes towards school. Thus, the Homes study found that the vast majority of research on repetition found its effect to be negative for repeated students with respect to academic achievement, personal adjustment, and self-concept/attitudes towards school.

To be sure, there are critics of the above research who point out that nearly all of it has been conducted in North America or Europe (e.g., Schwille, et al, 1991). More pointedly, several studies have found repetition to have some positive effects on student learning in developing countries (e.g., Burundi, Nigeria) although these effects have been found mainly in the context of terminal exit examinations and not as a result of classroom evaluation (e.g., Martin and Ta Ngoc, 1993). In view of these findings, it is, therefore, not known to what extent the findings cited by Holmes and others might apply in the developing world. This observation is troublesome to some because it would suggest that many of the efforts to abolish student repetition through policy changes are really based on invalid generalizations between contexts. Without knowing clearly what or if repeated students in developing countries learn as a result of being repeated, efforts to eliminate student repetition through such measures as automatic promotion may be highly "ineffective" (though "efficient" and desirable from an economic perspective).

The evidence against repetition is puzzling given how readily it is embraced by many teachers and parents (e.g., UNESCO, 1998; House, 1989). Peterson (1989) has attributed the tendency of some teachers to repeat children in greater numbers than others to the image held of the learner. In her survey of American teachers, she found that those who held a "maturationist" view of the learner were more likely to repeat children. These teachers explained their view of learning as an evolutionary process of proceeding from lower to higher order thinking processes. Children who had not mastered lower order skills could not handle higher order ones and that this, therefore, often justified repeating a child; it gave them the second chance needed to master the necessary skills before proceeding to the next grade where curriculum content would be more complex. On the other hand, teachers with a more "constructivist" view of learning tended not to repeat children. In this view, "learning involves the making of connections between the learner's existing network of knowledge and the new information to be learned" (1989: p. 181). Learning can, therefore, occur from the bottom up as well as from the top down. Since the role of the educational system is to facilitate the child's efforts to "construct" knowledge and build on existing networks of understanding, grade level was largely irrelevant. This research finding seems significant because it may be the one of the key elements in any campaign to change the mind set of teachers from one of repetition to one of promotion as a better means to facilitate the learning of the child.

3.2.4. The Relationship with Dropout

Repetition and dropout are linked in often subtle ways. It has already been pointed that there is growing evidence to suggest that children in Cambodia who drop out in the middle of the school year may be re-enrolling in the same grade the following year thereby inflating repetition numbers (p. 11). This phenomenon is not unique to Cambodia but has been reported widely by several re-

searchers (e.g., Latin America, Schiefelbein, 1991). Depending on whether such students are counted as dropouts or repeaters (or both) can create distortions in the reported magnitude of total enrollments, repetition, and dropout. In Latin America, for example, counting students who leave school in the middle of the year but who then re-enroll the following year as dropouts has led to an underestimation of repetition. The linkage between dropping out and repeating also complicates analyses of causality since dropouts who are counted as repeaters may be repeating due to out-of-school factors and not factors relating to the quality of educational services within the school.

There is now a very large body of evidence which shows that grade repetition increases the risk of dropout. A very early cross-national study found that repetition was the *only* educational variable which was related to dropout in the later grades (Levy, 1971). Subsequent research has found repetition to be a very strong predictor of dropout. For example, a study conducted in several municipalities in China found that only 21.6% of nonrepeaters eventually dropped out whereas 68.6% of those repeating at least once had. And among those repeating a grade more than twice, nearly 83% had dropped out (UNESCO, 1992). The fact that repetition seems to promote dropout has a very strong bearing on the issue of its effectiveness as a remedial strategy to give children a second chance to learn. Many teachers and parents may not be aware of the degree to which grade repetition leads to dropping out of school.

But it is important to remember that although repetition may promote dropout as the above studies demonstrate, the characteristics of the students who drop out of school may be very different from those who repeat (Eisemon, 1997). This has strong implications for developing strategies to reduce repetition. For example, we have already seen in Cambodia that boys seem to have a greater proclivity for repeating than girls but that girls have significantly higher rates of dropout, especially in the later grades. Thus, measures which are addressed to solving the problem of repetition in any given context may not have any effect on dropout if the way in which these factors are interlinked is not clearly understood.

3.2.5. The Relationship with Early Acquisition of Literacy Skills and Linguistic Diversity

Language is one of the most important tool subjects in any national curriculum. This is not only because of the dominant role it occupies in terms of the total number of teaching hours required but also because it is the key to self-study and reinforcement of skills learned in other subjects. This importance may be one of the crucial reasons that accounts for higher rates of grade repetition in the lower primary grades in many countries (UNICEF/IBE, 1995). That is, many children at the earliest entry points to the primary education system may have failed to acquire the needed basic literacy skills for self-study and are thus totally dependent on interventions by teachers for their learning. In classrooms where pupil teacher ratios exceed 50 or 60, this situation can only bode ill for children with weak literacy skills in reading and writing. This situation contrasts sharply with lower rates of repetition in the higher grades in some countries where acquired literacy skills may be depressing additional grade repetition.

The important role of language also has important implications for children from minority groups or whose native language is different from that of the language of instruction. Linguistic diversity in many developing societies may be an important factor in exacerbating grade repetition. Although UNESCO has called on all countries to respect the right of a child to study in her native tongue, this goal presents many practical as well as political challenges. The fact that many minority languages do not even have a written script (such as many minority languages in Cambodia) let alone an educational curriculum is a serious obstacle. Nevertheless, there is widespread agreement that it is best for children in the earliest grades to study in their native tongue (e.g., Eisemon, Prouty, & Schwille, 1989; UNESCO, 1998). But this presents political challenges as well, not least from policies which seek to promote national integration but also from parents. This stems from the per-

ception that native language instruction at the primary level decreases one's chances of admission to secondary institutions where a metropolitan or national language other than the native tongue is the medium of instruction. Some have cited this public perception as one of the driving forces behind the rapid expansion of private pre-schools in many developing countries which use foreign languages (Eisemon, 1997).

One of the most important responses to the challenge of native language instruction in multilingual societies has been bilingual education programs. These programs are usually characterized by efforts to develop reading skills in the native language and then transfer these skills to an official language. The track record of such programs has been very promising with projects in Nigeria, Guatemala, and Burkina Faso all reporting very low incidences of dropout and repetition (UNESCO, 1998).

SECTION SUMMARY

1. Higher enrollment and policies to promote equity such as double shifts and multi-grade teaching may be feeding the repetition problem.
2. Repetition not only incurs a great cost to educational systems in developing countries and promotes dropout, but has also been found to have no effect on student learning.
3. Out-of-school factors such as socio-economic level of households and school readiness seem to have a strong relationship with variations in repetition; in-school factors such as teacher expectations, promotional criteria used by teachers, and educational policy also seem to have a clear impact on repetition rates.
4. Interpretations of causality with respect to student repetition vary greatly from context to context making the task of generalization very difficult.
5. Variability in the way in which teachers apply promotional criteria and inaccuracies in reporting greatly complicate the task of interpreting the meaning of repetition statistics. In general, low repetition does not necessarily imply high educational attainment and vice versa.
6. Acquisition of basic literacy skills in the early grades may be a key to increasing proficiency in all subjects at the lower primary level and among minority groups.

4. Strategies to Reduce Repetition: Lessons from Other Countries

4.1. Generalizing from Context to Context

It goes without saying that learning from the successes (and mistakes) of others can greatly help to facilitate efforts to formulate effective policy. But it also goes without saying that there are dangers in such generalizations since the differences between contexts are often great. For student repetition, such differences can take many forms. For example, in-service teacher training may be effective in reducing student repetition in some countries but not in others due to such mediating factors as differences in the level of basic education of teachers or variable practices in promotional decision-making. In the latter case especially, an effective teacher training program may not translate into reduced repetition rates if promotional decision-making practices are arbitrary.

Generalizations from one context to another also entail some risk because perceptions between educational stakeholders regarding repetition vary from place to place. In this respect, it was noted earlier that teachers and parents in different countries may react differently to the same stimuli depending on what their perceptions of repetition are. Thus, a policy of automatic promotion may work in Malaysia because teachers accept it but not in Honduras where they do not. Finally, it must be remembered that repetition itself as a phenomenon has many different dimensions: it may vary along parameters involving grade, setting, or gender to name but a few. Therefore, policies that work in some places in Africa where repetition occurs chiefly in the upper primary grades may not be effective or relevant in a country like Cambodia where repetition occurs chiefly in the lower grades. All of this argues for great caution when considering the methodologies used in other countries to solve repetition.

4.2. The Range and Context of Strategies Through Which to Address Student Repetition

4.2.1. Country Specific Experiences

There is no shortage of strategies employed to reduce student repetition. Some of these are documented in Table 4.1. This list is not exhaustive nor is it intended to provide ready made recipes for reducing school repetition. But it does suggest the diversity of strategies possible and the delicate task of putting together effective combinations of strategies that address local needs.

Many successful strategies used to reduce repetition elsewhere have employed multi-pronged approaches which aim to improve *school effectiveness*. For example, Thailand initiated an extensive series of educational reforms in the 1980s which took in increased curricular relevance to rural children, efforts to increase community participation and financing, and school clustering. Clusters were used as an important means through which to promote accountability for student learning. This was achieved primarily by using clusters as the vehicle for local testing so that student achievement could be closely monitored and schools and districts held in strict compliance with national performance standards (Tsang and Wheeler, 1992).

A similar approach was taken in Nepal in the well-known Seti Project. This entailed re-inventing the school system so that it supported local development of relevance to communities. A major premise behind these efforts was the belief that traditional school systems as they are currently conceived are largely irrelevant to rural populations in developing countries. Bennet (1992) notes that a *radical transformation* of the school system in this remote zone of Nepal was possible not so much by flexibility inherent in the educational system as by a great distance from bureaucrats in Kathmandu. Local development efforts such as starting forest and fruit tree nurseries and other income enhancing activities were, therefore, able to go hand in hand with changing schools. Instead of learning an academic curriculum suited for a middle class audience, children studied such things as how to take care of fruit orchards and what local foods constituted a nutritious diet. The Seti

project also initiated a number of other community development projects which were orchestrated from resource centers in school clusters. Among the most important of these were adult literacy programs which fostered greater school readiness in the home environment for many local children. The Thai and Nepali approach to increasing school effectiveness, therefore, both used a combination of strategies which emphasized in- and out-of-school factors.

Table 4.1: **Commonly Used Strategies to Reduce Student Repetition**

DOMAIN	INTERVENTIONS	INTERVENTION LOGIC
Out-of-School Factors	*Scholarships for poor families	*Reduces direct/opportun costs of education
	*Strengthen parental involvement in education	*Helps raise social awareness about repetition and its consequences
	*Adult literacy programs	*Fosters home environment which promtes school readiness
	*Community health and nutrition programs	*Promotes school readiness
	*Enforce child labor laws	*Reduces opportunity costs of education
In-School Factors	*Expanded pre-school coverage	*Promotes school readiness
	*Mid-day meal programs	*Promotes school readiness
	*Clean water and sanitation	*Promotes school readiness
	*Track absenteeism and develop service referral systems	*Increases contact hrs at school/reduces absenteeism by referral for financial problems, etc
	*Link school performance to funding	*Improves accountability with respect to grade repetition
	*Develop cluster schools	*Improves accountability and enables intensive utilization of scarce resources
	*Reduce class sizes	*Facilitates teacher interventions
	*Build teacher housing remote areas	*Lessens teacher shortages/pupil class ratios
	*Lengthen school year/day	*Increases contact hours
	*Increase teacher/school supervision	*Improves accountability with respect to grade repetition
	*Provide teacher in-service program	*Increases the opportunity to learn for children
	*Provide free textbooks	*Facilitates self-study/reinforcement of learned skills
	*Develop bilingual education programs	*Facilitates learning among children from marginal social groups and minorities
	*Rationalize promotional policies	*Reduces arbitrary promotional decisions
	*Introduce criterion-referenced testing	*Increases assessment validity and reduces arbitrary promotonal decision-making
	*Develop local profiles of repetition incidence	*Helps to "fine tune" interventions so that they are consistent with needs
	*Establish student remediation programs	*Targets interventions at students with highest risk of repeating
	*Establish peer tutoring programs	*Cost-effective means to target students with highest risk of repeating

Adapted from Eisemon, 1997

The literature on 'effective schools' is in general a very rich source of ideas on how to increase schools' effectiveness and hence their efficiency (i.e., reduce repetition). The Thai and Nepali experiences described above are two very useful examples. The effective schools movement has a long history and has undergone many permutations. But its overriding theme is that effective and efficient schools are dependent on 9 things:

- school site management
- instructional leadership
- staff stability
- curriculum articulation and organization
- schoolwide staff development
- parental involvement and support
- schoolwide recognition of academic success
- maximized learning time
- district support

(Lockheed and Levin, 1992)

This list is prescient if only because it mirrors so closely much of the anecdotal experience in Cambodia on schools that work. This speaks especially to the critical role of school directors and parental involvement in education.

Some countries have had singularly great success in reducing repetition through approaches that focus heavily on in-school factors. For example, Uruguay and Chile both report that well-planned interventions in textbook provision, school incentives, and in-service teacher training have had a notable effect in reducing student repetition at the primary level (UNICEF/IBE, 1995). The efforts in these two countries are notable in that they were *comprehensive* (as opposed to piecemeal) and were *sustained* over time.

A World Bank (1996) assessment of cost-effective strategies to improve school efficiency in India found that the most recommended interventions included enhancing teacher competency, provision of learning materials, and increasing floor space per student (as reported in Eisemon, 1997). Conversely, the same study also found that reducing class sizes and increasing the amount of time spent in school were less "efficient" though the latter was found to be the most "effective" intervention in terms of increasing student learning. Cost effectiveness analyses of specific interventions while sometimes useful in the contexts in which they are done also suffer from limitations with respect to their generalizability. Caution is, therefore, advised when considering other country experiences. For example, Lockheed and Hanushek (1988) reported that textbooks were four times as cost-effective as in-service teacher training in Brazil but that interactive radio was a more cost-effective intervention than textbooks in Nicaragua. Thus, cost-effective analyses of similar interventions to increase educational efficiency render different conclusions in different settings.

4.2.2. Alternative Approaches to Reducing Student Repetition

Nonformal educational interventions are gaining increased attention for their ability to reduce repetition vis a vis more traditional approaches. A new program in Bangladesh, for example, makes the point that "large-scale quality improvement programs are presently designed to address quality issues and indicators in an aggregated manner, thereby enlarging the learning gaps between the traditional high and low achievers" (Plan International, 1999, p. 4). This observation might also be very true of many of the large educational development programs occurring in Cambodia today: high achievers benefit most leaving the highest risk children behind. Nontraditional approaches to repetition reduction involving nonformal education are, therefore, becoming increasingly attractive because of their greater ability to target children at high risk of repetition. The Community Learning Assistance Project (CLAP) in Bangladesh, for example, seeks to help such children through a number of remedial interventions involving assessment of learning needs, preparation of special remedial packages for community teachers, organization of tutorial camps in communities, and close monitoring of student learning outcomes (ibid).

Another nontraditional approach to repetition reduction of some interest is *cross-age peer tutoring*. This intervention involves using older students as tutors of younger ones. Although most analyses of the effectiveness of cross-age peer tutoring have occurred in the United States, results have shown it to be highly cost-effective (Lockheed & Hanushek, 1988).

4.2.3. Automatic Promotion

The practice of automatic promotion, sometimes called social promotion, has been used in many countries as the major policy response to student repetition. Based on the premise that children should advance through the educational cycle according to their chronological age or attendance rate and not necessarily their achievement of curriculum goals, this policy is particularly attractive to educational administrators because it enables conservation of scarce resources. It is widely practiced in both developed and developing countries not only because of its ability to enhance school efficiency but also because it prevents negative effects to children's social development which is usually associated with the practice of grade repetition. Among the developing countries, it can be found in places as far afield as Latin America, the State of Kerala in India, and Malaysia. Latin America has perhaps developed the most permutations of automatic promotion where it occurs in varying degrees. For example, some countries such as Bolivia have mandated automatic promotion throughout the primary cycle whereas others (like Peru) practice it only in Grades 1 and 2 (Eisemon, 1997).

But automatic promotion has fallen on hard times recently and is receding in many places such as the United States where there is little public support for it (e.g., Economist, 1999). This popular opposition in the United States is doubly puzzling given the abundance of in-country research which argues against the effectiveness of grade repetition as a remedial learning strategy (cf. Holmes, 1989). The primary argument made against automatic promotion is that it undermines educational standards. Put more succinctly, it is believed that automatic promotion shifts the problem of failure from the system on to the shoulders of children, many of whom seem to be leaving the educational system with limited literacy and numeracy skills. In addition, several researchers have found that in those places where there is little popular support for this policy, both teachers and parents find ways to circumvent the rule. In Costa Rica and Venezuela, Schiefelbein and Wolf (1993) discovered that while principals reported 0% repetition in Grade 1, hidden repetition of approximately 20% was still occurring. Similar findings in Honduras have already been reported (cf. McGinn, 1992 above). The present survey has also discovered similar tendencies in Cambodian schools. Automatic promotion brings into sharp focus the admonition made by Lockheed and Hanushek earlier that what is "efficient" is not always "effective" educationally. But even when automatic promotion is paired with mitigating interventions such as student remediation, it may still not yield the desired results if important educational stakeholders (i.e., teachers, parents, etc.) do not support it.

4.3. Important Considerations in Developing Strategies to Reduce Repetition

In spite of the risks of generalizing between contexts, several general guidelines through which to address student repetition have emerged from cross-national experiences. These are summarized below:[1]

- ***Prioritize:*** It may not be possible to solve every aspect of repetition, especially given that resources are usually limited. Many countries approach repetition by "mapping out" where it is most prevalent (e.g., lower grades, rural areas, areas of the North and Northeast, etc.) and concentrating resources accordingly.
- ***Develop strategies which are comprehensive and sustained:*** The experience of Chile and Uruguay are a good example to consider. Interventions focusing on in-school factors were designed comprehensively and not in a piecemeal fashion. In addition, they were sustained over time and not implemented as a one time intervention.
- ***Use flexible approaches:*** The same intervention may not work in all places. Good ideas often turn into bad ones when they are implemented nationally without concern for the differences between locations. Interventions should be "fine-tuned" so that they meet local needs and conditions. This might include building teacher housing in remote areas only; organizing clusters in densely populated areas and looking for alternative strategies for remote areas; or concentrating remedial interventions in the lower primary grades.
- ***Build policies on consensus:*** Failing to take into consideration the attitudes of educational stakeholders undermines policies. The national experiences of several countries with respect to automatic promotion have already been cited above. Findings in this particular survey suggest strong local opinions on certain policy options such as abolishing repetition and emphasizing out-of-school factors in enhancing promotion. These attitudes must be considered seriously to formulate effective policy.
- ***Consider sectoral approaches:*** Educational systems are characterized by very delicate "ecologies." Interventions in one subsector without consideration of the effects in another may create unforeseen problems. If, for example, a policy of massive expansion of pre-school facilities diverts too many resources from the primary subsector, this may ad-

[1] The following guidelines are adapted from "Repetition in Primary Education: Relevant Aspects" by UNICEF/IBE, 1995 and "Reducing Repetition: Issues and Strategies" by T. Eisemon, 1997.

versely affect learning conditions and exacerbate the very problems which pre-schools were intended to relieve.

SECTION SUMMARY

1□ Generalizing interventions to reduce repetition from one national context to another incurs many risks due to local differences. This speaks especially to the attitudes towards repetition by important educational stakeholders such as teachers and parents.

2□ The literature on "effective schools" provides a wealth of ideas on how to increase educational effectiveness and reduce repetition.

3□ Automatic promotion is a controversial policy strategy through which to address repetition. It has many advocates as well as many opponents. Advocacy is often strong among administrators and within the research community while parents and teachers in many countries have been found to oppose it.

4□ Nontraditional approaches to reducing repetition such as community based student remediation programs are gaining increasing favor because they target high risk children usually by-passed by more traditional interventions.

5□ Cross-national experiences have been most useful not for the specific interventions tried but for the general guidelines which they generate. These include the need to prioritize and to develop interventions which are comprehensive, sustained, flexible, based on consensus, and sectoral in focus.

PART II:

Research Findings

5. Research Design and Methodology

5.1. Research Questions

The design of this study addresses 5 research questions which are described in greater detail in the next section. These research questions deal with 1) the identification of repetition predictors; 2) the validity of the evaluation process in schools; 3) the identification of significant differences in repetition between schools which have received technical assistance and those which have not; identification of significant differences in repetition between schools which are rural, semi-urban (e.g., provincial towns), and urban; 4) describing teachers', directors' and parents' attitudes towards repetition; and 5) describing repeaters'/dropouts' attitudes towards life, and the school/learning in general.

5.2. General Sampling and Procedural Considerations

The study sample has been drawn from 18 schools in 5 provinces and Phnom Penh (Table 5.1). The total student population sampled took in 14,256 students. The provinces selected show a bias towards the central plains since this is where approximately 60% of the student population in Cambodia lives. Care has been taken to create a balance between schools according to urban and rural differences and historical patterns of technical assistance (or the lack thereof). Given the importance of detecting differences in repetition along these parameters, the study has employed a controlled sampling technique in its selection of schools. In this respect, 9 technically assisted schools were matched with 9 unassisted schools of similar composition. Criteria to ensure comparability between schools included school category (e.g., satellite, core school), urban/rural setting, and pupil class ratio (cf. Appendix). School selections according to these criteria were based on data provided by EMIS.

Table 5.1: **Description of the School Sample Used in the Study**

No.	Geographical Area	Province	Number of Schools				Total
			Assisted/ Rural	Assisted/ Urban	Unassisted/ Rural	Unassisted/ Urban	
1.	Central Plain	Kandal	3	0	1	0	4
2.	Central Plain	Kampong Cham	1	1	1	1	4
3.	Central Plain	Svay Rieng	1	1	1	0	3
4	Central Plain	Phnom Penh	0	1	0	1	2
5.	West	Bantheay Meanchey	1	0	1	1	3
6.	Northeast	Ratanakiri	0	0	2	0	2
Total			6	3	6	3	**18**

Each research question has entailed somewhat different sampling designs. The selection of subjects for research questions 1 and 4 constituted the most labor intensive survey activity undertaken. In this respect, the study originally sought to obtain a sample of 500 students half of whom were to be repeaters and the other half promoters. For each student, a complete data set describing household background, classroom learning conditions, and school governance was to be compiled and submitted to a regression analysis to identify repetition predictors. Attitudinal data on perceptions of repetition by parents, teachers, and directors was compiled simultaneously with the data required for Research Question 1. Because of difficulties in obtaining complete class lists of stu-

dents from the previous academic year, it was necessary to rely on current year name lists in generating a population of student names[1]. This required tracking students' teachers from the previous academic year, many of whom had retired, transferred, stopped teaching (in the case of many contract teachers), or died. This situation ultimately required boosting the total sample size to 547 students and 140 teachers. Even so, the high rate of teacher attrition resulted in a reduction of students with both household and classroom background data to a total of 438 (203 repeaters and 235 promoters).

The actual selection of subjects for Research Questions 1 and 4 was characterized by a two tiered process involving proportional stratified cluster sampling of Grade 1, 2, and 3 classes followed by a random selection of students in two equally weighted conditions: repeaters and promoters. Teachers were chosen based on their association with the student sample. Data on school governance for inclusion in the data set was obtained from interviews with all school directors.[2]

Research Question 2 required a selection of students for purposes of comparing performance on an external battery of tests with internal evaluation scores. Students were selected from 6 of the 18 schools which were studied more intensively than the others. Those 6 schools with the highest rates of repetition among the schools in their particular condition of assistance were the ones chosen for this investigation.[3] Accordingly, 3 technically assisted schools and 3 unassisted schools with the highest repetition rates each received a battery of tests for selected students in Grades 1, 2, and 3.[4] Student sampling was done through a two tiered process similar to that described for Research Questions 1 and 4. Proportional stratified cluster sampling was used to identify the classes to be included in the investigation; however, the selection of students in each class was based on *systematic* and not random sampling. Systematic sampling was employed in this regard because student selection occurred on site. A total of 314 students in Grades 1, 2, and 3 from the 3 assisted schools were administered tests in language and math while 430 students from the 3 unassisted schools were similarly evaluated.

For Research Question 5, 21 repeaters and 23 dropouts were selected for in depth interviews. The schools participating in this segment of the study were the same 6 schools used in Research Question 2. The selection of students for this particular investigation was nonrandom in design. A number of considerations dictated this selection process. First, the difficulties involved in interviewing Cambodian children ranging from shyness to fear of adults necessitated a selection of students based on such personality characteristics as some minimal measure self-confidence and a willingness to engage in conversation. This of course has introduced a certain element of bias into the survey data compiled but at least enables consideration of some of the attitudes held by students with respect to their status as repeaters and dropouts. Another consideration of some importance in using this selection process was the absence of name lists of dropouts to facilitate random selection. To maximize students' ability to engage in meaningful conversation, care was taken to choose interviewees from Grades 4, 5, and 6 among repeaters and from among teenagers for dropouts.

Research Question 3 did not require subject sampling and was based on analysis of repetition data reported to EMIS by all 18 schools.

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[1] Many schools were found not to maintain student records from the previous academic year. This deficiency in school record keeping greatly complicated data collection activities.

[2] Readers should note that no school directors in the sample played a dual role as teacher.

[3] Schools from Ratanakiri were not considered due to distance, prohibitive travel costs for invigilators, and the need for translators for oral interviews of students.

[4] Assisted schools included 2 in Kandal Province and 1 in Svay Rieng; unassisted schools included 1 in Kandal, 1 in Svay Rieng, and 1 in Bantheay Meanchey.

5.3. Specific Design Considerations

5.3.1. Variables Considered

A total of 27 research variables were considered by this study. These can be seen in Table 5.2. Numbers listed parenthetically after each variable indicate the research question to which the variable relates. Variables 1-12 and 26 are independent variables considered for the regression analysis conducted in Research Question 1; Variable X is the dependent variable considered for the regression. All other variables considered are dependent variables for their specific research question. The manner in which variables have been operationalized and quantified is explained more thoroughly in the Appendix (cf. Questionnaires & Point Scoring Key). In order to streamline data analysis, some variables (e.g., pedagogical qualifications of teachers, socio-economic status of parents, etc.) have been expressed as total scores based on the cumulative scores of the questions that apply.

Table 5.2: **List of Variables**

Code	*Variable*
1.	Sex (1)
2.	Pedagogical qualifications of teachers(1)
3.	Availability of textbooks (1)
4.	Socio-economic status of parents (1)
5.	Governance of school/cluster (1)
6.	Premature enrollment (1)
7.	Distance from school (1)
8.	Attendance (1)
9.	Number of times repeated previously (1)
10.	Class size (1)
11.	Attendance of preschool (1)
12.	Secondary occupations of teachers (1)
13.	Concurrent Validity of internal student marks and externally administered measures (2)
14.	Internal Reliability of internal student marks (2)
15.	Anomalies in promotional decision-making (2)
16.	Difference between repeaters and non-repeaters who pass External Test (2)
17.	Difference in repetition between rural, urban, and semi-urban schools (3)
18.	Difference in repetition between assisted and unassisted schools (3)
19.	Perception of parents, teachers, directors with respect to the *causes* of repetition (4)
20.	Perception of parents, teachers, directors with respect to the *effectiveness* of repetition as a remedial intervention (4)
21.	Perception of parents, teachers, directors with respect to *strategies* to solve the repetition problem (4)
22.	Perceptions of repeaters towards life and their living situation (5)
23.	Perceptions of repeaters towards the school/learning in general (5)
24.	Perceptions of dropouts towards life and their living situation (5)
25.	Perceptions of dropouts towards the school/learning in general (5)
26.	Native language spoken by parents and children (1)
X.	Promotional status of students (1)

5.3.2. Instrumentation Used

The instrumentation employed in this study includes 6 questionnaires and 6 achievement tests. All questionnaires were administered in an interview format as it was felt that many respondents would be unable to fill out self-completion forms. With respect to Research Questions 1 and 4, questionnaires were developed for Parents, Teachers, and School Directors; for Research Question 5, 2 additional questionnaires were developed for interviews with repeaters and dropouts; Research Question 2 required the development of achievement tests in language and mathematics for Grades 1, 2, and 3. An additional questionnaire was also developed for the purpose of investigating the nature of internal evaluation practices within schools. This questionnaire was used to structure 6 focus group discussions which were conducted with directors, teachers, and parents.

All instrumentation used in the study has been pretested and revised accordingly. Questionnaires were pretested to gauge comprehensibility of questions and internal reliability ratings between questions and total scores pertaining to the relevant variable. In general, acceptable levels of internal reliability (i.e., statistically significant) have been maintained during the actual interview process. Internal reliability coefficients for each questionnaire are presented below:[5]

[5] No internal reliability coefficients are available for focus group questionnaires as most question responses were expressed as qualitative data.

- Parent Interviews: 0.57
- Teacher Interviews: 0.42
- Director Interviews: 0.58
- Repeater Interviews: 0.46
- Dropout Interviews: 0.50

Achievement tests were similarly pretested to ensure their reliability. Two rural village schools in Kampong Cham Province were used as the pretest sites to set an achievement standard at the lower end of the performance spectrum. This was done to prevent the selection of pretested questions which were too difficult for children in other sites to answer. Questions in language and mathematics were developed by subject specialists at the Provincial Teacher Training College of Kampong Cham and were screened using classical item analysis methods. Because the study wanted to determine whether repeated students had possibly achieved an acceptable level of mastery of the curriculum, care was taken to test only that content which had not yet been retaught in the current academic year. Content and construct validity concerns for the tests were addressed through the development of tables of specification for each test. The cut off point for question selection were item difficulty scores ranging from 35% to 70% and item discrimination indices of 0.30 or more. Because it is known that children in Grades 1, 2, and 3 are unable to complete written tests unassisted, all tests were administered orally. For Grade 1 children, this entailed one-on-one interviews lasting 30 minutes per child. Grade 2 and 3 children were tested as a large group with invigilators reading questions to students one at a time followed by an example of how to do each exercise.

5.3.3. Analytical Techniques Employed

Data analysis activities took in a range of quantitative and qualitative techniques. Analytical programs used included SAS and Excel. For Research Question 1, statistical analyses involving *chi-square* and the *Pearson product moment correlation coefficient* were used to narrow the range of potential variables relating to repetition (Variables 1-12 and 27). Those variables showing some relationship to the dependent variable were then subjected to a *logistic regression* to establish a model of predictors leading to repetition.

For Research Question 2, the Pearson product moment correlation coefficient was again used to determine the concurrent validity and internal reliability of student marks among those repeated and promoted from the last academic year (cf. Variables 13 and 14).[6] These correlation analyses were done for assisted and unassisted schools to determine possible differences in evaluation practices as a result of technical assistance. Differences in average scores between repeaters and nonrepeaters on the external tests administered were also gauged for both groups of schools using a series of *t-tests* (cf. Variable 16). By investigating the number of promoted students who passed the external evaluation and the number of repeaters who failed, the researchers also hoped that it would be possible to validate (or not validate as the case may be) the process through which students are promoted and repeated. A certain amount of qualitative data was also admitted during this segment of the study including discussions with teachers, directors, and parents regarding actual evaluation practices employed during the year (cf. Variable 15). These focus group discussions allowed the researchers to understand certain anomalies in the evaluation data compiled including the promotion of failing students and the repetition of passing ones.

The extent of differences in repetition rate between technically assisted and unassisted schools and those in urban, semi-urban, and rural settings was determined through a series of chi-square

[6] These analyses required compilation of student marks from the previous year which in several cases proved difficult because many schools do not keep student records. This led to a number of gaps in the data available for analysis.

analyses of data reported by EMIS (cf. Variables 17 and 18/Research Question 3). Discrete analyses were conducted for rates reported in Grades 1, 2, and 3. The category of semi-urban schools was added to this part of the research design because of concerns sometimes expressed that district towns (which are usually categorized as urban by the Census and EMIS but which serve both rural and urban populations) may differ in distinct ways from true urban populations in Phnom Penh and elsewhere.

Differences between parents, teachers, and directors with respect to their perceptions of repetition have been described through comparisons of response frequencies on specific questions investigating various dimensions of the repetition issue. These dimensions include the *causes* of repetition, the *effectiveness* of repetition as a remedial intervention, and *strategies* to reduce repetition (cf. Variables 19, 20, and 21/Research Question 4). Chi-square analyses and t-tests have been used to determine differences between response groups. Total question scores for each of these variables have also been tabulated and presented in the form of standardized scales to help readers gauge general patterns of responding. Respondents were also asked to rank the causes of repetition in terms of importance. Responding patterns here have been expressed both as frequency counts for each cause as well as mean rank scores.

Attitudes of repeaters and dropouts with respect to their *lives and living situation*, the *school*, and *learning* in general (cf. Variables 22, 23, 24, and 25) have been analyzed in a manner similar to that described for Research Question 4. These include the reporting of response frequencies to specific questions, the use of standardized scales to gauge patterns of responding, and the presentation of a number of case studies to amplify survey findings.

6. Survey Findings

6.1. Predictors of Student Repetition

6.1.2 Factors Considered

The identification of predictors of student repetition in Cambodia was perhaps one of the most important aims of the study. The identification of such predictors will greatly facilitate the development of policies to target those factors which may best lead to a reduction in repetition. In conducting this segment of the survey, 15 major factors were entertained as possible predictors. These are summarized in Table 6.1. Because of the complexity of several variables, a significant number of questions were asked to arrive at a suitably operationalized definition of each. The table presented does not take into account all of these questions but rather indicates some of the general parameters used in computing overall scores for each variable. Fearing that poorly correlated total scores on any given variable might cause the researchers to miss an important relationship with a subvariable measured in questionnaires, the analyses conducted also considered those subfactors thought to be of some importance. For example, income and parents' educational level were analyzed as discrete variables even though scores from these subvariables were already included in Total SES (cf. Table 6.1).

Table 6.1: Possible Predictor Variables Entertained

1. Sex (of student and teacher)
2. Pedagogical qualifications of teachers
   - education level
   - professional status
   - in-service training
   - teaching style
3. Textbook availability
4. Parents' socio-economic status (SES)
   - family income
   - mother's education level
   - father's education level
5. School governance
6. Premature enrollment
7. Distance from school
8. Attendance
9. Times repeated previously
10. Class size
11. Preschool attendance
12. Secondary/tertiary teacher occupations
13. Parents' native language
14. Urban/rural residence*
15. Satellite/core school*

*Note: Factors considered not as questionnaire variables but on the basis of data provided by EMIS.

The original dependent variable used in this analysis was "promotional status" for the last academic year (i.e., repeated or promoted). But in the course of the survey, it was discovered that this variable by itself failed to take in a student's total repetition history (i.e., some promoted students were found to have repeated before the academic year considered). As a result, 3 dependent variables were considered in 3 separate rounds of analysis. These included not only "most recent" promotional status but also whether the student had "ever repeated before the last academic year" and the "total number of times they had ever repeated."

Table 6.2: First Round of Correlations with Promotional Status (1=repeater; 2=promoter)

Simple Correlations with Promotional Status *(in descending order of magnitude)*	
1. Attendance	0.22
2. Class size	0.18
3. Family's socio-economic status	0.15
4. Family income	0.15
5. Father's education level	0.14
6. Age when enrolled	0.11
7. Premature enrollment	0.11
8. Mother's education level	0.09 (p<.04)
9. Urban/Rural Location	0.09 (p<.05)
10. Times repeated previously	-0.36

significant at p<.01

6.1.2. Simple Relationships Found

A first round of analysis of possible predictors found 10 to correlate in some way. These are presented in Table 6.2. *Attendance* and times *previously repeated* showed the strongest relationships with promotional status from the previous academic year. *Urban or rural location* of schools was the most marginally significant of any variable. In a second round of analysis using the factor "ever repeated before" as the dependent variable, *preschool attendance* showed a significant relationship (0.10, $p<0.02$). And in a third round of analysis with "total number of times previously repeated," *school governance* further showed a significant relationship ($p<.003$) using a chi-square test. Thus, the added dependent variables described above helped to amplify relationships which would otherwise have been missed. Sex (of student and teacher), most teacher variables, and distance to school showed no relationship. Strangely, most of the correlations

found, though significant, were all rather weak with few reaching above 0.20. This may be due to the fact that repetition may be most related to student achievement, a variable for which data was not available due to difficulties relating to school record keeping as described earlier.

A finding of some note was the absence of a significant relationship with most teaching related variables although in a chi-square test, total teacher qualification score did show a weak relationship with "most recent promotional status" ($p<0.077$, close but not statistically significant). This absence of a relationship was relatively consistent in a number of combinations including analyses of teachers' education level, professional status, and times in-serviced.

It should be pointed out, however, that *teaching style* was significantly related to promotional status but in an inverse way ($p<.04$). That is, the teachers with teaching styles most student-centered were more likely to have higher repetition rates. This relationship and some others like it (see below) is interpreted to mean that the teachers who are judged to be best (in terms of student-centered teaching) have stricter promotional standards whereas those who do use such methods simply allow everyone to pass regardless of performance. This interpretation is speculative but supported by similar observations regarding the relationship between school governance, evaluation practices, and repetition which are reviewed below and in a later section. A review of the evaluation practices in 3 technically assisted schools, for example, demonstrated that all internal mark components have higher levels of validity than was found in unassisted schools. In addition, more promoted students in these schools were able to pass a standardized achievement test whereas this was less true of unassisted schools. There are two important implications of this finding if corroborated by further research. First, it suggests that technical assistance is having an effect on teaching practice. Such teachers may be expressing higher expectations of students as well as doing more and better evaluation. The question that should perhaps be asked is not why children taught by teachers with student-centered orientations are experiencing more repetition but why students in unassisted schools with lecture-oriented teachers promote students with lower levels of achievement. This brings us to the second implication of this finding which is that repetition may not be a very meaningful indicator of educational attainment as it is often times assumed to be.

Table 6.3: **Percentage of Repeaters and Nonrepeaters in Different Conditions of School Governance**

Relationship between *Repetition History* and *School Governance*

Status	*Good Governance*	*Weak Governance*
Never Repeated	46.5%	53.5%
Repeated Once or More	51.9%	48.1%

N=545; Differences signif at $p<.01$

Related to the above discussion, *school governance* also showed an inverse relationship with the variable "ever repeated." In this respect, schools receiving higher scores for governance had significantly more children with repetition histories (Table 6.3). This observation helps to substantiate the above interpretation that better teaching (or governance in this case) implies stricter standards leading to a higher probability of being repeated. It further challenges the frequent assumption that low rates of repetition suggest better student learning.

Table 6.4: **Differences between Repeaters and Nonrepeaters with respect to Preschool Attendance**

Relationship between *Repetition History* and *Preschool Attendance*

Status	*Attended Preschool*	*Never Attended*
Never Repeated	20.5%	79.5%
Repeated Once or More	12.2%	87.8%

N=545; Differences signif at $p<.02$

Other in-school factors yielding surprising findings was the absence of a significant relationship with textbook availability and the inverse relationship with *classroom size*. Textbook availability may not have yielded any relationship with various repeater conditions, however because serious shortages were not found in any of the schools surveyed[1]. The counterintuitive relationship with class size contradicts the earlier reported

[1] For the major subjects of Khmer and Math, 83.8% of students reported having their own texts and 16.2% using shared texts; for mathematics, 86.5% reported having received their own textbook while 13.5% used shared texts.

positive relationship between repetition rate and pupil class ratio for the national data (see page 11). This finding may have reflected a sample bias of large schools with relatively low rates of repetition. This possibility seems quite likely when one considers the size of several of the urban schools included in the survey. Although only 6 of the 18 schools included in the sample were located in urban settings, several of these were quite large, especially the two in Phnom Penh. Combined with the tendency for urban areas to have lower repetition rates, it is quite likely that this is the source of the bias which gives an inverse relationship between class size and repetition.

Another interesting relationship concerns *preschool attendance* Analysis of those students who had never previously repeated versus those that had were compared in terms of whether they had ever attended preschool. Here, it emerged that 20.5% of the students who never repeated had attended preschool whereas only 12.2% of those who previously repeated had done so (Table 6.4). While this finding is consistent with the conventional wisdom relating to preschool, it nonetheless provides empirical evidence for a belief long held by Cambodian educators but never before validated.

A finding that was not expected was the relationship between the *age of enrollment* and repeating a grade. An analysis of students never repeating before the last academic year and age when first enrolled found premature enrollment to increase the likelihood of repeating. While there appear to be no differences between repeaters and nonrepeaters when enrolled at the correct age (age 6 or 7), a very statistically significant difference emerges among those first enrolled at age 5 or under and among those age 9 or over (Figure 6.1). The conventional wisdom is that overage children are at greater risk of repeating because teachers do not modify their teaching to accommodate older children's needs. This assumption, however, was not borne out.

One way of interpreting the above finding is that children who have enrolled at an older age must be highly motivated to be in school or they would not endure all the stigma attached to being the oldest in their class. In an extreme case, the survey interviewers found some children in remote schools in Ratanakiri at ages 16 and 17 years old who had just enrolled in Grade 1. Obviously, these students are there because they wish to be. Many teachers are also probably loathe to repeat older children since they feel there is no point in keeping them back whereas such

Figure 6.1: **Differences between Repeaters and Nonrepeaters with respect to Age Enrolled**

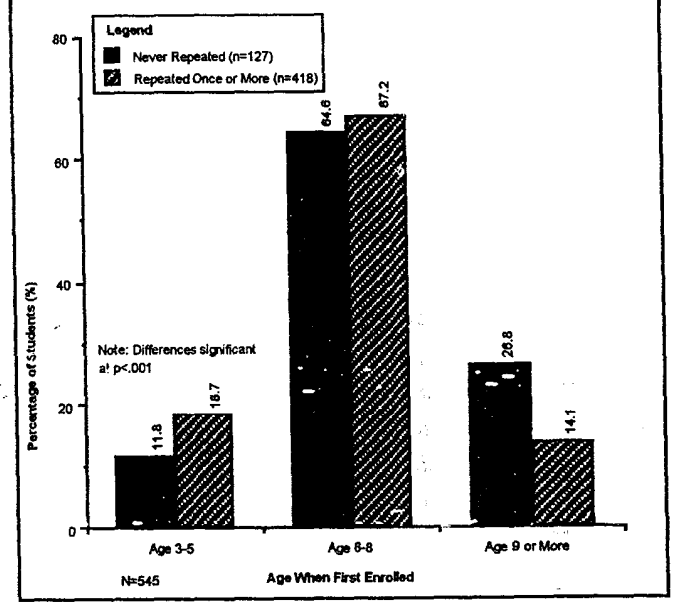
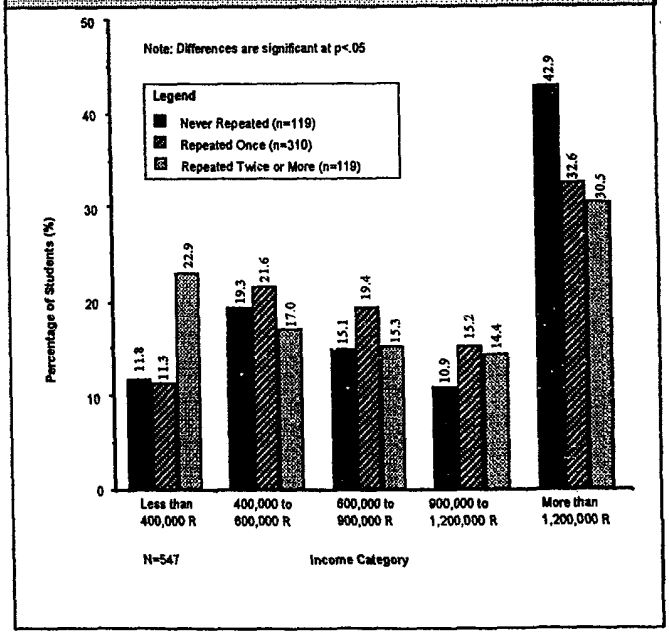
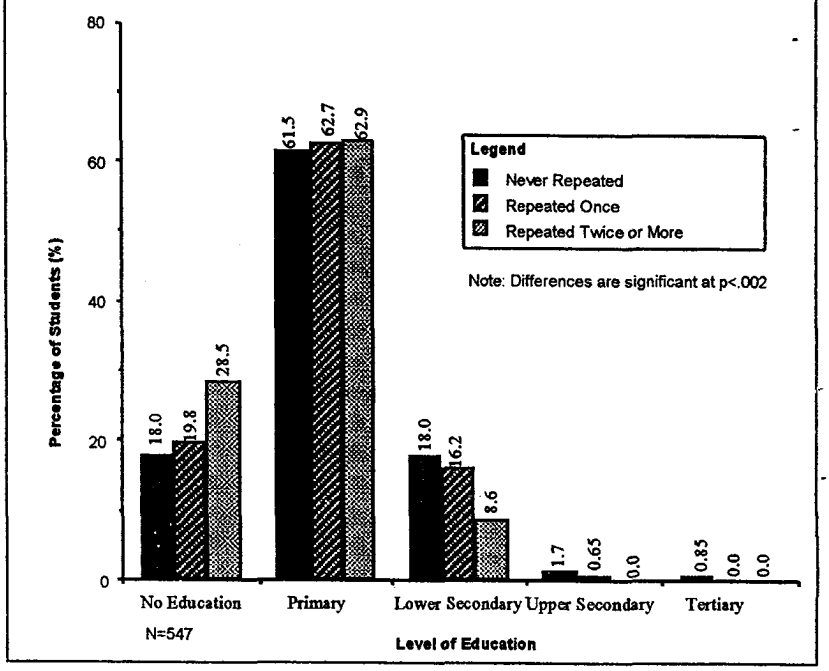


Figure 6.2: **Differences between Repeaters and Nonrepeaters with respect to Income Category**



sentiments would likely not apply to an underage child. Among those children who were under the proper age for enrollment (but whose parents prevailed upon directors to accept them), problems of school readiness are probably very great. Children who lack school readiness skills in their earliest classroom experiences must be very likely to pick up undesirable study habits such as short attention spans and failure to listen to the teacher. These study habits in turn must no doubt increase a student's exposure to the possibility of repeating. This interpretation helps to understand the clear differences which exist between students prematurely enrolled and those enrolled at an older age.

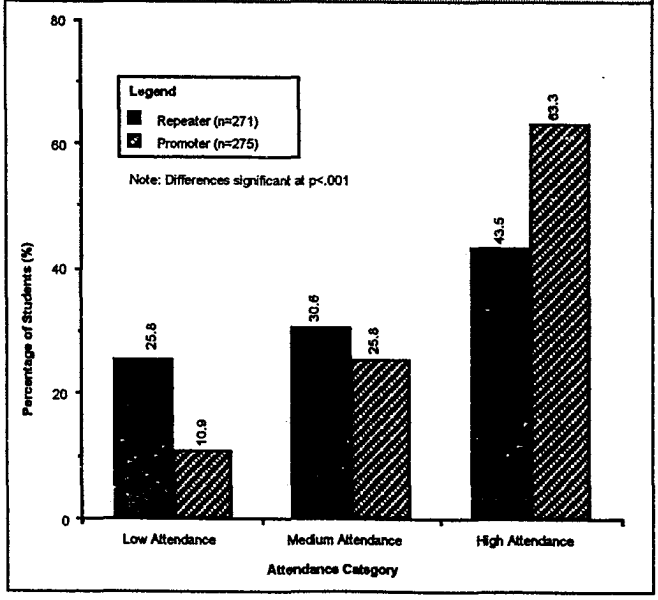
Figure 6.3: Differences between Repeaters and Nonrepeaters with respect to Mother's Level of Education



Though the simple correlation between *family's income* and repetition initially appeared to be rather weak (0.15), a closer examination of this relationship found there to be very clear differences between those in the very lowest and the very highest income groups (Figure 6.2). Marginal differences in the middle income range may have depressed the overall relationship thereby accounting for the weak correlation coefficient. But this could not hide the fact that children from very low income households were much more likely to be repeaters than those from the highest income households. For those students who had repeated twice or more, 22.9% were in the lowest income category whereas only 11.9% of those who had never repeated were. Among those students in the highest income category, the reverse relationship held true. In this respect, 42.9% of those who had never repeated were in this group compared with only 32.6% of those who had repeated once and 30.2% of those who repeated more than once.

A similar pattern of relationship can be observed with regard to *mother's education level* (Figure 6.3). In this respect, differences between students in the different repetition conditions were not great for those whose mothers had entered or completed primary school (i.e., the middle education range). But for those whose mothers were at the extreme ends of the spectrum in terms of educational level, significant differences emerged. This was particularly true for those groups whose mothers had no education and those whose mothers had studied to lower secondary school. For example, among those whose mothers had no education, only 18% had never repeated as against 28.5% who had repeated more than twice. On the other hand, among those whose mothers had studied to the lower secondary level, 18% had never

Figure 6.4: Differences between Repeaters and Promoters with respect to Attendance Level



repeated compared with only 8.6% who had repeated more than twice.

Among children with mothers at the highest education level, more clear differences emerged but the smaller number of respondents at these education levels makes conclusions more tenuous. Nevertheless, one can still see that there were few or no repeaters among those with mothers who had studied to the upper secondary or tertiary levels.

Table 6.5: Possible Predictor Variables Correlating with Attendance

Simple Correlations with Student Attendance*(in descending order of magnitude)	
1. School Governance	0.33
2. Urban/Rural Residence	0.28
4. Teacher Qualifications	0.26
5. Parents' SES	0.22
6. Mother's Education Level	0.22
7. Father's Education Level	0.19 (p<.0005)
8. Teacher's Professional Status	0.17 (p<.0005)
3. Kind of School Attended**	0.10 (p<.03)
9. Family Income	0.09 (p<.03)
10. Secondary Occupation of Teacher	-0.10 (p<.03)
11. Distance to school	-0.13 (p<.002)
12. Previous History of Repetition	-0.18
13. Native tongue of Parents	-0.29 (p<.01)

* Significant at p<.0001 unless otherwise

The most important relationship found among all the possible predictors considered was *attendance*. As reported earlier, attendance correlates with "most recent promotional status" at 0.22. Once again, differences between repeaters and promoters were most apparent at the extremes (Figure 6.4). In this respect, one can see that 25.8% of repeaters were in the lowest attendance category versus only 10.91% for promoters; at the same time, 63.27% of promoters were in the highest attendance category while only 43.54% of repeaters were. At p<.001, these differences between repeaters and promoters are highly significant.

But the importance of attendance as a key predictor lies not only in the strength of its correlation with promotional status but also with the number of other predictors with which it also correlates. These correlations are presented in Table 6.5. Some of the factors listed do not correlate directly with promotional status. These include distance to school, teacher qualifications, secondary occupation of teachers (i.e., whether teachers work other jobs besides that of teacher), and native tongue of parents among others. This strongly suggests that attendance is an important mediating variable between promotional status and a number of other factors that are usually intuitively thought to relate to being repeated or promoted. This interpretation of the role of attendance with respect to promotional status is validated by the regression analysis described below.

6.1.3. The Prediction Model and Regression Analysis

One of the most important aims of the current study was to develop a prediction model for student repetition in Cambodia. The statistical tool used for this task was a "logistic regression" since the dependent variable considered was dichotomous (repeated/promoted). In doing this regression, the predictor variables described above that seemed most likely to correlate with student repetition simultaneously were systematically analyzed in various combinations.[2] Those variables that maintained a continuous relationship with repe-

Table 6.6: Values Generated from a Logistic Regression of Variables Associated with Student Repetition

Logistic Regression Predicting Student Repetition					
Predictor	*Parameter Estimate*	*Standard Error*	*Standardized Estimate*	*Odds Ratio*	*Probability*
1. Premature Enrollment	-1.02	0.42	-0.20	0.362	0.02
2. Attendance	-1.02	0.21	-0.47	0.361	0.0001
3. Preschool Attendance	0.84	0.32	0.17	2.320	0.01
4. Class size	-051	0.13	-0.30	0.601	0.0001
5. School Governance	0.03	0.01	0.20	1.030	0.01

Condition Tested: Never repeated=0; Repeated once or more=1

Other Coding: Premature Enrolm - 1=premature; 2=not premat.; Preschool Attendance - 1=yes; 2=no; Attendance: high value=high attendance, low value=low attendance; Class size: high value=large class size, low value=small class size; School Governance: high value=good governance, low value=poor governance

[2] "Number of times repeated previously" was not considered in the regression because it overlapped with the dependent variable. It was feared that this overlap might create a regression which underestimated the role of other variables.

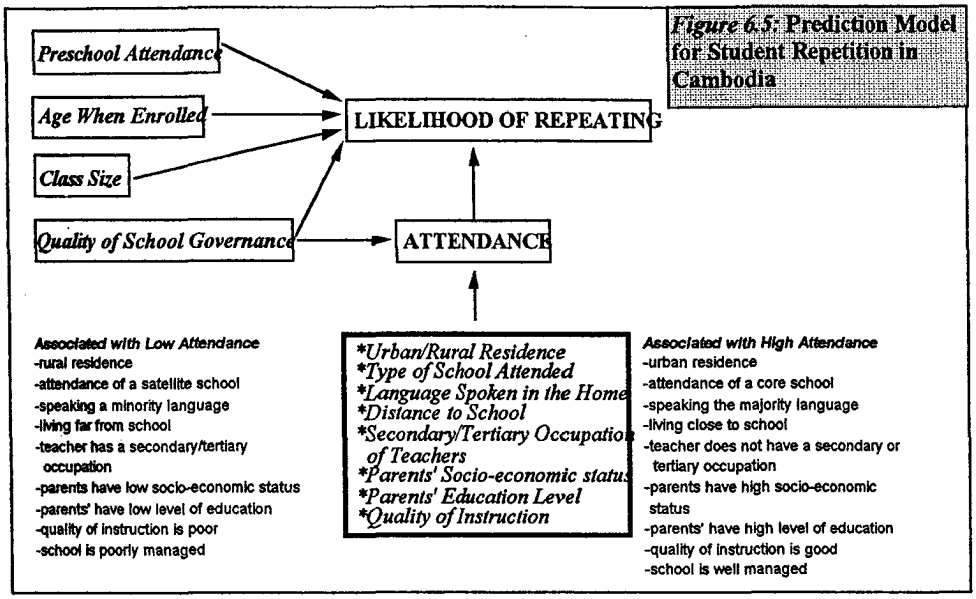


Figure 6.5: **Prediction Model for Student Repetition in Cambodia**

tition are summarized in Table 6.6.[3]

Once again, the variable exhibiting the strongest relationship in the regression was student attendance (-0.47) followed by class size (-0.30) which continued to show an inverse relationship with repetition (for reasons cited above). School governance, premature enrollment, and preschool likewise all stayed in the relationship. Factors dropping out as not statistically significant included SES, teacher qualifications, income, residence, and parents' level of education.

Based on the relationships observed with student attendance by other factors usually associated with student repetition as well as the strong relationship exhibited by attendance itself, it can reasonably be assumed that the primary reason that many of these other factors dropped out of the regression was that their effects are mediated by student attendance. Given this assumption, a prediction model for student repetition has been developed in Figure 6.5. In this model, *attendance, preschool, age when enrolled, class size,* and *school governance* are conjectured as "direct" predictors of the likelihood of repeating a grade. Secondary factors such as place of residence (i.e., urban/rural), family income, and parents' education are also placed in the model but as "indirect" predictors. This is to say that their effects are mediated primarily through student attendance which is the most important predictor in the model. School governance is presented as both a direct and indirect predictor since its relationship did not drop out of the regression even though it is also associated positively with attendance. Presenting the relationship of governance in this way helps to mitigate the fact that its relationship with student repetition is still counterintuitive owing to the likelihood that better administered schools also have higher educational standards (and hence higher repetition rates). The relationship with class size explained by the regression is also still counterintuitive (i.e., large class sizes are associated with low repetition) and probably stems from a bias in the sample as explained earlier. This, then, is one area in which future research might seek to better refine the model.

Survey Anecdotes:
Gone with the Wind

In compiling students' internal marks, testers went to great lengths to find the record sheets of students from the previous academic year. In the case of one class, the school office had no records at all. After ascertaining the name of the teacher who taught the class, it was discovered that she had not come to work that day. When a surveyor went to the teacher's village to track down the mark sheet, they did find the teacher but were told that she had given the records to her nephew to use as book covers. Unfortunately, her nephew had transferred to another school so the search ended there.

6.2. Validity of the Evaluation Process Leading to Repetition and Promotion

6.2.1. Factors Considered

This segment of the study sought to determine the degree to which evaluation activities *conducted in schools* reliably predict student achievement. This is an important question

[3] In *logistic regression,* the terminology differs slightly from that used in multiple regression, its more common counterpart. "Parameter estimates" are here used to refer to b-coefficients. These values have in turn been converted into "standardized estimates" which refer to correlation coefficients. "Probability" is based on a Wald Chi Square.

Table 6.7a & b: Correlation Coefficients for Internal and External Scores

(a) *Internal Evaluation - ASSISTED SCHOOLS*

External Evaluation	Term 1	Term 2	Yearly Average	Lang. Average	Math Average
GRADE 1					
Average	n/a (n=0)	0.77 (n=48; p<.01)	0.34 (n=79;p<.01)	0.55 (n=95; p<.01)	0.64 (n=95; p<.01)
Language	–	–	–	0.55 (n=95; p<.01)	–
Mathematics	–	–	–	–	0.53 (n=95;p<.01)
GRADE 2					
Average	0.59 (n=95;p<.01)	0.60 (n=66;p<.01)	0.46 (n=70;p<.01)	0.78 (n=59;p<.01)	0.61 (n=59;p<.01)
Language	–	–	–	0.77 n=59;p<.01	–
Mathematics	–	–	–	–	0.56 (n=59; p<.01)
GRADE 3					
Average	0.51 (n=74;p<.01)	0.38 (n=48;p<.01)	0.63 (n=74;p<.01)	0.71 (n=36;p<.01)	0.67 (n=36;p<.01)
Language	–	–	–	0.74 (n=36;p<.05)	–
Mathematics	–	–	–	–	0.35 (n=36;p<.01)
ALL GRADES					
Average	0.54 (n=169;p<.001)	0.59 n=162;p<.001	0.47 n=223;p<.001	0.62 (n=190;p<.001)	0.59 (n=190;p<.001)
Language	–	–	–	0.63 (n=190;p<.001)	–
Mathematics	–	–	–	–	0.47 (n=190;p<.001)

(b) *Internal Evaluation - UNASSISTED SCHOOLS*

External Evaluation	Term 1	Term 2	Yearly Average	Lang. Average	Math Average
GRADE 1					
Average	0.39 (n=97;p<.01)	0.31 (n=114;p<.01)	0.34 (n=163;p<.01)	0.18 (n=57; ns)	0.28 (n=57; p<.05)
Language	–	–	–	0.14 (n=57; ns)	–
Mathematics	–	–	–	–	0.28 (n=57;p<.05)
GRADE 2					
Average	0.41 (n=103;p<.01)	0.23 (n=98;ns)	0.31 (n=112;p<.01)	0.54 (n=90;p<.01)	0.48 (n=90;p<.01)
Language	–	–	–	0.50 n=90;p<.01	–
Mathematics	–	–	–	–	0.47 (n=90; p<.01)
GRADE 3					
Average	0.67 (n=88;p<.01)	0.71 (n=74;p<.01)	0.74 (n=76;p<.01)	0.59 (n=69;p<.01)	0.62 (n=69;p<.01)
Language	–	–	–	0.61 (n=69;p<.01)	–
Mathematics	–	–	–	–	0.58 (n=69;p<.01)
ALL GRADES					
Average	0.48 (n=288;p<.001)	0.35 n=286;p<.001	0.39 n=351;p<.001	0.43 (n=216;p<.001)	0.45 (n=216;p<.001)
Language	–	–	–	0.40 (n=216;p<.001)	–
Mathematics	–	–	–	–	0.42 (n=216;p<.001)

because promotional decision-making is largely based on information relating to students' internal marks. A failure to validate the evaluation process in whole or in part would suggest that repetition data may not be as meaningful an indicator of students' learning as is sometimes thought. In the final event, this is exactly what was found.

This research question took in 3 areas of inquiry. These included examinations of the *concurrent validity* and *internal reliability* of the evaluation activities in schools as well as an investigation of any *anomalies in promotional decisions* vis a vis students' level of achievement. Each of these questions was investigated in two conditions: among schools having received technical assistance and those not having received such assistance.

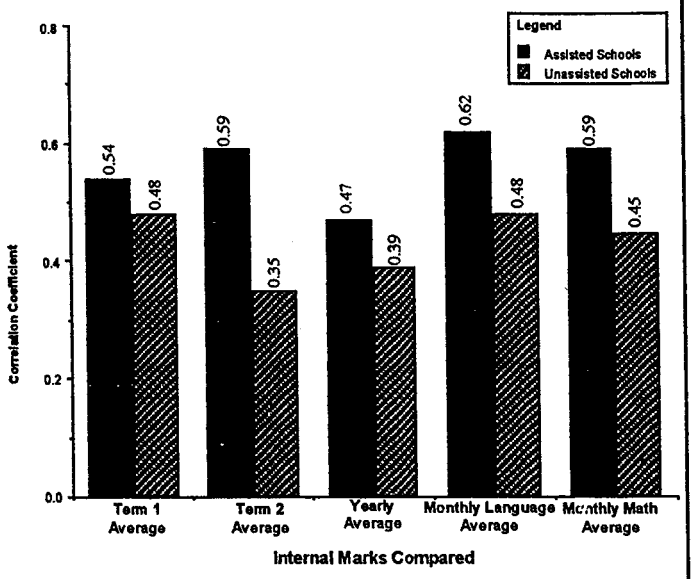
In conducting these analyses, 744 students in Grades 1, 2, and 3 were administered external achievement tests in language and mathematics based on the MoEYS curriculum (314 students from assisted schools and 430 from unassisted schools).[4] Subsequent analyses encountered some difficulty because internal student marks (monthly, 1st Term, 2nd Term, and Yearly Averages) were not always available. For monthly marks, schools were only able to provide data on 55% of those students receiving an externally administered test; 61% for 1st Term marks; 60% for 2nd Term marks; and 77% for Yearly Averages. This in and of itself was an important revelation on the state of record keeping in the nation's schools.

6.2.2. Concurrent Validity and Internal School Evaluation

Following the completion of all achievement tests, students received an external test score for language, mathematics, and an average of both subject tests. Analyses of the concurrent validity be-

[4] Because the analysis was based on the previous academic year's performance scores, Grade 1 students tested included repeaters still in Grade 1 and Grade 2 students recently promoted from Grade 1. In determining Grade 2 and 3 students to test, the same selection process applied.

Figure 6.6: Comparison of Concurrent Validity on Internal & External Measures between Assisted and Unassisted Schools



tween these external test scores and internal marks found distinct differences between schools which had received technical assistance and those that had not (Tables 6.7a and 6.7b). In general, the internal evaluation scores of assisted schools yielded coefficients which tended to be stronger as well as more statistically significant. Indeed, there was an absence of values which were not significant. With a handful of exceptions, most correlation values were in excess of 0.50.

Unassisted schools on the other hand showed a pattern of poorer comparative performance. Although most coefficients were statistically significant, some were not. In any case, coefficient values tended to be weaker than those observed for assisted schools. Except for a few instances, most coefficients were below 0.50 and in some cases reached as low as 0.18.

Another important set of observations from this data was that there seemed to be greater concurrent validity in the higher grades and for internal marks which were monthly. The fact that continuous evaluation practices in all schools considered exhibited higher levels of concurrent validity than end of term/year marks argues for a possible reconsideration of the manner in which yearly averages are computed.

The main thrust of these observations is that technically assisted schools exhibited evaluation practices which were more readily validated than those in schools receiving no technical assistance. The pervasiveness of this pattern is quite evident in Figure 6.6 where the correlation coefficients for average external test scores in all grades are compared in each internal marking category. Without exception, assisted schools exhibit a higher level of concurrence than unassisted schools.

The finding that technically assisted schools have seemingly more valid internal evaluation practices helps to substantiate a point made earlier with respect to the relationship between school governance and student repetition. This is because the 3 assisted schools used in this segment of the study were also found to have had higher governance scores than the unassisted schools. The argument has already been made that schools which are better administered have higher levels of repetition because they possess higher educational standards. In addition, we now see that these better administered schools also have more valid evaluation practices.

Another way in which the study has sought to validate internal evaluation practices has been to compare the number of *promoted* students who failed or passed external achievement tests with the number of *repeated* students who passed or failed.[5] The results of these comparisons for both assisted and unassisted schools are presented in Figures 6.7a and b.

[5] The criterion used for passing/failing on external tests was set at 50% mastery of content, the same standard used by schools in their internal evaluation.

Table 6.8a & b: Comparison of Mean Percentage Scores for Promoters and Repeaters

(a) **ASSISTED SCHOOLS**

Grade	*Language*		*Math*		*Average*	
	Promoters	Repeaters	Promoters	Repeaters	Promoters	Repeaters
1	47.8	28.4	58.0	35.2	50.9	30.7
2	55.4	28.2	33.0*	23.0*	44.4	25.3
3	49.8	21.0	22.3	14.0	37.6	17.9

(b) **UNASSISTED SCHOOLS**

Grade	*Language*		*Math*		*Average*	
	Promoters	Repeaters	Promoters	Repeaters	Promoters	Repeaters
1	42.8	24.0	58.0	36.8	47.7	28.3
2	39.4	27.0	23.3**	16.3**	32.2	22.2
3	52.8	22.2	33.8	12.5	44.4	18.0

Differences are all significant at $p<.001$ unless otherwise noted.
* $p<.003$
** $p<.05$

According to these results, external and internal evaluation measures seem to be in agreement with respect to those students who should have repeated due to poor mastery of content. With the exception of a small number of students, most repeaters failed the external achievement test. But a very surprising discovery was that in most cases, 50% or more of promoted students in both assisted and unassisted schools had also failed the external tests administered. But this pattern tended to be more true of unassisted schools than assisted ones.

A comparison of the actual scores of promoters and repeaters within the schools tested confirms the observations seen in Figure 6.7 that repeaters do score significantly lower than promoters in all grades and conditions. An analysis of mean percentage scores for repeaters and promoters using a *t-test* indicate that all differences are statistically significant (Table 6.8a & b).

The above findings suggest a number of important implications. First, Cambodia may already have a *de facto* policy of automatic promotion being enacted locally by schools. One likely reason that so many promoted students failed achievement tests in language and math relates to an earlier discussion about inflationary marking practices (see pp. 4-5). That is, teachers use the marks from other minor subjects to inflate yearly averages so that as many students pass as possible. For example, such subjects as "singing and dance" are weighted equally with "reading." Some teachers were

Figure 6.7a & b: Comparison of Promoted/Repeated Students on External Evaluation Measures

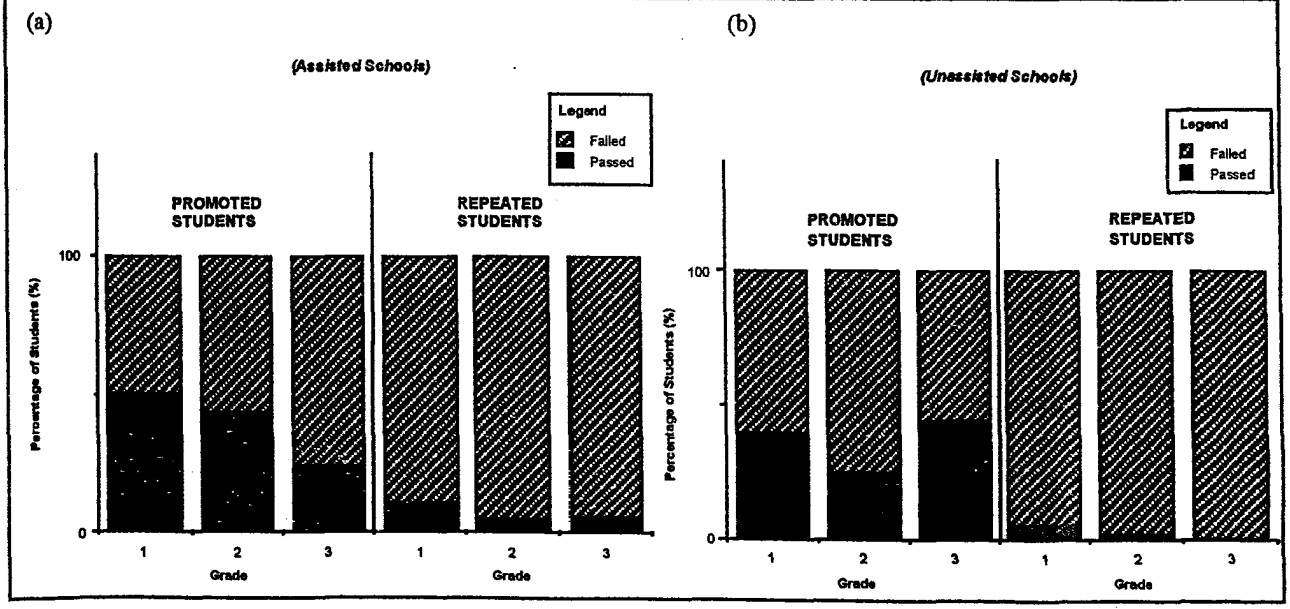
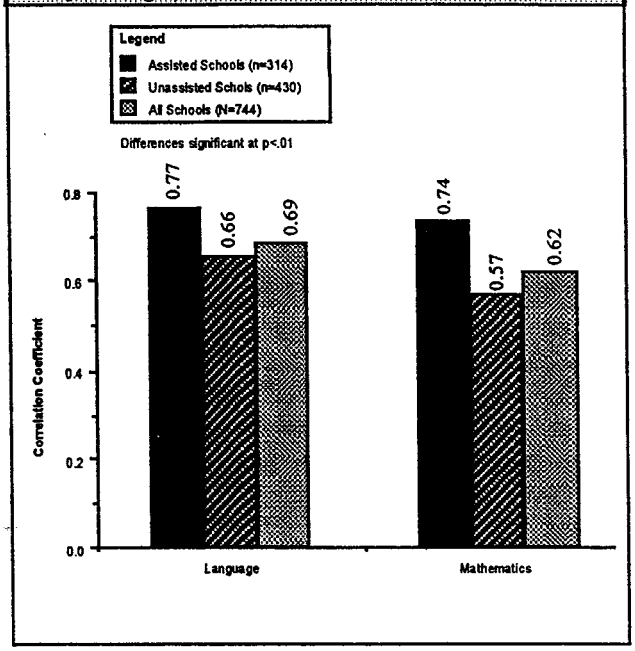


Figure 6.8: Comparison of Internal Reliability Coefficients (Monthly Marks for Language, Mathematics, and Overall Yearly Averages)



even found to grade students for school yard work (under the subject heading "hand work") to inflate student marks. Thus, averaging usually very high scores in minor subjects helps to offset lower scores in the core subjects.

Another implication of these results heard earlier is that extreme variability in educational standards has diluted the meaning of the designation "promoted. Among subject tests in language and math, promoter mean scores only reach above 50% in 5 out of 18 cases. This harkens back to a supposition stated earlier that repetition rates as currently defined may not necessarily be a very meaningful measure of actual student achievement.

6.2.3. Internal Reliability of School Marking Practices

The study also looked at the degree to which there existed internal consistency between the various internal mark components that are used in making the decision to promote or repeat a student. Based on the high correlation coefficients with external achievement tests found in Tables 6.7a and b, monthly marks were taken to be the most valid internal mark component calculated by schools (i.e., valid in terms of measuring real educational attainment). These marks were then compared with yearly student averages because it is largely upon the basis of these scores that students are repeated or promoted. Correlation coefficients were accordingly computed for assisted and unassisted schools. An additional coefficient was computed for all schools combined. These results are presented in Figure 6.8.

All coefficients demonstrating internal reliability were statistically significant. Once again, however, assisted schools were found to have relatively higher measures of internal reliability of its marking process. Unassisted schools, on the other hand, showed a smaller magnitude in the reliability of its internal evaluation practices. Overall, all 6 schools evidenced internal reliability measures of 0.69 for language and 0.62 for math. Based on this analysis, the internal reliability of the marking process seems adequate although this conclusion is much truer among assisted schools than it is among unassisted ones.

6.2.4. Examination of Anomalies in Promotional Status

Given various examples in the literature on the circumvention of official promotional guidelines (e.g., McGinn, 1992), the study also checked to see whether any such anomalies in promotional status existed in Cambodian schools. In addition to compiling internal student marks for comparison with external test scores, field testers had also collected data on the promotional status of each student tested. It was, therefore, possible to make determinations of the degree to which schools were complying with official guidelines as to when students should be repeated or promoted. As noted earlier, the primary criterion used for promotion is the yearly average score with marks of 5.0 or higher requiring promotion. Of the 574 students with yearly averages examined, 9 students with marks less than 5.0 were found to have been promoted and 29 students with

Table 6.9: Anomalies in Promotional Status of Students based on Yearly Average Scores

Anomaly Category	
Failing students passed	1.6% (9)
Passing students failed	5.1% (29)

N=574; ()=No of cases

marks more than 5.0 had been repeated (Table 6.9). Some of the anomalies found were extreme such as one repeater with a yearly average score of 8.0 and a promoter with an average of only 3.87.

Focus group discussions with directors, teachers, and parents in each of the 6 schools tested found frank acknowledgment of the practice of circumventing the official promotion guidelines (i.e., cut-off points for promotion) in certain circumstances. For repeating students who should have been promoted, the most common reasons cited were:

- Accommodating a request from parents
- Students do not show an adequate degree of readiness to take on higher grade level learning tasks
- Students were found to have cheated on an examination
- (For Grade 6 students) High School too far away so parents request students to repeat Grade 6 again

Survey Anecdotes:
Push 'em up, push 'em down
One of the schools tested during the survey seemed to have more repeaters than officially reported. Upon closer examination, it was discovered that the particular school in question had indeed reported a rather low number of repeaters for Grade 1 to the PoE in response to a directive to "increase" promotion rates. But after a month of study at the beginning of the following school year, the students seemed so lost in the Grade 2 curriculum that the director decided to change the class level to Grade 1. All promoters became repeaters overnight.

Reasons cited for promoting students who should otherwise have been repeated included:

- Accommodating a request from parents
- Classrooms at higher grade level lack students so some (borderline) repeaters are promoted to fill up class lists
- PoE has sent directive to increase promotion rates so yearly averages are "revised" to allow repeaters into the next grade level
- Seems apparent that student will drop out if not promoted
- Student is too old to stay in current grade

By far the most common cause of changing a student's promotional status (in both categories) according to these focus groups was a request from parents. In cases where the parent is asking for their child to be promoted, the director usually extracts a promise that attendance must be high and/or that the child be helped in his/her homework by the parent. But the acknowledgment that students' marks are sometimes "revised" to allow promotion or repetition as the case may be suggests that the number of anomalies gleaned from the present data set is only the tip of the iceberg with respect to actual occurrence. Since teachers are the acknowledged guardian of students' marks and primary decision-maker for repeating them, such revisions are easy enough to make. The policy response to the above situation should probably be very cautious. Obviously, the possibility that such practices may be widespread indicates that they are meeting a need sorely felt by schools (e.g., being responsive to parents, bolstering class lists, etc.). The fact that the system has this flexibility is not necessarily a bad thing either. And it should be recognized that trying to strictly enforce current guidelines without addressing underlying causes will probably only lead to more "creative circumvention." Perhaps the best response might be to formalize current practices by allowing for a 3rd category of borderline students who may be either repeated or promoted based on the discretion of an authorized school committee.

Composite Case Study of School Practices Leading to Promotion and Repetition

The 6 schools studied intensively during this study dramatized the extent and depth of diversity in variable practices relating to promotional decision-making and general evaluation matters. In some cases, these practices were creative and responsive to local needs. In others, they showed poor management and a general failure to grasp the importance that should attach to the decision to repeat or promote a student.

Among the positive practices, researchers found some schools going to great lengths to help students move on to the next grade. One very interesting mechanism employed by a number of schools was to allow repeaters a second chance at the beginning of the school year to take one last examination (usually in language and mathematics) in order to get into the next grade level. One problem with this practice, however, is that it creates serious inconsistencies between the number of repeaters officially reported earlier to the Provincial Office of Education and the Ministry and the number of students who actually repeat (which depends on how many children pass the informal test given at the beginning of the following academic year). Another interesting means used to help students was to extract promises from parents to ensure high attendance and tutoring at home as a precondition for promotion (for those students who would normally have repeated). For the under age children whom parents pressure schools to enroll, some directors were found to put them all together in one room and call it a preschool class rather than mixing them in with more mature Grade 1 children. This practice is seen to prevent classroom management problems and the high likelihood of repetition that might otherwise occur by putting children who lack school readiness skills in with mature students. It may, however, lead to problems later on for these children, especially if as was explained earlier, they are not constructively engaged in a way to forestall the development of bad study habits.

Teachers also seemed to show great flexibility regarding the application of promotional criteria. For example, students who miss more than 30 days must technically be repeated even if their point averages exceed 5.0. But in several cases where students had missed more than 30 days, teachers still promoted them if their point averages exceeded the minimum required. These findings demonstrate that the 'three criterion rule' for promotion (marks, attendance, and behavior) is in fact a 'one criterion rule.'

There were serious concerns, however, about the way nearly all schools evaluated Grade 1 children. For example, there seemed to be wide variation between schools with respect to evaluation exercises administered at the Grade 1 level during the First Term. Some schools do conduct formal evaluation during this period while others do not. For those schools that do not, there were serious questions about the reliability of student evaluation records because report cards issued to students during the First Term indicate evaluations which are not based on objective measures of students' abilities. Rather, these evaluations are simply highly subjective assessments made by teachers at the end of each month and reported to parents. These marks, however, form part of the student's official mark sheet which is used for promotional decision-making. When formal tests are administered to Grade 1 students at the end of the year, these usually take the form of very short batteries of exercises consisting of 5 questions or less per subject. Such exercises usually consist of a few arithmetic problems given to the class as a whole, some dictated words to be written on a slate, and a few minutes of reading which is done individually by each child during class recess. To cover the 50, 60, or 70 children that a teacher may have in his or her class, this process is spread out over a period of a week or more. For teachers who maximize the number of questions asked during these evaluations, reliability of the evaluation is more assured. But for many children at Grade 1 level, promotion or repetition seems to hang on successfully completing a few questions at the end of each term.

Promotional decision-making also seemed to be greatly influenced by a number of administrative concerns such as filling up class lists. When a school is faced with the prospect of only 4 or 5 students at a certain grade level, they often reverse decisions to repeat students to fill up class lists. Conversely, a school may initially promote everyone to comply with a central directive to increase promotion rates only to change their status to repeaters at the beginning of the following year if they find it too difficult to teach them the next level of curriculum tasks.

And of course there were simply a number of practices which can only be described as very unprofessional. When organizing samples of students for achievement testing, survey invigilators often found that teachers did not know who the repeaters or promoters in their classes were. Such ignorance of students' backgrounds suggests that many teachers do not target remedial help for children who repeated previously but simply present the same package of teaching for all students without regard to special needs. Many schools do not even keep student evaluation records from one year to the next so checking such background would be difficult to impossible even if the teacher wanted to find out. In addition, the manner in which many annual averages were calculated was sometimes quite sloppy. When computing

internal student marks for concurrent validity analyses, researchers found that averages calculated in the computer did not correspond with final averages awarded by teachers. In one case, this affected over 10 students whose averages showed that they should have been promoted but had been repeated instead. When going back to the school to check these anomalies, researchers were told that the teacher had had a lot of personal problems and was prone to making such mistakes. Such thinking shows a major lapse in professionalism and a failure to give the promotional decision-making process the seriousness which it requires.

6.3. Investigation of Differences in Repetition by Selected Criteria: Technical Assistance and Urban/Rural Setting

An important thesis underlying the study was to detect differences between schools with respect to repetition rate patterns in two conditions: degree of technical assistance received and urban/rural setting. Repetition differences between schools with respect to the degree of technical assistance which they have received is an area which has not really been systematically investigated in the past in spite of millions of dollars in investment. Although analyses of national data have already confirmed there to be clear differences in the incidence of repetition between urban and rural schools, the study wanted to go one step further. Accordingly, the investigation tried to better understand possible discrete differences between urban schools in large cities such as Phnom Penh and those in district towns which serve a combination of rural and urban populations. With this in mind, analyses of repetition rate differences took into account a third category of schools designated as "semi-urban." This category refers primarily to schools in district towns which are very close to rural areas.

All 18 schools surveyed by the study were used in this segment of the investigation. As explained in Chapter 5, schools were selected through controlled sampling techniques and paired with each other to ensure comparability in terms of kind of school, setting, and pupil class ratio (cf. Appendix). This resulted in a sample comprising 9 school pairs. Classification of schools according to the technical assistance received and other criteria was based primarily on data received from EMIS. Because some technical assistance delivered during the past several years has been national in scope (e.g., PASEC), criteria used for assistance classifications focused on localized inputs such as intensive teacher training (excluding distance education), cluster school development, library development, and special inputs for community development.[6] Once again, the fact that the analysis below does not distinguish between the kind, quality, or quantity of technical assistance provided could be a possible limitation. But as the underlying goal of all assistance is to reduce repetition, this seemed an appropriate justification for looking at differences between schools in this respect.

Table 6.10a: **Repetition Rate Differences for Assisted and Unassisted Schools**

(a)

	Grade Level	% Repeated	% Promoted
Assisted Schools	1	45%	55%
	2	26%	74%
	3	17%	83%
	1-3	32%	68%
Unassisted Schools	1	34%	66%
	2	28%	72%
	3	19%	81%
	1-3	28%	72%

N=18 Schools

Table 6.10b: **Interpretation of Differences**

(b)

Analysis of Differences
Grade 1 Signif. at p<.0001 in favor of unassisted schools
Grade 2 Not significant (p<.05)
Grade 3 Not significant (p<.05)
Grades 1-3 Signif. at p<.0001 in favor of unassisted schools

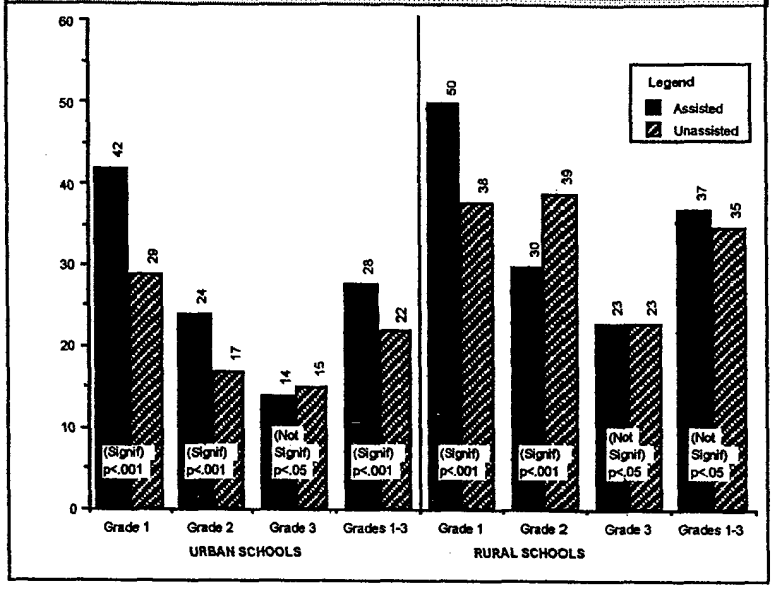
6.3.1. Repetition Rate Differences among Schools Receiving or Not Receiving Technical Assistance

Overall rates of repetition for all schools in each condition were considered for Grades 1, 2, and 3. Differences in overall rates are reported in Tables 6.10a and b below. Rates were found to be significantly different primarily for Grade 1 in favor of unassisted schools (Table 10b). Although rate differences for Grades 2 and 3 were not statistically significant, the magnitude of the variation in Grade 1 resulted in an overall difference of significant value between the two assistance conditions for the lower primary rates as a whole.

This finding echoes back to a now familiar theme - that technical assistance may indeed be related to better governance, evaluation practices, and other quality variables which have the general effect of raising educational standards. This in turn leads to a tendency towards higher rather than lower rates of repetition. This likelihood becomes even greater when one considers the difference in

[6] Aid providers in this regard included UNICEF, SCFA, Redd Barna, CAPE, Sipar, and CONCERN.

Figure 6.9: Differences in Repetition between Assisted & Unassisted Schools When Controlling for Urban/Rural Location



average ratings in governance between schools based on survey data. On a scale of 1-10, average ratings for technically assisted schools stood at "5.4" whereas the average rating for the 9 unassisted schools was only "2.7."[7] But it is puzzling to see that superior governance and other quality variables do not translate into higher educational attainment for students. One possible answer to this puzzle based on earlier findings is that high student attendance is a necessary condition for quality inputs to have effect. Since schools have little control over attendance, rates of repetition in better managed schools become exacerbated among children from those households with the lowest incomes and poorest levels of parental education.

Although there was a balance in the sample between urban/rural schools which had received assistance and those which had not, the study also tried to control for urban/rural differences in the event that there was some unforeseen sample bias at work. The results of an analysis controlling for urban/rural differences is presented in Figure 6.9. Here one can see that the significantly higher rates of repetition in Grade 1 among the assisted schools holds firm for both urban and rural schools. But urban location seems to intensify the difference between assisted and unassisted schools in Grade 2 as well although Grade 3 continues to show no significant differences in either condition. In this regard, one can see that urban assisted schools reveal higher rates of repetition than unassisted ones and that this pattern is more consistent than can be said of a similar comparison between assisted and unassisted rural schools. If one accepts the thesis that technical assistance tends to raise educational standards and repetition rates along with it, then this finding indicates that such an effect is greater among urban schools than rural ones.

Table 6.11a: Repetition Rate Differences for Urban, Semi-urban, and Rural Schools

	Grade Level	% Repeated	% Promoted
Urban Schools	1	36%	64%
	2	19%	81%
	3	13%	87%
	1-3	25%	75%
Semi-urban Schools	1	38%	62%
	2	23%	77%
	3	16%	84%
	1-3	27%	73%
Rural Schools	1	44%	56%
	2	35%	65%
	3	23%	77%
	1-3	36%	64%

N=18 Schools

Table 6.11b: Interpretation of Differences

Analysis of Differences
Grade 1-3 Differences in rates between urban/semi-urban and rural schools is significant for all grades in favor of the former (p<.001).
Differences in rates between urban and semi-urban schools are not significant (p<.001)

6.3.1. Repetition Rate Differences among Schools in Urban/Rural Locations

The results of analyses comparing urban and rural schools were rather straightforward and are consistent with the conventional wisdom concerning urban/rural differences between schools (Table 6.11a and b). In this regard, repetition rates for urban schools were lower than for those in rural locations. Indeed, significance levels were very high (p<.001). It was also found, however, that the difference in repetition

[7] Governance ratings were based on question scores covering planning, availability and organization of teaching aids, access to library services, etc. (see Questionnaire in Appendix).

rates between urban and semi-urban schools was not statistically significant. This gives some empirical basis for lumping schools in true urban areas such as Phnom Penh in with schools in provincial towns as is often done.

6.4. Attitudes towards Repetition among Education Stakeholders: Parents, Teachers, and Directors

This part of the survey tried to assess differences in attitudes about student repetition among important education stakeholders. Attitudinal dimensions considered concerned the *causes* of repetition, the *effectiveness of repetition* as a strategy to help children learn, and general *strategies through which to reduce repetition.*

Attitudinal surveys of parents in Cambodia are rare and fraught with difficulties. Problems with such surveys include the need to explain the difference between an opinion and a fact to respondents and that such survey items have no "correct" answer. *Social desirability response bias* is another serious problem, especially given the importance of deference in Cambodian society. The interview process tried to address these concerns by presenting survey items in a nonthreatening way, to use pictures for responses (see Interview Guidelines in the Appendix), and by explaining that there is no correct response to any given statement. Nevertheless, it is likely that many respondents still felt compelled to provide socially desirable answers leading to some response patterns that are contradictory. This limitation should, therefore, be remembered when considering responding patterns below.

6.4.1. Important Highlights Regarding the Attitudes of Education Stakeholders

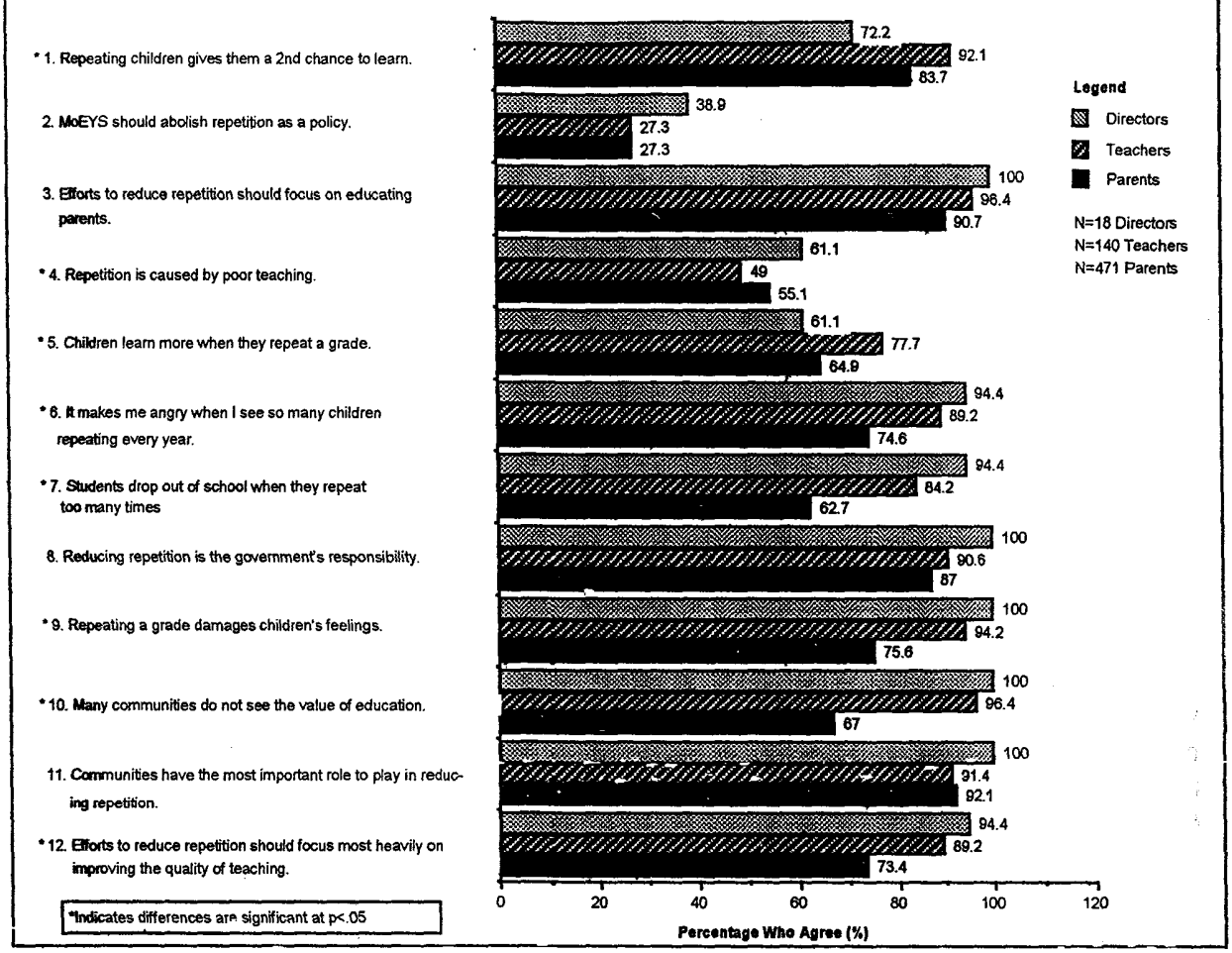
All attitudinal items asked during the survey required indicating agreement (or disagreement) to a set of statements along a continuum from Strongly Agree to Strongly Disagree. The polarities of items were reversed in a random order to ensure that respondents did not simply agree with all statements. Some of the more important findings with respect to this investigation are presented in Figure 6.10 below. Items for which responses between parents, teachers, and directors are significantly different are marked by a star (*).

Perhaps the most interesting response by education stakeholders was the attitude about keeping or discarding repetition as a Ministry policy (Figure 6.10). Here, one can see that a majority of parents, teachers, and directors disagreed with the statement that the MoEYS should "abolish repetition because it is an ineffective policy." Among directors 38.9% agreed with this proposition compared with 23.7% of teachers and parents. Although more directors supported the abolition of repetition than either parents or teachers, the difference between groups was not statistically significant. Thus, a substantial majority of all education stakeholders appear to want repetition maintained as a Ministry policy. *This finding suggests there may be little public support for the introduction of automatic promotion in Cambodia unless preceded by intensive education of communities and school personnel.*

An expected difference between respondents was that teachers would attribute the cause of repetition to teaching least (Item 4) whereas parents would attribute cause to "communities not seeing the value of education" least (Item 10). This expectation was borne out by a responding pattern for Item 4 in which parents and directors were both more likely to accept the proposition that poor teaching is the primary cause for repetition. On the other hand, almost all teachers and directors accepted the proposition that communities do not value education whereas only somewhat more than half of parents did. Both differences were statistically significant.

Another interesting finding is that parents and teachers seem to have somewhat more of a tolerance for repetition than directors, seeing it not necessarily as a bad thing (see Items 1 and 5). In this regard, a large majority of parents and teachers seem to feel that repeating a grade gives children a "second chance" and that they indeed "learn more when they repeat." It should be noted, however,

Figure 6.10: Response Patterns to Items Assessing Attitudes towards Repetition by Education Stakeholders



that this did not prevent many teachers (and directors) from feeling that repetition is more likely to lead to dropout than parents (Item 7) and that it hurts children's feelings (Item 9).

Some qualifications should be added to the above findings. First, the margins of agreement for many questions seem high and suggest a problem with pressures to give socially desirable answers. Thus, response patterns should be interpreted as suggesting particular trends of opinion and not absolute margins of agreement/disagreement. Some findings from the survey were also contradictory. For example, parents, teachers, and directors all tend to agree (i.e., differences are not statistically significant) with the proposition that "reducing repetition is the government's responsibility" (Item 8) but also that "communities have the most important role to play in reducing repetition" (Item 11).

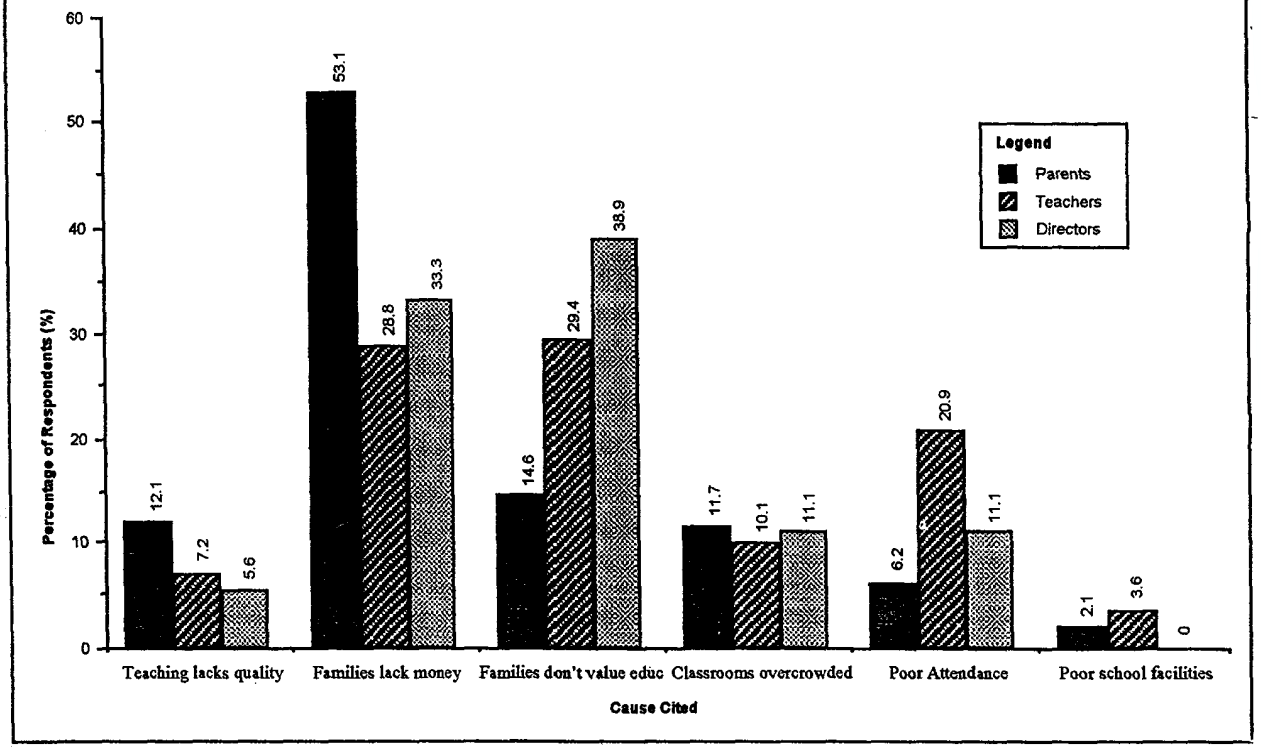
6.4.2. *Attitudes About the Cause of Repetition*

One of the tasks asked of parents, teachers, and directors was to rank the causes of student repetition in order from most to least important. To keep the task simple, the causes suggested to respondents were kept to 6 in number. Rankings among respondents were compared in two ways. First, mean rank scores were computed for parents, teachers, and directors and ordered accordingly (Table 6.12). Another way in

Table 6.12: Mean Rankings of Cause of Repetition by Education Stakeholders in order of importance (1=most important; 6=least important)

Cause	Rankings		
	Parents	*Teachers*	*Directors*
Teaching lacks quality	3	5	5
Families do not have enough money for education	1	2	2
Many families do not place high value on education	2	1	1
Classrooms are too overcrowded	4	4	4
Students' attendance is poor	5	3	3
School facilities such as buildings, desks, etc. are inadequate	6	6	6

Figure 6.11: **Percentage of Stakeholders Citing Various Causes of Repetition as the 'Most' Important**



which differences were analyzed was to compare response frequencies among each stakeholder group according to the cause which they ranked as most important (Figure 6.11).

Analysis of differences through comparison of mean rankings showed there to be surprising uniformity between teachers and directors. Indeed, there are no differences in ranking between these two stakeholders. For all three stakeholder groups, the two most important causes leading to student repetition seem to be "lack of money" for spending on education by families and failure of many families to "value" education. Not surprisingly, parents gave failure to value education an average rank of "2" whereas many teachers and directors seemed to think it the most important reason that students repeated. Still, it is remarkable that so many parents would have been as self-critical as even a ranking of "2" would suggest. Another interesting finding is that parents gave "teaching" a rank of moderate importance ("3") in causing repetition whereas both teachers and directors showed a relative rank of only "5". In this respect, school directors seemed to contradict themselves *vis a vis* their response to Item 4 in Figure 6.10.

Differences in responses regarding the role of student attendance as a cause of repetition are also striking. Teachers and directors give this cause a rank of moderate importance ("3") whereas parents only ranked it as "5" in importance. Based on earlier survey findings of the importance of attendance as a repetition predictor, this suggests an important element of content in community education programs which might be planned in the future.

A point of perfect uniformity among stakeholders concerns the cause regarded as 'least' important in leading to repetition. In this respect, all stakeholders ranked "poor school infrastructure" as the least important cause of repetition. This finding suggests that the frequent requests for infrastructural improvement often relayed by community associations may, therefore, not represent the things most important to parents in terms of the education of their children. This may be because such associations are usually led by the "grandfathers" of the community and not parents.

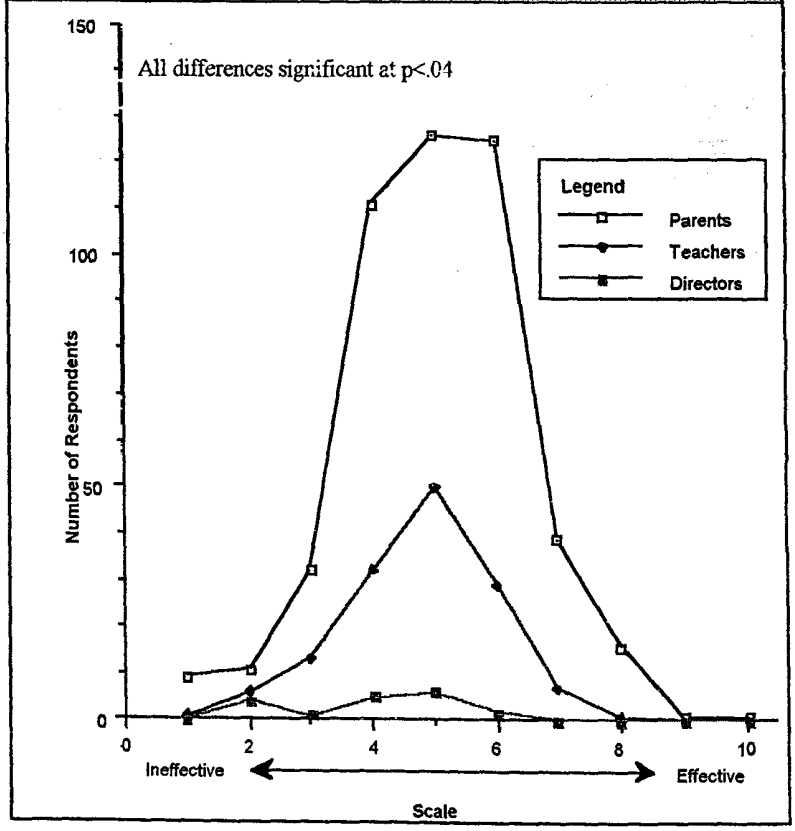
Percentage differences among stakeholders when ranking the most important cause of repetition (Figure 6.11) confirm much of what has been related above with some qualifications. In particular, failure to value education and economic factors continue to maintain a dominating presence as leading causes cited. However, it seems that a sizable proportion of teachers (28.8%) and directors (33.3%) agree with parents (53.1%) that inadequate family finances for education are the most important factor leading to repetition.[8] In addition, only 14.6% of parents placed the failure of many families to value education as the leading cause of repetition, thereby tempering earlier conclusions regarding the importance of this factor among parents. It should also be pointed out that a sizable proportion of teachers (20.9%) placed attendance as the leading cause of repetition. Given teachers' unique perspective as the guardians of children's learning, this finding helps to echo conclusions about the importance of attendance made earlier.

An unmistakable thrust of the findings above is that there seems to be a tendency among many education stakeholders to cite out-of-school factors as the leading cause of repetition. These include family income, failure to value education, and student attendance (though the latter could be regarded as both an in- and out-of-school factor). Such in-school factors as classroom overcrowding, infrastructure, and even the quality of teaching seem to be starkly absent from the minds of most parents, teachers, and directors as the leading causes of student repetition.

6.4.3. Attitudes Concerning the Effectiveness of Repetition as an Intervention Strategy

In addition to attitudes concerning the causes of repetition, the study also tried to assess whether education stakeholders felt that repetition is an *effective* intervention which ultimately improves children's learning. The literature review has already indicated that in many countries, public perceptions tend to favor the use of repetition as an effective means to help children even though the vast majority of research shows it to be ineffective and even damaging to children's social development. Thus, this seemed to be an important area of inquiry for the present study to investigate in Cambodia, especially given the number of advocates in and out of government who favor abolishing repetition as a policy.

Figure 6.12: **Frequency Distribution for Total Scores on Effectiveness of Repetition among Education Stakeholders**



Some general impression of response patterns concerning effectiveness has already been indicated in the overview of specific questionnaire items above. Those items which were specifically used to assess attitudes regarding effectiveness of grade repetition included Items 1, 2, 5, 6, 7, and 9. High item scores on this parameter were interpreted to mean that respondents thought that repetition *is* effective whereas low scores indicated the attitude that it was *not*

[8] Readers should note that the above opinions notwithstanding, survey analyses of *repetition* and *budget spent by families on education* did not show any significant correlation.

effective. All respondents' scores have been converted into a scale of 1-10 to facilitate gauging overall response patterns.

Frequencies of responding on the 1-10 point scale for effectiveness-ineffectiveness are summarized in Figure 6.12. The mean point score for each stakeholder group is as follows:

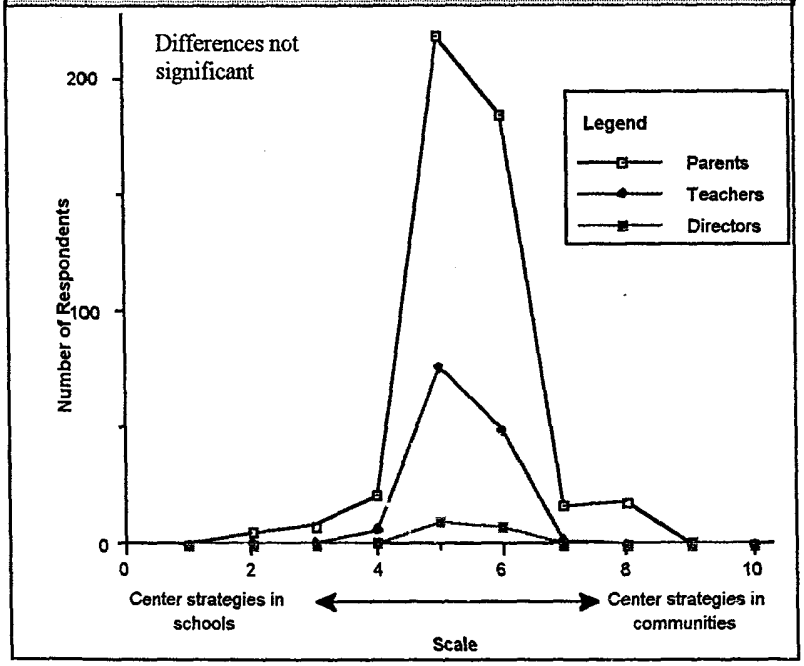
- Parents: 5.03
- Teachers: 4.76
- Directors: 4.06

All mean differences were statistically significant ($p<.04$). *In an overall sense, the mean scores suggest that parents are evenly split in their attitudes towards repetition with large numbers feeling that it is both an effective and ineffective intervention. Teachers and directors, on the other hand, seem to have a slightly more negative view of repetition with respect to its effectiveness.*[9] The frequency distribution in Figure 6.12, however, shows large groupings of individuals on either side of the effectiveness-ineffectiveness divide. The distribution for directors was in fact bimodal with a noticeable minority scoring at the very lowest end of the scale. Among parents, the distribution was slightly skewed towards the higher end of the scale with 163 (34.6%) individuals getting scores of 4 or less whereas 182 (38.6%) had scores of 6 or more; for teachers, skewing occurred in the opposite direction with frequencies of 52 (37.4%) individuals getting scores of 4 or less as against 37 (26.6%) with scores of 6 or more. With some exceptions, these findings tend to agree with the response patterns for specific items noted earlier.

6.4.4. Attitudes Concerning Strategies through which to Reduce Repetition

Another attitude parameter examined dealt with the kinds of *strategies* which should be used to reduce repetition. There were basically two kinds of strategies which were examined: those which stressed addressing in-school factors and those which stressed out-of-school factors. Items dealing specifically with this parameter included Items 3, 8, 11, and 12. Some of the points stressed in this regard included whether primary interventions should stress educating parents, improving teaching, engaging communities as lead agents, and whether ultimate responsibility for reducing repetition lay with the government. Although there were contradictions in the ways respondents answered, a pattern emerged which conformed to the tendency to cite out-of-school factors as the leading cause of repetition.[10]

Figure 6.13: Frequency Distribution for Total Scores on Strategies to Address Repetition among Education Stakeholders



A simple scale of 1-10 was again used to help readers gauge general patterns of responding. In

[9] This conclusion, however, is not so clear cut for teachers as a large margin believes that repetition does help children learn but also that it is damaging to their emotional development and tends to promote dropout.

[10] While there was broad agreement among stakeholders to emphasize strategies to educate parents and give communities a leading role in efforts to reduce repetition, most stakeholders also agreed that primary responsibility for this initiative rested with the government and not with communities. This seeming contradiction may represent peculiarities in the political system which stress centralized decision-making.

this case, scores at the lower end of the scale indicated the belief to center strategies on in-school factors whereas scores at the higher end of the scale indicated attitudes stressing out-of-school factors. Frequency distributions are displayed in Figure 6.13.

Mean scores for each stakeholder group are provided below:

- Parents: 5.47
- Teachers: 5.16
- Directors: 5.33

These mean values once again suggest an even split among stakeholders in the nature of the strategies which should be formulated to combat repetition. Mean differences were not statistically significant suggesting some uniformity in attitudes on this variable. The frequency distribution, however, shows skewing among parents, teachers, and directors towards the higher end of the scale. In this respect, only 34 parents (7.2%) had scores of 4 or under as against 219 (46.5%) with scores of 6 or more. Similarly, only 8 teachers (5.8%) had scores of 4 or under compared with 51 (36.7%) with scores of 6 or more. Although a majority of directors seemed to straddle the middle with 10 individuals scoring "5", 7 (38.9%) had scores of 6 as against only 1 (5.6%) with a score of less than 5.

6.5. Survey of Attitudes among Repeaters and Dropouts

The final research question dealt with by the study concerned attitudes among repeaters (in the higher grades) and children who had dropped out of school. The attitudes probed concerned how they viewed their lives and the world in which they live as well as their schooling experience, both past and present. The discussion below tries to identify the most interesting attitudes held by children regarding the above parameters and to see how the two groups differ. A number of case studies are also provided to amplify survey findings. Interviewing Cambodian children even at this age/grade level was difficult due to such problems as fear of adults, shyness, and a tendency to be bewildered by the interview process. As with the attitudinal survey of parents, teachers, and directors, social desirability response bias was a major issue and this should again be remembered during the discussion below.

As described in the methodology section, the selection of interview subjects was nonrandom. Interviewers asked school directors to suggest a number of interview candidates from both target groups who were older or from the higher grades, able to engage in conversation, and not shy of adults. The survey sample size was small and was not intended to indicate any definitive conclusions regarding children's attitudes. But since this report is committed to clarifying why children repeat, it would have been an unseemly omission to ignore opinions from the very target group which researchers are trying to help (i.e., repeaters). Originally aiming for 20 interviewees in each group, researchers were able to conduct

Case Study 1: "Just can't seem to get it"

Vannara lives at home with her mother. Her father left home recently because he did not get along with Vannara's mother. This year, Vannara is repeating the fourth grade. She is 13 years old and is rather talkative for her age. But she feels that she is rather "ignorant" and just can not understand how to read. This makes her unpopular with her classmates who do not like the fact that Vannara often copies from them. But she just does not know what else to do because she simply can not read the textbooks. Vannara's teacher is rather strict and inspires some fear in her, especially when she comes late. She wishes that she had someone at home who could help her with her studies but her mother never went to school and so can neither read nor write. So it seems that there is no one at home who can help.

When doing the interview, Vannara did not understand the meaning of the word "repeat." It took a great deal of explaining before she understood that this means that you have to study in the same grade again. This fact aside, however, Vannara seems to feel painfully aware of the fact that she is not a very "smart" person like some of the other children in her class. She feels that learning this year is as difficult as it was last year even though many of the lessons seem familiar. But Vannara said that she did not understand them last year and she still does not understand them this year either.

Vannara really has no idea what she wants to do in life and rarely thinks about the future. She has no expectation of going to High School. Her main expectation in life at the moment is to stay at home and raise vegetables with her mother.

Figure 6.14: **Response Patterns among Repeaters regarding their Education Experience**

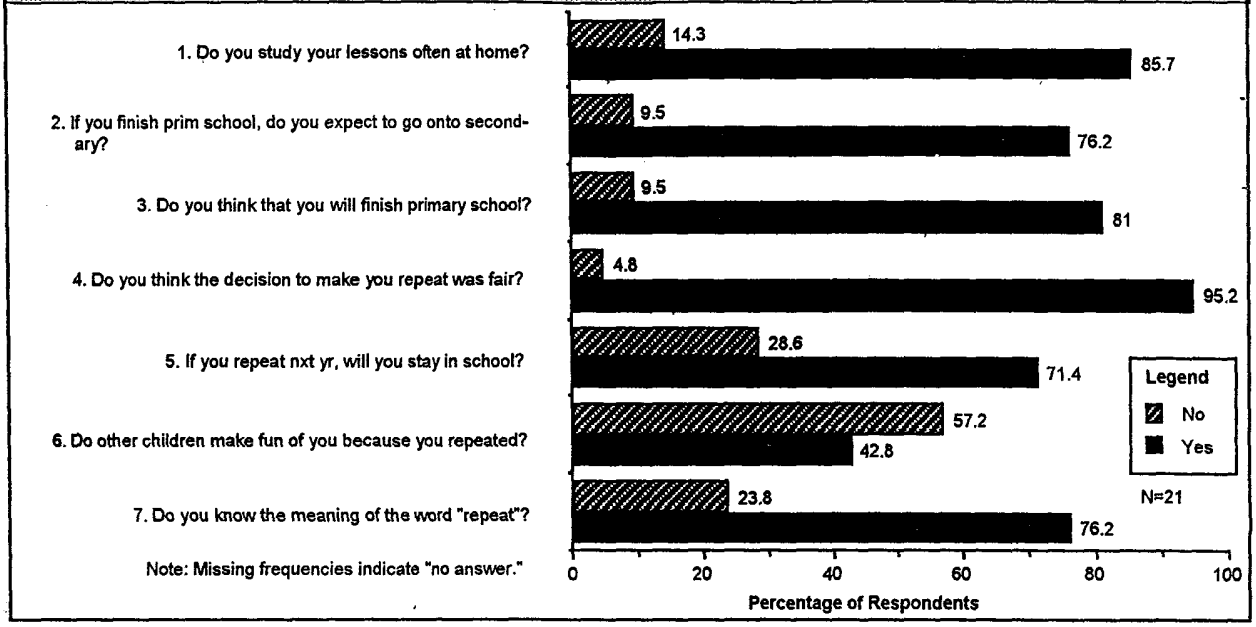


Table 6.13

Has repeating made studying easier or more difficult ?	
Easier	81.0%
About the same	9.5%
More difficult	9.5%

N=21

Table 6.14: **Reasons cited among those repeaters who feel that repeating has made studying easier**

Reasons Cited	
Easier to learn	41.2%
Learned same lessons as last year	35.3%
Tried harder this year	11.8%
Don't know	11.8%

N=17

interviews with 21 repeaters and 23 dropouts. Among the repeaters, the average age was 14.3 with an average grade level of 4.6. Among the dropouts, the average age was 16.1 and the average grade at which interviewees had dropped out was Grade 5. The sample was assembled with the help of school directors and unfortunately showed a bias among repeaters to be male with 71% of those interviewed being boys vs 29% as girls; among dropouts the bias was slightly reversed with 53% girls and 47% boys. In general, responses from dropouts seemed to be characterized by more than a tinge of despair and hopelessness whereas repeaters tended to be slightly more positive in their outlook, at least in a relative sense.[11]

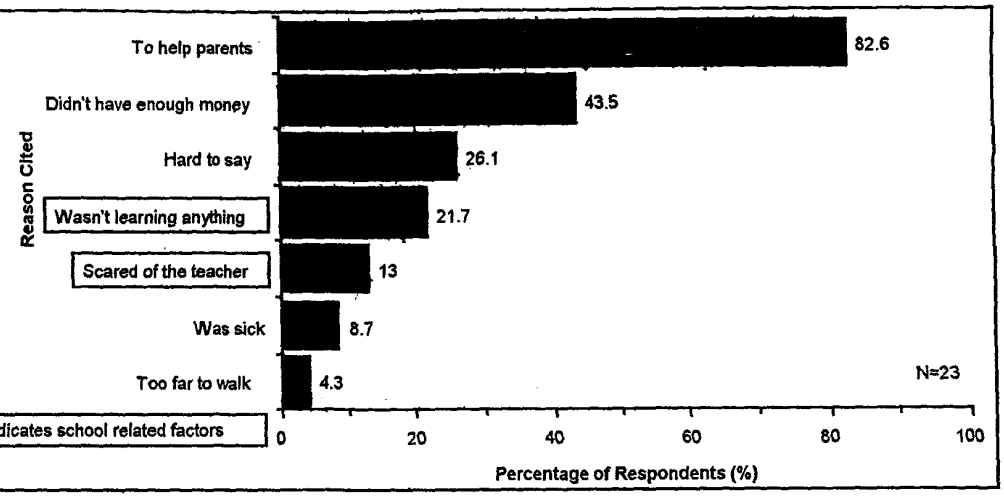
6.5.1. Important Highlights among Responses Provided by Repeaters and Dropouts.

In general, many of the responses made by repeaters indicate a positive attitude towards school (Figure 6.14). A large majority of respondents stated their desire to finish primary school and to go onto secondary school. Most even stated that they felt the decision to make them repeat the year was fair although social desirability response bias may have been an important factor in eliciting such an overwhelmingly positive response (95.2%) to this question. It was also of some interest that nearly half of those interviewed (42.8%) stated that other children teased or taunted them because they had repeated.

A rather interesting finding which contradicts most research on the topic of repetition is that a very large majority of the repeaters (81.0%) interviewed believed that repeating a grade had made studying easier for them (Table 6.13). Only 9.5% of those answering felt that it had made studying more difficult. Among those expressing the former opinion, the reasons cited included making it "easier to learn" (41.3%) and that they had "learned the same lessons last year" (Table 6.14). It is unfortunate, however, that so many student responses to this question (which was open ended) are somewhat circular in reasoning. Many were not able to convey clearly why it was "easier to learn."

[11] Though the younger age of repeaters may have led to a tendency to give the socially desirable responses they hoped the interviewer was looking for.

Figure 6.15: **Reasons Cited by Interviewees for Dropping Out of School**



Nevertheless, the repeaters interviewed seem to be in agreement with parents, teachers, and directors who also believe that repeating is "good" for learning.

Among the children who had dropped out of school, it was a sobering discovery to find that a majority (78.2%) had repeated a grade at least once with 30.4% reporting that they had repeated more than once (Table 6.15). Although based on a very small sample which is nonrandom, this observation helps to add that much more confirmation to a widely held belief that grade repetition increases the "risk" of dropping out of school. This is not to suggest that repetition 'causes' dropout; other economic factors are almost certainly more crucial. But grade repetition may increase a child's exposure to the possibility of dropping out at a later date.

Table 6.15: **Repetition History of Children Dropping out of School**

Times Repeated	
Never	21.7%
Once	47.8%
Twice or More	30.4%

N=23

The individuals dropping out of school had done so for a variety of reasons. These are reported in Figure 6.15. The two most important reasons, however, related to out-of-school factors including the need to help parents (82.6%) and a lack of money to continue school (43.5%). Two clear cut in-school factors were also cited but these only accounted for 21.7% ("wasn't learning anything") and 13% ("scared of the teacher") of the respondents. Nevertheless, these two responses are somewhat serious indictments of the educational services received by these children. Most dropouts (65.2%) had also reported that they had decided to drop out themselves as against 34.8% whose parents had made the final decision. Even so, 69.5% stated that they would have decided to stay in school if they had to make the decision over again.

Table 6.16: **Responses among Repeaters & Dropouts when Describing their Living Situation**

Pick a word card which best describes how you feel about the world you live in.

	Dropouts	Repeaters
Fair	13.0%	23.8%
Unfair	4.3%	4.8%
Hopeful	17.4%	14.3%
Hopeless	8.7%	0%
Happy	0%	23.8%
Sad	8.7%	4.8%
Easy	13.0%	4.8%
Difficult	34.8%	23.8%

Differences not significant
N=22 (dropouts); N=20 (Repeaters)

6.5.2. *Attitudes about Life and Living Situation*

Efforts to assess children's attitudes about their lives and living situation took in a range of questions on the future, occupational expectations, and picking words to describe their view of life. On most of these measures, repeaters and dropouts did not seem to show differences which were statistically significant. For example, when asked to choose a word to describe their living situation, 56.5% of dropouts picked negative terms such as "unfair," "hopeless," and "difficult" compared with 33.4% among repeaters (Table 6.16). Although this difference seems great, the small sample size has created a higher threshold for significance

which was rarely met.[12] Still, it does seem remarkable that so many dropouts would describe their living situation in such stark terms, especially given the "push" that many must have felt to give socially desirable answers.

Another interesting indicator of students' life views was the degree to which they thought about the future (Table 6.17). Although nearly half said that they thought of the future "often," about one-fifth said that they "never" thought about it. Once again, responding patterns between the two groups were comparable with no statistically significant differences. But the fact that so many of the respondents thought so rarely of the future also seemed to be a somewhat sad commentary on the lives of Cambodian children.

Table 6.17: **Responses among Repeaters & Dropouts regarding the Future**

How often do you think about the future?	Dropouts	Repeaters
Often	43.5%	47.6%
Sometimes	34.8%	28.6%
Never	17.4%	19.0%
Hard to say	4.3%	4.8%

Differences not significant
N=23 (dropouts); N=21 (Repeaters)

In another interview exercise, children were read a story about two protagonists. Although both protagonists were poor, one struggled to finish their education in spite of serious obstacles while another had to sacrifice their education to help their families survive.[13] After listening to each story, respondents were asked which protagonist they "admired" most. It was expected that dropouts would choose a protagonist who epitomized the same fatalistic situation as they found themselves in while repeaters would go with a more hopeful outlook. A key assumption in this exercise was that a statement of praise of one character or another would give some insight about how each respondent saw their world: fatalistically or with some degree of optimism. In the actual event, differences between the two groups were again very slight with 31.6% of dropouts choosing the protagonist with fatalistic overtones as against 23.8% of repeaters (Table 6.18). Still, it does seem rather noteworthy that even this many children chose a story protagonist whose life was so sad.

Table 6.18: **Kind of Protagonist Chosen by Repeaters and Dropouts when Interpreting Stories**

Kind of Protagonist	Dropouts	Repeaters
Protagonist with PositveOvertones	68.4%	76.2%
Protagonist with Fatalistic Overtones	31.6%	23.8%

Differences not significant
N=23 (dropouts); N=21 (Repeaters)

Clear differences did emerge, however, between repeaters and dropouts in responses regarding what they wanted to be when they were older. This question was careful to distinguish between what respondents actually expected to be and what they could be if they had the chance. Repeaters seemed to maintain some high hopes with 3 wishing to become doctors and 6 wishing to be teachers (Tables 6.19a and b). A majority of dropouts, however, seemed to set their sights on being farmers and local vendors with only 3 individuals aiming for white collar type professions.

Table 6.19a & b: **Occupations Cited by Repeaters & Dropouts If They Had the Chance**

(a) Repeaters	*(b) Dropouts*
Occupation Cited	**Occupation Cited**
*farmer (3)	*farmer (8)
*doctor (3)	*vendor (7)
*teacher (6)	*teacher (2)
*factory worker (1)	*civil servant (1)
*civil servant (1)	*merchant (1)
*policeman (1)	*anything except thief (1)
*someone learned (1)	*don't know (2)
*regular person (1)	
*don't know (4)	
N=21	N=22

Each individual question dealing with the variable "attitudes towards life and living situation" had scores attached to them which were additive. Questions operationalizing this variable in addition to those discussed above included judgmental comparisons with others, additional assessments of future prospects, and fairness of various decisions affecting respondents. As was done earlier, these scores were tabulated and converted into a simple 1-10 point scale to help gauge general patterns of

[12] In this particular case, a chi-square analysis yielded a probability value of only $p<.12$, larger than some others but still not significant.

[13] Both narratives can be found in the questionnaires for repeaters and dropouts (see Appendix).

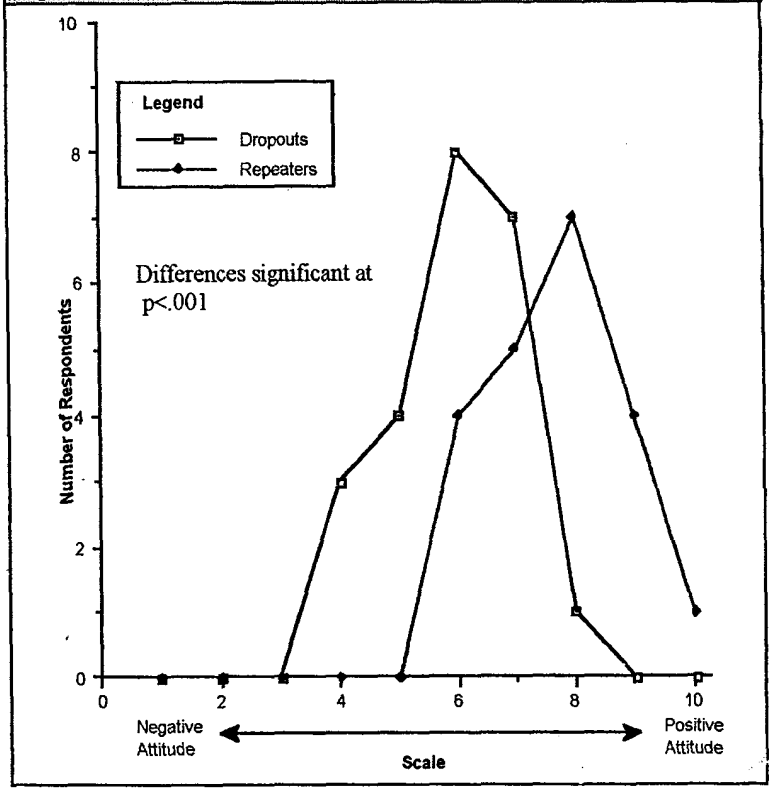
responding. High scores indicated a positive attitude towards life and lower scores represented a more negative attitude. Response frequencies are summarized in Figure 6.16.

Mean scores for each group were as follows:

- Dropouts: 5.96
- Repeaters: 7.67

Mean differences were significant at $p<.001$ and suggest a relatively more negative life view among dropouts than among students still in school albeit in a repeater status. It should be noted, however, that frequency distributions were skewed to the right for both groups although this was much truer of repeaters than dropouts. In this respect, *all* repeaters had scores of 6 or more whereas this was true of 69.6% of dropouts. But some question does attach to the veracity of high score ranges due to the possibility of social pressures for children to provide positive responses.

Figure 6.16: **Frequency Distribution for Total Scores on Life Views among Repeaters & Dropouts**



6.5.3. *Attitudes towards School and Learning*

This last section describes an assessment of repeaters' and dropouts' view of education. This activity took in a number of questions on both the school at which they were studying or had studied as well as attitudes on learning in general. When given a picture of a typical school to look at, most respondents picked positive word cards to describe the school (Table 6.20). In this respect, repeaters expressed more positive sentiment with 90.5% choosing word cards such as "happy," "important," and "interesting." Among dropouts, 78.2% chose positive words to describe the school as against 27.7% who chose negative ones. This high response rate among dropouts seems to fit with an-

Table 6.20: **Responses among Repeaters & Dropouts when Describing a Picture of a School**

Pick a word card which best describes how you feel about the school shown in the picture

	Dropouts	Repeaters
Happy	30.4%	42.9%
Sad	8.7%	9.5%
Important	34.8%	19.0%
Useless	8.7%	0%
Good	0%	0%
Interesting	13.0%	28.6%
Tired	4.3%	0%
Scared	0%	0%

Differences not significant
N=22 (dropouts); N=20 (Repeaters)

Case Study 2: **"One thing is sure"**

Rith is a young boy who just repeated the fourth grade. He is 13 years old and seems to be rather self-confident. He feels that he learns much faster than his classmates even though he repeated a grade this year. Although his parents only mention the importance of studying from time to time, Rith studies frequently at home and seems to like school. He has many friends and does not worry about anyone making fun of him for having repeated since everyone seems to repeat at sometime or another after all.

If all goes well, Rith hopes someday to be a policeman because he wants to serve society. But first he has to finish his studies. He hopes very much to be able to attend secondary school in two more years.

Rith seems to feel that repeating a grade this year has helped him to be a better student because all the lessons are the same ones he had to study last year. But Rith is very sure of one thing - he does not want to have the same teacher next year if he has to repeat again. The reason is that Rith's teacher is apparently a very strict fellow who whacks him when he comes to class late or does not pay attention in class.

swers to a question mentioned earlier regarding whether respondents would still drop out if they had to make the decision over again today. As noted above, over two-thirds of dropouts said that they would have decided to stay in school. Among the minority of respondents in both groups who chose negative words, the sentiments expressed included "sad," "useless," and "tired." Interestingly, some dropouts seemed more inclined to choose the word "useless" to describe school whereas no repeaters had used this term. In spite of the slight contrast in response patterns between repeaters and dropouts, differences were not statistically significant.

Table 6.21: Responses among Repeaters & Dropouts concerning Usefulness of Their Education

How useful has what you have studied been ?

	Dropouts	Repeaters
Very useful	73.9%	85.7%
Somewhat useful	21.7%	9.5%
Not at all useful	0%	0%
Hard to say	4.3%	4.8%

Differences not significant
N=23 (dropouts); N=21 (Repeaters)

Another interesting question related to an evaluation of the usefulness of respondents' schooling up to the present time (Table 6.21). Responses favored positive answers by a large margin. As before, responding patterns showed more repeaters expressing a positive view with 85.7% indicating that their education has been "very useful" as against 73.9% among dropouts. No one indicated that their education had been of absolutely no use. The fact that more dropouts than repeaters expressed some ambivalence to the usefulness of their education may belie the fact that they dropped out. Differences between the two groups were not found to be statistically significant.

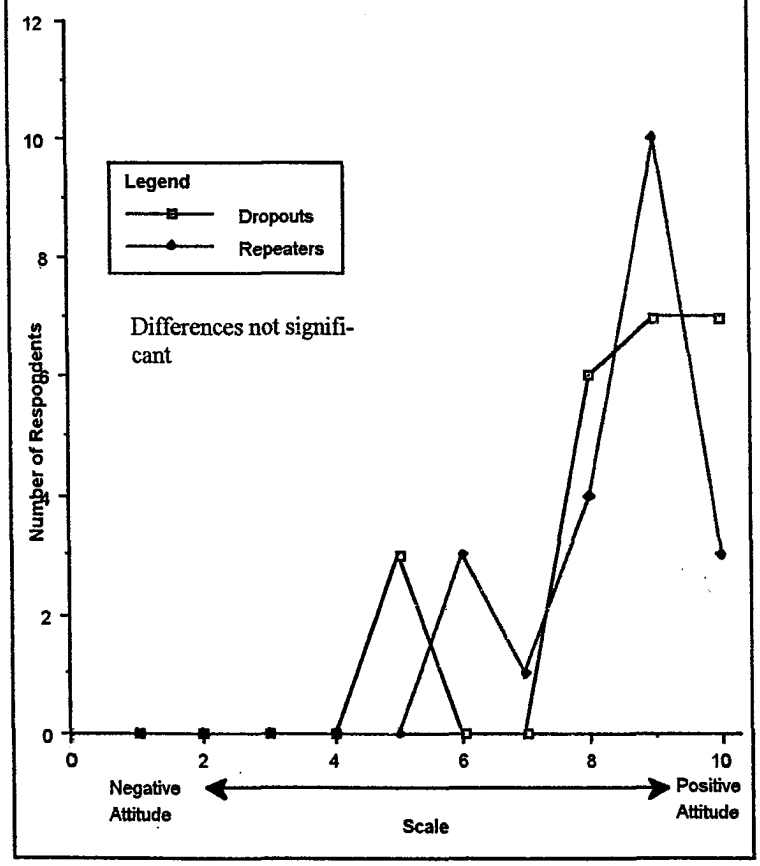
The remaining questions dealing with attitudes towards school and learning covered such topics as intentions to continue studying, comparative assessments of whether those still in school were better off (for dropouts), difficulties in learning, study habits at home, and others. As with other attitudinal parameters, these were tabulated and scaled for comparative purposes. Frequency distributions which show total scores on this parameter are shown in Figure 6.17. Once again, a simple scale of 1-10 is used with high scores indicating a positive attitude towards school and learning and low scores a more negative attitude. Mean scores for each group tended to be high as follows:

- Dropouts: 8.52
- Repeaters: 8.71

Mean differences were not found to be statistically significant.

As with life views, both distributions are highly skewed to the right strengthening the interpretation that a large majority of repeaters and dropouts have very positive views of education. But the truthfulness of responding continues to cast a long shadow over this assessment. Interestingly, both frequency distributions are bimodal with discernible minorities of respondents indicating a more negative attitude towards school and learning than the majority. This may suggest that for minorities of children at least, the dropout/repetition experience has soured their view of education.

Figure 6.17: **Frequency Distribution for Total Scores on Attitudes towards School and Learning among Repeaters & Dropouts**



Case Study 3: **Son's Burden**

When he was small, Vantha really wanted to be a teacher like his uncle. He always admired his uncle and enjoyed school. In fact, he is proud of the fact that in 6 years, he only repeated once. But when his father died from a sickness, Vantha had to drop out of school to support his family. He was 15 years old then and in the fifth grade. It has been two years now since he left school and things seem less and less settled than ever before. Vantha feels that his future is very uncertain at this point, that's why tries not to think about it.

At first, Vantha tried to support his family by going to work in a nearby factory. But after a while, his mother asked him to come back to help her at home. He at first tried to continue his studies during this time but he was always late to class. This used to make his teacher very angry. Fearing his teacher, Vantha finally decided to drop out. He would like to someday go back to finish his studies but he does not see how he could do that in his present situation. He looks at his friends who are still in school and sees that they are much better off than he is. Education helps a lot in life, Vantha says, that's why he really regrets having left school.

Case Study 4: **Sister's Burden**

When her mother got sick, the time had come for young Taree to drop out of school to take up the burden of running the household. Taree is 15 years old now and had just entered the sixth grade. Although her brother is older, the both of them were both in the same grade this year. That is because her brother had repeated several grades. But even Taree herself said that she had repeated twice before as well.

For Taree, it seemed only right that she should drop out of school this year to take care of her mother and the household because she is the oldest girl in the family. But Taree said that she made the decision to drop out herself because her family really needs her now and that is important. Even if she had the chance to make the decision again, she would still have decided to drop out - that's how important helping at home is.

Taree says that she only thinks about the future from time to time because she is too busy these days. Right now, her father is away from home looking for work so he can send money back to the family. Her family is very poor and surviving from day to day is an overriding priority. So Taree has no idea what she will be doing 10 or even 5 years from now. She has no occupational ambitions and has in fact never really thought about it. If she could have any wish granted at this point, it would be for her family to be well-off and happy.

SECTION SUMMARY

1. The best predictor of grade repetition is student *attendance* which mediates a number of other important variables. These include the way the school is managed, the qualifications of teachers, family income, parents' education level, distance to school, and native tongue of parents.
2. Other important factors which seem to directly affect repetition is whether a child *enrolls in school at the correct age*, whether they *attended preschool*, *class size*, and *school governance*.
3. Technical assistance to schools seems to increase the validity and internal reliability of evaluation practices.
4. An unexpected consequence of technical assistance is that it may increase educational standards and with it repetition rates. This finding brings into question the meaningfulness of repetition as an indicator of educational attainment.
5. More than half of the promoted students examined were not able to achieve scores of over 50% on an external achievement test. This finding was especially true of schools receiving no technical assistance. This raises further questions about the meaningfulness of promotion rates as an indicator of student attainment.
6. Evaluation practices in schools vary widely from place which creates some anomalies in the promotional status of students with respect to their annual averages.
7. Survey results confirm that urban schools have lower repetition rates than rural schools. In addition, there seem to be no significant differences between schools in true urban centers and those in district towns which serve both rural and urban populations.
8. Parents, teachers, and school directors seem to agree in their opinions that the leading causes of repetition are that families lack funds for education and that they do not value education as much as they should.
9. While a majority of teachers are inclined to agree with parents that repetition promotes learning, they also believe more strongly than the latter that it promotes dropout and damages their social development.
10. A majority of parents, teachers, and directors do not seem to support the abolition of grade repetition as a policy.
11. Parents, teachers, and school directors tend to agree that strategies to reduce repetition should focus more strongly on out-of-school factors than in-school ones.
12. A majority of the repeaters interviewed stated that repeating a grade had made studying easier for them. It is not known, however, to what degree this finding has been influenced by social desirability response bias.
13. Students who have dropped out of school seem to have somewhat more negative views of life than repeaters.
14. Both repeaters and dropouts seem to have a very positive view of school and learning in general in spite of their diminutive educational status.

7. The Consequences of Student Repetition

7.1. Consequences to Whom ?

The consequences of student repetition can best be thought of in terms of whom they affect most. One might consider two main constellations of affected groups: the students themselves as the ones mainly affected and those who must bear the cost of providing education to students.

In spite of the great wealth of data compiled on student repetition in Cambodia over the last few years, one major question concerning its effects remains unanswered. This refers to whether repeating a grade actually helps a majority of children learn more. We have already seen in this report that many education stakeholders believe that it does. In addition, the anecdotal reports from a number of repeaters themselves also seems to support this belief. But we have also seen that the vast majority of research evidence indicates that grade repetition does not promote learning and in fact can be very damaging to children's social development (cf. Holmes, 1984, etc.). This fact notwithstanding, several researchers such as Schwille (1991) feel that since most of the 'effect size' research by Holmes and others was conducted in developed countries, its generalizability to the developing world is less than certain. In the current research study, achievement testing was able to ascertain that the decision to repeat most children seemed justified based on Ministry grading guidelines but due to their timing (i.e., early in the academic year), these tests could not confirm whether repeaters' learning had improved.[1] Thus, a definitive conclusion on the learning consequences of student repetition in Cambodia is still not possible.

But the present survey data has established that repeating a grade may greatly increase a student's likelihood of repeating again in the future. In addition, anecdotal evidence (from dropout interviews) also seems to suggest that repeating tends to increase the likelihood of dropping out of school as well. In the light of evidence that girls are more likely to drop out of school when they are older (MoEYS-CARE, 1998), repetition especially increases girls' exposure to the risk of dropping out by unnecessarily increasing the number of years which they must spend in the primary school system.

Following upon the above observation are analyses which indicate that repetition greatly lengthens the amount of time needed for students to complete a primary education. It was noted in Chapter 2 that, based on 1999 data, low levels of efficiency in the primary system currently requires stakeholders (including pupils) to invest 14.3 pupil years in producing each primary school graduate.[2] This fact has a number of important implications. First, it means that those who support children's education must pay the economic cost of additional years in the system. Furthermore, staying in primary school for an extra 8.3 years means that students will be much older than they normally would have been when moving into the secondary education system. As children grow older, the economic value of their labor likewise increases. Thus, the opportunity or indirect costs to families for secondary education are greatly increased by delaying the age at which children move from primary to secondary.

The impact of repetition on learning conditions within the classroom is also quite negative, especially in the lower grades. For example, the nationally reported repetition rate in Grade 1 in the 1998-9 academic year requires that approximately 39.5% (less the percentage who may drop out) of all class seats be reserved for repeaters in the following academic year. Besides limiting capacity to increase participation rates, this naturally leads to significant overcrowding with accompanying effects on classroom management and the ability of the teacher to effectively monitor student learning.

[1] This would best be done through baseline testing at the beginning of the academic year followed by year-end testing to ascertain differences in achievement.

[2] An alternative analysis using 1998 data found the number of years to complete one primary cycle to be 13.6 years. This indicates that efficiency levels have declined.

The increased number of years required to complete a primary school cycle leads to reduced efficiency in other ways as well. For example, ADB has stated that Cambodia's rate of repetition will require additional inputs in the form of 10,000 teachers and 5,000 more classrooms (ADB, 1996). This represents a significant cost to the public sector. But given the large proportion of the cost of public education which is carried by parents and local communities (59%, cf. Bray, 1998), repetition represents tremendous added costs for private households as well. These added costs are both direct (for school fees, uniforms, supplies, etc.) and indirect (for the lost value of labor which children could otherwise provide at home or in the labor market). Thus, the repetition phenomenon has the consequence of decreasing efficiency and thereby increasing the cost (both direct and indirect) of a primary education to important stakeholders.

7.2. Consequences as Costs in Efficiency

Planners usually think of the consequences of repetition in terms of its impact on efficiency. In making such considerations in this report, it might first be useful to differentiate between the different kinds of efficiency which characterize the educational process. Different definitions of efficiency have one common denominator - they all describe the use of inputs to achieve certain outputs. But inputs and outputs can take different forms. These differences provide the basis for distinguishing between distinct kinds of efficiency. Lockheed and Hanushek (1988) have developed a conceptual framework which helps one to clearly define efficiency categories on the basis whether inputs and outputs are *monetary* or *nonmonetary*. For purposes of facilitating a discussion on efficiency costs of student repetition, a review of these efficiency categories is provided below:

- ***Internal Efficiency:*** refers to the utilization of monetary inputs (e.g., cost of teacher salaries) to achieve nonmonetary outputs (e.g., a primary school graduate)
- ***External Efficiency:*** refers to the utilization of monetary inputs (e.g., cash investments in improving educational facilities) to achieve monetary outputs (e.g., earning potential of a school graduate)
- ***Internal Effectiveness:*** refers to the utilization of nonmonetary inputs (e.g., time invested in studying) to achieve nonmonetary outputs (e.g., mastery of the curriculum)

Student repetition has important consequences for education stakeholders with respect to the level of efficiency of each of the categories described.

7.3. Specific Efficiency Costs

7.3.1 Consequences for Internal Efficiency

Discussions of internal efficiency pertain mainly to efficiency considerations within the school system (i.e., internal to it). As noted above, these considerations focus on the amount of monetary inputs utilized to produce a nonmonetary output such as the number of children taught or who successfully complete a primary cycle. Reductions in internal efficiency mediated by repetition can be thought of in several different ways. It is useful, however, to consider the added total costs of primary education to stakeholders which repetition incurs. Using a survey of primary education cost estimates recently compiled by Bray (ibid), cost analyses such as these have been greatly facilitated.

Table 7.1: **Added Costs of Repetition to Education Stakeholders (1998-9 Academic Year)**

Cases of Repetition	Cost per Pupil		Total Cost of Repetition	As % of Total	Total Expenditure for All Students	Total Cost w/out Repetition
514,363	***Total:***	**$77.09**	**$39,652,244**	**24.6%**	**$161,426,460**	**$121,774,216**
	Government:	$9.68	$4,979,034	--	$20,269,920	$15,290,886
	Political Contrib:	$8.00	$4,114,904	--	$16,752,000	$12,637,096
	NGO/IO:	$13.86	$7,129,071	--	$29,022,840	$21,893,768
	Household Contrib:	$45.50	$23,403,517	--	$95,277,000	$71,873,484
	School Contrib:	$0.05	$25,718	--	$104,700	$78,982

Source: Based on estimates from Bray, 1998 & MoEYS, 1999

Table 7.2: Breakdown of Added Costs Incurred by Households as a result of Repetition

Category of Expenditure	Unit Cost per Pupil	Total Cost from Repetition
School fees	$0.67	$344,623
Supplies	$3.49	$1,795,127
Clothing/Uniforms	$3.90	$2,006,016
Teacher gifts	$1.38	$709,821
Transportation	$16.41	$8,440,697
Pocket Money	$12.82	$6,594,134
Opportun. Labor Cost	$1.47	$756,114
Supplemental Tutoring	$5.08	$2,612,964
Festival Contributions	$0.28	$144,022

Source: Bray, 1998

For example, per pupil unit costs (recurrent) have been estimated by Bray to be $77.09 per annum. This estimate, aggregated over several regions, can help Ministry planners to get some global idea of the actual costs implied by student repetition. Based on these estimates and the total number of repetition cases reported for 1999, the added cost incurred by repetition to all stakeholders was approximately $40,000,000 in the 1998-9 academic year. This estimate takes into account costs not only to the government but to a range of education stakeholders including households and donors (Table 7.1).[3]

The added cost implications for private households are especially sobering as they suggest that repetition incurs extra costs in excess of $23,000,000 per annum. A breakdown of these added costs for households is presented in Table 7.2. The reader should note, however, that these costs are really incurred for an extra year of study, i.e., in the following academic year. Although some of the costs attributed to households in Table 7.2 may not apply to all families, the financial burden for households would nevertheless be very great. Indeed, even if one accepted, for the sake of argument, a downward adjustment of this estimate by 50%, it would still represent a staggering hardship for Cambodian families to bear.

Another way of looking at the effect of repetition on internal efficiency is to consider its impact on the total cost per graduate. This estimate can be found by finding the total unit costs per pupil over a 6 year cycle (with appropriate adjustments by grade) and multiplying this estimate by the magnitude by which a primary cycle has been lengthened due to repetition.[4] Given that the number of years required to complete a primary cycle has been increased by a magnitude of 2.38 times (or 14.3/6), the cost per graduate can be estimated at $922.49. This compares with an estimate of $387.60 per graduate without repetition or an added cost of $534.89.

The above observations require a number of important qualifications. For example, it must be remembered that increases in efficiency through reductions in repetition would *not* lead to immediate savings by government. This is because a big part of government expenditure for education in Cambodia is accounted for by teacher salaries. A large number of the teachers currently employed, however, could not be immediately dismissed owing to greater efficiencies in the number of students passing through the system.[5] Rather such savings would only be seen in the long term when planning for new teacher intake. The same would apply for other government side inputs which can not be easily manipulated in the short term (textbooks, desks, etc.). But it is equally true that reductions in repetition would likely lead to more immediate savings for households (Eicher, 1984).

The effects of repetition on student achievement are another major aspect of internal efficiency. For example, do the added costs of a repeated child lead to higher achievement? The absence of solid data on student achievement in this regard make any conclusions speculative. But the possibility that repeated children do not achieve substantially more in their learning is ominous for it would mean that added input costs are producing the same achievement level (or perhaps even less).

[3] Readers should note that Bray's estimate for government costs in the primary education sector exceeds the actual cost which in 1999 was $16,724,000. This is due to the fact that his unit cost estimates include expenditures for teacher training which MoEYS usually considers separately from costs for primary education.

[4] Household unit costs for this calculation have been adjusted by grade based on Bray's findings. For example, Bray reports that the household costs per pupil for Grade 1 are significantly below those for Grade 5 with the former constituting only 54% of the latter.

[5] Although certain other efficiencies would be seen through a reduction of the pupil class ratio.

Table 7.3: Rates of Return from a Primary Education in Developing Countries

Country Category	Social Return	Private Return
Low Income Countries	23.4%	35.2%
Asian Countries (excl OECD countries)	19.9%	39.0%

Source: Tsang, 1988

7.3.2. Consequences for External Efficiency

Considerations of external efficiency concern variations in efficiency after a student has left the education system, that is, benefits derived are 'external' to the system. Repetition's impact on external efficiency can be thought of as the general consequences to society and individuals at large. When assessing variations in external efficiency, both inputs and outputs (or benefits) are expressed in monetary terms. A useful technique employed by planners in gauging the rate of benefit from education concerns social and private rates of return. Social rates of return refer to the *benefits* of education to society as compared with the *costs* of education to society. Similarly, private rates of return refer to the benefit of education to individuals compared with the cost of that education. Based on extensive research by Psacharopoulos (1994) in over 70 countries, general rates of return in a wide range of developing countries have been estimated and found to be quite high. Table 7.3 shows social and private rates of return for developing countries in Asia and for low income countries.

Repetition affects the acquisition of a primary education mainly by promoting dropout. Although it is not known what part of the overall cause leading to dropout is accounted for by repetition, it is likely to be significant. When considering the rates of return from a primary education to society and individuals shown in Table 7.3, the consequences of failing to acquire such an education become manifest. The national census estimates that 63.4% of Cambodians currently lack a primary education (MoP, General Population Census of Cambodia, 1998). If for the sake of argument one accepted that social and private rates of return for low income countries approximated the rate of return from a primary education in Cambodia, one could then see that nearly two-thirds of the population had foregone potential benefits that were 35% higher than the cost they had incurred. For society at large, this would have approximated 23% of the investments made. It is true of course that the entire potential benefit from an incomplete primary is not foregone as a result of dropping out of school. Still, these benefits may become smaller than the cost of a primary education or the rate of return may even become negative.

7.3.3. Consequences for Internal Effectiveness

Consequences for efficiency along this parameter concern nonmonetary inputs and outputs. For example, considerations of the average amount of time (an input) required to produce a primary school graduate (an output) are one measure of a system's internal effectiveness (also called 'technical efficiency'). We have already seen that a major consequence of repetition is to greatly lower efficiency in relation to the total number of years required to complete a primary cycle. In this regard, an extra 8.4 years are required on average for a student to move through one cycle.

Another major aspect of internal effectiveness which relates to an earlier discussion of internal efficiency is the effect of repetition on achievement. In determining whether the effects of repetition are positive or negative, it is important that we know how the extra years spent in school affects achievement. Do children who spend 10 years in the primary system achieve more than they normally would have by spending only 6 years. Once again, the absence of achievement data makes it difficult to assess this aspect of repetition's effect on the internal effectiveness of the primary education system.

SECTION SUMMARY

1. The consequences of repetition are best thought of in terms of how it directly affects students and the added costs which it incurs for the stakeholders who have to bear the burden of supporting children's education.
2. The primary effects of repetition on students include raising the likelihood of repeating or dropping out in the future (especially for girls) and increasing the number of years required to complete a primary cycle. Current research in Cambodia has not been able to demonstrate how it affects student achievement.
3. Consequences for education stakeholders are best considered in terms of the way that repetition affects educational efficiency.
4. For 'internal efficiency,' repetition has been found to increase the overall input costs of education significantly. This includes the overall cost for all students and the cost per graduate. These costs are especially great for private households and the government.
5. 'External efficiency' is affected indirectly by repetition through its mediating effect on dropout. To the degree that repetition promotes dropout, it is likely to have a similar effect on diminishing the social and private rate of return of investments in education.
6. Repetition affects 'internal effectiveness' by reducing the efficient use of nonmonetary resources in education. The most obvious way in which internal effectiveness is affected is by greatly increasing the time required to produce one primary school graduate as well as inflating class sizes. Its effect on effectiveness measures of student achievement, however, is not known.

PART III:

Summation

8. Conclusions and Recommendations

8.1. Redefining the Problem

Student repetition in Cambodia is a problem which exists at two levels. At a surface level, it incurs great costs to education stakeholders by increasing the number of years required for a student to complete a single primary education cycle. At a deeper level, however, it implies a number of danger signals about the state of learning of Cambodian children. Based on limited testing of the competency level of several hundred promoted students, the present survey discovered that the level of curriculum mastery is perilously low. If repetition were truly a measure of educational attainment (which is unlikely based on what we have found so far), then the problem is probably even worse than current statistics might suggest. At the surface level, the repetition problem could be solved overnight by simply abolishing it as a policy. But that is unlikely to make the underlying problems associated with it go away. Indeed, by seeing 100% promotion rates every year, we might forget about them altogether. This is where the idea of automatic promotion can go awry. From an administrative point of view, it makes all the sense in the world. In the long run, it would save millions in both direct and indirect costs. It would help reduce class sizes, facilitate classroom management, improve utilization of existing resources, greatly help expand access, and increase transition rates to secondary school. But there is the very real danger that it would ignore the underlying fundamental problem that children are not learning. It might also lower the value of a primary education even further, weaken accountability, and push the problem of unprepared graduates into secondary school. In the current situation, everyone pays the price. With automatic promotion, there is the danger that children will pay an even heavier price in terms of their learning.

8.2. Redefining the Possible Solutions

But the choices in reducing repetition surely need not be as stark as one might think. Automatic promotion need not be an all or nothing policy choice, especially if implementation is cautious, incremental, and combined with other measures. By prioritizing, fine tuning, building on consensus, and above all being flexible, there is a great deal that can be done. For example, automatic promotion could be introduced as a second line strategy only a single grade (like Grade 1) and perhaps even made optional with parents as the final arbiters. But their wish to promote their children might be made contingent on certain conditionalities requiring them to boost attendance and provide tutoring at home. This would formalize practices that many schools already observe albeit covertly as it contravenes official policy guidelines.

If the small sample of schools studied during this survey is any indication, we have seen that technical assistance for improving in-school factors has had some effect on quality variables. But some of the effects have been somewhat unanticipated. They seem to have raised educational standards, improved school management, strengthened the validity of evaluation practices, and unexpectedly increased repetition rates. In terms of minimizing the risk of repeating a grade, the children most likely to benefit from these quality improvements seem to be those with the best attendance. But we have also seen that those children with good attendance are very likely to be members of households with higher incomes and better educated parents. Thus, past development efforts using more traditional approaches to improve educational quality in schools have not helped the groups with the highest risk of repeating a grade. This suggests that the more traditional development approaches involving teacher and director training, teaching aid and textbook provision, etc. should be coupled with efforts to reach more high risk children. Since these children's families may have a weaker link with the education system by merit of lower education levels and income, this means placing greater focus on strategies which emphasize out-of-school factors (e.g., community-based remedial support).

Survey data also suggest other possible interventions which seem to correlate with low repetition. These include expansion of preschools (to the extent possible) and also trying to ensure that underage children are not enrolled in primary schools.

Solutions also require accurate information. According to survey activities to validate evaluation practices, it was found that promotional decision-making was often based on variable criteria and objective measures whose validity was sometimes very low. This finding and the counterintuitive relationship between technical assistance and repetition rates raises significant questions about the meaningfulness of repetition data with respect to educational attainment. Repetition data from assisted schools seems to mean that quality has improved most for low risk children but that high risk children from poor backgrounds and with low attendance are being more penalized by repetition policy than before. Unassisted schools on the other hand guarantee low quality for everyone but with poor educational standards and management practices seem more prone to promoting students with poor achievement. In this respect, externally administered achievement test results found somewhat more promoted students with failing scores in unassisted schools than was true in assisted ones. While some degree of variability will always exist in the way that educational standards are implemented between schools, it seems that the present degree of variability is above an acceptable threshold. The end result is that we do not really know what repetition data means with respect to the educational attainment of Cambodian children. There is great room to clarify promotional criteria and improve evaluation practice.

8.3. Guidelines in the Implementation of Recommendations

In considering the recommendations below, potential adoption should be guided by 5 guiding principles taken from cross-country experience. These principles are reviewed again below:

1. Set priorities so that limited resources are not overextended: Given finite resources, the Ministry will have to determine where its highest priorities are. Such priorities could include a particular demographic group (e.g., rural populations), a geographical area or areas (e.g., the North and Northeast), or a particular set of grade levels (e.g., lower primary) among others.
2. Develop strategies which are comprehensive and sustained. One time interventions which are implemented in a piecemeal manner should be avoided.
3. Use flexible approaches. The same interventions may not be universally applicable everywhere. It may be best to provide menus of options to different areas so that an appropriate mix of interventions can be matched to local needs.
4. Build on consensus: Policies will only succeed if stakeholders accept them. If a policy is at variance with stakeholder beliefs, it may be necessary to precede interventions by community and school education campaigns.
5. Consider sectoral approaches: What happens in the primary subsector will affect other subsectors. These effects should be anticipated beforehand so that prior preparations can be made to accommodate them. This principle is especially relevant now given imminent plans to upgrade secondary education.

8.4. Specific Recommendations

8.4.1. Strategy Group 1: Organization and Management of Interventions

a) Creation of a Student Repetition National Taskforce

The Ministry may consider the creation of a national level group with representation from the relevant departments to map out strategy for reducing repetition. In keeping with the Ministry's desire to decentralize decision-making, this body would merely set the stage for lower level planning and implementation of interventions. This body could also formulate formal policy statements relating to grading and promotional criteria, the introduction of automatic promotion, expansion of preschools to target areas, and other possible national interventions for consideration by top level Ministry decision-makers.

There are a number of different tasks and activities that such a body could undertake which would be a necessary first step for systematic action to reduce student repetition. Different Ministry departments would each have something special to contribute in undertaking these tasks. For example, the Dept. of Planning would be best equipped to develop local repetition profiles (at district or provincial level) as a preliminary step for informing the local planning process. The Dept. of Primary Education and Preschools would be well placed to develop intervention menus which would stimulate the planning and implementation of Local Cluster School Committees (LCSC). The Dept. of Pedagogical Research could assist by overseeing the revision of grading guidelines to make them more consistent with the allocation of curriculum hours for each subject. And the Dept. of Teacher Training could help to develop guidelines for remedial instruction of high risk students. Specific groups in each department could perform these and other tasks and bring drafted proposals for consideration and review by the Taskforce. These would in turn be sent on to a higher level for adoption, rejection, or further revision.

Each of these possible activities are discussed in more detail below.

b) *Develop Intervention Menus to Stimulate Local Planning*

One of the difficulties often encountered by local level planners at district, cluster, school, and community level is the lack of exposure to a wide range of possible interventions to address specific problems. Local level plans are frequently characterized by vague generalizations as to the activities to be carried out to improve student learning. To support local planning, interventions can be presented to target groups in the form of options or 'menus' to be put together in combinations which meet local needs. Using the broad experience of different Ministry departments, these intervention menus can be developed as formally documented packages to "prime the pump" for planning at the local level, especially LCSCs. The actual administrative unit at which intervention mixes are developed will depend on the availability of Ministry resources. The use of intervention menus would build flexibility into problem solving and help to achieve the fine tuning of inputs required for local effectiveness. Some provinces such as Takeo and Kampong Cham already have some experience of this planning approach. It can be used effectively elsewhere as well.

c) *Develop District and Provincial Repetition Profiles to Inform Local Level Planning and Problem Identification*

Effective local planning requires accurate information, especially for the identification of problems and their causes. Local level planners at district and LCSC level often must rely on anecdotal experience as the primary information source for their planning. The Ministry can facilitate local level planning to reduce repetition by improving the information available. This can take the form of a "repetition mapping" exercise which will help to empirically establish the nature of local problems. The product of these mapping exercises would be *district and provincial profiles* describing repetition in these areas. EMIS now has a wealth of background information down to district and school level which can be used for this purpose. Colorful printouts of performance data reported by schools are already distributed locally every year. EMIS can now go one step further by doing simple analyses to determine what factors most relate to repetition in a given area (in-servicing of teachers, class size, lack of blackboards, etc.). If, for example, there is a strong relationship with a factor such as class size, then interventions targeted at manipulating class size might be considered.

When profiles have been prepared, planning to identify problems, causes, and appropriate interventions with local stakeholders can begin. Once again, these planning exercises can

occur at whatever unit level the Ministry has resources for. Repetition mapping can be done for an entire province or if the resources permit, at district level as well. Alternately, densely populated areas might have district repetition profiles but sparsely populated provinces might have just one provincial profile. The use of hard data (suitably presented) to stakeholders (province and district personnel, school directors, teacher representatives, parent representatives, etc.) can be a good starting point for discussion. It will help prevent discussions from being highly subjective and vague as they are sometimes prone to be at local level.

8.4.2. Strategy Group 2: Systematize, Rationalize, and Formalize the Criteria which Guide Promotional Decision-making.

a) Review Current Promotional Decision-making Practices in Schools and Develop Revised Criteria

There is currently wide variation in the implementation of promotional criteria between and even within schools. Current criteria covering attendance and behavior are often times ignored by schools. Many teachers seem to rely exclusively on point score averages for most of their decision-making. The Ministry should address current practices by either formalizing some of what is actually done and/or presenting a new set of functional criteria (e.g., using currently ignored criteria only for borderline students). Formulation of new criteria should be consistent with local needs and perceptions or it might invite a new round of the "creative circumvention" discussed in the report. Other informal practices which help many students move onto the next grade might also be formalized by the Ministry. These include such creative innovations as "last chance tests" before the new academic year begins and tutoring during the vacation to facilitate passing such tests.

b) Re-issue Promotional Guidelines in a Concise Documented Form

Promotional decision-making in many schools now occurs in the absence of documented guidelines. New criteria, when developed, should be expressed in a concise easily readable form and issued to all schools as quickly as possible.

c) Consider Formal Creation of a Category of Borderline Students Who May Be Either Repeated or Promoted Depending on Local Discretion

Borderline student categories should be formally defined (e.g., 4.50-4.99). In such cases, stakeholders could have "official" discretionary authority to promote or repeat based on certain conditions which are discussed with parents (e.g., minimum number of attendance days in the next academic year; failure to meet the minimum attendance will result in automatic remission to a previous grade; participation in a remedial program if one exists; etc.). Discretionary decision-making with respect to the promotion of borderline students could be conducted by committees with representation from directors, teachers, and parents. This will promote transparency and less arbitrary decision-making.

8.4.3. Strategy Group 3: Review Evaluation Practices and Grading Guidelines Used in Schools

a) Reconsider Weighting Formulae of Internal Mark Components to Enhance Validity

Promotional status of many students frequently does not match their level of achievement. This makes interpretation of repetition data problematic. The Ministry may wish to consider a general overview of the evaluation practices which generate the measurement data used for promotional decision-making. Some of the possible actions to be taken are described below. Of the 4 internal mark components assessed (1st Term, 2nd Term, Yearly, and monthly), monthly evaluation seems to have the highest level of validity. Continuous assessments (such

as quizzes tabulated on a monthly basis) tend to achieve higher levels of validity by merit of their frequency. High stakes testing on the other hand (such as Term Tests) sometimes underestimates students' understanding because they are based on only a single test administration. The Ministry may, therefore, want to consider *reweighting continuous assessment measures* to give them greater importance in overall grading.

b) Reconsider the Weighting Formulae of Minor Subjects in Monthly and Term Marking Schemes

The Ministry may also wish to consider the manner in which minor subject scores for such things as "singing and dance" are used to offset low scores in the core subjects of language and mathematics. Such practices diminish the meaningfulness of repetition indicators as measures of the acquisition of literacy and numeracy skills. Making modifications to the current system such as lowering the weighting of some minor subjects or requiring passing marks in a core subject are possible measures to be considered. But caution is advised as these may also exacerbate repetition rates by raising educational standards. The Ministry may initially consider making less radical changes such as slightly increasing the weighting of core subjects at the expense of some minor subjects.[1]

c) Revise and Review Grade 1 Evaluation Practices

The manner in which Grade 1 students are evaluated especially needs to be overhauled. First Term assessments which are based on unobjective measures should be discontinued. Assessments based on objective measures should occur throughout the school year and not only during the Second Term as is currently done by many schools. The Ministry may also wish to consider enlisting donor support to develop special *exercise kits* which would enable teachers to assess Grade 1 children more continuously.

d) Support Cluster-based Testing

Evaluation practices can also be improved through such measures as *cluster-based testing* similar to the kind done in Thailand. This practice would facilitate more systematic test development and better accountability in monitoring and reporting of student performance. An important means through which to achieve this goal would include training programs for directors and teachers which focus more on evaluation methodology. PASEC and other donors have already presented useful programs on question writing (open, closed, etc.). Future programs should move further to help school personnel to understand basic principles leading to more valid evaluation. Some of the possible topics in such a training program might include:

- General Principles of Validity
- Kinds of Evaluation and their Purpose (e.g., formative, summative, criterion-referenced, etc.)
- Use of Tables of Specification to Ensure Construct and Content Validity
- Item Analysis and Item Banking
- Question Formats and their Uses

8.4.4. Strategy Group 4: Specific Interventions to be Considered

a) General Policy Options

Specific policy options to be considered by the Ministry for implementation include the following:

[1] The way in which marks for some minor subjects are weighted shows some variation with the number of curriculum hours allocated. For example, social studies only constitutes 24.5% of allocated curriculum time but occupies 58.3% of the weighting used in term tests. This weighting could be reduced to some degree to make up for some of the underweighting which has occurred in the major subjects of Khmer and mathematics.

- greater enforcement of the age rule for enrollment (i.e., not less than age 6)
- increasing contact hours
- expanding preschool access

These last two options may be "pie in the sky" choices at this point as a scarcity of resources (for teachers to teach longer hours and organize more preschool classes) continue to be serious constraints. But latitude for maneuver does exist by *targeting specific high risk groups* with expanded contact hours through remediation as well as increasing access to preschools for these specific groups only.

b) Automatic Promotion

It is not recommended that automatic promotion be used as a first line strategy to reduce student repetition. Although it will surely reduce "reported" repetition, it may not address underlying problems as noted earlier. Automatic promotion is often seen as a costless measure to reduce repetition but there are hidden costs such as the depreciation of the value of education and weakened accountability for learning. Its rapid implementation across the system may also destabilize the upper primary grades and secondary institutions by greatly increasing enrollments. But its introduction in an incremental manner after actual improvements in student learning are achieved may be considered later. Projections by SEIP[2] of static primary enrollments through the year 2010 may present a wide window of opportunity for such implementation. Partial implementation of automatic promotion for the grade most affected by repetition (i.e., Grade 1) is another possibility to be considered. Automatic promotion could also be coupled with *the creation of school committees with discretionary authority to promote borderline students* with parental promises of increased attendance and home tutoring and/or participation in remediation classes if available (see below).

Because a majority of education stakeholders in schools and communities may not advocate the introduction of automatic promotion, the Ministry is advised to precede any curtailment of repetition through enforced promotion by an educational campaign targeted at these groups. Television advertising is one possibility. This campaign should try to disseminate information relating to the fact that repetition incurs great costs to stakeholders, promotes dropout, damages children's social development (especially at higher grades), is related to poor attendance, and may not increase learning (although this has not been firmly demonstrated by research in Cambodia).

c) Use of Reduction Targets

The use of reduction targets in certain grades should also be used cautiously as it has already been seen that schools will circumvent these targets if they do not address local needs. *Trying to raise the profile and seriousness of promotional decision-making through the creation of school committees with discretional authority to promote or repeat based on clear criteria is one way of addressing these need.*

d) *Set in motion a new round of educational improvement initiatives which stress out-of-school factors.*

Traditional interventions focusing on in-school factors are missing the students with the highest risk of repeating because their attendance is such that they are not in school to benefit from improvements. As attendance seems to be mediated by such out-of-school factors as income and parents' educational level, *interventions will be required which affect families directly.* An increasingly attractive option for helping high risk children is through nonformal educa-

[2] Secondary Education Improvement Program

tional alternatives - the so called nontraditional approaches. *Remedial classes,* for example, that are based in communities (and not in schools) are strongly recommended. But given the problem of limited resources, the Ministry should put in place mechanisms so that these interventions target the highest risk children. Screening through testing is suggested. It is strongly urged that remedial classes *not* be made available for everyone otherwise their effectiveness may be greatly compromised. The Ministry might also consider piloting remedial interventions for high risk children in order to develop approaches which are pedagogically sound and effective. Remediation should not just be a publicly subsidized version of current tutoring practices done privately in Phnom Penh and elsewhere.

Other out-of-school interventions considered by the Ministry for inclusion in an interventions menu might comprise *cross-age peer tutoring, community-based attendance tracking systems, service referral systems to address the problems causing absenteeism, expanded adult literacy classes to improve parental education levels,* and *attendance incentives* (possibly through rebates on school fees for high attendance or through external subsidies). Several of these interventions such as peer tutoring are already being implemented by several NGOs/IOs (e.g., Redd Barna, UNICEF). These experiences can be studied, modified, and applied more widely.

Because several of these interventions may be beyond the expertise of many education programs to implement, coupling of activities with community development initiatives such as UNICEF's Community Action for Social Development Program is strongly urged.

Some interventions such as attendance incentives and remedial fees for teachers will require redoubled efforts to ensure accountability for use of resources, especially if such incentives are provided externally by the Ministry or donors. This could be done, however, by linking implementation of these interventions with Budget Management Centers (BMCs) which are currently planned for a number of provinces as part of the Priority Action Program/2000 (PAP).

8.5. Areas for Further Research

8.5.1 Assessing the Effectiveness of Repetition to Increase Student Learning

An important question of fundamental importance which remains unanswered is whether or not repeating students actually leads to improved learning. Many stakeholders believe that it does. Even some of the repeaters interviewed in this study believe it does as well. The vast majority of research data from the developed countries, however, indicates that it does not. One means of answering this question would be to administer a battery of achievement tests in the major subjects to repeaters at the beginning and the end of the repeated year. Testing of promoted students could be carried out as a control condition with comparison of male/female performances also considered. Pretest data on 700 students in the lower primary grades is already available as a result of the present study's activities. This could greatly simplify and shorten this research activity.

8.5.2. Longitudinal Studies

A considerable data base on over 500 students has been compiled during the present study. The data collected covers socio-economic variables, age, sex, minority status, preschool and repetition histories, quality of teaching received, and governance ratings of schools attended. Attitudinal data regarding a number of educational issues is also available for children's guardians and teachers. The availability of this data represents an ideal opportunity to follow the development of children of differing social backgrounds through the primary cycle. Systematic follow-up of selected members of the sample is, therefore, strongly suggested.

8.5.3. Other Possible Research Activities

Additional research activities are recommended to corroborate or disprove some of the findings described as a result of the current survey. Some of these research activities relate to the following:

- *The relationship between technical assistance and student repetition:* Counterintuitive findings were presented in this study regarding the effects of technical assistance on rates of repetition. The thesis was made that technical assistance tends to raise educational standards and student repetition along with it. This proposition, however, needs to be further studied to determine whether similar relationships are found in other locations, how wide spread such effects might be, and their causality.
- *The effect of the double shift system on student repetition:* It was reported earlier that the degree to which provinces employed double shifting was inversely related to repetition rate. Do double shifts really help to depress repetition rates or is some other hidden factor at work? It is possible, for example, that the setting of schools which most use double shifting is urban in nature. This then would help explain the strong inverse relationship found between these two factors. Additional research would help to clarify how these two factors are connected.
- *The relationship between class size and student repetition:* Two contradictory findings were presented in this study. An analysis of the pupil-class ratio and school repetition rates based on a sample of 400 schools showed a positive relationship between these two factors. Another analysis based on the repetition histories of 500+ students and their respective class sizes, however, produced an inverse relationship. Clarification of these findings is required.
- *The relationship between teaching style and educational attainment:* Students learning with teachers who use student-centered teaching styles were found in this study to have higher rates of repetition. But this finding was based on a very small number of students studying with such teachers (24 individuals). In addition, the use of repetition as a measure of educational attainment lacks reliability due to wide variation in educational standards between teachers. Thus, this issue should be looked at again using other more reliable measures of educational attainment. More systematic control conditions are also recommended.

References

1. Asian Development Bank, ***Cambodia: Education Sector Strategy Study***, Phnom Penh, 1996.
2. Bray, M., ***The Private Cost of Public Schooling,*** Hong Kong: Comparative Education Research Center, 1998.
3. Bennet, N., "How can schooling help improve the lives of the poorest? The need for radical school reform," in ***Effective Schools in Developing Countries*** by Levin, H. and Lockheed, M., (eds.) London: The Falmer Press, 1991.
4. Carvajal, M.J., et al., "Economic determinants of academic failure and school desertion in the Guatemala Highlands," ***Economics of Education Review***, Vol. 12, No. 1, 1993.
5. Economist, "Fail the test, miss the grade," April 10, 1999.
6. Eicher, J.C., ***Educational Costing and Financing in Developing Countries,*** Washington, D.C.: World Bank, 1984.
7. Eisemon, T.O., et al., What language should be used for teaching? Language policy and reform in Burundi," ***Journal of Multilingual and Multicultural Development,*** Vol. 10, 1989.
8. Eisemon, T.O., ***Reducing Repetition: Issues and Strategies,*** Paris: UNESCO International Institute of Educational Planning, 1997.
9. EMIS, Dept. of Planning, MoEYS, ***Education Statistics and Indicators,*** Phnom Penh, 1999.
10. Holmes, C.T. et al., "Estimating effect sizes in meta-analysis," ***Journal of Experimental Education,*** Vol. 52, No. 2, 1984.
11. Holmes, C.T., et al., "Grade level retention effects: A meta-analysis of research studies" in ***Flunking Grades: Research and Policies on Retention*** by Shephard, L. and Smith, M.L. (eds.), London: The Falmer Press, 1989.
12. House, E.R., "Policy implications of retention" in ***Flunking Grades: Research and Policies on Retention*** by Shephard, L. and Smith, M.L. (eds.), London: The Falmer Press, 1989.
13. Kemmerer, F., ***Resources for Schooling: A Model for Local Accountability,*** (PPU-LIL Study No. 6), Phnom Penh: Education Learning and Innovation Loan (World Bank/MoEYS), 1999.
14. Levy, M., "Determinants of primary school dropouts in developing countries," ***Comparative Education Review,*** Feb., 1971.
15. Lockheed, M.E., and Hanushek, E., "Improving educational efficiency in developing countries: What do we know?" ***Compare,*** Vol. 18, No. 1, 1988.
16. Lockheed, M.E., and Verspoor, A.M., ***Improving Primary Education in Developing Countries,*** New York: Oxford University Press, 1991.
17. Lockheed, M.E. and Levin, H.M., "Creating effective schools in developing countries," in ***Effective Schools in Developing Countries*** by Levin, H. and Lockheed, M., (eds.) London: The Falmer Press, 1991.
18. Martin, J.Y. and Ta Ngoc, C. "The quality of primary school in Guinea, a case study" Paris: UNESCO International Institute for Educational Planning, 1993.
19. McGinn, N., et al., "Why do children repeat? A study of rural primary schools in Honduras," ***BRIDGES*** Research Report No. 13, Cambridge, MA: Harvard International Institute for Development, 1992.
20. McLaughlin, R. and Sprechman, S., ***Effective Teaching Hours in Cambodian Primary Schools: Findings and Recommendations,*** (PPU-LIL Study No. 5), Phnom Penh: Education Learning and Innovation Loan (MoEYS-World Bank), 1999.
21. MoEYS, Dept. of Planning, "Internal Efficiency of Primary Schools," Phnom Penh, 1994.
22. MoEYS, Dept. of Planning, ***Education for All (EFA): The Year 2000 Assessment,*** Phnom Penh, 1999.
23. MoEYS-CARE, ***Survey on Girls' Education in Cambodia***, Phnom Penh, 1998.
24. MoP (Ministry of Planning), ***General Population Census of Cambodia***, Phnom Penh, 1998.

25. Peterson, P., "Alternatives to student retention: New images of the learner, the teacher, and classroom learning," in ***Flunking Grades: Research and Policies on Retention*** by Shephard, L. and Smith, M.L. (eds.), London: The Falmer Press, 1989.
26. Plan International, "Community Learning Assistance Project Plan," Dacca, 1999.
27. Prouty, R., et al., "The overachieving principal and the implementation of school reform in Burundi," Paper presented at the annual conference of the Comparative and International Education Society, Pittsburgh, March, 1991.
28. Ratnaike, J., "Operation Rescue of Young Children out of School," Phnom Penh: Redd Barna, 1999.
29. Schiefelbein, E., ***Efficiency and Quality of Latin American Education,*** Santiago: UNESCO, 1991.
30. Schiefelbein, E. and Wolff, L., "Repetition and inadequate achievement in Latin America's primary schools: A review of magnitudes, causes, relationships, and strategies," ***UNESCO/ORLEAC Bulletin,*** No. 30, 1993.
31. SEIP-MoEYS, "Education flow rates analysis and enrollment projections 1998-2010," Phnom Penh, 1999.
32. Schwille, J., et al., "Is grade repetition always wasteful? New data and unanswered questions," ***BRIDGES*** Research Report No. 7, Cambridge, MA: Harvard Institute for International Development, 1991.
33. Torres, M., "Repetition: A major obstacle to education for all," UNICEF, ***Education News,*** No. 12, 1995.
34. Tsang, M., "Cost analysis for Educational Policymaking: A review of studies in education in developing countries," ***BRIDGES*** Research Report No. 3, Cambridge, MA: Harvard Institute for International Development, 1988.
35. Tsang, M. and Wheeler, C., "School Improvement in Thailand," in ***Effective Schools in Developing Countries*** by Levin, H. and Lockheed, M., (eds.) London: The Falmer Press, 1991.
36. UNDP, ***Kampuchea Needs Assessment Study (for UNDP),*** Phnom Penh, August, 1989.
37. UNESCO, "Wastage in Primary Education from 1970 to 1980," ***Prospects,*** Vol. 14, No. 3, 1984.
38. UNESCO, ***Coping with Dropout: A Handbook,*** (APEID), Bangkok: UNESCO Regional Office for Education in Asia and the Pacific, 1987.
39. UNESCO, "Aftermath of the World Conference on Education for All," Bulletin of the UNESCO Principal Regional Office for Asia and the Pacific, No. 31, Bangkok, 1992
40. UNESCO, ***Wasted Opportunities: When Schools Fail,*** Paris: EFA Forum Secretariat, 1998
41. UNICEF, Student Achievement Test Results for Grades 1-5 in Selected Clusters, Phnom Penh, 1994.
42. UNICEF/IBE, "Repetition in Primary Education: Relevant Aspects," Workshop on 'School Repetition: A Global Perspective,' Geneva, Feb., 1995.
43. World Bank, ***India: Primary Education Achievement and Challenges,*** Washington, DC: World Bank, 1996.

Appendix 1:

- Questionnaires
- Supplementary Interview Guidelines,
- Point Scoring Explanation for Variables

Interview Schedule for Directors

Directions for Interviewer: Please refer to the directions accompanying this interview questionnaire in order to receive instructions about how the interview process should be introduced to the interviewee as well as how each question should be clarified and answers recorded.

Name of Interviewee/Sex _____/__ Name of Cluster _____

Name of School / School Type _____ Name of Interviewer _____

Province/City _____ Date of Interview _____

District/Khan _____ *(Note for interviewer: Bold nos. indicate total score boxes)*

Commune _____

No.	Question	Point Coding	Variable
1.	Does your school or cluster have an annual plan ? (Interviewer should ask to see written documentation.) ☐ Has detailed plan ☐ Has plan but not detailed ☐ No	2 1 0	5
2.	If yes, have you disseminated the plan to teachers/community ? (Interviewer should check to see if plan is posted in a visible place.) ☐ Yes ☐ No	1 0	5
3.	Can you show me some actual documentation or other evidence which indicates the degree to which you have implemented the plan ? (Please specify the documentation or evidence provided: _____ ☐ Evidence of significant implementation ☐ Evidence of some implementation ☐ No concrete evidence of implementation	2 1 0	5
4.	To what degree has your school achieved the objectives set out in your annual plan ? Pls specify evidence provided: _____ ☐ Significant achievement ☐ Moderate achievement ☐ Some achievement ☐ No achievement	3 2 1 0	5
5.	Does your school have teaching aids for teachers to borrow when they teach ? (Interviewer should ask to see evidence) ☐ Yes, a lot ☐ Yes, some ☐ None at all	2 1 0	5
6.	If yes, have the materials been organized so that they are easy to use ? ☐ Very accessible ☐ Moderately accessible ☐ Accessible but with great difficulty ☐ Not at all accessible	3 2 1 0	5
7.	Does your school have any evidence of having received library services, either from a core school or local agency ? (Please specify the evidence provided:) _____ ☐ Yes ☐ No	1 0	5
8.	Does your school have any evidence of having received any services from the cluster's resource center ? (Please specify the evidence provided:) _____ ☐ Yes ☐ No	1 0	5
9.	Does your school have any evidence that teachers meet on Thursday technical days ? (Please specify the evidence provided:) _____ ☐ Yes ☐ No	1 0	5
10.	If yes, to what degree do teachers attend these meetings ? (Interviewer should check attendance roster of these meetings) ☐ With very high attendance ☐ With moderately high attendance ☐ With poor attendance	3 2 1	5

No.	Question	Point Coding	Variable
11.	How often has the technical group of the school (cluster) met together to develop a lesson plan or presentation plan for the Thursday meeting? (Interviewer should ask to see some evidence of these plans) ☐ Very Often ☐ Sometimes ☐ Rarely ☐ Not at all	2 1 0	5
12.	How many times has your school met with the parent association or community support committee ? ☐ Not at all ☐ Once ☐ Twice ☐ Three times ☐ Three times or more	0 1 2 3 4	5
13.	Does your school buy report cards every year or not? ☐ Yes ☐ No	1 0	5
14.	In what ways has the parent association or community support committee supported the school ? ☐ Not at all ☐ Construction/Repair/Maintenance ☐ Quality improvement of educational services ☐ General fund raising ☐ Other (Please specify:) _____	0 1 1 1 1	5
15.	Is your school a member of a school cluster ? (Interviewer should ask to see an organigram chart) ☐ Yes ☐ No	1 0	5
16.	If yes, how often do you attend meetings of the Local Cluster School Committee ? (Interviewer should ask to see evidence of LCSC meetings such as a schedule, calendar, etc.) ☐ Often ☐ Sometimes ☐ Never	2 1 0	5

No.	Question	Point Coding	Variable
17.	If your LCSC does have meetings, what kinds of activities do you organize and implement and to what degree ?		5
	Teacher Supervision/School Support Visits ☐ Often ☐ Sometimes ☐ Never	2 1 0	
	Library Services ☐ Often ☐ Sometimes ☐ Never	2 1 0	
	Resource Center Services ☐ Often ☐ Sometimes ☐ Never	2 1 0	
	Cluster-based Testing ☐ Often ☐ Sometimes ☐ Never	2 1 0	
	Income Generation Activities ☐ Often ☐ Sometimes ☐ Never	2 1 0	
	Planning and Review ☐ Often ☐ Sometimes ☐ Never	2 1 0	
	Other (Please specify:) _____ ☐ Often ☐ Sometimes ☐ Never	2 1 0	
	TOTAL SCORE FOR THIS VARIABLE		5
	Interviewer Note: The following questions should only be asked of those directors from the schools included in Research Question 4. Otherwise, STOP THE INTERVIEW HERE.		

No.	Question	Point Coding	Variable
18.	Look at some of the the picture/word cards which I have placed in front of you. Each of these show some of the most commonly cited causes of repetition. (Explain each card.) How would *you* order these causes in terms of their importance for your *own* children. Take the card showing the number 1 and place it in front of the cause you think most important. Then take the number 2 and put it in front of the next important cause until you have ordered all 6 by their importance. If you don't understand the meaning of a card, please ask me. Remember, there are no *right* or *wrong* answers for this question. We only want to know what *you* think.		19
	_____ Teaching lacks quality.	A: 1 2 3 4 5 6	19
	_____ Families do not have enough money for the education of their children.	B: 1 2 3 4 5 6	19
	_____ Many families do not place a high value on the education of their children.	C: 1 2 3 4 5 6	19
	_____ Classrooms are too overcrowded.	D: 1 2 3 4 5 6	19
	_____ Students' attendance is poor.	E: 1 2 3 4 5 6	19
	_____ School facilities such as buildings, desks, are inadequate.	F: 1 2 3 4 5 6	19
	Don't know.	G: 0	
	In a minute, I am going to read to you a statement of opinion about repetition in Cambodia. What I would like you to do now is to tell me if you *strongly agree* (SA) with the statement, if you just *agree* (A) with the statement, if you have *no opinion* (NO) or idea at all about the statement, if you *disagree* (D) with the statement, or if you *strongly disagree* (DA) with the statement. Use the smiling faces below to help you to remember each of these responses. Remember, there are no *right* or *wrong* answers for each statement. We only want to know what *you* think.		
19.	Repeating a grade gives children a needed second chance for learning. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	20

No.	Question	Point Coding	Variable
20.	The Ministry of Education should abolish repetition because it is an ineffective policy. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	20
21.	Efforts to reduce repetition should focus most heavily on educating parents to keep their children in school the whole year. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	21
22.	The primary cause of repetition in Cambodian primary schools is that teachers do not teach well at all. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	19
23.	Children's learning improves when they repeat a grade. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	20
24.	It makes me very angry when I see repetition rates in our schools continue to increase. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	20
25.	Many, many students decide to dropout of school because they have repeated too many times. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	20
26.	Reducing repetition is the responsibility of the government. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	21
27.	It is certain that repetition has a damaging effect on children's feelings. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	20
28.	One of the primary reasons for repetition today is that the community does not see the value of education. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	19

Appendix 2:

- Sample Achievement Test (Grade 1 Khmer)
- Table of Specifications

Code	Variable	Point Scoring Key		Additional Explanation
19	Perceptions of Teachers/Direc-ors & Parents with respect to Causes of Repetition	High Score:	Suggests more focus on out-of-school factors or tendency to blame communities for repetition	Interval
		Low Score:	Suggests more focus on in-school factors or tendency to blame schools for repetition	
		Rank Scores:	To be averaged by respon-dent	Ordinal
20	Perceptions of Teachers/Direc-ors & Parents with respect to Effectiveness of Repetition as a Remedial Strategy	High Score:	Suggests a belief that repeti-tion is an effective means thru which enhance children's learning	Interval
		Low Score:	Suggests a belief that repeti-is not an effective means thru which to enhance children's learning	
21	Perceptions of Teachers/Direc-ors & Parents with respect to Strategies to Solve the Repetition Problem	High Score:	Suggests focusing more on activities which are centered in communities	Interval
		Low Score:	Suggests focusing more on activities which are centered in schools	
22	Perceptions of Repeaters to-wards Life/Living Situation	High Score:	Suggests high self-esteem, an interest in the future, and in bettering oneself	Mostly Interval (includes some nominal data)
		Low Score:	Suggests low self-esteem, lit-tle or no interest in the future or in bettering oneself	
23	Perceptions of Repeaters to-wards the School/Learning in General	High Score:	Suggests positive feelings to-wards the school/learning	Mostly Interval (includes some nominal data)
		Low Score:	Suggests negative feelings to-wards the school/learning	

Code	Variable	Point Scoring Key		Additional Explanation
24	Perceptions of Dropouts to-wards Life/Living Situation	High Score:	Suggests high self-esteem, an interest in the future, and in bettering oneself	Mostly Interval (includes some nominal data)
		Low Score:	Suggests low self-esteem, lit-tle or no interest in the future or in bettering oneself	
25	Perceptions of Dropouts to-wards the School/Learning	High Score:	Suggests positive feelings to-wards the school/learning	Mostly Interval (includes some nominal data)
		Low Score:	Suggests negative feelings to-wards the school/learning	
26	Native language spoken	1=Khmer is native language spoken 2=Minority tongue is language spoken 3=Both Khmer and Minority tongue are the language spoken		Nominal
X	Promotional Status	1=Repeater 2=Promoter		Nominal

Point Scoring Explanation for Variables

Code	Variable	Point Scoring Key	Additional Explanation
1	Sex	1 = male; 2 = female	Nominal/Nonadditive
2	Pedagogical qualifications of teachers	High Score: High qualifications Low Score: Low qualifications	Interval
3	Availability of textbooks	High Score: High availability Low Score: Low availability	Interval
4	Socio-economic status of parents	High Score: High status Low Score: Low status	Interval
5	Organization of school/cluster	High Score: Good organization Low Score: Poor organization	Interval
6	Premature enrollment	1 = Enrollment not premature 2 = Enrollment premature	Nominal/Nonadditive
7	Distance from school	High Score: Many obstacles in getting to school Low Score: Few obstacles in getting to school	Interval
8	Attendance/Midterm dropout	High Score: High attendance/Little history of dropout Low Score: Poor attendance/Strong history of dropout	Interval
9	Number of times repeated previously	High Score: Repeated many times Low Score: Not a strong history of repeating	Interval
10	Class size	High Score: Large class size Low Score: Small class size	Interval
11	Attendance of preschool	1 = Attended preschool 2 = Did not attend preschool	Nominal/Nonadditive
12	Secondary/Tertiary occupation of teachers	High Score: Tends to work other jobs Low Score: Tends to work only at school	Interval
13	Concurrent Validity between Internal Student Marks and Externally Administered Measures	High Correlation: Internal Evaluation Validated Low Correlation: Internal Evaluation not Validated	Interval
14	Internal Reliability of Internal Student Marks	High Correlation: Internal Evaluation Validated Low Correlation: Internal Evaluation not Validated	Interval
15	Anomalies in Promotional Decision-making	Few Anomalies Found: Internal Evaluation Validated Many Anomalies: Found Internal Evaluation not Validated	Nominal/ Qualitative
16	Differences between Repeaters Nonrepeaters who Pass External Test	T-test value Significant: There is a real difference between repeaters/nonrepeaters T-test value not Significant There is no real difference between repeaters/nonrepeaters	Interval
17	Difference in Repetion between Rural, Urban, & Semi-urban schools	Chi square Significant: There is a real difference between rural, urban, and semi-urban schools Chi square: not Significant There is no real difference between rural, urban, and semi-urban schools	Nominal
18	Difference in Repetiton between Assisted & Unassisted Schools	Chi square Significant: There is a real difference between assisted and unassisted schools Chi square: not Significant There is no real difference between assisted and unasisted schools	Nominal

No.	Question	Point Coding	Variable
20.	How useful has what you have learned up until the present time been to you ? ☐ Very useful ☐ Somewhat useful ☐ Not very useful ☐ Hard to say Explain why: _____	3 2 1 0	23
21.	What do you hope to be when you are older? _____ _____	2 1 0	22
22.	If you could change anything at all in your life, what would it be? _____ _____ _____	*Open ended Question/ No score*	22
23.	Can you tell me what the most important thing to you in your life is? _____ _____ _____	*Open ended Question/ No score*	22
24.	How often do you think about the future? ☐ Often ☐ Sometimes ☐ Never ☐ Hard to say Comments, if any: _____	3 2 1 0	22

No.	Question	Point Coding	Variable
	For the next question, I am going to tell you a story about 2 girls (boys) about the same age as you. Listen very carefully to each story. Pheap was a little girl (boy) who lived with her (his) parents both of whom were poor farmers. Pheap had 2 smaller brothers and her (his) parents were both hard pressed to keep the whole family fed. Everyday, Pheap had to help her (his) mother prepare kindling wood to make a fire, feed her (his) little brothers, and sweep the house before going to school *(if interviewee is a boy, substitute the following:* father bring the cattle out to the field before he went to school). Her (His) parents had hardly any money to buy her (him) study supplies let alone a decent blouse (shirt) to wear to school every day. Because she (he) had so little time to study, Pheap took a long time to understand her (his) lessons and she (he) had to repeat grades 1, 3, and 5. But she (he) really wanted to learn as well as finish primary school. Finally, after 9 hard years of work and struggle, Pheap was able to finish her (his) studies. Her (His) parents were very proud of her (him). Vanna was a little girl (boy) who lived in a large family of 10 people. Though very large, Vanna's family could not afford a wooden house but had to live in a small mud hut. Life was terribly difficult because the land which Vanna's family had to farm was not very fertile. In addition, Vanna's father was often sick. On those days, Vanna and her (his) mother had to go and work in the fields in order to enable the family to survive. Vanna's family was among the poorest of the poor in her (his) village. Because of her (his) family's difficult situation, Vanna did not have much time to go to school on a regular basis. It seemed that she (he) repeated every grade at least once. And her (his) family had hardly any money to buy school supplies at all. Finally, Vanna's father died and it was up to her (him) as the oldest child to help her (his) mother to keep the family fed. Vanna decided that she (he) would have to give up school altogether in order to work in the fields and get any money she (he) could for the family. Although this was a terrible price to pay, Vanna's decision eventually helped her (his) family to survive for many years.		
25.	After listening to each of these stories, tell me whom do you admire more, Pheap or Vanna? ☐ Pheap ☐ Vanna ☐ Both ☐ Hard to say	3 1 2 0	22
26.	Explain why. _____ _____ _____ _____ _____	*Open ended Question/ No score*	22
	TOTAL SCORE FOR THIS VARIABLE *(Excluding nonadditive questions)*		22
	TOTAL SCORE FOR THIS VARIABLE *(Excluding nonadditive questions)*		23
	END OF INTERVIEW		

No.	Question	Point Coding	Variable
10.	If yes, do you think that you will be able to go on to secondary school? ☐ Yes ☐ No ☐ Hard to say Explain why: _____	2 1 0	23
11.	If no, what do you think will happen to you after you leave school? ☐ Nothing ☐ Life may be more difficult ☐ Will try to find work ☐ Will help my parents ☐ Hard to say ☐ Other (Please specify:) _____ Comments, if any: _____	1 2 3 4 5 0 *(nonadditive)*	22
12.	If you compare yourself with your classmates, how would you describe yourself in terms of your school work? ☐ Learn faster than they do ☐ Learn about the same as they do ☐ Learn slower than they do ☐ Hard to say ☐ Other (Please specify): _____ Explain why: _____	3 2 1 0 3 2 1 0	22 23
13.	Do you study your lessons often at home ? ☐ Yes ☐ No	1 0	23
14.	If no, why not ? *Interviewers should choose all categories which apply* ☐ Not enough time ☐ Not interested ☐ No one to help me ☐ Other (Please specify: _____	1 2 3 4 0 *(nonadditive)*	23

No.	Question	Point Coding	Variable
15.	What is (are) your biggest problem(s) in school? *Interviewers should choose all categories which apply.* ☐ Do not understand the teacher ☐ No materials ☐ Class too crowded ☐ Scared of the teacher ☐ Too far away ☐ Classmates bother me ☐ Hard to say ☐ Other (Please specify): _____ Comments, if any: _____	1 2 3 4 5 6 7 8 0 *(nonadditive)*	23
16.	What do you see yourself doing 5 years from now? _____	1 2 0	22
17.	Look at the picture of this school. Pick any of the following word cards that describes your *feeling* about how things might be in that school in general. ☐ happy ☐ important ☐ good ☐ interesting ☐ sad ☐ useless ☐ scared ☐ tired Comments, if any: _____	2 1 0	23
18.	Do your parents ever to talk to you about the importance of school? ☐ Yes, often ☐ Yes, sometimes ☐ Not at all	3 2 1	23
19.	Look at some of the following word cards. Pick a word which best describes how you *feel* about the world in which you live. ☐ fair ☐ hopeful ☐ happy ☐ easy ☐ unfair ☐ hopeless ☐ sad ☐ difficult Explain why you chose that card : _____	2 1 0	22

Interview Schedule for Repeaters

Directions for Interviewer: Please refer to the directions accompanying this interview questionnaire in order to receive instructions about how the interview process should be introduced to the student as well as how each question should be clarified and answers recorded.

Name of Interviewee _____ Name of Child's School _____

Sex/Age _____/_____ Name of Cluster _____

Province/City _____ Grade/Class (Last yr/This yr) _____

District/Khan _____ Name of Interviewer _____

Commune/Section _____ Date of Interview _____

Village/Group _____

No.	Question	Point Coding	Variable
1.	Do you know what the word "repeat" means? ☐ Yes ☐ No ☐ Hard to say If yes, please explain the meaning: _____	1 2 0 *(nonadditive)*	22
2.	Do other children ever make fun of you because you stayed in the same grade or because you are older than they are? ☐ Yes, a lot ☐ Sometimes ☐ Never ☐ Hard to say Explain why: _____	1 2 3 0	22
3.	If you repeat next year, do you think you will stay in school? ☐ Yes ☐ No ☐ Hard to say Comments if any: _____	2 1 0	23
4.	Do you know why your teacher made you repeat? ☐ Yes ☐ No ☐ Hard to say Comments if any: _____	1 2 0 *(nonadditive)*	23
5.	If yes, what was (were) the reason(s)? *(Interviewer should choose all categories which apply.)* ☐ Did not understand the lessons ☐ Missed too many days ☐ Hard to say ☐ Teacher did not like me ☐ Was sick a lot ☐ Other (Please specify): _____	1 2 3 4 5 0 *(nonadditive)*	23
6.	Do you think that the decision to make you repeat the year was a fair or good decision? ☐ Yes ☐ No ☐ Hard to say	1 2 0 2 1 0	22 23
7.	If yes, explain why. (*or* If no, explain why not.) _____	*Open ended Question/ No score*	23
8.	Has the fact that you repeated the school year made studying easier or more difficult for you? ☐ Easier ☐ About the same ☐ More difficult ☐ Hard to say Explain why: _____	3 2 1 0	23
9.	Do you think that you will finish primary school? ☐ Yes ☐ No ☐ Hard to say Comments if any: _____	2 1 0	23

No.	Question	Point Coding	Variable
19.	After listening to each of these stories, tell me whom do you admire more, Pheap or Vanna? ☐ Pheap ☐ Vanna ☐ Both ☐ Hard to say	3 1 2 0	24
20.	Explain why. _____ _____ _____ _____ _____	*Open-ended Question* *No score*	24
	TOTAL SCORE FOR THIS VARIABLE *(Excluding nonadditive questions)*		24
	TOTAL SCORE FOR THIS VARIABLE *(Excluding nonadditive questions)*		25
	END OF INTERVIEW		

No.	Question	Point Coding	Variable
11.	Look at the picture of this school. Pick any one of the following word cards that describes your *feeling* about how things might be in that school in general. ☐ happy ☐ important ☐ good ☐ interesting ☐ sad ☐ useless ☐ scared ☐ tired Explain why: _____	2 1 0	25
12.	If you compare yourself with some of your friends who are still in school today, would you say that their living situation is ☐ better off than yours. ☐ about the same as yours. ☐ worse than yours. ☐ Hard to say. Explain why: _____	1 2 3 0	24
13.	Look at some of the following word cards. Pick a word which best describes how you feel about the world in which you live. ☐ fair ☐ hopeful ☐ happy ☐ easy ☐ unfair ☐ hopeless ☐ sad ☐ difficult Explain why: _____	2 1 0	24
14.	If you could change anything at all in your life, what would it be ?	*Open-ended Question No score*	24
15.	What do you see yourself doing 5 years from now ?	1 2 0	24

No.	Question	Point Coding	Variable
16.	How useful has what you learned in school up until the time that you dropped out been ? ☐ Very useful ☐ Somewhat useful ☐ Of no use at all. ☐ Hard to say. Explain why: _____	3 2 1 0	25
17.	If you had your chance to choose, what would you like to do for a living?	2 1 0	24
18.	What is the most important thing in your life today?	*Open-ended Question No score*	24
	For the next question, I am going to tell you a story about 2 girls (boys) about the same age as you. Listen very carefully to each story. Pheap was a little girl (boy) who lived with her (his) parents both of whom were poor farmers. Pheap had 2 smaller brothers and her (his) parents were both hard pressed to keep the whole family fed. Everyday, Pheap had to help her (his) mother prepare kindling wood to make a fire, feed her (his) little brothers, and sweep the house before going to school *(if interviewee is a boy, substitute the following:* father bring the cattle out to the field before he went to school). Her (His) parents had hardly any money to buy her (him) study supplies let alone a decent blouse (shirt) to wear to school every day. Because she (he) had so little time to study, Pheap took a long time to understand her (his) lessons and she (he) had to repeat grades 1, 3, and 5. But she (he) really wanted to learn as well as finish primary school. Finally, after 9 hard years of work and struggle, Pheap was able to finish her (his) studies. Her (His) parents were very proud of her (him). Vanna was a little girl (boy) who lived in a large family of 10 people. Though very large, Vanna's family could not afford a wooden house but had to live in a small mud hut. Life was terribly difficult because the land which Vanna's family had to farm was not very fertile. In addition, Vanna's father was often sick. On those days, Vanna and her (his) mother had to go and work in the fields in order to enable the family to survive. Vanna's family was among the poorest of the poor in her (his) village. Because of her (his) family's difficult situation, Vanna did not have much time to go to school on a regular basis. It seemed that she (he) repeated every grade at least once. And her (his) family had hardly any money to buy school supplies at all. Finally, Vanna's father died and it was up to her (him) as the oldest child to help her (his) mother to keep the family fed. Vanna decided that she (he) would have to give up school altogether in order to work in the fields and get any money she (he) could for the family. Although this was a terrible price to pay, Vanna's decision eventually helped her (his) family to survive for many years.		

Interview Schedule for Dropouts

Directions for Interviewer: Please refer to the directions accompanying this interview questionnaire in order to receive instructions about how the interview process should be introduced to the student as well as how each question should be clarified and answers recorded.

Name of Interviewee _____ Name of Former School _____

Sex/Age _____/_____ Name of Cluster _____

Province/City _____ Grade at Which Left School _____

District/Khan _____ Name of Interviewer _____

Commune/Section _____ Date of Interview _____

Village/Group _____

No.	Question	Point Coding	Variable
1.	Do you ever regret having left school ? ☐ Yes, a lot ☐ Sometimes ☐ Never ☐ Hard to say Explain why: _____	3 2 1 0	25
2.	Do you think that you may someday return to school ? ☐ Yes ☐ Perhaps ☐ No ☐ Hard to say Explain why: _____	3 2 1 0	25
3.	Can you tell me the reason that you decided to leave school ? ☐ To help my parents ☐ Didn't have enough money ☐ Scared of the teacher ☐ Repeated too many times ☐ Wasn't learning anything ☐ Too far to walk ☐ Was sick ☐ Hard to say *Interviewer should choose all categories which apply.* ☐ Other (Please specify): _____	1 2 3 4 5 6 7 8 9 0 *(nonadditive)*	25

No.	Question	Point Coding	Variable
4.	Who made the final decision that you should drop out of school ? ☐ I did. ☐ My parents ☐ The director of my school. ☐ Hard to say ☐ Other (Please specify): _____ Explain the reason why: _____	1 2 3 4 0 *(nonadditive)*	24
5.	How many times did you repeat a grade before you dropped out ? ☐ Never ☐ Once ☐ Twice ☐ 3 times or more	0 1 2 3 *(nonadditive)*	--
6.	(If yes) How did repeating a grade make you feel ? *If #5 is "never", skip this question.* ☐ Resented it ☐ Embarassed ☐ No special feelings ☐ Hard to say ☐ Other: (Please specify: _____ Comments, if any: _____	1 1 2 0	24
7.	How often do you think about the future ? ☐ Often ☐ Sometimes ☐ Never ☐ Hard to say Comments if any: _____	3 2 1 0	24
8.	Did your parents ever talk to you about the importance of school ? ☐ Yes, a lot ☐ Sometimes ☐ Never ☐ Hard to say Comments if any: _____	2 1 0	25
9.	How old were you when you dropped out of school? _____ Yrs.		--
10.	If you had the chance to decide again whether to leave or stay in school, what would you do ? ☐ Dropout again ☐ Stay in school ☐ Hard to say Comments if any: _____	1 2 0	25

Question 11

- The interviewer may accept *any* evidence of marking records kept by the teacher for this question (e.g., notes on notebook paper, etc.) even if such evidence does not include formal mark books published by the Ministry of Education.

Question 12

- If the answer to this question is "no," the interviewer should indicate whether this is because the school has not purchased report cards or whether the cards are available but the teacher has not filled them out on a regular basis. Make these notes under *Comments*. If possible, the interviewer should try to cross-check this response with directors to ascertain the availability of report cards (cf. Question 13, Director Interview Schedule).

Question 13

- The interviewer should listen to teacher's description of his/her teaching and then try to classify the description under Category A, B, or C. The interviewer should not read classifications to the teacher but may ask supplementary questions in order to clarify details set out in each of the categories described.

- If the description provided does not match any of the categories given, check *Other* and do not score the question.

Question 14

- The interviewer should try to verify the teacher's response by inspecting the actual arrangement of desks in the classroom.

Question 15

- The interviewer should try to verify the teacher's response by inspecting the actual posting of students' work on walls in the classroom.

Question 16

- Self-explanatory.

Question 17

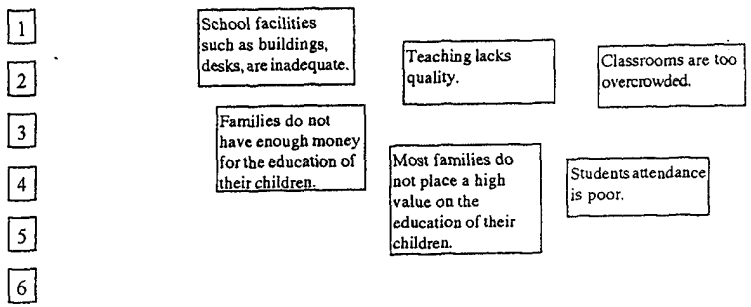
- The interviewer may wish to cross check the teacher's response by asking students whether they were ever required to attend special classes for which they were charged during the Parent Interview.

Question 18

- Self-explanatory.

Question 19

- The directions for this question should be read carefully to the respondent. The interviewer should arrange number cards vertically in front of the respondent:

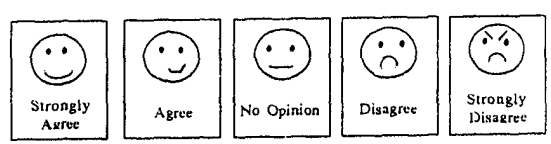


At some distance to the right, response listing each of the causes of repetition should be grouped together in a random order.

Because this kind of question format will be quite novel for the respondent, the interviewer is urged to provide considerable time and explanation to facilitate responding but *without cueing any specific responses.* If in the final instance, respondents can not answer the question, circle "Don't know" and score the entire question "0".

Questions 20 - 41

- As with Question 19, the directions for Questions 20 to 41 should be read carefully to the respondent. As a mnemonic device to help respondents remember each of the five possible responses to each statement of opinion, use the cards provided with each interview set. These should be set out in front of the respondent as follows:



When responding, urge teachers to express their opinion to each statement read by pointing to the appropriate card.

Supplementary Interview Guidelines
(For Teacher Interview)

The following guidelines are to be used by interviewers using the Interview Schedule for Teachers. Some of the questions to be asked in this interview are self-explanatory and should not pose any serious problems for the interviewer in terms of ensuring comparability between interviews. Other questions, however, require clarification to enable similar interpretations between interviewers. These clarifications are provided below.

If at all possible, the interview should take place in the teacher's classroom to facilitate the teacher's ability to present evidence needed for responding to various questions.

The interviewer is also reminded that question scores in Column 3 are cross-referenced with response categories from left to right. Question scores should be noted by circling the numbers which apply.

Question 1

- Interviewer should be sure that the response given is for last year's class and not this year's.

Question 2

- The interviewer should note that a number of possible combinations may occur when respondents answer this question. These should be noted under *Other*. For example, if students sit on mats but under trees and not in a classroom, this should be noted. *Other* possible responses might include "on the ground with no mats," "on rocks" "some at desks but most on the floor," etc..

- If *Other* is the response, do not score this question.

Question 3

- If some textbooks are provided "individually" and others are "shared," the interviewer should check the category which pertains to the majority of students.

Question 4

- The interviewer should note that any level of study within a given category can be accepted as having reached that level of educational attainment. For example, if a teacher only studied to Grade 11, the interviewer should score the parent's level of educational attainment as "Upper Secondary."

- Interviewer's should also note that older teachers may report his or her level of study according to grades within the old French system. In this case, Grades 12-7 are classified as primary, 6-4 as lower secondary, and 3-1 as upper secondary.

- *Other* may include such responses as temple school, technical school, etc.. These responses should be recorded in the appropriate box. As above, do not score the question if *Other* is the highest level of educational attainment.

Question 5

Self-explanatory

Question 6

- *Other* may include such responses as AIDS training, human rights training, rights of the child, dental hygiene, etc.. Such responses may be scored "1" by the interviewer and added with other responses. Total response scores, however, should not exceed "3".
- If a teacher was never in-serviced, leave all categories blank and score the question "0".

Question 7

- Self-explanatory

Question 8

- The interviewer should ask to see evidence of lesson planning before scoring the question. Any informal collection of planning notes for teaching should be accepted by the interviewer as evidence of lesson planning. Based on the number of these notes, the interviewer will have to assess the frequency with which teachers do lesson planning.

Question 9

- This question is designed to determined if the teacher has teaching aids *besides* those available in the resource center or school office. If the teacher did not bring any teaching aids to class but insists that he or she has such aids, the interviewer should ask the teacher to list the aids which they have (presumably at home) and some of their specific characteristics. Based on the level of detail which the teacher can provide with respect to these teaching aids, the interviewer should make an assessment as to whether he/she is actually in possession of such aids.

- The interviewer should also be sure to note whether these aids are only for the teacher or whether they are intended for use by teacher *and* students.

Question 10

- The interviewer may accept *any* evidence of attendance records kept by the teacher for this question even if such evidence does not include formal attendance books published by the Ministry of Education.

No.	Question	Point Coding	Variable
30.	Communities have a more important role to play than schools in reducing repetition. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	21
31.	Efforts to reduce repetition should focus most heavily on improving the quality of teaching in the classroom. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	21
	TOTAL SCORE FOR THIS VARIABLE. (Excluding Question 19)		**19**
	TOTAL SCORE FOR THIS VARIABLE.		**20**
	TOTAL SCORE FOR THIS VARIABLE.		**21**
	TOTAL SCORE FOR QUESTIONS 20-31.		
	For the next set of questions, I would like you to describe your school by stating whether you agree or disagree with a list of statements. What I would like you to do now is to tell me if you *strongly agree* (SA) with the statement, if you just *agree* (A) with the statement, if you have *no opinion* (NO) or idea at all about the statement, if you *disagree* (D) with the statement, or if you *strongly disagree* (DA) with the statement. Use the smiling faces below to help you to remember each of these responses. Remember, there are no *right* or *wrong* answers for this question. We only want to know what *you* think. All answers will be kept in strict confidentiality.		
32.	My school tries very hard to help students learn. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	19
33.	My school is not at all responsive to the needs of the community. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	19
34.	My school is very well-organized. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	19

No.	Question	Point Coding	Variable
35.	My school is very difficult for parents to contact. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	19
36.	My school is a nice place to learn. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	19
37.	My school is hopeless as a place of learning. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	19
38.	My school is very fair towards its students. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	19
	TOTAL SCORE FOR QUESTIONS 32-38.		19
	END OF INTERVIEW		

No.	Question	Point Coding	Variable
19.	Look at some of the the picture/word cards which I have placed in front of you. Each of these show some of the most commonly cited causes of repetition. (Explain each card.) How would *you* order these causes in terms of their importance for your *own* children. Take the card showing the number 1 and place it in front of the cause you think most important. Then take the number 2 and put it in front of the next important cause until you have ordered all 6 by their importance. If you don't understand the meaning of a card, please ask me. Remember, there are no *right* or *wrong* answers for this question. We only want to know what *you* think.		19
	____ Teaching lacks quality.	A: 1 2 3 4 5 6	19
	____ Families do not have enough money for the education of their children.	B: 1 2 3 4 5 6	19
	____ Many families do not place a high value on the education of their children.	C: 1 2 3 4 5 6	19
	____ Classrooms are too overcrowded.	D: 1 2 3 4 5 6	19
	____ Students' attendance is poor.	E: 1 2 3 4 5 6	19
	____ School facilities such as buildings, desks, are inadequate.	F: 1 2 3 4 5 6	19
	Don't know.	G: 0	
	In a minute, I am going to read to you a statement of opinion about repetition in Cambodia. What I would like you to do now is to tell me if you *strongly agree* (SA) with the statement, if you just *agree* (A) with the statement, if you have *no opinion* (NO) or idea at all about the statement, if you *disagree* (D) with the statement, or if you *strongly disagree* (DA) with the statement. Use the smiling faces below to help you to remember each of these responses. Remember, there are no *right* or *wrong* answers for each statement. We only want to know what *you* think.		
20.	Repeating a grade gives children a needed second chance for learning. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	20

No.	Question	Point Coding	Variable
21.	The Ministry of Education should abolish repetition because it is an ineffective policy. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	20
22.	Efforts to reduce repetition should focus most heavily on educating parents to keep their children in school the whole year. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	21
23.	The primary cause of repetition in Cambodian primary schools is that teachers do not teach well at all. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	19
24.	Children's learning improves when they repeat a grade. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	20
25.	It makes me very angry when I see repetition rates in our schools continue to increase. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	20
26.	Many, many students decide to dropout of school because they have repeated too many times. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	20
27.	Reducing repetition is the responsibility of the government. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	21
28.	It is certain that repetition has a damaging effect on children's feelings. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	20
29.	One of the primary reasons for repetition today is that the community does not see the value of education. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	19

No.	Question	Point Coding	Variable
10.	Do you take attendance on a regular basis ? (Interviewer should ask to see attendance books) ☐ Yes, always ☐ Yes, usually ☐ Yes, sometimes ☐ No	3 2 1 0	2
11.	Do you record students' marks in your grade book on a regular basis ? (Interviewer should ask to see grade book) ☐ Yes, always ☐ Yes, usually ☐ Yes, sometimes ☐ No	3 2 1 0	2
12.	Do you send report cards to your students' parents on a regular basis ? (Interviewer should ask to see report cards signed by parents) ☐ Yes, always ☐ Yes, usually ☐ Yes, sometimes ☐ No Comments (if any): _____	3 2 1 0	2
13.	Please describe the way that you teach everyday. (Interviewer should try to classify the teaching style according to the following categories.) ☐ *A.* I teach students as a large group with students sitting in rows for the entire hour. ☐ *B.* I teach students as a large group for most of the hour but then ask them to work in small groups at the end of the hour. ☐ *C.* I teach students for a time as a large group but then have them do a short activity in small groups. After that, I continue teaching as a large group followed by another small group activity, and so on. ☐ Other (Please specify:) _____	1 2 3	2
14.	How do you usually arrange the desks in your classroom. ☐ In rows only ☐ Sometimes in rows, sometimes in groups ☐ In groups ☐ Other (Please specify:) _____	1 2 3	2

No.	Question	Point Coding	Variable
15.	Do you ever decorate your classroom by putting up the written or drawing work done by your students on the walls ? ☐ Yes, always ☐ Yes, usually ☐ Yes, sometimes ☐ No	3 2 1 0	2
16.	Do you ever take time to correct students' exercises while students are sitting in the classroom ? ☐ Yes, always ☐ Yes, usually ☐ Yes, sometimes ☐ No	1 2 3 4	2
17.	Do you ever require your students to attend special classes taught by yourself outside of the regular study hours. ☐ Yes, always ☐ Yes, usually ☐ Yes, sometimes ☐ No	1 2 3 4	2
	TOTAL SCORE FOR THIS VARIABLE		2
18.	Do you have to work at other jobs besides your work as a teacher ? ☐ Yes, always ☐ Yes, usually ☐ Yes, sometimes ☐ No	4 3 2 1	12
	Interviewer Note: The following questions should only be asked of those teachers from the schools included in Research Question 4. Otherwise, STOP THE INTERVIEW HERE.		

Research Question: 1 4 (Please circle)

Interview Schedule for Teachers

Directions for Interviewer: Please refer to the directions accompanying this interview questionnaire in order to receive instructions about how the interview process should be introduced to the interviewee as well as how each question should be clarified and answers recorded.

Name of Interviewee/Sex _____/___ Name of Cluster _____

Name of School / School Type _____ Grade/Class Letter (this year) _____

Province/City _____ Grade/Class Letter (last year) _____

District/Khan _____ Name of Interviewer _____

Commune _____ Date of Interview _____

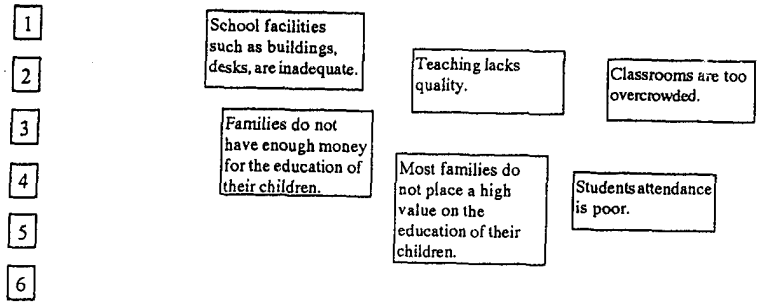
(Note for Interviewer: Bold nos. indicate total score boxes)

No.	Question	Point Coding	Variable
1.	How many students were in your class last year ? ☐ Less than 40 ☐ 40 to 49 ☐ 50 to 59 ☐ Over 59	1 2 3 4	10
2.	How are most of the students in your class seated ? ☐ At desks ☐ On mats ☐ Other _____	1 2	10
	TOTAL SCORE FOR THIS VARIABLE		**10**
3.	Could you tell me how textbooks in your class are distributed for the majority of your students in each subject ?		**3**
	Khmer: ☐ Individually ☐ Shared ☐ Have none	3 2 1	
	Math: ☐ Individually ☐ Shared ☐ Have none	3 2 1	
	Science ☐ Individually ☐ Shared ☐ Have none	3 2 1	
	Social Studies ☐ Individually ☐ Shared ☐ Have none	3 2 1	
4.	What is your highest level of educational attainment ? ☐ Primary ☐ Lower Secondary ☐ Upper Secondary ☐ University ☐ Other (Please specify:) _____	1 2 3 4	2

No.	Question	Point Coding	Variable
5.	What is your professional status as a teacher within the education system ? ☐ Contract Teacher ☐ Locally Appointed ☐ In-service Certified ☐ Pre-service Certified ☐ University Certified	1 2 3 4 5	2
6.	Could you decribe the nature of any in-service training which you have received in addition to those trainings for textbook usage ?		2
	From Gov't:		
	Times in-serviced: ☐ Once ☐ Twice ☐ Three times or more	0 1 2 3	
	Content: ☐ Technical/Pedagogical ☐ Administrative ☐ Other (Please specify:) _____	0 1 1 1	
	From Nongovernmental/International Organization:		
	Times in-serviced: ☐ Once ☐ Twice ☐ Three times	0 1 2 3	
	Content: ☐ Technical/Pedagogical ☐ Administrative ☐ Other (Please specify:) _____	0 1 1 1	
7.	How many years have you taught in all ? ☐ 1 Year ☐ 2 Years ☐ 3 Years ☐ 4 Years or more	1 2 3 4	2
8.	Do you do lesson plans on a regular basis ? (Interviewer should ask to see an example) ☐ Yes, always ☐ Yes, usually ☐ Yes, sometimes ☐ No	3 2 1 0	2
9.	Do you have any of your own teaching aids for teaching ? (Interviewer should ask to see some examples) ☐ None ☐ Only for teacher ☐ For teacher and students	0 1 2	2

Question 24

- The directions for this question should be read carefully to the respondent. The interviewer should arrange number cards vertically in front of the respondent:



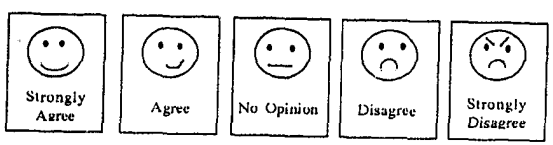
At some distance to the right, response cards listing each of the causes of repetition should be grouped together in a random order. If parents are illiterate, the interviewer should use cards that include illustrations of each factor on them. Otherwise, only word cards should do.

Because this kind of question format will be quite novel for the respondent, the interviewer is urged to provide considerable time and explanation to facilitate responding but *without cueing any specific responses*. Read the question to the respondent as many times as necessary.

- If respondents do not rank all of the causes provided, score only those which have been ranked. If in the final instance, respondents can not rank any of the causes at all, circle "Don't know" and score the entire question "0".

Questions 25 - 43

- As with Question 24, the directions for Questions 25 to 43 should be read carefully to the respondent. As a mnemonic device to help respondents remember each of the five possible responses to each statement of opinion, use the cards provided with each interview set. These should be set out in front of the respondent as follows:



When responding, urge parents to express their opinion to each statement read by pointing to the appropriate card.

Question 7

- If the family member is unable to answer the question, the interviewer should provide assistance in computing income. For example, ask questions relating to how much rice they usually harvest in a year, how much is the going price for a rice sack, do the multiplication, etc.. Do not leave the question unanswered if at all possible.

Question 8

- The interviewer should skip this question if the answer to Question 3 is "no."

- If a parent's occupation falls into 2 categories (e.g., the parent is a "farmer" and "private business man"), check both categories but *only* score the question for the highest category checked. Do *not* score this question by adding the score from both categories.

- If the respondent's answer falls into the *Other* category, describe the occupation in the space provided but do not score the question. This should be done by the research assistant and/or consultant.

Question 9

- The interviewer should skip this question if the answer to Question 5 is "no."

If a parent's occupation falls into 2 categories (e.g., the parent is a "farmer" and "private business man"), check both categories but *only* score the question for the highest category checked. Do *not* score this question by adding the score from both categories.

- If the respondent's answer falls into the *Other* category, describe the occupation in the space provided but do not score the question. This should be done by the research assistant and/or consultant.

Question 10

- To avoid confusion, this question should include only the biological children of the individual(s) in question.

Question 11

- Self-explanatory

Question 12

- Respondents may have difficulty in responding to this question. The interviewer should provide assistance to families in going over all their education costs including stationery, school fees, clothing, etc.

Question 13

- Self-explanatory

Question 14

- Self-explanatory

Question 15

- The interviewer should ask probing questions to ascertain the difficulty of terrain. These questions should cover such things as streams and forests to cross, hills to climb, how prone the area is to flooding, the need to use circuitous routes, etc.. If more than one physical obstacle is involved in getting to school (e.g., crossing a river and then climbing a hill), the interviewer should check the response "difficult terrain." If only one obstacle is involved, however, (e.g., road floods Oct. to Dec.), check "moderately difficult terrain." If no serious obstacles are involved, check "easy terrain."

Question 16

- The interviewer should ascertain the most usual type of transportation used by the student. If, for example, students walk one day a week but go on a motorcycle the other 4, the response recorded should be "motorcycle."

- This question is concerned only with the mode of transport to school and not that used in coming from school.

Question 17

- The intent of this question is not to ascertain the total number of days absent from school. The interviewer is expected to find out whether student have ever had a pattern of staying out of school for extended periods of time (i.e., exceeding one week at a time)

Question 18

- Self-explanatory

Question 19

- Self-explanatory

Question 20

- In asking this question, the interviewer may wish to use the colloquial term used for "repeat." It is also suggested that the child be present when asking this question as parents may not remember how many times their child repeated each grade as this question asks.

Question 21

- The scoring for this question is found by adding together the number of times repeated for *each* grade.

Question 22

Self-explanatory

Question 23

- If the answer to Question 22 is "no", the interviewer should skip this question.

Supplementary Interview Guidelines

(For Parent Interviews)

The following guidelines are to be used by interviewers using the Interview Schedule for Parents. Some of the questions to be asked in this interview are self-explanatory and should not pose any serious problems for the interviewer in terms of ensuring comparability between interviews. Other questions, however, require clarification to enable similar interpretations between interviewers. These clarifications are provided below.

The interviewer is also reminded that question scores in Column 3 are cross-referenced with response categories from left to right. Question scores should be noted by circling the numbers which apply.

Question 1

- Self explanatory

Question 2

- The first 3 questions in this section are not to be scored. Rather, these questions are intended to provide the interviewer with verifiable proof that the parent's child did indeed enroll at the correct age.

- Answers to uncoded questions should be written in the space provided for cross-checking after the interview is completed.

- It is suggested that parents' children be present when asking this question because it may happen that parents can not remember their children's age or what grade they are studying in.

Question 3

- If the interviewer is speaking with a female member of the family such as the child's mother, the interviewer should ask the first question. If the interviewer is speaking to a male member of the child's family, the second question should be asked.

- A "yes" response should cover any or all of the following circumstances:
  - -the father lives at home
  - -the father has left home to seek work but keeps in regular contact with the family
  - -the child's real father is dead but a male member of the family acts as a foster father

- A "no" response should cover any or all of the following circumstances:
  - -the father is dead and the mother is an unmarried widow
  - -the father has abandoned the family and does not keep in regular touch

Question 4

- If the answer to Question 3 is "no," skip Question 4 and move onto Question 5.

- The interviewer should note that any level of study within a given category can be accepted as having reached that level of educational attainment. For example, if a parent only studied to Grade 3, the interviewer should score the parent's level of educational attainment as "Primary."

- Interviewer's should also note that older parents may report their level of study according to grades within the old French system. In this case, Grades 12-7 are classified as primary, 6-4 as lower secondary, and 3-1 as upper secondary.

- If the parent reports studying outside of the formal education system, check *Other*. This especially includes such things as literacy classes, adult education schools, etc.. If the interviewer should score *Other*, leave the question unscored.

Question 5

- If the interviewer is speaking with a male member of the family such as the child's father, the interviewer should ask the first question. If the interviewer is speaking to a female member of the child's family, the second question should be asked.

- A "yes" response should cover any or all of the following circumstances:
  - -the mother lives at home
  - -the mother has left home to seek work but keeps in regular contact with the family
  - -the child's real mother is dead but a female member of the family acts as a foster mother

- A "no" response should cover any or all of the following circumstances:
  - -the mother is dead and the father is an unmarried widower
  - -the mother has abandoned the family and does not keep in regular touch

Question 6

- If the answer to Question 5 is "no," skip Question 6 and move onto Question 7.

- The interviewer should note that any level of study within a given category can be accepted as having reached that level of educational attainment. For example, if a parent only studied to Grade 3, the interviewer should score the parent's level of educational attainment as "Primary."

- Interviewer's should also note that older parents may report their level of study according to grades within the old French system. In this case, Grades 12-7 are classified as primary, 6-4 as lower secondary, and 3-1 as upper secondary.

- If the parent reports studying outside of the formal education system, check *Other*. This especially includes such things as literacy classes, adult education schools, etc.. If the interviewer should score *Other*, leave the question unscored.

No.	Question	Point Coding	Variable
35.	Communities have a more important role to play than schools in reducing repetition. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	21
36.	Efforts to reduce repetition should focus most heavily on improving the quality of teaching in the classroom. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	21
	TOTAL SCORE FOR THIS VARIABLE. (Excluding Question 24)		**19**
	TOTAL SCORE FOR THIS VARIABLE.		**20**
	TOTAL SCORE FOR THIS VARIABLE.		**21**
	TOTAL SCORE FOR QUESTIONS 25-36.		
	For the next set of questions, I would like you to describe your school by stating whether you agree or disagree with a list of statements. What I would like you to do now is to tell me if you *strongly agree* (SA) with the statement, if you just *agree* (A) with the statement, if you have *no opinion* (NO) or idea at all about the statement, if you *disagree* (D) with the statement, or if you *strongly disagree* (DA) with the statement. Use the smiling faces below to help you to remember each of these responses. Remember, there are no *right* or *wrong* answers for this question. We only want to know what *you* think. All answers will be kept in strict confidentiality.		
37.	My child's school tries very hard to help students learn. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	19
38.	My child's school is not at all responsive to the needs of the community. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	19
39.	My child's school is very well-organized. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	19

No.	Question	Point Coding	Variable
40.	My child's school is very difficult for parents to contact. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	19
41.	My child's school is a nice place to learn. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	19
42.	My child's school is hopeless as a place of learning. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	19
43.	My child's school is very fair towards its students. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	19
	TOTAL SCORE FOR QUESTIONS 37-43.		19
	END OF INTERVIEW		

No.	Question	Point Coding	Variable
24.	Look at some of the the picture/word cards which I have placed in front of you. Each of these show some of the most commonly cited causes of repetition. (Explain each card.) How would *you* order these causes in terms of their importance for your *own* children. Take the card showing the number 1 and place it in front of the cause you think most important. Then take the number 2 and put it in front of the next important cause until you have ordered all 6 by their importance. If you don't understand the meaning of a card, please ask me. Remember, there are no *right* or *wrong* answers for this question. We only want to know what *you* think.		19
	_____ Teaching lacks quality.	A: 1 2 3 4 5 6	19
	_____ Families do not have enough money for the education of their children.	B: 1 2 3 4 5 6	19
	_____ Many families do not place a high value on the education of their children.	C: 1 2 3 4 5 6	19
	_____ Classrooms are too overcrowded.	D: 1 2 3 4 5 6	19
	_____ Students' attendance is poor.	E: 1 2 3 4 5 6	19
	_____ School facilities such as buildings, desks, are inadequate.	F: 1 2 3 4 5 6	19
	Don't know.	G: 0	
	In a minute, I am going to read to you a statement of opinion about repetition in Cambodia. What I would like you to do now is to tell me if you *strongly agree* (SA) with the statement, if you just *agree* (A) with the statement, if you have *no opinion* (NO) or idea at all about the statement, if you *disagree* (D) with the statement, or if you *strongly disagree* (DA) with the statement. Use the smiling faces below to help you to remember each of these responses. Remember, there are no *right* or *wrong* answers for each statement. We only want to know what *you* think.		
25.	Repeating a grade gives children a needed second chance for learning. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	20

No.	Question	Point Coding	Variable
26.	The Ministry of Education should abolish repetition because it is an ineffective policy. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	20
27.	Efforts to reduce repetition should focus most heavily on educating parents to keep their children in school the whole year. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	21
28.	The primary cause of repetition in Cambodian primary schools is that teachers do not teach well at all. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	19
29.	Children's learning improves when they repeat a grade. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	20
30.	It makes me very angry when I see repetition rates in our schools continue to increase. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	20
31.	Many, many students decide to dropout of school because they have repeated too many times. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	20
32.	Reducing repetition is the responsibility of the government. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	21
33.	It is certain that repetition has a damaging effect on children's feelings. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	20
34.	One of the primary reasons for repetition today is that the community does not see the value of education. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	19

No.	Question	Point Coding	Variable
11.	Do you own a television set? ☐ Yes ☐ No	1 0	4
12.	Could you tell me approximately how much you spend on your child's education in one year ? ☐ Less than 100,000 R ☐ 100,000 to 300,000 ☐ More than 300,000	1 2 3	4
	TOTAL SCORE FOR THIS VARIABLE		**4**
13.	How far is your child's school from your house? ☐ Less than 1 Km ☐ 1 to 3 Km ☐ More than 3 Km	1 2 3	7
14.	How long does it take for your child to make the journey from home to his/her school every day? ☐ Less than 30 minutes ☐ 30 min to an hr ☐ Over an hr	1 2 3	7
15.	How would you describe the terrain over which your child must travel on his/her way to school? ☐ Very difficult ☐ Of medium difficulty ☐ Very easy	3 2 1	7
16.	How does your child go to school every day? ☐ Car ☐ Motorcycle ☐ Bicycle ☐ Walks	1 1 2 3	7
	TOTAL SCORE FOR THIS VARIABLE		**7**
17.	Has your child ever been absent from school for more than a week at one time ? ☐ Yes ☐ No ☐ Not sure	1 2 0	8
18.	In total, about how many days was your child absent from school last year? ☐ Less than 10 days ☐ 10-30 days ☐ More than 30 days	3 2 1	8

No.	Question	Point Coding	Variable
	TOTAL SCORE FOR THIS VARIABLE		**8**
19.	Has your son/daughter ever studied in preschool ? ☐ Yes ☐ No	1 2 *(nonadditive)*	**11**
20.	Has your son/daughter ever repeated school before ? ☐ Yes ☐ No	1 0	9
21.	If yes, how many times have they repeated and in what grades ? Grade 1 ☐ Once ☐ Twice ☐ Three times Grade 2 ☐ Once ☐ Twice ☐ Three times Grade 3 ☐ Once ☐ Twice ☐ Three times	1 2 3 4 5 6	9
	TOTAL SCORE FOR THIS VARIABLE		**9**
22.	Have you ever signed a report card sent by your child's school? ☐ Yes ☐ No	2 1	2
23.	If yes, about how often do you sign report cards ? ☐ Once a month ☐ Once every 2 or 3 months ☐ Once a year ☐ Can't remember	3 2 1 0	2
	TOTAL SCORE FOR THIS VARIABLE *(To be added to score from teacher interview)*		**2**
23a	*For Ratanakiri Only:* What is your native language? ☐ Khmer ☐ Other (Please indicate: _____)	1 2	26
23b	What language(s) do you use in your home with your children? ☐ Khmer only ☐ Minority tongue ☐ Both	1 2 3	26
	Interviewer Note: The following questions should only be asked of those parents from the schools included in Research Question 4. Otherwise, STOP THE INTERVIEW HERE.		

Research Question: 1 4 (Please circle)

Interview Schedule for Parents

Directions for Interviewer: Please refer to the directions accompanying this interview questionnaire in order to receive instructions about how the interview process should be introduced to the interviewee as well as how each question should be clarified and answers recorded.

Name of Interviewee/Sex _____/___
Name of Interviewee's Child _____
Province/City _____
District/Khan _____
Commune/Section _____
Village/Group Number _____/____

Name of Child's School _____
Name of Cluster _____
Grade/Class (Last yr/This yr) _____
Name of Interviewer _____
Date of Interview _____

(Note for interviewer: Bold nos. indicate total score boxes)

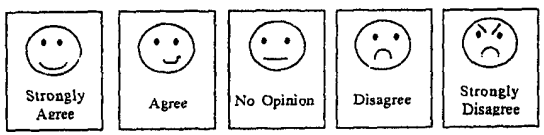
No.	Question	Point Coding	Variable
1.	What is your child's sex? ☐ Male ☐ Female	1 2 *nonadditive*	1
	How old is your son/daughter? ____	(no coding)	
	What grade is your son/daughter in? ____	(no coding)	
	How many years has your son/daughter been in school? ____	(no coding)	
2.	Did your son/daughter enroll in school at the correct age ? ☐ Yes ☐ No ☐ Don't Know	2 1 0	6
3.	Does your son/daughter have a father? *or* Are you ____'s father? ☐ Yes ☐ No	2 1	4
4.	If yes, what is his level of education? *or* What is your level of education? ☐ None ☐ Primary ☐ Lower Secondary ☐ Upper Secondary or Higher ☐ University ☐ Other (Pls specify): _____ ☐ Don't Know	1 2 3 4 5 0	4

No.	Question	Point Coding	Variable
5.	Does your son/daughter have a mother? *or* Are you ____'s mother? ☐ Yes ☐ No	2 1	4
6.	If yes, what is her level of education? *or* What is your level of education? ☐ None ☐ Primary ☐ Lower Secondary ☐ Upper Secondary ☐ University ☐ Other (Pls specify): _____ ☐ Don't Know	1 2 3 4 5 0	4
7.	Could you tell me about how much money you earn in one year? ☐ Less than 400,000 R ☐ 400,000 and 600,000 R ☐ 600,000 R to 900,000 R ☐ 900,000 to 1,200,000 R ☐ Over 1,200,000 R	1 2 3 4 5	4
8.	(For father) What is your occupation ? *or* What is your husband's occupation ? ☐ Farmer ☐ Worker ☐ Private Business ☐ Employed by Private Company ☐ Civil Servant ☐ NGO/IO Worker ☐ Other (Please specify): _____	1 1 2 3 4 4	4
9.	(For mother) What is your occupation ? *or* What is your wife's occupation ? ☐ Farmer ☐ Worker ☐ Housewife ☐ Private Business ☐ Employed by Private Company ☐ Civil Servant ☐ NGO/IO Wrker ☐ Other (Please specify): _____	1 1 1 2 3 4 4	4
10.	How many children do you have in your family in all? ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ More than 5	6 5 4 3 2 1	4

If respondents do not rank all of the causes provided, score only those which have been ranked. If in the final instance, a respondent can not rank any of the causes at all, circle "Don't know" and score the entire question "0".

Questions 19 - 30

- As with Question 18, the directions for Questions 19 to 30 should be read carefully to the respondent. As a mnemonic device to help respondents remember each of the five possible responses to each statement of opinion, use the cards provided with each interview set. These should be set out in front of the respondent as follows:



When responding, urge directors to express their opinion to each statement read by pointing to the appropriate card.

Question 7

- In scoring this question, the interviewer should look for such evidence as the physical presence of books, of a mobile library box, a schedule of book rotations, material request forms, or even short interviews with children.

Question 8

- In scoring this question, the interviewer should look for such evidence as the physical presence of teaching aids or a schedule of teaching aid rotations. The interviewer may also want to cross check this information with a resource center manager in the cluster if one exists.

Question 9

- The interviewer should check such documentary evidence as attendance rosters of these meetings, a planning calendar in which such meetings are scheduled, or presentation plans.

Question 10

- If the answer to Question 9 is "no", skip this question and move to Question 11.

- Use the following criteria in scoring this question:
  - -Teachers show two-thirds attendance or more -- "With very high attendance"
  - -About half of teachers attend meetings on average -- "With moderately high attendance
  - -Less than one-third of teachers attend meetings on average -- "With poor attendance"

Question 11

The interviewer should check lesson or presentation planning documents in scoring this question.

Question 12

- If possible, the interviewer may want to cross-check this response with a member of the School Committee or Parent Association.

Question 13

- The interviewer should ask evidence that report cards have been purchased by the school.

Question 14

- The interviewer should check all categories which apply. Be sure to circle all number scores which apply accordingly.

Question 15

- Interviewer should ask to see an organigram chart or cluster map which shows the role/location of this school in a cluster.

Question 16

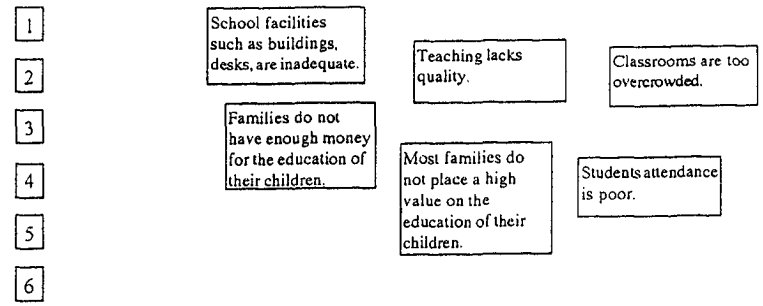
- The interviewer should ask to see evidence that LCSC meetings have taken place such as schedules, calendars, meeting minutes, attendance lists, etc..

Question 17

- The primary purpose of this question is to ascertain the *degree* to which educational services exist in each school. This follows on several questions asked earlier about the existence of such services (e.g., existence of library services, resource center services, etc.). For each category of activity indicated, the interviewer should look for some documentary evidence as follows:
  - *-Teacher supervision:* schedule of visitations to schools, observation data, signed log books, etc.
  - *-Library services:* rotation schedules which indicate the number of times books received.
  - *-Resource Ctr services:* rotation schedules which indicate the number of times materials rotated to local schools, materials borrowing records, and indication of usage of materials (e.g., the absence of dust from materials).
  - *-Cluster based testing:* evidence of test records
  - *-Income generation activities:* ledger books indicating income received, any record of income.
  - *-Planning and review:* schedules indicating regular follow-up of an annual plan.

Question 18

- The directions for this question should be read carefully to the respondent. The interviewer should arrange number cards vertically in front of the respondent:



At some distance to the right, response cards listing each of the causes of repetition should be grouped together in a random order.

Because this kind of question format will be quite novel for the respondent, the interviewer is urged to provide considerable time and explanation to facilitate responding but *without cueing any specific responses.* Read the question to the respondent as many times as necessary.

Survey Personnel

Mr. Kurt Bredenberg	Consultant/KAPE
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Mr. Nuon Si Ra Nyeuan	Interviewer/KAPE
Mr. Hin Sim Huon	Interviewer/KAPE
Mr. Tuol Lon	Interviewer/KAPE
Ms. Ma Chan Sok Pheap	Interviewer/KAPE
Mr. Sim Dara	Interviewer/KAPE
Mr. Ung Sieng Hua	Interviewer/KAPE
Ms. Lon Somanee	Subject Specialist (Kh)/TTC Kampong Cham
Mr. Yean Sreng	Subject Specialist (Kh)/TTC Kampong Cham
Mr. Sok Chom	Subject Specialist (Ma)/ TTC Kampong Cham
Mr. Chhuon Saran	Data entry/Typing / KAPE
Mr. Bun Bros	Data entry/Typing / KAPE
Mr. Keo Sareth	Invigilator/Prey Chor District
Ms. Hy Sinang	Invigilator/Prey Chor District
Mr. Sang Sy Meuang	Invigilator/Tabong Khmum District
Mr. Sao Vanna	Document Formatting

RATES OF REPETITION FOR ALL PROVINCES, 1998-9

PROVINCE	GRADE 1		GRADE 2		GRADE 3		GRADE 4		GRADE 5		GRADE 6		ALL GRADES	
	TOTAL	GIRLS	TOTAL	GIRLS	TOTAL	GIRLS	TOTAL	GIRLS	TOTAL	GIRLS	TOTAL	GIRLS	TOTAL	GIRLS
Bantheay Mean Chey	40.30%	39.30%	25.30%	23.60%	19.20%	17.50%	11.70%	10.70%	8.00%	6.80%	5.10%	3.60%	24%	24%
Battambang	34.40%	33.50%	20.00%	19.10%	14.50%	12.90%	8.40%	7.80%	5.60%	5.40%	1.80%	1.50%	19%	19%
Kampong Cham	39.40%	38.00%	26.60%	24.90%	21.30%	18.60%	13.20%	11.10%	8.10%	6.80%	3.70%	3.00%	25%	25%
Kampong Chnang	43.40%	41.70%	28.30%	25.80%	20.20%	18.00%	11.70%	9.80%	5.60%	3.90%	4.60%	2.50%	27%	27%
Kampong Speu	44.30%	43.40%	23.10%	22.90%	17.70%	18.10%	12.30%	11.80%	8.50%	7.50%	4.80%	4.80%	27%	27%
Kampong Thom	40.90%	39.50%	25.60%	23.30%	19.00%	18.10%	12.00%	11.40%	6.80%	6.10%	2.40%	1.70%	26%	26%
Kampot	44.40%	42.40%	24.50%	23.20%	17.70%	16.10%	9.60%	10.10%	5.60%	5.00%	2.60%	2.50%	26%	26%
Kandal	45.20%	42.90%	29.70%	27.60%	20.60%	18.60%	13.00%	11.40%	7.50%	6.20%	2.90%	2.50%	26%	26%
Kep	44.70%	44.50%	23.80%	23.60%	19.40%	17.50%	15.20%	14.30%	9.60%	10.20%	4.40%	4.60%	26%	26%
Koh Kong	42.40%	43.10%	23.60%	23.30%	21.90%	21.40%	16.10%	12.10%	8.20%	7.40%	11.60%	11.40%	30%	30%
Kratie	52.00%	51.90%	34.90%	32.60%	25.80%	25.20%	20.90%	17.90%	12.50%	9.40%	7.00%	4.70%	34%	34%
Mondulkiri	61.90%	59.70%	22.80%	20.80%	26.20%	16.90%	20.70%	16.30%	16.20%	14.90%	0.00%	0.00%	42%	42%
Pailin	41.40%	46.50%	25.30%	34.20%	14.50%	18.00%	20.00%	14.60%	0.00%	0.00%	0.00%	0.00%	23%	23%
Phnom Penh	34.40%	32.60%	21.80%	20.20%	13.50%	12.20%	12.10%	9.50%	6.90%	5.90%	2.80%	2.10%	18%	18%
Preah Vihear	46.70%	47.20%	30.00%	28.90%	19.40%	19.90%	12.50%	13.60%	6.70%	5.90%	2.10%	2.50%	35%	35%
Prey Veng	44.10%	41.90%	24.90%	23.80%	20.10%	18.80%	14.80%	13.70%	10.90%	9.30%	7.00%	6.10%	27%	27%
Pursat	39.50%	37.80%	23.70%	22.70%	17.20%	16.30%	13.50%	12.00%	9.00%	6.30%	3.60%	2.60%	25%	25%
Ratanakiri	42.40%	41.70%	31.50%	28.10%	23.50%	16.40%	23.80%	18.30%	11.30%	5.50%	5.50%	1.10%	35%	35%
Siem Reap	36.30%	34.80%	24.70%	23.30%	17.90%	17.40%	12.20%	10.60%	8.00%	7.40%	3.90%	2.30%	24%	24%
Sihanoukville	40.50%	38.60%	22.60%	21.50%	15.10%	14.00%	11.60%	10.30%	8.70%	8.20%	6.30%	6.40%	24%	24%
Steung Treng	46.60%	44.40%	32.00%	31.60%	23.70%	21.30%	14.90%	13.50%	8.00%	7.90%	5.40%	6.30%	33%	33%
Svay Rieng	47.20%	44.40%	24.70%	23.30%	20.60%	19.70%	12.40%	10.10%	6.60%	6.00%	3.60%	3.80%	26%	26%
Takeo	34.50%	34.00%	19.80%	18.50%	14.40%	13.10%	9.20%	8.20%	4.90%	4.20%	2.30%	2.30%	19%	19%
Whole Kingdom	40.90%	39.50%	24.90%	23.50%	18.50%	17.00%	12.20%	10.80%	7.50%	6.40%	3.80%	3.10%	25%	25%

SCHOOL SAMPLE FOR REPETITION STUDY

ASSISTED SCHOOLS									UNASSISTED SCHOOLS								
Province	District	School	Kind of School	Urban or Rural	Number of Students	Number of Classes	Student-Teacher Ratio	Repetition Rate	Province	District	School	Kind of School	Urban or Rural	Number of Students	Number of Classes	Student-Teacher Ratio	Repetition Rate
Kampong Cham	Prey Chor	Prey Toteung	Core	Urban	1507	37	41	26%	Kampong Cham	Kong Meas	Peam Che Kong	Core	Urban	512	16	39	39%
Kampong Cham	Tbong Khmum	Ongkanaram	Core	Rural	589	13	45	26%	Kampong Cham	Oriang O	Chamgar Sabow	Core	Rural	515	11	47	29%
Bantheay M.Chey	O'Chrao	Soria Thmei	Core	Rural	436	10	44	22%	Bantheay M. Chey	O'Chrao	Vang Mong	Core	Rural	407	10	41	35%
Kandal	Kieng Svay	Kao Dack	Satellite	Rural	583	14	42	35%	Kandal	Muk Kampol	Kampong Prasat	Satellite	Rural	570	14	41	32%
Kandal	Muk Kampol	Chong Kao	Satellite	Rural	330	8	41	25%	Ratanakiri	Krom Preah	Krom Preah	Satellite	Rural	359	9	40	44%
Phnom Penh		Practice School	Satellite	Urban	1901	31	61	26%	Phnom Penh		W. Sinsomkosal	Satellite	Urban	2022	33	61	18%
Svay Rieng	Svay Rieng	Preah Sihanouk	Core	Urban	1836	46	40	23%	Bantheay M. Chey	O'Chrao	Poipet	Core	Urban	666	17	39	8%
Kandal	Kieng Svay	Koki Thom	Core	Rural	743	17	44	43%	Svay Rieng	Svay Theap	Kcheay*	Core	Rural	823	16	51	43%
Svay Rieng	Svay Theap	Prey Cheu Teal	Satellite	Rural	247	6	41	31%	Ratanakiri	Banlong	Hun Sen	Satelllite	Rural	210	5	42	12%

*Note: Kcheay differs from Koki Thom in its student-teacher ratio by more than a margin of 5 due to an error in the data provided

Appendix 3:

- Survey Sample
- Survey Team
- Table of Provincial Repetition in Provinces

TABLE OF SPECIFICATIONS FOR GRADE 1 ACHIEVEMENT TEST Khmer					
Construct **Content**	***Memory***	***Under-standing***	***Application***	***Analysis***	***Total Points***
Discrimination of Letter Sounds				✓	**10%**
Word Forms	✓				**10%**
Syntax	✓				**10%**
Word Meanings		✓			**10%**
Word Usage (Written)			✓		**10%**
Word Usage (Oral)		✓			**10%**
Spelling		✓			**10%**
Handwriting			✓		**15%**
Sentence Composition			✓		**15%**
TOTAL	**20%**	**30%**	**40%**	**10%**	**100%**

ផ្នែកទី ៦ : ការប្រើប្រាស់ពាក្យ « ផ្តាល់មាត់ »

គោលបំណង : សិស្សអាចផ្លាស់ប្តូរពាក្យអោយត្រូវតាមន័យរបស់ល្បះ ។

ការវាយតំលៃ : ពេលគ្រូអានល្បះមិនត្រឹមត្រូវ សិស្សរកពាក្យថ្មីមកជំនួស ឬ លុបពាក្យណាមួយដែលមិនទាន់សមស្របក្នុងល្បះនោះ ។

ការណែនាំ : គ្រូត្រូវសរសេរល្បះចំនួន ៥ លើក្រដាសធាក់មុខសិស្ស ។ ដំបូងគ្រូត្រូវអោយឧភាហរណ៍គំរូមួយ ។

ឧទាហរណ៍ : ផ្លែ [ឃំ] ពេលយើញមនុស្ស ។ [ព្រួស]

១- គោជាសត្វញ៉ាំស្មៅជាអាហារ ។

២- លោកសង្ឃស៊ីបាយ ។

៣- ក្របីមិនចូលចិត្តទឹកទេ ។

៤- ពស់ដើរចាប់ចំណី ។

៥- មនុស្សហោះ ។

ការអោយពិន្ទុ : និយាយត្រូវ មួយល្បះ បាន ពិន្ទុ : 1 ពិន្ទុសរុប : 5

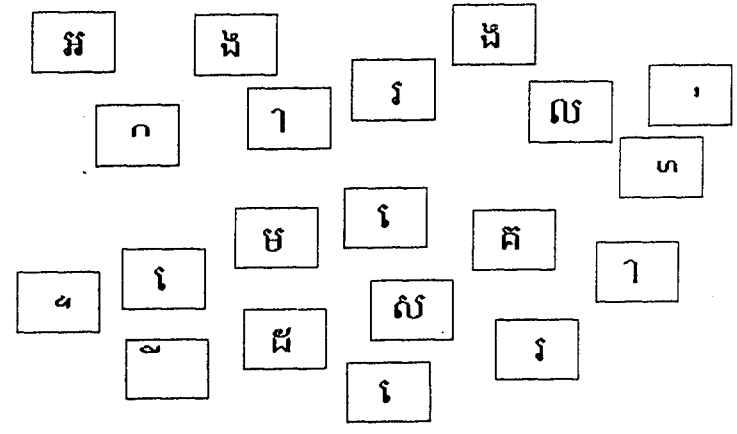
ផ្នែកទី៧ : ការប្រកបពាក្យ

គោលបំណង : សិស្សអាចប្រកបពាក្យបានត្រឹមត្រូវតាមអក្ខរាវិរុទ្ធ ។

ការវាយតំលៃ : នៅពេលដែលគ្រូបង្ហាញបំណ្ណព្យញ្ជនៈ និង ស្រៈ សិស្សផ្សំដោយប្រកបបានជាពាក្យត្រឹមត្រូវ ។

ការណែនាំ : គ្រូរៀបចំបំណ្ណព្យញ្ជនៈ និង ស្រៈមួយចំនួន ដើម្បីផ្សំពាក្យអោយបានចំនួន ៥ ពាក្យ អោយសិស្សជ្រើសរើសបំណ្ណទាំងនោះផ្សំជាពាក្យ ដូចជា

ពាក្យ : អង្គរ - ល្អង - ម្ខែ - គោ - ដើរ



ការអោយពិន្ទុ : រៀបត្រូវ មួយពាក្យ បាន ពិន្ទុ : 1 ពិន្ទុសរុប : 5

ផ្នែកទី៨ : ការសរសេរពាក្យ

<u>គោលបំណង</u> : សិស្សចេះសរសេរពាក្យបានត្រឹមត្រូវ ។

<u>ការវាយតំលៃ</u> : ពេលគ្រូហៅពាក្យមួយ សិស្សសរសេរពាក្យនោះ នៅលើក្តារឆ្នូន បង្ហាញគ្រូ ។

<u>ការណែនាំ</u> : អោយសិស្សយកក្តារឆ្នូន និង ដីស ។ គ្រូហៅពាក្យដែលបានរៀបចំទុកជាពាក្យដែលសិស្សរៀនរួចហើយ ។ គ្រូហៅម្តងមួយពាក្យអោយសិស្សសរសេរបង្ហាញ បន្ទាប់មកធ្វើដូចនេះរហូតដល់អស់ពាក្យទាំង ៣ ។

<u>ពាក្យ</u> : បង - យ៉ - អាហារ

<u>ការអោយពិន្ទុ</u> : សរសេរត្រូវ មួយពាក្យ បាន ពិន្ទុ : 2 ពិន្ទុសរុប : 6

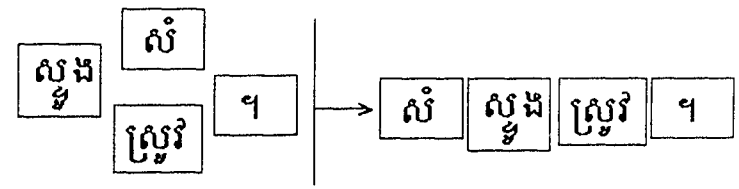
ផ្នែកទី៩ : ការតែងល្បះ

<u>គោលបំណង</u> : សិស្សអាចបង្កើតល្បះបានត្រឹមត្រូវ ។

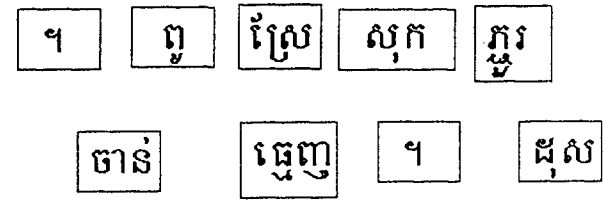
<u>ការវាយតំលៃ</u> : ផ្តល់បំណែពាក្យដល់សិស្ស ហើយសិស្សអាចបង្កើតជាល្បះមួយបានត្រឹមត្រូវមានន័យគ្រប់គ្រាន់ ។

<u>ការណែនាំ</u> : គ្រូរៀបចំបំណែពាក្យមួយចំនួន ជាពាក្យដែលសិស្សរៀនរួច អោយសិស្សរៀបចំអោយបានជាល្បះសមស្របមានន័យគ្រប់គ្រាន់ ។ គ្រូឧទាហរណ៍បង្ហាញសិស្សមួយល្បះ ។ បន្ទាប់មកគ្រូបង្ហាញម្តងមួយល្បះៗ ។

<u>ឧទាហរណ៍</u> :



សុំអោយសិស្សរៀបចំបំណែពាក្យនេះអោយបានជាល្បះ ។



<u>ការអោយពិន្ទុ</u> : រៀបចំត្រូវ មួយល្បះ បាន ពិន្ទុ : 4,5 ពិន្ទុសរុប : 9

សាលាគរុកោសល្យ និង វិក្រឹតការ
ខេត្តកំពង់ចាម

ភាសាខ្មែរថ្នាក់ទី ១
តេស្តផ្ទាល់មាត់សំរាប់វាយតំលៃ

Khmer Language Achievement Test

1999

Kampong Cham Province, Cambodia

Developed with Technical Assistance from Kampuchean Action for Primary Education (KAPE)

ផ្នែកទី១ : ការញែកសូរ

គោលប៉ំណង : សិស្សអាចស្គាល់សំលេងអក្សរ បញ្ជាក់ដោយអ្នកវាយតំលៃ ។

ការវាយតំលៃ : នៅពេលដែលបង្ហាញរូបសត្វឬវត្ថុ សិស្សអាចចាប់យកបំណ្លៀងព្យញ្ជនៈ តាងអោយរូបនោះបាន ។

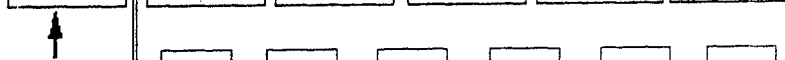
ការណែនាំ :

ក/ រៀបចំរូបភាពចំនួន ៥ និងបំណ្លៀងព្យញ្ជនៈចំនួន ៦ នៅមុខសិស្ស រួចអោយឧទាហរណ៍មួយដល់សិស្សដោយបង្ហាញរូប ហើយយកបំណ្លៀអក្សរមួយដាក់ភ្ជាប់និងរូបនោះ ។ រូប ៥ និងបំណ្លៀព្យញ្ជនៈ ៥ អោយសិស្សធ្វើដោយខ្លួនឯងដោយគ្រូបង្ហាញរូបម្តងមួយៗ ។

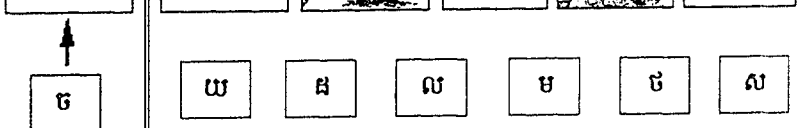
ខ/ រៀបចំរូបភាពចំនួន ៥ និងបំណ្លៀព្យញ្ជនៈចំនួន ៦ ផ្សេងទៀតហើយអនុវត្តដូចសិស្សទី ១ ដែរ (សិស្សទី ២) ។

ក/ ឧទាហរណ៍ :

លំហាត់ទី ១ :



លំហាត់ទី ២ :



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Supplementary Interview Guidelines

(For Director Interview)

The following guidelines are to be used by interviewers using the Interview Schedule for Directors. Some of the questions to be asked in this interview are self-explanatory and should not pose any serious problems for the interviewer in terms of ensuring comparability between interviews. Other questions, however, require clarification to enable similar interpretations between interviewers. These clarifications are provided below.

If at all possible, this interview should take place in the school office to facilitate the director's ability to present evidence needed for responding to various questions.

The interviewer is also reminded that question scores in Column 3 are cross-referenced with response categories from left to right. Question scores should be noted by circling the numbers which apply.

Question 1

- The interviewer requires documentary evidence of the school and/or cluster's annual plan to score this question "yes."
- The interviewer should score this question according to the following criteria:
  - -School has a detailed plan with objectives, activities, budget, etc. -- "Has detailed plan"
  - -School has a plan but consists only of schedules -- "Has plan but not detailed"
  - -School has no plan -- "No"

Question 2

- If the answer to Question 1 is "no," skip this question and move onto Question 5.

- The interviewer should check to see whether this plan has been posted in the school office in order to score the question "yes." Obviously, a plan kept in the director's desk is scored as an undisseminated plan.

Question 3

- In scoring this question, the interviewer should ask to see documentary evidence of activities implemented, schedules, meeting notes, etc.. In the absence of these, the interviewer may also ask probing questions to see whether the director can logically describe the linkage between the school's objectives and the activities used to achieve those objectives.

- The interviewer should try to approximate how many activities have been implemented. Scoring should be done according to the following criteria:
  - -More than half of planned activities have been implemented -- "Evidence of significant implementation"
  - -Less than half of planned activities have been implemented -- "Evidence of some implementation"
  - -No apparent evidence of implementation -- "No concrete evidence of implementation"

Question 4

- This question seeks in particular to ascertain the degree to which specified objectives have been *achieved* (as opposed to the number of activities implemented). In scoring this question, the interviewer should examine documentary evidence such as statistical tables and diagrams, survey data, descriptions of indicators, etc.

- The following criteria should be used to help the interviewer determine the approximate level of achievement:
  - -Approximately 60% of objectives achieved -- "Significant achievement"
  - -Approximately 40-60% of objectives achieved -- "Moderate achievement"
  - -Approximately 15-40% of objectives achieved -- "Some achievement"
  - -Fewer than 15% of objectives achieved -- "No achievement

Question 5

- The interviewer should score this question using the following guidelines:
  - -15 teaching aids or more -- "Yes, a lot"
  - -Less than 15 teaching aids -- "Yes, some"
  - -No teaching aids -- "None at all"

- If the director, reports that all materials have been distributed to teachers, the question should be scored "none at all" since past experience has shown that such practices eventually lead to total loss of teaching aids provided to schools.

Question 6

- If the answer to Question 5 is none at all, skip this question and move to Question 7.

- In scoring this question, the interviewer should consider some of the following criteria:
  - -materials are kept separated in small boxes or plastic bags
  - -materials in bags and boxes are labeled
  - -materials are organized on a shelf by grade or subject matter
  - -materials such as maps and posters are not nailed to the wall
  - -materials are kept in a special cabinet or cupboard
  - -materials are not kept locked in a cabinet or metal box*

- If the interviewer finds 5 or more of these conditions to be met, score the question "very accessible," 3 to 4 conditions may scored as "moderately accessible," 2 or less may be scored as "accessible but with difficulty."

- If the interviewer finds that the condition with a star is not met, score the question as "not at all accessible."

No.	Question	Point Coding	Variable
29.	Communities have a more important role to play than schools in reducing repetition. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	5 4 3 2 1	21
30.	Efforts to reduce repetition should focus most heavily on improving the quality of teaching in the classroom. ☐ SA ☐ A ☐ NO ☐ D ☐ SD	1 2 3 4 5	21
	TOTAL SCORE FOR THIS VARIABLE. (Excluding Question 18)		**19**
	TOTAL SCORE FOR THIS VARIABLE.		**20**
	TOTAL SCORE FOR THIS VARIABLE.		**21**
	TOTAL SCORE FOR QUESTIONS 19-30.		
	END OF INTERVIEW		