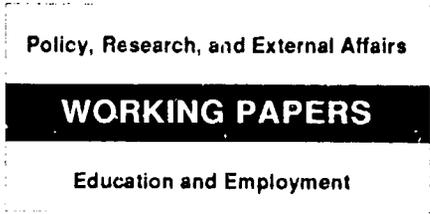


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World Bank Lending for Education Research, 1982-89

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Since 1982 about \$98 million — 2.2 percent of Bank lending for education, in 116 projects — has been allocated to research. But many Bank-financed educational research components are not completed, or if completed are not widely available — or even listed. And few (5.6 percent) measure educational outcomes.

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This paper — a product of the Education and Employment Division, Population and Human Resources Department — is part of a larger effort in PRE to build education research and assessment capacity in developing countries. Copies are available free from the World Bank, 1818 H Street NW, Washington DC 20433. Please contact Cynthia Cristobal, room S6-214, extension 33640 (91 pages).

Research on education is useful for policy change, helps build national research capabilities, and yields information on interventions of use to others — borrowers and donors.

But many Bank-financed educational research components are not completed, or if completed are not widely available, and few measure educational outcomes.

In taking stock of research components in education projects, J.P. Tan (1982) found that 122 Bank projects in education (1972-82) contained 272 studies. Tan noted that these studies were seldom available to audiences beyond their original sponsors and were often not available even to them, and that many planned studies were never initiated or completed. Many of those studies were longitudinal in design so some thought the attempt to identify completed research may have been premature.

Lockheed and Rodd reviewed education studies (1982-89) and traced the completion status of studies that were incomplete before 1982. They found that:

- Of 146 Bank education projects initiated since 1982, 116 included research components with 436 identifiable, planned studies. These 116 projects were supported with loans and credits of about \$4.5 billion, of which about \$98 million (or 2.2 percent) was allocated to research.

- Research as a percentage of total loan commitment declined sharply from 1982 to 1989.

- Of the 436 planned studies, only 184 (42 percent) were completed, 84 were available through Regional Information Centers, and only 5.6 percent had anything to do with assessing educational outcomes.

- Anecdotal evidence suggests that research components have often been included as a form of “slush fund” to provide a financial buffer for other areas, drawing down resources available for study activities. Similarly, studies are included for political reasons, to develop in-country discussions on divisive issues or to resolve policy negotiation deadlock. Few studies enhance domestic research capacity.

Lockheed and Rodd conclude that:

- More attention should be paid to the design and implementation of research components in education projects, with specific emphasis on institutional weaknesses.

- Freestanding educational research projects should be considered wherever possible (usually in large countries).

- The Bank should develop a training program for operational staff to design studies with appropriate methodologies and which develop domestic research capacity.

- Information on studies should be more accessible. All data and documents about studies should be sent to Regional Information Centers, which should provide a list of information received to the Education and Employment Division, Population and Human Resources Department. Project completion reports should list studies in bibliographies.

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LENDING BY THE WORLD BANK FOR EDUCATION RESEARCH

I. Introduction

1. Research components¹ have been consistent elements of technical assistance in most World Bank education projects for the past two decades². In an earlier stock-taking exercise of research components in education projects, Tan (1982)³ found that 122 Bank projects in education, 1972-82, contained 272 studies⁴. Yet Tan also noted that studies supported under research components were seldom available to audiences wider than their original sponsors, were often not even available to them, and that many planned studies were never initiated or completed. However, since many of the studies planned during 1972-1982 were longitudinal in design, it may be that the attempt to capture completed research in the earlier review was premature.

2. As a follow up to the earlier review of research in education projects, this study inventories research in education projects, 1982 to 1989, and traces the completion status of studies that were incomplete before 1982. Data were collected on research volume, cost and the conditions under which research components yield accessible and useful information⁵. The following questions were addressed:

- (a) How many education projects, 1982-89, included research components?
- (b) In these research components, how many studies were planned, completed and are available?
- (c) How does this compare to planned, completed and available studies initiated before 1982?
- (d) How many studies, initiated before 1982, but incomplete, were completed and are now available?
- (e) What types of research have been financed in education projects?
- (f) What amount was budgeted for research components and related studies since 1982?
- (f) What might be the preconditions of study completion?

¹In this paper, the term "research component" refers to planned project activities involving the systematic collection and/or analysis of data (both numerical and non-numerical). Research components include project-related, institutional development, and knowledge-development activities. The term does not refer to randomly accumulated anecdotal experience, social criticism or comment.

²Most of the support for research components is provided in the form of consultant advice. Although many studies are carried out by domestic institutions or Ministries, cost estimate breakdowns categorize the expenditure as technical assistance.

³J.P.Tan (1982). *Research components in World Bank Education Projects*. Education Department.

⁴The term "study" refers to empirical research, evaluations, tracer studies, [etc] and other related activities typically resulting in a written product.

⁵Studies are the principal vehicle for implementing research components within projects, and are the primary focus of this paper.

3. The paper is organized as follows. The first section describes the strategy we employed to identify the research components and studies. The second section presents our findings with respect to (i) the volume of studies and compares these results with the earlier study, (ii) the type of studies reported, and (iii) the budgeted cost of the studies. The third section examines preconditions of study completion, using data from Staff Appraisal Reports (SARs) and interviews with selected Project Officers. The final section discusses the findings and draws conclusions.

II. Methodology

Volume of Research

4. A list of all education projects initiated since 1982 was compiled from annual analyses of World Bank lending for education and training.⁶ The project description and objectives, agreements, recommendations and annexes of Staff Appraisal Reports (SAR) for each project was examined for evidence that the project contained a research component. All research components so identified were then listed and, to the extent possible, planned studies were classified by design.

5. Projects were then grouped by Bank region and survey forms sent to division chiefs of the 19 sub-regions with a memo asking that they be completed by appropriate staff and returned.⁷ The surveys asked staff to indicate the status of the listed studies, provide information on studies not included, and confirm those projects which were indicated as containing no research component. They were also asked to identify documents relating to completed studies. A list of all projects and research components with the comments of regional staff, quoted verbatim, and available documents is listed in Annex 1.

6. A list of studies identified in the Tan (1982) document, but remaining incomplete as of 1982, was also sent to regional staff, with the same request. A list of these projects and research components with regional staff comments is listed in Annex 2.

7. Where regional staff were unable to provide information⁸, Project Completion Reports (PCR), where available, were scrutinized for results of previously indicated studies⁹. Information from PCRs is also included within the list of projects. However, PCRs did not provide information on specific documents used in their analysis of

⁶ EDC, 1981-7, PHREE, 1987-89

⁷ See Annex 4 for the list of Division Chiefs and the accompanying memorandum.

⁸ There was an 84% response to the memo sent to division chiefs. The shortfall is primarily accounted for by ASS (Indonesia in particular) and LA4. The Reorganization has resulted in some institutional memory loss, although respondents were able to provide information on the status of 90% of indicated studies.

⁹ Project Completion Reports were available for 19% of the projects. Some were completed before the results of studies were released, others did not provide detail of study success. No PCR provided bibliographic information relating to project studies.

projects. When regional staff indicated that a study had been completed, the regional Information Centers and Record Center were requested to search for relevant documents.

8. From these activities, a comprehensive list of all planned, completed, and available studies in education projects, 1982-1990, was compiled.

Type of Research

9. Studies were classified in two separate ways. First, to be comparable with Tan (1982), studies were identified as either "tracer" studies or not tracer studies¹⁰. Second, studies were classified more extensively according to seven categories:

- (a) education inputs (this category represents descriptive studies covering topics such as textbook availability, teacher upgrading, school supervision, educational materials and classroom conditions, the improvement of teacher training, and curriculum development),
- (b) education outputs (student achievement testing, external efficiency, monitoring standards of institutions),
- (c) labor force participation (manpower needs assessment, education/employment sector linkages and general vocational education coordination studies. Tracer studies were also included in this sub-group),
- (d) project feasibility (pre-investment or feasibility studies related to project generation or future projects, the design of which is based on the experience of the current project. Since these studies provide the bulk of research studies they were incorporated in other categories wherever possible. However, when the SAR or President's Report made only general references to pre-investment and feasibility studies they were included in this general category),
- (e) statistical and information systems (Management Information Systems, evaluation of in-country propensity to gather statistical data, development of administrative and finance systems, development of domestic information gathering and analysis, rationalization of domestic Ministries, and budget management. Also includes school mapping studies as part of the information system development),
- (f) cost related studies (all studies related to cost and efficiency analysis, regardless of the topic focus), and

¹⁰ Tracer studies are cross sectional and longitudinal studies designed to analyze specific graduating cohorts to test the external efficiency of educational inputs into project institutions. These studies generally focus on vocational training institutions and their graduates. They take more time to complete, as they rely on cohort data of graduates entering the labor market, and often must extend beyond the formal completion of the project.

(g) "other" (includes broad unspecified evaluation studies of projects, women in education, subsector linkages in education and intersectoral linkages, such as education and rural health).

10. These categories were established on the basis of a careful review of project description. They reflect the most salient feature of each study, and attempt to reflect mutually exclusive categories. However, classification of study by type was difficult, and it is possible that a study could fit more than one classification.¹¹ Therefore, care must be taken in interpreting the results of this exercise.

Resources for Research

11. Budgeted expenditures (loan commitments) on research components were taken from cost tables in SARs or were estimated from planned manmonths of technical assistance for research. Loan commitments could not be calculated directly for 10 projects. In these cases, were estimated as a percentage of the total cost of the project, which percentage was derived from a weighted average of the sub-region percentage loan commitments on research. All loan commitments are expressed in current dollar terms.

III. Lending for Education Research

Volume of Research

12. Planned, completed and available studies. Between 1982-1989, a total of 146 education projects were appraised; of these, 116 included research components, which in turn included 436 planned studies. Of these, 184 (42%) had been completed at the time of this review.¹² Documents were identified for 84 of the 184 completed studies. By comparison, Tan (1982) found 272 planned studies, 1972-82, of which 73 (27%) were completed and 55 had available documents. Of 104 studies incomplete at the time of Tan's study, 59 were completed after 1982, and 30 had available documents.

13. Table 1 breaks down the number of planned studies into two periods, from 1972-82 and from 1982-89, and indicates the number of studies completed in those time periods. There was a rapid absolute increase in the number of planned studies incorporated in education projects in the period after 1982. The average number of studies increased from 1.6 per project in 1972-1982 to 3.7 per project in 1982-1989, and

¹¹ Classification was completed by one researcher only, with no attempt to achieve inter-rater reliability among multiple raters.

¹² Of these 28, (15%) had produced first drafts of reports only, but were considered complete, or were to be pursued under a continuing project. These have been included in the cost estimates for the period 1982-1990, since it seems unlikely that further work will be undertaken within the assigned project. See, for example, Guinea CR 1341; Malawi CR 1767; Rwanda CR 1683; Nepal CR 1198; Jordan LN 2633.

from 27 per year to 62 per year. This increase might, in part, be explained by the emphasis on the development of domestic statistical information systems, which have incorporated studies as part of their design. The increase might also reflect the shift in emphasis within Bank education projects from infrastructure development (expansion of education systems) to software components (efficiency and quality improvements).

Table 1 : Planned, completed and available studies, 1972-1989

Studies	Studies initiated between	
	1972-1982	1982-1989
Total Planned	272 (100%)	436 (100%)
Total Completed 1972-1989	132 (49%)	184 (42%)
Completed 1972-1982	73 (27%) ^{1/}	-
Completed 1982-1989	59 (22%) ^{2/}	184 (42%)
Total Available 1972-1989	85 (31%)	84 (19%)
Available 1972-1982	55 (20%)	-
Available 1982-1989	30 (11%)	84 (19%)

^{1/} Percentages are based on the total number of planned studies for that time period.

^{2/} Of the 59 completed studies 21 were the products of only two projects: Malawi IV and Thailand V.

14. Table 1 also shows that completion rate for studies improves over time. The completion rate for studies initiated during 1972-1982 was 27%, but if the time period for completion of the same studies is extended to 1989, the completion rate rises to 49%. This may in part be due to the completion of studies begun in the last two years of the sample time frame and completed thereafter. In the period 1982-1989, 42% of studies were completed, higher than for the same time span of the earlier studies. This suggests that feedback on research components has been slightly accelerated. However, completion rates remain low.

15. Geographical distribution. Table 2 provides data on completed studies by region. For the studies planned before 1982, Asia had consistently higher completion than the other regions. This trend is reversed for the period since 1982. The completion rates for Latin America and the Caribbean are skewed by one successful research project in Brazil. If this is excluded then completion rates for the region fall to 43% for the period after 1982. The performance for Africa has remained constant.

Table 2: Completed studies and completion rates^{1/} by region, 1972-1982 and 1982-1989

Studies	Africa	Asia	LAC ^{2/}	EMENA ^{3/}
<u>Initiated 1972-1982</u>				
Completed 1972-1982	29 (32%)	21 (33%)	12 (21%)	11 (19%)
Completed 1982-1989	17 (19%)	20 (31%)	12 (21%)	10 (17%)
Total	46 (52%)	41 (64%)	24 (42%)	21 (36%)
<u>Initiated 1982-1989</u>				
Completed 1982-1989	50 (42%)	38 (31%)	53 (53%)	43 (44%)

Source: Tan (1982). Table 1; Annex 1

^{1/} Completed studies as a percentage of planned studies for that region

^{2/} 1982-1989 include Brazil LN 2180 (Skills Formation) for which 23 out of 30 studies have been completed.

^{3/} Figures for 1972-1982 include Pakistan in EMENA region in order to be consistent with current Bank regional country grouping.

16. Table 3 compares the numbers and distribution of planned studies between regions over the two time periods. The distribution indicates a shift in research interest away from Africa toward a more equal emphasis across regions.

Table 3: Distribution of planned studies by region, 1972-1982 and 1982-1989

	Africa	Asia	LAC	EMENA ^{1/}	Total
1972-1982	91 (34%)	64 (24%)	58 (21%)	59 (21%)	272 (100%)
1982-1989	119 (27%)	120 (28%)	99 (23%)	98 (22%)	436 (100%)

Source: Tan (1982). Table 1; Annex 1

^{1/} Figures for 1972-1982 include Pakistan in EMENA region in order to be consistent with current Bank regional country grouping.

Parentheses indicate percentages of all planned studies for that time period.

Type of Research

17. Methodology: Tracer studies. Types of studies financed under research components were compared. The earlier review of research classified studies into two groups only: tracer studies and "other." Our first classification replicates the earlier study.

18. Of all intended studies before 1982, 77 (or 28%) were tracer studies of which 11 were completed by 1982, and only a further 6 were completed by 1989; a completion rate of 22%. This compares with 31 (7% of intended studies), of which 12 (a completion rate of 39%) were completed between 1982-1990. The use of tracer studies has declined, but the completion rates for tracer studies has increased.

Table 4: Comparison of tracer and "other" studies, 1972-1982 and 1982-1989

	Study type	
	Tracer	Other
<u>1972-1982</u>		
Total	77	195
Completed 1972-82	11	62
Completed 1982-89	6	45
Available	10	45
<u>1982-1989</u>		
Total	31	405
Completed 1982-89	12	172
Available	7	77

19. Methodology: Study objective. Classifying a study as a "tracer" study emphasizes its research methodology, which involves "tracing" individuals over time; it says relatively little about the objective of the study. To include information about the objectives of the studies, we expanded the typology to include different research emphases. Although it was difficult to ascertain either the objective or methodologies employed in many studies, we were able to sort studies into seven categories: education inputs, education outputs, labor market, cost and finance, Management Information System development and statistics collection, feasibility, and other.

20. Table 5 provides data on the total distribution of studies by type, and separated by region for the period 1982-1989. Studies relating to educational inputs, especially teachers and teaching materials are most frequent, and account for one-fourth of all

studies. Yet, on average, only 5% of studies relate to educational outputs that measure student achievement and school efficiency. This is surprising considering that the fundamental output of the education system is student learning. One fifth of all studies examine education and its relation to the labor market; this category also includes all tracer studies, as well as manpower and specific vocational training development studies. It is also interesting to note that a number of studies relate to statistical and information system development.

Table 5: Regional comparison of distribution of studies by type, 1982-1989, as a percent of all studies within the region.

	Educational Inputs	Educational Outputs	Labor Market Studies	Feasibility Studies	Cost and Finance	MIS and Stats	Other
All regions	24.8%	5.6%	21.2%	8.8%	15.1%	12.2%	12.4%
Africa	29.2	5.0	13.3	8.3	17.5	14.2	12.5
Asia	23.6	8.9	23.6	9.8	12.2	8.9	13.0
EMENA	19.5	3.5	27.6	13.8	11.5	12.6	11.5
LAC	25.9	3.7	22.7	2.5	19.7	13.6	12.3

21 In general, for all regions, studies related to educational inputs were the most frequent, while those related to educational outputs received least attention. There were no between-region differences in the distribution of types of studies, $\chi^2(18, N=436) = 22.4, P > .05$.

22. We attempted to classify the studies in Tan (1982), using the descriptions of studies found in Annexes II-VII of her paper, so that comparisons of changes in study type over the two time periods, 1972-1982 and 1982-1989 could be made. However, these descriptions were not specific enough for consistent classification, and studies listed were typically tracer study or broad institution and program evaluation. In the 1982-1989 period classification, broad evaluations were listed as "other." For the 1972-1982 period, where possible, such broad evaluations were classified by the areas that were being evaluated. Therefore, extreme caution should be taken in interpreting changes in the types of studies funded between the two time periods.

23. Table 6 compares the distribution of study types for 1972-1982 and 1982-1990. There was a statistically significant difference between the type of studies planned between 1972-1982 and those planned between 1982-1989 ($\chi^2(5, N=708) = 46.14, P <$

.05), primarily attributable to the sharp decline in labor market studies (a reflection of the decline in tracer studies) and the increased emphasis on descriptive input and cost and finance studies in the period 1982-1989.

Table 6: Distribution of studies by type, 1972-1982 and 1982-1989, as a percent of all studies.

	Educational Inputs	Educational Outputs	Labor Market Studies	Feasibility Studies	Cost and Finance	MIS and Stats	Other
1972-1982	18.8%	5.6%	40.4%	7.3%	5.6%	9.8%	12.5%
1982-1989	24.8%	5.6%	21.2%	8.8%	15.1%	12.2%	12.4%

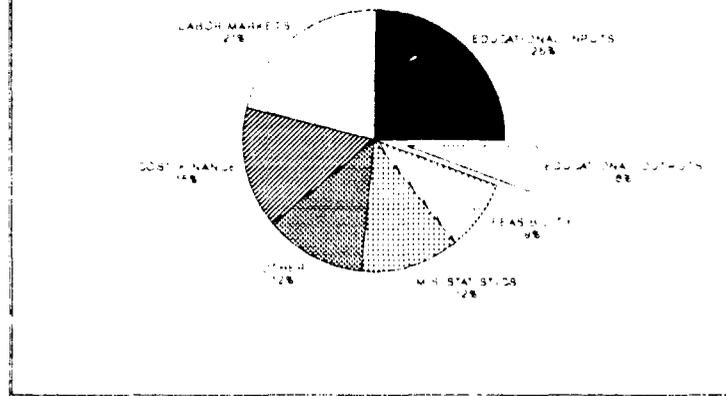
24. In contrast there are few distinct trends in distribution of study type over the period 1982-1989, suggesting differences may indeed be due to reporting and classification difficulties. Nevertheless, Table 7 does show a gradual move away from broad feasibility¹³ and labor market studies toward a more diverse distribution of study type, with a gradual increase in the proportion of studies investigating educational outcomes.

Table 7: Annual comparison of distribution of studies by type, 1982-1989, as a percent of all studies within given year.

	Educational Inputs	Educational Outputs	Labor Market Studies	Feasibility Studies	Cost and Finance	MIS and Stats	Other
1982	27.8	0	24.0	13.0	14.8	11.1	9.3
1983	36.0	4.0	20.0	12.0	10.0	12.0	6.0
1984	22.9	6.2	14.6	16.7	14.6	8.3	16.7
1985	22.9	8.3	22.9	10.4	14.6	12.5	8.3
1986	14.3	6.1	34.7	6.1	16.3	6.1	16.3
1987	27.6	2.1	19.2	4.3	17.0	21.3	8.5
1988	21.3	6.6	19.7	1.6	21.3	8.2	21.3
1989	25.9	11.1	14.8	7.4	11.1	18.5	11.1

¹³ The increase in this category in 1989 can be explained by the introduction of "study funds," with no specific allocation of funding. See, for example, Chad CR 1950-CD: Education Rehabilitation Loan and Tunisia LN 3054-TUN: Education and Training Sector Loan.

Figure 1: Distribution of Studies by Type, 1982-1989 (percent)



The distribution of studies by type reveals the emphasis placed on information relating to inputs to and financing of the education process. Information on learning outcomes is clearly lacking. Yet, to understand issues of effectiveness and efficiency, data on the distribution of resources and their relative cost must be linked to information on achievement. Without the ability to assess educational outcomes, the impact of specific interventions on the heart of the education progress, learning, cannot be assessed. It is surprising, therefore, that such little emphasis has been directed toward studies of educational outcomes.

Resources for Research

25. Total costs. The level of resources allocated for research components was considered next. For this, we computed the loan commitments for research as a percentage of the Bank loan or credit commitments to projects with research components only, both by year (Table 8) and by region (Table 9). The total loan commitments in Tables 8 and 9 do not indicate total commitments to education, but total commitments to the 116 education projects with research components. Percentages were also weighted by the size of the project loan commitment. This increases the average commitment to research since many large projects, which carry greater weight, also committed a larger percentage of the project loan to research components.

26. Total resources committed to research components amounted to an average 2.2% of total project commitments, 1982-1989. This figure declined sharply over the eight years, from 3.7% during 1982 to 1.3% during 1989 (Figure 2), and from \$17.7 million in 1982 to \$10.6 million in 1989, despite absolute increases (in current US\$) for education projects, 1982-1989. Regionally, a higher proportion of project commitments was allocated to research components in Latin American and Caribbean (3.2%) and in

Africa (2.9%) than in the other two regions, but only in LAC were these higher levels of budget allocation sustained for all sub-regions.¹⁴

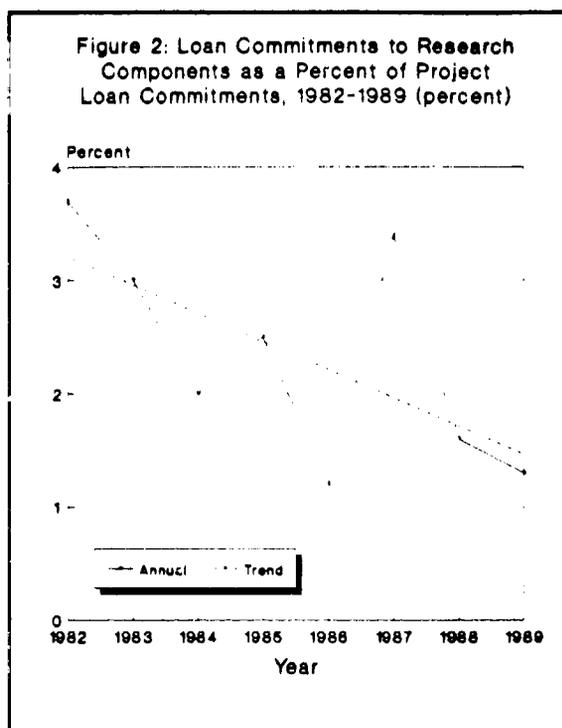


Table 8: Loan Commitments to research components as a percent of Bank Project loans, by year, 1982-1989

Year	Total loan commitments (US\$ Millions)	Loan commitments to research components (US\$ Millions)	Percent of total loan commitment (%)	Percent of total loan commitment weighted by project size
1982	479	17.7	3.7	5.2
1983	476	14.4	3.0	2.7
1984	562	11.6	2.0	2.8
1985	531	13.4	2.5	3.1
1986	607	7.4	1.2	1.4
1987	403	13.8	3.4	4.3
1988	604	9.6	1.6	1.9
1989	797	10.6	1.3	2.4

¹⁴ See Annex 3 Table 5 for breakdown by subregion.

Table 9: Loan commitments on research components as a percent of Bank Project loans, by region, 1982-1989

Region	Total loan commitment (US\$ Millions)	loan commitments to research components (US\$ Millions)	Percent of total loan commitment (%)	Percent of total loan commitment weighted by project size
Africa	597	17.1	2.9	3.2
Asia	2040	44.0	2.2	2.6
LAC	563	18.2	3.2	4.2
EMENA	1260	19.2	1.5	2
All regions	4460	98.5	2.2	3.0

27. Cost per study. On average, \$US 230,000 was budgeted per planned study. However, it is not possible to calculate actual costs per completed study for several reasons. First, the costs of completed studies may be under-estimated from existing information: studies may be partially or completely funded by the governments and therefore the costs unreported; studies listed as incomplete may have been cancelled and resources reallocated to another sector within the project; extra studies, not reported in SARs, may have been completed using available resources. Secondly, commitments to research outlined in cost profiles of SARs may not be so easily identifiable in disbursement allocations. Many studies are incorporated into line items for technical assistance, because consultant fees are often the main component. This combined with co-financing by other donors and governments hinders information on separate costs per study.

28. One possible method to identify cost per study (assuming that the number of studies completed is correctly counted) is to examine the disbursable amounts allocated to research components. These figures come from the Loan and Trust Funds Department and represent the agreed disbursable amount available through the loan. Comparisons between budgeted support for research components and the allocated disbursable amounts are available for a small sample of African countries. Wide discrepancies are observed. For example, in the 1988 Burundi Education Sector Development Project (CR 1881-BU), there were no studies listed within the SAR, and so nothing was budgeted; but \$150,000 was disbursable toward "education related studies." Unfortunately, data on disbursable amounts are available for only a few projects.

Table 10: Comparison of budgeted and disbursable allocation to studies within selected African countries.

Country	Loan	Amount Budgeted (US\$)	Amount Disbursable (US\$)
Burundi	CR 1811	None	150,000
Cape Verde	CR 1853	16,000	100,000
Equatorial Guinea	CR 1797	140,000	110,650
Ethiopia	CR 1873	1,000,000	1,500,000
Nigeria	LN 2926	100,000	100,000

IV. Determinants of Study Completion and Availability

29. We have noted that only 42% of planned studies are completed. In this section we review documents and interview project officers to explore reasons for study completions.

Review of Documents

30. Under the document review, we examine four broad conditions under which studies are more likely to be completed: when studies are included in the formal loan conditions ("covenants") of the President's Report, when they are planned in advanced as evidenced by inclusion in the annexes of the SAR, when they are more adequately funded, and when they are additionally supported by Bank Research Committee funds.

31. Conditions of agreement. Sixty one percent of all planned studies, 1982-1989, were included in the conditions of agreement in the President's Report. The completion rates for these studies was 10% higher than those not included in the President's Reports (47% vs. 36%), although their availability was no greater (Table 11). Although relatively effective, the appropriateness of the use of covenants to secure research output remains an open question, and one that could be avoided were more effort to be directed toward improving borrower understanding of the research, and advance joint preparation in its conception.

Table 11: Comparison of degree of completion of studies by inclusion and exclusion from President Report conditions of agreement, 1982-1989

Degree of study implementation	President's Report	
	Included	Excluded
Planned only	140 (53%)	106 (64%)
Completed only	75 (29%)	25 (15%)
Completed and available	47 (18%)	35 (21%)
Total ^{1/}	262	166

Figures in parentheses represent percentages of planned studies for that group.

^{1/} No information for 8 studies, of which two were complete and available.

32. Advanced planning. As a proxy for considering the effect of advanced planning on completion of studies, the annexes of the Staff Appraisal Reports were searched to determine the extent to which studies had been described in detail. The studies were classified in four levels of inclusion within the Annex of an SAR: not included; included in the expenditure tables only; included in the key indicators for monitoring and evaluation, which provided a brief outline; included as a separate annex providing detailed Terms of Reference for the study. Table 12 provides information on the number of studies planned, completed and available for these categories and their respective completion rates.

Table 12: Planned, completed and available studies within the Annex of SARs, 1982-1989

	Not Included	Cost Only	Brief Outline	Separate Annex
Planned only	89 (63%)	45 (47%)	60 (54%)	52 (66%)
Completed only	31 (22%)	28 (29%)	40 (36%)	1 (1%)
Completed and available	22 (15%)	23 (24%)	11 (10%)	26 (33%)
Total ^{1/}	142	96	111	79

Figures in parentheses indicate completion rates for that group.

^{1/} No information for 8 studies, of which two were complete and available.

33. Study completion rates were lower for studies that were not included in SARs (37%) than for those included in such reports, but-- surprisingly-- completion rates for studies with separate Annexes was equally low (34%). Apparently, the most effective strategy was costing the study separately within the expenditure tables (53% completion

rate). Study availability, however, was highest for studies having separate Annexes (33%), and 26 of the 27 such completed studies were available. Low completion rates may be explained by the large number of such studies included in more recently initiated projects. This suggests that the more time that is spent preparing the study, the easier it is for Bank staff to obtain the results.

34. Size of research component. The absolute size of the research component (in monetary terms) is more important in determining success than the proportion of total project expenditures to support research. Studies embedded in research components of more than \$0.5 million per project had a completion rate of nearly 50%, compared to a completion rate of 38% for studies embedded in research components of less than \$0.5 million per project. This difference was statistically significant $\chi^2(1, N=403) = 5.37, p < .05^{15}$. This finding is similar to that for agricultural research¹⁶, and suggests that there is some critical investment level above which research will be successfully implemented.

Table 13: Distribution of studies and completion rates by size of commitments to research components, 1982-1989

	Number of Projects	Planned studies	As Percent of all studies	Completed studies	Completion rate
Less than \$0.5 million	64	205	47.0%	78	38.0%
More than \$0.5 million	42	198	45.4%	98	49.5%
Not known/ not stated	10	33	7.6%	8	24.2%
Total	116	436	100.0%	184	42.2%

35. Support from Bank Research Committee. The Bank Research Committee has funded 34 studies within the education sector since 1970, many of which have been based on independent research. In only 4 (12%) instances has the research utilized data from project financed studies (Edurural in Brazil; Living Standards Measurement Surveys in Peru and Cote d'Ivoire; diversified schools in Colombia). Moreover, those

¹⁵ Studies within projects with unidentifiable commitments to research were not included. The Yate's correction was applied since $\nu = 1$.

¹⁶ Pritchard, Anthony J. (1990). Lending by the World Bank for Agricultural Research: A Review of the Years 1981 through 1987. World Bank Technical Paper No 118. Washington, D.C.: World Bank.

countries that are chosen for the research tend to have established research abilities, and so tend to have better completion records for Bank financed studies. In Africa, for example Research Committee funded projects conducted research in Tanzania, Lesotho, Malawi, Swaziland, Kenya, Ghana, Ethiopia and Somalia. Of these, only Ethiopia and Somalia have a poor record in terms of completing project financed research. Similarly, in Asia, Research Committee projects considered Thailand, Nepal, Korea, China and the Philippines. Of the 23 intended studies for these countries since 1982, 18 have been completed, and two more have been started. Furthermore an additional 6 studies were cited in addition to those planned. Bank Research Committee projects take place in those countries where research appears to thrive and Bank and local research efforts are mutually reinforcing.

Project Officer Interviews

36. To provide further insight into the conditions under which research components were completed, 20 projects were selected at random from the 122 projects identified as part of the broader study and the responsible project officers interviewed. Of the 18 project officers approached, 11 provided information on the projects under their supervision. Non-respondents were either on mission (N=5), or supervising projects too recently initiated to provide information concerning the success of research components (N=2).

37. Project officers were asked to explain why research components were successful or unsuccessful, with particular focus on the initiation, purpose and outcome of research components. While there was considerable variation among countries, a few generalizations can be offered regarding the design, implementation, and results of research components.

38. The interviews provided some confirmation for three of the previous suggestions regarding conditions for study completion. Conditions of agreement clauses were considered effective, not because Governments were fearful of the repercussions from failing to uphold them, but because they served as a reminder to project officers to include follow-up of research within aide-memoires for supervision missions. Studies that were planned in advance were also more likely to receive direct attention in supervision missions, which encouraged their completion. Finally, Project Officers confirmed that successful Bank directed research often takes place in countries with established capacity for undertaking research, and may be related to in-country research completion. In addition to these findings, a number of other interesting issues arose relating to research undertakings in Bank projects.

39. Study purpose. The Bank provides initial impetus for almost all research components in education projects, most of which are ad hoc studies initiated in response to specific project needs. Although many studies are included as part of a plan to develop national education information systems, they actually serve other functions: to evaluate specific ongoing policies, to investigate potential areas for future lending, and

as "resolutions" to difficult policy negotiations¹⁷. The studies rarely involve systematic collection and analysis of data; rather, they provide qualitative, reflective information relating to areas of possible education policy change.

40. These studies function as pointers to future areas of effective policy intervention; as constructive mechanisms to develop in-country consensus on particularly difficult issues (cost recovery, language of instruction, double-shift teaching etc.), by introducing an element of "criticism" often lacking within Ministries, and encouraging introspection if not implementation; and as a resource upon which other countries may draw, when data are collected and disseminated effectively. However, the extent to which they reflect the research agenda of the borrower and encourage a sense of ownership in the research results is unclear.

41. Study design. Study components neither differentiate between nor link together evaluation and policy research. While evaluation is intended to assess the effectiveness (post hoc) of an ongoing or completed program, policy research is intended to study the causes and consequences of policy alternatives using modeling techniques that require the analyst to project effectiveness. Policy analysis uses previous evaluations to make these projections. For policy research to be effective, countries must have both a monitoring system that allows the continuing evaluation of implemented projects, and the ability to incorporate the findings into broader policy research. Bank project research initiatives encourage evaluations without fully incorporating them in a broader policy research agenda.

42. Unfortunately, few countries have an efficient monitoring system. This is primarily a result of institutional weaknesses (no computers or trained technicians), lack of management continuity or motivation, or lack of demand (managers are not convinced of the need for expenditure on monitoring rather than new policy implementation, especially when limited funds forces choices).

43. Many projects have tried to overcome the lack of monitoring systems by providing both physical infrastructure in the form of computers and technical training, and encouraging management motivation. However, the combined effects of high staff turnover and the resulting lack of strong leadership tend to reduce the impact of these interventions. For example, in Brazil, the National Institute of Educational Research (INEPE) was ineffective because the Secretary of State for Education failed to fully finance the institution. In Niger, the first Director of the Education Planning Unit failed to delegate responsibility, and his replacement over-delegated, providing no management support. Until efficient monitoring systems are established, investments in ad hoc research components are unlikely to realize their full potential.

44. Study implementation and impact. Studies directed toward the development of future projects were the most likely to be completed and result in policy

¹⁷ A deadlock is sometimes reached during loan negotiations involving recommended policy actions. To ensure the timely conclusion of negotiations, a study is incorporated to examine the issues at hand, and provide policy recommendations to be further discussed.

implementation. This is probably due to the emphasis that project officers place on these types of studies, in order to incorporate the results in future Bank-initiated loans.¹⁸ Studies that were retrospective and evaluative were completed, but less likely to impact policy.¹⁹

45. Since the role of research components is primarily to influence policy making decisions, their potential impact in this area must be considered in their design. The utilization of research in policy-making can be considered from two perspectives: the research study itself and the decision maker. The research study may not be adopted as policy if the methodologies are not rigorous, the credibility of the evaluator and or evaluation process is suspect, the research is irrelevant to perceived information needs of the decision-maker, or the results are not disseminated in a timely fashion. Similarly, if the decision-maker has no commitment or receptiveness to evaluation, is influenced by competing information (personal beliefs etc.), or the political climate (fear of contradicting existing regimen), research is unlikely to be converted into policy.

46. In many of the research components discussed with project officers, one or more of these conditions was lacking and the research remained incomplete or un-utilized. The most important conditions for research to impact policy appeared to be the timeliness of the findings, and the receptiveness of the decision-makers, which was in part linked to the political climate. For research components to impact policy they must be designed with these conditions in mind.

47. Data transfer. There are two opportunities when completed research might be lost; between country and project officer, and between project officer and Regional Information Centers (RICs). There is no systematic procedural transfer for reports of completed studies either between country and staff, or between staff and RICs. Such transfer primarily depends on the initiative of the project officer. This initiative is frustrated in two ways: (1) there is little time available on supervision missions, for example, to trace complete studies, and (2) in the past, studies have been difficult to retrieve from RICs, prompting a reluctance to pass them on.

¹⁸ The availability of results appeared strongly correlated to the enthusiasm of the officer in charge (this is a qualitative impression, not quantitative fact!).

¹⁹ In Nepal (CR 1198-NEP), for example, input/output evaluations of Project vocational centers were completed over a four year period by a Dean at the Western Regional Center. However, the evaluations were discontinued when they raised issues to which the administration did not wish to respond. In Haiti (CR 1305-HA), studies on classroom conditions and curriculum effectiveness were completed. They promoted discussion on the reform of the education system, but did not lead to any policy changes.

V. Conclusions, Discussion and Recommendations

Conclusions

48. This review confirms and supports the findings of the 1982 study of research within Bank education projects: research components do not produce the studies that are planned, and those that are produced are inadequately disseminated. We also find that the total number of studies per project has increased over time, but resources available for research components have declined since 1982, despite increases in Bank lending for education. A consistently small proportion of all studies address educational outcomes.

49. Studies are marginally more likely to be completed, though no more likely to be available, if they are included within project Conditions of Agreement. Completion rates are higher for studies embedded in larger research components. Studies that are fully described within a separate Annex of a Staff Appraisal Report are the most likely to be available. Study completion was also influenced by study design, and perceptions by national decision-makers and Bank staff of the benefits to be derived from research undertakings .

Discussion

50. What can be done to improve the completion and dissemination rate of studies financed by education projects? Two types of answers to this question must be considered. First, on methodology: are the data we collected sufficient to answer the questions posed, and, if not, how might it be improved? Second, on findings: if we accept our conclusions, how do we explain them, and what do we do about it?

51. Data sufficiency. The first issue is data sufficiency. Central questions regarding data sufficiency are: have all studies that were financed by the project been identified? Has information about all the studies identified been obtained? Overall, it is accepted that all studies financed by the Bank education projects, 1982-1989, may not have been listed and all the information that could be available about these studies has not been obtained. But what is missing is unlikely to have a major effect on our conclusions.

52. To some extent the data may under-represent the total number of studies financed by the project. There are undoubtedly more studies planned and completed than are explicitly mentioned within SARs. It is beyond the scope of this paper to identify additional studies (some possibly hidden in colleague's drawers). However, quite a number of completed (available) studies would have to be identified before their inclusion would have a significant impact on our conclusions, as they would increase not only the number of completed (possibly available) studies, but would also increase the base upon which the percentages were computed.

53. Secondly, because of time constraints on the part of project staff, information received from the survey respondents may not be complete. However, a respectable

84% response rate to the survey was obtained, with information provided for more than 90% of listed studies.

54. Third, there may be completed studies that have not been sent to project files. As a result, they would not be included in the number of studies characterized as "available." Thus, the availability of completed studies may be underestimated.

55. Why studies might be incomplete. There are legitimate reasons for planned studies to remain uncompleted. Studies originally proposed in SARs may be dropped or replaced in response to changing needs and circumstances, throughout the life of the project. Delays in project implementation, and the subsequent devaluation of funds, can prevent the completion of studies. Anecdotal evidence suggests that, in the past, the research components have been included as a form of "slush fund" to provide a financial buffer for other areas, drawing down resources available for study activities. This may still be the case, even though research projects intending to draw on lump sum budgets for studies must be cleared by project staff at the Bank. It is often the case that disburseable accounts for research components are drawn on to finance other technical assistance components of projects. In some circumstances project staff are faced with a "fait accompli."

56. To some extent, the poor conceptualization and design of studies may contribute to inadequate product generation. This is, perhaps, the central issue to be addressed. What role do these studies play in the overall design of the project? All too often the studies are introduced as means of easing the negotiation process during the introduction of a project. Controversial recommendations can be resolved by an agreement to "study the issue." Secondly, planned studies are used to answer project related issues, which may not answer central policy choices facing governments, and hence are accorded little importance. Finally, project studies are often implemented in isolation, without developing a more permanent domestic research and evaluation capacity.

57. This inadequate educational research capacity may also contribute to the high non-completion rate. Even appropriately designed studies, which could be used to evaluate and refine policy choices made within the sector, may fail to be implemented if countries lack the research capacity to gather or analyze data.

58. Why completed studies are not available. Often studies have been completed but are not available to Bank staff or other interested readers. One reason is that there may be little demand for the actual research reports, once they have been completed. Research findings are reported to the staff of project divisions at the initiative of Borrower governments, but the responsibility for obtaining research documents falls on the supervision missions. While supervision missions provide an opportunity for the Bank to encourage study completion and dissemination, there is little time allocated to this purpose in their agendas. Principally, the Bank has relied on loan/credit covenants to secure the output from research components, relying on countries to send data.

59. Another reason is that the collection and storage of research output within the Bank is poor; only 46% of studies reported completed by project staff were found in the Regional Information Centers (RICs). The system of storage and retrieval of data depends upon links between staff and RICs. While RICs provide a convenient central reserve for studies, they can only function as such if they receive the relevant documents. Yet not all studies collected by staff are forwarded to the RICs, and some studies, commissioned locally by Government ministries, are not sent to the Bank, with results transmitted orally or in brief memos to project staff.

60. Yet, even when studies are forwarded to the RICs, there is no precise system for filing this information. The "files" themselves are often several volumes of chronological "correspondence", from which it is difficult to retrieve specific data, unless the date of its receipt is known. Provision of separate volumes for information related to research components would ease the process of document retrieval. Since 1987, the records have been stored on a computer database, which has eased the process of document retrieval. However, it is still difficult to retrieve a study unless its exact title is known, since search words must be used. Furthermore, completed projects are retired to the Central Record Office ("Archives"). Access to documents in "Archives" depends upon identifying document retrieval numbers, which are located in a Rolodex of index cards listing information retained under the project file. Often, documents listed by project officers as in "Archives" were not listed on these index cards.

61. Project Completion Reports provided information on research components whose status was not known by regional staff. However, no bibliography was listed for the projects. This should be included as a matter of form.

Recommendations

62. Three principal benefits arise from research components in education projects. They provide: (i) scientific assessments of the implementation and impact of alternative policy decisions embedded in projects, (ii) opportunities for enhancing domestic research capacities, and (iii) generalizable knowledge of interest to national and international education research and practice. Unfortunately, not all benefits are equally realized. This section reviews the reasons for observed shortcomings, and some suggestions for increasing the benefits of research components in Bank education projects.

63. Implementation and impact assessment. For studies to provide information on the implementation and impact of Bank-assisted projects will necessitate studies that: (i) are designed at the outset to answer specific policy questions of high priority to the borrower, (ii) include measures of education outcomes, such as student learning achievement, and (iii) are completed in a timely fashion. Improving research design and including measures of outcomes requires technical expertise beyond that presently available in many developing countries, and -- in some cases -- in Operations. Timely completion of studies requires more intensive and sustained Bank supervision.

64. Enhanced domestic research capacities. To enhance domestic education research capacities will require: (i) technical training in research and assessment methods

appropriate to policy research, (ii) practical experience with empirical policy research, (iii) sustained professional support and, (iv) support for researchers to attend international meetings and publish in refereed journals. While many research components include provision for technical assistance and training, these resources are frequently under-utilized. Reasons include lack of sufficient technical expertise to effectively purchase expert services and training, government reluctance to spend foreign exchange for technical assistance, failure to take into account the extant research capacities and to consequently "over design" the external technical assistance component, and insufficient supervision time to ensure implementation. Again, additional resources are necessary.

65. Enlarged knowledge base. For studies components to build the international educational research knowledge base requires that: (i) studies be completed, (ii) results be written up objectively, (iii) reports of findings be disseminated and (iv) papers be accessible for national and international readers. Improving the knowledge base requires not only that studies be designed to answer appropriate questions and that they be carried out successfully, but also that the results be shared widely. The most significant way in which the Bank can assist international dissemination is to cite project studies in Bank documents and research reports. For internal Bank purposes, three important dissemination strategies are: (i) including bibliographies of research reports generated through project activities in Bank supervision and completion reports, (ii) sending all data and documents relating to studies to the Regional Information Centers with a copy of the transmittal document to PHREE, and (iii) establishing within the Regional Information Centers a separate volume within "project files" specifically for studies.

Implications

66. The above discussion points out the need for specific allocation of resources for building education research capacity through provision of professional support (either within or outside the Bank) for research component design and more intensive technical supervision of research components once the project has been approved. Administrative budgets of Sector Operations Departments are usually insufficient to fund the specialized expertise necessary for the preparation and supervision of what, typically, are small components in large projects. To accomplish these objectives several options should be considered:

A special allocation from the Research Budget should be made to support the design, implementation and supervision of research components in Bank education projects, possibly complemented by allocations from other agencies interested in supporting educational research

Freestanding educational research projects should be considered, wherever possible (usually in large countries)

A training program for Bank operational staff should be developed

Support should be provided for training programs for borrower staff in agencies such as the Educational Testing Service and the Institute for International Education Planning.

67. To ensure availability:

(a) all data and documents relating to studies should be sent to the Regional Information Centers. A list of information received should be sent by the Information Centers to PHREE.

(b) Regional Information Centers should establish a separate volume within "project Files" specifically for studies.

(c) All PCRs should list a bibliography of research materials used in their compilation.

ANNEX 1

Research components of World Bank Education Projects, 1982-1989

Research Components of World Bank Education Projects,
since 1982.

Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
AFRICA	Benin CR 1246-BEN	1982	<p><u>Second Education.</u> (i) Study of impact of educational materials (para. 2.17 p.12).</p> <p>(ii) Report on Ministry data collection systems.</p> <p>(iii) Prepare for future education projects (2.21-2, 13).</p>	<p>(i) still outstanding (ii) not initiated (iii) Richard Sack undertaking preparation with UNDP funding.</p>
AFRICA	Botswana CR2057-BT	1982	<p><u>Third Education.</u> Completion of tracer study begun under Second Education Project.</p>	No information available
AFRICA	Botswana CR2644-BT	1986	<p><u>Fourth Education.</u> Proposed studies: (i) cost effectiveness of vocational and skill training;</p> <p>(ii) correlation between formal and non-formal education and training, and employment;</p> <p>(iii) development of investment options in post-secondary education;</p> <p>(iv) construction technology;</p> <p>(v) pre-investment studies for possible future project (total 54 manmonths)(para. 3.16 p.18).</p>	<p>Completed data for projects (i), (ii) and (iii). Projects (iv) and (v) being implemented.</p> <p>(i) V. Gottsleben and G. Rosch (1984). "Strengthening the Industrial Training Trade Testing System of Botswana." (doc. # 110.075)</p> <p>(ii) Ministry of Education, Botswana (1985). "Community Junior Secondary Schools Building Program" (doc. # 114.541)</p> <p>(iii) Ministry of Education, Botswana (1984). "The role of Technical and Vocational Training in the Economic Development of Botswana." (doc. # 111.083)</p> <p>TOR supplied for (iii), (iv) and (v). (doc. # C00856-7)</p>
AFRICA	Burkina Faso CR1598-UV	1985	<p><u>Primary Education Development.</u> No research component.</p>	Confirmed
AFRICA	Burundi CR1358-BU	1983	<p><u>Third Education.</u> School mapping project</p>	Completed: CEGIR "Cartes Scolaires" (doc. # 106.990)
AFRICA	Burundi CR1881-BU	1988	<p><u>Education Sector Development.</u></p>	

Research Components of World Bank Education Projects,
since 1982.

Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
AFRICA	CAR CR1359-CA	1983	<p>No research component. Completion Report. <u>Second Education</u>. (i) develop and evaluate achievement tests;</p> <p>(ii) future project preparation to include feasibility of extension of rural vocational training centers, textbook production, teacher training;</p> <p>(iii) evaluation to relationships between; better housing and teacher retention; better school environments and improved school community interaction; improved school environments and changes in community behavior (paras. 2.21-4 p.16).</p>	<p>Studies completed by Luc Demba of RCA and Clement Thiebert of Societa CEGIR</p> <p>IDET-CFGOS S.A. (1982) "Etude Formation Emploi" Tome 1 & 2; Bologne; Billancourt (doc. # 128.443 (A), (B1) and (B2))</p>
AFRICA	CAR CR1863-CA	1988	<p><u>Education Rehabilitation and Development</u>. Studies on:</p> <p>(i) scholarships in higher education;</p> <p>(ii) employment/education linkage at upper-secondary and post-secondary levels;</p> <p>(iii) evaluation studies linked to textbook use and wider evaluation of quality of planned education;</p> <p>(iv) teacher training</p>	<p>Studies started: no results as of January 1990</p>

Research Components of World Bank Education Projects,
since 1982.

Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
AFRICA	Cameroon LN 2683-CM	1986	<p><u>Educational and Vocational Training.</u> Conduct study to prepare proposals to improve the efficiency of primary education.</p> <p>Strengthen institutional capacity . (para. 3.3 p.9)</p> <p>Manpower surveys for voc. ed. (para. 3.11p.13). Included in component to establish data systems and provide consulting services (approx. \$8m).</p>	<p>Project suspended shortly after effectiveness in 1987. Currently being substantially redesigned However following studies available:</p> <p>(i) "Etude de la mise en place d'une systeme de formation par l'apprentissage au Cameroun" (doc. # 128.286)</p> <p>(ii) "Etude des couts et des financements de l'education" (doc. # D13828; ISN 35660)</p> <p>(iii) Etudes sur l'enseignement et la formation (doc. # D11168-74; ISN 31955)</p>
AFRICA	Cape Verde CR 1853-CV	1988	<p><u>Primary Education Upgrading.</u> Studies on cost of financing education and low-cost methods of school construction (para. 3.25 p.16).</p> <p>(ii) study of socio-economic and educational parameters of Municipality of Santa Cruz (1988).</p> <p>Evaluation of test project in 1989 (para. 3.5 p.10 Annex 13).</p>	<p>Studies not yet available</p>
AFRICA	Chad CR 1950-CD	1989	<p><u>Education Rehabilitation.</u> Provision for (i) the monitoring of book distribution (para. 3.5 p.11);</p> <p>(ii) the monitoring and evaluation of teacher training (para. 3.7 p.12);</p> <p>(iii) study community initiatives in primary education (Annex 3-11);</p> <p>(iv) study payment procedures for teachers;</p>	<p>Studies not yet started.</p>

Research Components of World Bank Education Projects,
since 1982.

Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
AFRICA	Comoros CR 1751-COM	1987	(v) study MEN organization; (vi) establish study fund (\$300,000) <u>Second Education.</u> Planning Unit of Education Planning Directorate to undertake studies to assess factors detrimental to student achievement and collect education statistics (para. 33.03 p.15)	Excellent statistics being produced by planning unit with project support. No other studies.
AFRICA	Comoros CR 1195-COM	1982	<u>First Education.</u> No research component.	
AFRICA	Djibouti CR 1543-DJI	1985	<u>First Education.</u> Evaluation studies to focus on; (i) teacher recruitment, training and upgrading, and commitment; (ii) curricula adjustment; (iii) relationship between exam scores and curricula/teacher qualifications; in relation to test scores (para. 4.06 p.21) and, (iv) repetition and double shift teaching	No information supplied.
AFRICA	Equatorial Guinea CR 1797-EG	1987	<u>Primary Education.</u> As part of strengthening the education sector planning capabilities; (i) school map updating (March 1988), (ii) collect and publish school statistics (iii) prepare a study on the future needs of secondary and university education	(i) and (ii): work underway (iii): not initiated.

Research Components of World Bank Education Projects,
since 1982.

Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
			(due March 1989) (para. 3.15 p.11 Annex 3-13).	
AFRICA	Ethiopia CR 1873-ET	1988	<u>Seventh Education</u> . Pre-investment studies to include: (i) testing of rural health training programs for medical students; (ii) establishment of physical property maintenance system in higher education (para. 3.29 p.27).	No information supplied.
AFRICA	Ethiopia CR1520-ET	1985	<u>Sixth Education</u> . No research component.	
AFRICA	Ghana CR 1744-GH	1987	<u>Education Sector Adjustment</u> . No research component.	Confirmed.
AFRICA	Guinea-Bissau CR 1914-GUB	1988	<u>Basic Education Development</u> . (i) Studies on prospects of private education in Guinea-Bissau.	No information available
AFRICA	Guinea CR 1341-GUI	1983	<u>Second Education</u> . (i) Studies on Vocational Training development; (ii) tracer study of graduates of IPSs and agro-zootechnic faculties (para. 2.07 p.14). (iii) Study to plan the development of the teacher training system (para. 2.16 p.17). (iv) comprehensive definition of future sector strategy; (v) interim financing of adjustment program.	(i) and (ii): not received. (iii): short proposals made in framework of preparation of future projects; (iv) "Declaration of Sector Policy" adopted by Government in September 1989; (v) two simulation studies by IREDU working out cost implications of the "PASE"
AFRICA	Kenya CR 1673-KE	1986	<u>Sixth Education</u> . No research component.	
AFRICA	Lesotho CR 1512-LSO	1985	<u>Fourth Education</u> . Provisions for: (i) analysis of staff utilization and facilities at	No information for project (i).

Research Components of World Bank Education Projects,
since 1982.

Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
			secondary schools;	Projects (ii), (iii) and (iv) completed.
			(ii) review of curriculum, staff utilization and facilities in vocational schools;	
			(iii) development of trade testing and	
			(iv) review of inservice training course content (para. 3.23 p.20).	
AFRICA	Liberia CR 1306-LBR	1983	<u>Fourth Education</u> . No research component.	Confirmed.
AFRICA	Madagascar CR 1661-MAG	1986	<u>Accounting and Management Training</u> . No research component.	Confirmed.
AFRICA	Malawi CR 1330-MAI	1983	<u>Fifth Education Project</u> . Studies to: (i) evaluate cost-effectiveness of primary school self-help construction program;	Projects completed by the MOEC, Lilongwe.
			(ii) to what extent could secondary school boarding facilities be eliminated (para. 4.18 p.21).	(i) Ministry of Finance (1983) "Feasibility study of the Need for Boarding Places and Establishment of New Day Schools." (doc. #113.845)
				(ii) Ministry of Education (1984) " Study on the Development of Private Schools" (doc. # 109.284)
AFRICA	Malawi CR 1767-MAI	1987	<u>Education Sector Credit</u> . Feasibility studies to convert urban secondary schools to double shift institutions (due March 1988),	Feasibility studies completed by the MOEC, Lilongwe. Secondary School mapping survey: draft available from MOEC, Lilongwe.
			(ii) secondary school mapping survey (March 1987).	No information on intended studies, however:
			Implementation, not research, studies.	(i) University of Malawi (1984): Tracer studies of graduates from Chancellor College (doc.#110.592/3)
				(ii) Feasibility study for establishing day secondary schools in Malawi (doc. # D32608)

Research Components of World Bank Education Projects,
since 1982.

Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
AFRICA	Mali P-5010-MLI	1989	<p><u>Education Sector Consolidation.</u></p> <p>(i) Collection and analysis of educational statistics; (ii) school mapping project (para 79 p.28 Annex V); (iii) identify gender issues (Annex 4-1); (iv) study secondary higher education (Annex 5-3)</p>	No information supplied
AFRICA	Mauritania CR 1214-MAU	1982	<p><u>Second Education.</u> Funding for sundry services to prepare for future education projects (para. 2.19 p.19).</p>	<p>Following documents available:</p> <p>(i) Alain Mingat and Jean-Pierre Larousse (1986). "Coûts, Financement et Politique de l'éducation en République Islamique de Mauritanie" (doc. # D01661)</p>
AFRICA	Mauritania CR 1943-MAU	1989	<p><u>Education Sector Restructuring Project.</u> Studies of: (i) country wide primary school map;</p> <p>(ii) tracer study of graduates from secondary school;</p> <p>(iii) analysis of cost functions in secondary schools;</p> <p>(iv) measures likely to increase female enrollment.</p> <p>Part of a broader plan to strengthen the Directorate of Planning and Coordination (para.3.32 p.19 Annex-12).</p>	<p>(ii) Jean Lamoure (1987). "Structures, Coûts et Financement de l'Enseignement supérieur en RIM"</p> <p>(iii) Ministère de l'Éducation Nationale, RIM (1987) "Projet de Restructuration du Secteur de l'Éducation en RIM"</p> <p>(iv) Bacuur Taoufik (1987). "Étude sur l'Adequation entre l'Emploi, L'Éducation et la Formation en RIM"</p> <p>(v) Ministère des Pêches et de l'Économie Maritime (1987). "Étude de la Formation dans la secteur de pêches: Partie I - Étude global et Partie II - Centre de Formation Professionnelle Maritime (CFPM)" Study prepared by RDA International.</p> <p>No studies yet available for Education Restructuring Project.</p>
AFRICA	Mozambique CR 1907-MOZ	1988	<p><u>Education and Manpower Development.</u> Included in</p>	Progress reports delayed one year to 03/90

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
AFRICA	Niger CR 1740-NIR	1987	<p>the sectoral planning and management component are the following studies: (i) the financing of the educational system;</p> <p>(ii) education sector management,</p> <p>(iii) mother-tongue languages (para. 3.30 p.116 Annex 3-7). Due March 1991;</p> <p>(iv) Manpower planning.</p> <p><u>Primary Education Development.</u></p> <p>(i) cost recovery schemes for textbooks;</p> <p>(ii) supply and demand of primary and secondary school teachers;</p> <p>(iii) scope for extending use of multi-grade teaching to rural areas;</p> <p>(iv) study ways to introduce double-shift teaching to urban areas;</p> <p>(v) evaluate internal and external efficiency of experimental primary schools;</p> <p>(vi) promote community involvement in school-building;</p> <p>(vii) prepare school construction rehabilitation program;</p>	<p>Studies completed:</p> <p>(i) Etude des besoins en main-d'oeuvre des entreprises parapubliques et privees (10/88)</p> <p>(ii) Evaluation de la double vacation dans l'enseignement primaire au Niger (9/89)</p> <p>(iii) Projet de la consolidation et de developpement de la formation professionnelle au Niger (2/89) (doc. # D26765)</p> <p>(iv) L'enseignement technique court au Niger: Une evaluation pour la marche (1/89) (doc. # D12296/7)</p> <p>(v) Proposition pour une repartition rationnelle des enseignements dans le secondaire (8/88)</p>
AFRICA	Nigeria LN 2926-UNI	1988	<p><u>Technical Education Project.</u> Staff development at National Board for Technical Education to assess efficiency of instructional programs;</p>	<p>Study of Technical Education. Workshop held 8/89 Papers presented are to form basis of a study.</p>

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
AFRICA	Rwanda CR 1683-RW	1986	develop tracer study [due 1996] <u>Third Education.</u> Monitor textbook distribution; (ii) improve school inspection and management; (iii) improvement of educational system; (iv) pre-investment studies of project related components (para. 4.10 p.18).	(i) Textbook distribution monitoring not started (ii) draft report available Etude pour l'amelioration de l'inspection et de la gestion des ecoles (1987) (doc. # D74466-70) (iii) not initiated. Also available: K. Baritsch and R. Sack (1985). "Employment in and Training for the Modern Sector of Rwanda." (doc. # 113.621)
AFRICA	Rwanda CR 1263-RW	1982	<u>Second Education.</u> Studies: (i) assessment of teacher training needs to year 2000; (ii) medical teaching methodology and adoption of texts to Rwandese requirements; (iii) evaluation/pre-investment studies (para. 3.13 p.19).	(i) Study on distribution system for textbooks; (ii) study on the reorganization of textbook printing; (iii) seminar to evaluate primary school curricula; "Seminaires d'evaluation des curricula et des manuels d'enseignement primaire" (doc. # C02116) also: (i) "Production de material didactique pour l'enseignement paramedical" (doc. # 111.842)
AFRICA	Senegal CR 1638-SE	1986	<u>Regional Management School.</u> CESAG will maintain graduate's employment histories to serve as basis for tracer studies. No other research component.	No information supplied.
AFRICA	Senegal CR 1735-SE	1987	<u>Primary Education Development.</u> Studies include:	All studies in advanced stages of preparation and will become available in early 1990.

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
			<p>(i) determinants of demand for education in rural areas (due Feb 1988)</p> <p>(ii) identify areas for cost efficiency in secondary general and technical education (Dec 1987)</p> <p>(iii) prepare school mapping project (Jan 1987)</p> <p>(iv) identify areas for cost saving in higher education (March 1988);</p> <p>(v) explore possibility of student loan system (July 1988). (Annex 3-2).</p>	<p>In addition, several other studies have been completed in areas such as evaluation of double-shift teaching, restructuring of primary school inspectorates and testing of new curricula.</p>
AFRICA	Sierra Leone CR 1353-SL	1983	<p><u>Third Education.</u> (i) Study of efficiency, capacity, utilization and demand for teachers in primary education (para. 2.18 p.15);</p> <p>(ii) Study of impact of textbooks on changes in student achievement, attendance and promotion rates;</p> <p>(iii) Study of the distribution, storage and use of textbooks (2.37 19). Further related studies.</p>	<p>(i) Textbook study not started as far as can be ascertained;</p> <p>(ii) Textbook Impact study not started.</p> <p>(iii) B. Green (1984). Report on textbook distribution. (doc. # 129.684 (L))</p> <p>(iv) Studies commissioned 04/87 - not started.</p>
AFRICA	Sudan CR 1451-SU	1984	<p><u>Third Education.</u> Study to review curricula and staff development of Higher Technical Secondary schools (para. 4.12 p.17).</p>	<p>No information supplied.</p>
AFRICA	Togo CR 1568-TO	1985	<p><u>Educational Improvement.</u> Reorganized education planning division to study:</p> <p>(i) current budgetary allocations;</p>	<p>(i) document completed 1986; updated 1988.</p> <p>(ii) not started</p>

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Are.	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
AFRICA	Uganda CR 1329-UG	1983	<p>(ii) provide comprehensive long-term financing plan;</p> <p>(iii) evaluate teacher upgrading;</p> <p>(iv) prepare a school location map (para. 3.1 p.10).</p> <p>(v) demand for primary education</p> <p><u>Third Education (Rehabilitation)</u>. Special studies in: (i) technical education;</p> <p>(ii) distribution (equity issues) and management of resources for educational financing;</p> <p>(iii) teacher supply and demand (paras.3.23-6 p.20).</p>	<p>(iii) ongoing - no document as yet</p> <p>(iv) to start early 1990</p> <p>(v) study in progress - being prepared by M. Diamboma</p> <p>Related document: W.W. Koch Publishers Association (1985). "Textbook publishing, distribution and printing report" (doc. # 220.276)</p> <p>No information supplied.</p>
AFRICA	Uganda CR 1965-UG	1989	<p><u>Fourth Education Project</u>. Evaluation of pilot scheme (June 1990);</p> <p>(ii) evaluation of textbook fund(June 1991);</p> <p>(iii) pre-investment studies including: financing and efficiency of education, feasibility study of textbook publishing, feasibility study on provision of water to rural primary schools.</p>	<p>Feasibility study of textbook publishing and printing in Uganda (1989) (doc. # 033655)</p>

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
AFRICA	Zaire CR 1519-ZR	1985	<p><u>Educational Technical Assistance and Training.</u> Provision of MIS. Data gathering and analysis as part of planning section (\$0.7m).</p> <p>Develop school mapping project(\$0.9m) [para. 47/8 p.19].</p>	<p>(i) Educational database established; Statistical Yearbook 1986/7</p> <p>(ii) School mapping study for Mabinda finished; Government of Zaire (1985). Seminaire de formation sur la methodologie de la Carte Scolaire au Zaire (doc. # 113.569)</p> <p>also: "Programme de formation en planification de l'education et statistiques scolaires. Rapport Final v. 1-3" (1986) (doc. # C01042)</p>
AFRICA	Zaire CR 1839-ZR	1988	<p><u>Higher Education Rationalization.</u> Analysis of:</p> <p>(i) student enrollment, costs and financing of higher education;</p> <p>(ii) teaching and non-teaching personnel;</p> <p>(iii) social composition of the student body;</p> <p>(iv) pass and failure rates.</p>	<p>Consultants to be hired 1990. This project should produce substantial information about the higher education system.</p>

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ASIA	Bangladesh CR 1396-BD	1983	<u>Second Agricultural Training</u> . No research component.	Confirmed.
ASIA	Bangladesh CR 1318-CD	1983	<u>Business Management Training and Education</u> . No research components, although Bank funded project and case developments at institutions.	250 case studies and 190 research projects underway.
ASIA	Bangladesh CR 1490-BD	1984	<u>Technical Education</u> . No research component.	Confirmed.
ASIA	Bangladesh CR 1574-BD	1985	<u>Second Primary Education</u> . Studies to review the efficacy of existing non-formal programs and to develop community support (para. 2.04 p.10); (ii) to determine costs and benefits of liberalized promotion (2.05); (iii) financing, pricing, distribution and publishing of textbooks (2.08); (iv) pre-service and inservice training (Annex 4, 7); (v) effectiveness of policy changes (Annex 4, 14); (vi) MIS system to collect and analyze data.	(i) study completed (1988); No report found (ii) Division of Planning, MOE (1987) "Report on the study of the implementation of the promotion policy." (doc. # F23824) (iii) Rapport Bangladesh Ltd. (1988). "Study on universal primary education textbook policy" (doc. # F19987) (iv) S. Rehman (1986). "Profile of primary teachers" (doc. # F00548) M. Haque (1986). "Teacher Effectiveness" (doc. # F00549) (v) not initiated Also A. Jabbar (1986). "Survey of Unemployed PTI graduates" (BBEIS) (doc. # F00550)
ASIA	Bhutan CR 1899-BHU	1988	<u>Primary Education</u> . Within the educational administration component there will be studies to assess the effectiveness of the extended classroom program (i) ability of program to encourage community involvement, and efficiency as feeder schools; (ii) understand needs of female students and, to encourage their attendance; (iii) effectiveness of using English as medium	Studies to be scheduled later in project period.

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
ASIA	China CR 1297-CHA	1983	<p>of instruction (para.2.26 p.13 Annex 8) <u>Agricultural Education and Research</u>. Establish high priority agricultural objectives and areas of research focus.</p> <p>(ii) Manpower study to assess future agricultural needs and develop manpower planning strategies.</p> <p>(iii) Pre-investment studies for future project</p> <p>(iv) Tracer studies of agricultural graduates (paras. 3.22-4 pp.29-30).</p>	Studies completed.
ASIA	China CR 1671-CHA	1986	<p><u>Provincial Universities</u>. Specialists to prepare reports on project implementation, mid-term review and 1995 evaluation (para. 3.20 p.31).</p>	Bi-annual meetings of Chinese and foreign experts to review project implementation. Last review 10/89. Reports of evaluation reviews in Asia files "Supervision reports.
ASIA	China CR 1411-CHA	1984	<p><u>Polytechnic/Television University Project</u>.</p> <p>(i) Tracer studies of graduates (para. 33 p.10)</p> <p>(ii) Pre-investment studies for future projects (para. 35 p.11).</p>	<p>(i) Tracer studies being undertaken as part of preparation of completion report.</p> <p>(ii) No pre-investment studies undertaken.</p>
ASIA	China LN 2444-CHA	1984	<p><u>Second Agricultural Education</u>. Tracer survey of graduates and project progress to be reviewed annually (para. 34 p.13).</p>	No information supplied.
ASIA	China CR 1551-CHA	1985	<p><u>Second University Development Project</u>. Three studies: (i) to introduce a system to monitor minimum University standards,</p> <p>(ii) to study existing national examination to improve its accuracy in predicting academic success,</p> <p>(iii) study of management of overall system of higher education (para. 33d p.11). [also to sponsor 35 unspecified subprojects].</p>	Three studies carried out by Chinese experts. Oral reports were given and taken into account when designing new policies and procedures. Bank did not demand the results.

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since 1982.

Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
ASIA	China CR 1908-CHA	1988	<p><u>Teacher Training Project</u>. Three studies to be completed by September 1990: (i) cost effectiveness of delivery systems for teacher training;</p> <p>(ii) training of dual subject teachers, effectiveness and cost-saving advantages;</p> <p>(iii) methods to increase female participation in teacher training system (para.2.8 p.13)</p>	<p>(i): TOR prepared and study team formed.</p> <p>(ii) and (iii): Task forces being organized to draft TORs.</p>
ASIA	India LN 3045-IN	1989	<p><u>Vocational Training Project</u>. There are a number of components to improve the planning and management of the National Vocational Training System: (i) monitoring and evaluation system between states will trace employment outcomes and financing of programmes;</p> <p>(ii) Central Staff Training and Research Institute will conduct studies to evaluate the self-employment scheme of the project(Dec 1994)</p> <p>trace Industrial Training Institute certificate holders in the labor market (Sept 1995),</p> <p>study the quality of ITI instruction (Dec 1994) and to review the accreditation standards of ITI (July 1995).[para. 2.23-2.28 pp.23-25].</p>	No studies yet initiated.
ASIA	Indonesia LN 2101-IND	1982	<p><u>Second Teacher Training</u>. Series of inter-related studies:</p> <p>(i) integration of schools and colleges:</p> <p>(ii) expansion of secondary teacher training colleges;</p>	No information supplied

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
ASIA	Indonesia LN 2355-IND	1984	<p>(iii) efficiency operation of schools and colleges;</p> <p>(iv) effects of educational restructuring on teacher training (para. 3.10 p.38).</p> <p>Establish monitoring system: Numbers of teachers with training, knowledge of teachers, use of training by teachers, effects on student achievement, effects on placement of teachers. (3.21, 43)</p> <p><u>Second Nonformal Education.</u> Studies in:</p> <p>(i) mechanisms for local financing of nonformal education;</p> <p>(ii) national system to test literacy and skill acquisition;</p> <p>(iii) economic and financial analyses of village-based nonformal education programs;</p> <p>(iv) study of volunteer incentive patterns;</p> <p>(v) development of BPKBs, SKBs, and BPMs training centers.</p>	No information supplied
ASIA	Indonesia LN 2547-IND	1985	<p>Sundry evaluation components(para. 2.28 p.16).</p> <p><u>Second University Development.</u> No research component.</p>	
ASIA	Indonesia LN 2992-IND	1989	<p><u>Tree Crops Human Resource.</u></p> <p>No research components</p>	
ASIA	Indonesia LN 2102-IND	1982	<p><u>Second Textbook.</u> Establish database to monitor textbook use, quality and effectiveness (3.12 p.14)</p> <p>(ii) Evaluate how changes in quality and cost</p>	<p>The following studies were found:</p> <p>"Decentralized book distribution using regional centers" (1985) (doc. # 355.112)</p> <p>"Curriculum improvement and textbook development</p>

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
			of printing and paper affect longevity of book use (3.09, 13)	program." (1986) (doc. # 339.117)
ASIA	Indonesia LN 2290-IND	1983	<u>Polytechnic II.</u> (i) Extend the existing study of financial and administrative schemes to retain university teaching staff, to cover polytechnic teaching staff (para. 2.13 p.15); (ii) conduct studies to determine management skills requirements and establish information system within polytechnic system (2.21 20); (iii) feasibility studies and identification for other projects; (iv) study shortage of technical teachers	"Feasibility study on the future organizational structure of the ITP within the MOEC." (1984) (doc. # 330.296) No information supplied.
ASIA	Indonesia LN 2341-IND	1983	<u>Third Agricultural Training.</u> Management strengthening through: (i) evaluation of training programs and tracer study of graduates; (ii) surveys of qualifications and technical skills of agricultural manpower; (iii) development of curricula for agricultural training programs; (iv) development of training programs and needs (para.28 p.9) [costs: Annex 8 p.3]	No information supplied.
ASIA	Indonesia LN 2472-IND	1985	<u>Secondary Education and Management Training.</u> Studies include: (i) comprehensive training needs assessment; (ii) management study of MEC;	(i) P.Hasfarm. "Training needs assessment Study" Oregon State University (doc. # 338.433) (iv) Instructor training and extension studies for PKG English language instructors (doc. # 434.202)

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
			(iii) tracer study of secondary school graduates' performance in the labor market;	and
			(iv) evaluation impact study to cover training of teachers and managers, production of equipment prototypes, and equipment distribution (para. 38 p.12).	A. Starrit "Assessment of, and assistance to, Math educators." (doc. # 433.600)
ASIA	Indonesia LN 2599-IND	1986	<u>Science and Technology Training</u> . Project designed to strengthen country's research and development capacity. No research components. Feedback seminars for returning fellows to investigate relevance of program to country needs.	No information supplied.
ASIA	Indonesia LN 2705 IND	1986	<u>Manpower Development and Training</u> . (i) Labor market studies in key fields (employment of women, youth training etc) as part of labor market information system (para. 2.05 p.12). (ii) Improve manpower policies for Repelita V (Annex V). (iii) Tracer studies and evaluation of instructor training programs (para. 2.18 p.15) (iv) Tracer studies of trainees and data cost effectiveness (para. 2.28 p.17).	(i) Report on the findings of the July 1984 industrial survey. (doc. # E00069); (iii) D. Clark (1985). "Tracer study of BKLI graduates" (doc. # E00071); also Indonesia MOE (1986). "Manpower Planning and Labor Market Information System" (doc. # E00052)
ASIA	Indonesia LN 2940-IND	1988	<u>Accountancy Development Project</u> . Evaluation component only through Coordinating Agency for Accountancy Development (para. 2.41 p.27 Annex 6).	(i) TOR drawn up for accounting manpower study. (doc. # F27309)
ASIA	Indonesia LN 2944-IND	1988	<u>Higher Education Development Project</u> . Eight major education sector planning and management	No information supplied.

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
ASIA	Korea LN 2427-KO	1984	<p>studies focussing on;</p> <p>(i) higher education costs and financing;</p> <p>(ii) promotion of efficiency and quality in teacher training;</p> <p>(iii) reform of accreditation procedures;</p> <p>(iv) the transferability of semester credits... (para. 2.13 p.21)</p> <p><u>Programme for Science and Technology Education.</u> Study future development of graduate study in science and technology (1984-5) (para. 2.03 p.10).</p>	<p>Completed 1985.</p> <p>(i) "Study on the expansion plan of research facilities in graduate education" Prepared by: Study Team (1986); (doc. # E05825)</p> <p>(ii) Korean Council of University Education "Evaluation of Science and Engineering Education at Undergraduate and Graduate Levels in Korea." (doc. # E05827)</p>
ASIA	Korea LN 3037-KO	1989	<p><u>Technology Advancement.</u> No research component.</p>	
ASIA	Lao PDR CR 2001-LA	1989	<p><u>National Polytechnic Institute.</u> Studies and evaluation to assess:</p> <p>(i) higher education programs (technical and vocational) to improve efficiency;</p> <p>(ii) efficiency of secondary education as preparation for higher education;</p> <p>(iii) tracer study of NPI graduates;</p> <p>(iv) examine external efficiency of NPI program (technical quality of graduates, salary level of graduates, market perception of graduates).</p>	<p>No studies initiated.</p>

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
ASIA	Malaysia LN 2145-MA	1982	<p>(v) Program content evaluated to ensure international relevance (para 3.12 p.20 Annex 14).</p> <p><u>Industrial Training.</u> Short-term training on-the-job courses to be assessed along with incentive schemes to encourage industry to adopt such programs.</p> <p>Feasibility studies for future projects (para. 3.17 p.25).</p>	<p>(i) Short term innovative training schemes not carried out;</p> <p>(ii) Study of incentive schemes - double tax deduction tried, but considered unsuccessful;</p> <p>(iii) study for future development of industrial skill development completed 1986 - findings credited as important in the development of the National Vocational Training Council. Report available from Malaysian Government.</p>
ASIA	Malaysia LN 2987-MA	1989	<p><u>University Development Project</u> No research components.</p>	
ASIA	Malaysia LN 2601-MA	1986	<p><u>Second Industrial Training.</u> No research component.</p>	
ASIA	Malaysia LN 2685-MA	1986	<p><u>Primary and Secondary Education.</u> Studies to include:</p> <p>(i) an analysis of the relationship between teacher attributes and teacher effectiveness;</p> <p>(ii) an analysis of the management and effectiveness of school facilities;</p> <p>(iii) school mapping for two states;</p> <p>(iv) an analysis of the interaction between socio-economic and environmental factors, input ratios and student achievement;</p> <p>(v) an analysis of the national integration process in the education setting.</p> <p>(vi) Also to analyze educational media service,</p>	<p>Final version of all studies to be collected by the supervisory mission, December 1990.</p>

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
			textbook loan scheme, evaluation system;	
			(vii) and to conduct tracer studies on polytechnic and technical school graduates (para 3.12 p.22).	
ASIA	Malaysia LN 2887-MA	1988	<u>University Development Project</u> . Component to improve University management, to design and introduce performance indicators such as unit costs, resource utilization (para. 2.13-17 p.15 Annex 6).	Activities as detailed in original project documents not conducted in manner originally envisaged. However, studies are being used to develop the Sixth Malaysia Plan, and for strategic management plans for the 1990s.
ASIA	Maldives CR 1981-MAL	1989	<u>Education and Training Project</u> . (i) a labor strategy drawing on previous research material; and	Studies not initiated.
			(ii) a study of teacher recruitment, training and deployment. (para 2.8, p. 17 - Annex 3).	
ASIA	Nepal CR 1198-NEP	1982	<u>Second Educational (Technical and Vocational)</u> . Feasibility studies in: (i) secondary education; (ii) nonformal and adult education (para. 2.11 p.16). (iii) Evaluation studies on outputs of project centers and relevance to industry's needs. (iv) Tracer study of graduates (2.12 16).	(i) and (ii) not initiated; (iii) bi-annual progress report of Pokhara campus only; (iv) available in Nepali.
ASIA	Nepal CR 1534-NEP	1985	<u>Agricultural Manpower Development</u> . No research components.	Confirmed.
ASIA	Nepal CR 2044-NEP	1989	<u>Engineering Education</u> . No research component.	Confirmed
ASIA	Nepal CR 2047-NEP	1989	This was an <u>emergency relief loan</u> for school rehabilitation. No research component.	

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
ASIA	Nepal CR 1463-NEP	1984	<p><u>Primary Education.</u> Survey of primary schools in 20 other districts.</p> <p>(ii) Study teacher education to improve training programs.</p> <p>(iii) Evaluation surveys (paras. 3.33-6 p.16).</p>	<p>(i) Base-line data for Project schools (1985 Phase) - discusses impact of project in terms of student enrollment, drop-out and survival rates. EU-PEP 1989;</p> <p>(ii) Evaluation report on materials training workshop - Central level preparation and testing - provides information on effectiveness of Educational Materials Training. EU-PEP 1989;</p> <p>(iii) Evaluation strategies for proposed Primary Education project - discusses institutions and data gathering process in education sector. EU-PEP 1989</p> <p>(iv) Evaluation of materials training workshop for field coordinators and resource persons.</p> <p>(v) Primary Education Project - an interim evaluative study report (draft). CERID 1988</p> <p>(vi) Evaluation of district level PEP training - Impact of training on teacher's professional knowledge.</p> <p>In process: Impact of training on teacher's classroom behavior; Impact of PEP inputs on student achievement</p>
ASIA	Papua New Guinea LN 2395-PNG	1984	<p><u>Secondary Education.</u> (i) Study to review the relationship between upper secondary education and middle and higher level employment to recommend expansion rates and future curriculum options;</p> <p>(ii) review relationships between primary, secondary and higher education (para. 2.04 p.14).</p> <p>(iii) Evaluation studies: teacher attrition, and inter-school transfer of teachers;</p>	<p>(i) and (ii) status unknown;</p> <p>(iii) Status report on the in-service B. Ed (1985) (doc. # 434.010);</p> <p>(iv) Report on National Grade 6 Examinations as a predictor of Grade 10 certificate performance. (doc. # 434.009);</p> <p>(v) Study on textbook impact - Evaluation II (1986) (doc. # 434.113) and Textbook development report (doc. # 434.112)</p>

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
			(iv) analyze student performance in Grade 10 examination; (v) impact of textbooks; (vi) use and impact of new teachers; (vii) progression rates from Grade 8 to Grade 9 (Annex 9)	Also: M. Olsen, J. Wasilewski and E. Apelis (1986). "The coordination, development and implementation of non-formal education in PNG."
ASIA	Philippines LN 2200-PH	1983	<u>Vocational Training</u> . No Research component.	Confirmed.
ASIA	Solomon Islands CR 1212-SOL	1982	<u>Primary Education</u> . Conduct studies on issues in the education sector (para.3.15 p.20). (ii) Evaluation surveys to consider increased enrollments; (iii) increase in fully trained teachers; (iv) methods of distribution and effectiveness of textbooks; (v) numbers of in-service courses conducted (3.14 20).	C. Currin (1986). "Curricular development and teacher training: A review." (doc. # 433.126)
ASIA	Solomon Islands CR 1686-SOL	1986	<u>Secondary Education</u> . Studies on (i) teacher utilization and incentives; (ii) in financing of education (due June 1987) (para. 2.09 p.12).	No information available.
ASIA	Sri Lanka CR 1698-CE	1986	<u>Second Vocational Training Project</u> . (i) Study economic and financial costs and benefits of publicly financed construction industry training (due Sept 1987)(para 2.03 p.13). (ii) Four tracer studies to cover demographic details of graduates (para 2.23 p.20).	(i) Cost study carried out during 1987 -reviewed during 12/88 supervision mission. People's Bank Research Department (1987). "Study on financing of ICTAD supported training programmes: Part 1" (doc. # F13102)

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
ASIA	Thailand LN 217B-TH	1982	<p>(iii) Implement training needs assessment model</p> <p><u>Sixth (Secondary) Education.</u> Undertake study on incentives for rural teachers (para. 3.11 p.26)</p> <p>Three areas for studies: (i) vocational and technical educational and manpower needs;</p> <p>(ii) preservice and in-service teacher training;</p> <p>(iii) educational planning.</p> <p>(iv) Provision for other studies (3.18, 31).</p>	<p>(ii) Training study #1 received; study #2 due May 1990. Institute for Construction Training and Development (ICTAD) (1988). "Fourth tracer study of graduates." (doc. # F19220)</p> <p>(iii) Training needs assessment carried out; model developed. Initial run data factored into ICTAD training program planning. R. Whitlock (1985). "Draft final report on training needs assessment for management training." (doc. # F01024)</p> <p>also:</p> <p>Consultants in Technology, Management and Development (1988). Training needs assessment for craftsmen, mechanics and operators in the construction industry." (doc. # F21842)</p> <p>M. Fernando (1989). "Training and employment needs of women in the construction industry of Sri Lanka." (doc. # F35771)</p> <p>Completed.</p> <p>(i) C. Buripakdi (1987). "Models for the development of technical teachers in Thailand." (doc. # F16905)</p> <p>(ii) MOE (1988). "Research for planning educational resource distribution." (doc. # F16906)</p> <p>(iii) MOE (1988). "A study of the improvement of vocational and technical programmes for formal and non-formal education." (doc. # F16907)</p> <p>(iv) NESDB (1985). "Long term projection of the labour supply." (doc. # F16911)</p> <p>(v) NESDB (1986). "Manpower planning in the public sector." (doc. # F16915)</p>

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
ASIA	Vanuatu CR 1694-VA	1989	<p><u>Primary and Secondary Education.</u> Studies in: (i) the financing of education</p> <p>(ii) teacher incentive systems (salaries, recruitment, teacher deployment etc) (Para 3.14 p.17)</p>	<p>(vi) MOE (1987). "Production and utilization of teachers." (doc. # F13375)</p> <p>Studies not initiated.</p>

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
EMENA	Algeria LN 2977-AL	1988	<p><u>Vocational Training Project</u>. Three separate studies: (i) graduate employment monitoring system (para. 2.14 p.17);</p> <p>(ii) strengths and weaknesses of apprenticeship training (para. 2.16 p.18);</p> <p>(iii) training institution's production for private sector (para.2.21 p.18). Studies due Dec 1989.</p>	<p>The total TA package consists of 10 operations. The consultants shortlist has been approved by the Bank. The total package (including training abroad) will be contracted to a single consultant. A timetable for implementation has been agreed upon; select consultants 01/90; TA operations to start 04/90 and to be completed 10/93.</p> <p>Ministere des Industries Legeres (1988). "Etude faisabilite d'un Projet d'Institut National et de Centre de Formation Technique pour les metiers de l'artisanant." (doc. # H18172)</p>
EMENA	Egypt LN 2664-EGT	1983	<u>Vocational Training</u> . No research component.	Confirmed.
EMENA	Egypt LN 2594-EGT	1985	<u>Third Vocational Training</u> . Sector wide manpower needs study as basis for comprehensive training policy (para. 2.21 p.17).	This study is under implementation and should be available by Sept 1990.
EMENA	Jordan LN 2068-JO	1982	<u>Fourth Education</u> . Tracer system to analyze graduates of project institutes (para. 2.31 p.18).	MOE and MOHE are developing their tracer systems. VTC has established the initial stage of its tracer system.
EMENA	Jordan LN 2378-JO	1984	<u>Sixth Education</u> . "Provide 48 months of specialist services for feasibility studies." (para 2.11 p.11). [strengthen teacher training; develop educational planning]	A planned pre-investment study under this project has been superceded by the provisions of the 1987 National Education Conference Report which recommended and provided guidelines for a general reform of education, and subsequent Government request of, and Bank support for, LN 3106
EMENA	Jordan LN 2246-JO	1983	<p><u>Fifth Education</u>. (i) Reinforce tracer studies of vocational training graduates by expanding to include 15 project GVSSs;</p> <p>(ii) technical assistance for pre-investment studies (para. 2.11 and 2.19 p.13 and 15).</p>	<p>(i) follow-up studies have been conducted on graduates of nurse training programs using tracer systems being developed under LN 2068 (ED. IV). The tracer system is currently being evaluated and refined.</p> <p>(ii) No information available</p>
EMENA	Jordan LN 2633-JO	1986	<u>First Manpower Development</u> . Tracer system	MOH has begun development of its tracer system on

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
EMENA	Jordan LN 2890-JO	1988	<p>established under the Fourth Project to analyze job placement and performance of graduates of Irbid NPITI to be extended to cover all MOH paramedical institutions.</p> <p><u>Seventh Education Project.</u> Strengthen technical capacities of Directorate of Examinations and evaluate impact of project inputs; (teacher upgrading, instructional materials school facilities) on student achievement (para. 3.15 p.18).</p> <p>(ii) evaluate Teacher Resource Center</p> <p>(iii) Conduct studies on relevance of higher education to labor market;</p> <p>(iv) financing of students abroad,</p> <p>(v) effectiveness of community college programs (para 3.17 p.19).</p>	<p>a sample of graduates from 1975 onwards. Refinement of the system is still in progress.</p> <p>Vocational training Corporation (1986). "Manpower Survey in Jordan" (doc. # H09709)</p> <p>(i) Work delayed due to basic and secondary educational reform measures. Proposed assessment to start 01/90.</p> <p>(ii) Baseline assessment scheduled for early 1990</p> <p>(iii) and (iv): the Government is preparing a reform of higher education under which these will be covered;</p> <p>(v) completed in 1989 - no document found.</p>
EMENA	Jordan LN 3106-JO	1989	<p><u>Development of National Center for Educational Research and Development (NCERD)</u> to monitor and evaluate project, provide feedback for design modifications, and to develop into a center for excellence in educational research. To be fully staffed by March 1990. Completed studies to be submitted to Bank for review and comment (para 3.46-9 p.28-9, and Annex 1.2).</p>	<p>Project not yet initiated.</p>
EMENA	Morocco LN 2149-MOR	1982	<p><u>Fifth Education.</u> Unspecified future project studies and architectural fees (para. 2.14 p.12).</p>	<p>Studies carried over to FY86 Education Sector Reform Program.</p>
EMENA	Morocco LN 2479-MOR	1985	<p><u>Vocational Training.</u> Evaluate experience of two mobile training units (para. 2.12 p.14);</p> <p>(i) study on vocational training coordination</p>	<p>(i) No information available;</p> <p>(ii) "Etude sur la definition d'une strategie de developpement de la formation des apprentis."</p>

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
EMENA	Morocco LN 2664-MOR	1986	<p>(2.16(a)(iii) 15);</p> <p>(iii) policy options for financing of future vocational training activities;</p> <p>(iv) pre-investment studies (2.16(a)(iv)).</p> <p><u>Education Sector Reform Program.</u> Studies to be conducted to develop new activities in:</p> <p>(i) standardized achievement testing;</p> <p>(ii) diagnostic testing;</p> <p>(iii) remedial instruction;</p> <p>(iv) multi-grade teaching;</p> <p>(v) in-service teacher training;</p> <p>(vi) career guidance counseling;</p> <p>(vii) diversification of university programs;</p> <p>(viii) school maintenance;</p> <p>(ix) achieving economies in secondary school building (para. 4.19a(iv) p.38 Annex C).</p>	<p>(doc. # H19957)</p> <p>(iii) "Etude de coordination et de financement de la formation professionnelle." (1986) (doc. # H11611-3; H26998-27000)</p> <p>(iv) "Problemes et perspectives de coordination de la formation professionnelle " (1988) (doc. # H26995)</p> <p>The study on multigrade teaching (iv) has been completed. Studies on standardization of achievement testing(i), diagnostic testing (ii), remedial instruction (iii), continuing education and teacher upgrading (v), and strengthening of orientation and guidance function (vi) for which conclusions and recommendations have yet to be issued, are still quite relevant and the Bank will recommend that they be pursued under FY91 Secondary Education Project, currently under preparation.</p> <p>The study focussing on the roles and functions of non-teaching staff does not warrant further work at this time.</p> <p>The status and future of the four studies on Higher Education will be assessed when the Ministry of Education is ready to resume its discussion with the Bank on post-secondary education.</p> <p>The objective of the last study was to design a maintenance program and analyze construction costs for educational buildings. However, in order to keep the focus on the studies dealing with the quality of education, the Bank will not insist on its completion at this time.</p>
EMENA	Morocco LN 2779-MOR	1987	<p><u>Second Vocational Training Project.</u> The project includes provision for 60 man months of consultant services (para. 2.14 p.14) for the</p>	<p>(i) ongoing: completion expected early 1991;</p> <p>(ii) completed for electronic, textile and leather</p>

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
EMENA	Morocco LN 3026-MOR	1989	<p>following projects: (i) tracer system for vocational training graduates (due Feb 1990),</p> <p>(ii) industrial trade specifications (June 1988)</p> <p>(iii) job creation investment possibilities (Feb 1989),</p> <p>(iv) employment counseling system for voc. training (Feb 1989),</p> <p>(v) manpower needs in agriculture, construction (Feb 1989), tourism (Feb 1990), handicraft (June 1990), textile, and fisheries sectors (Feb 1989).</p> <p><u>Rural Primary Education Project.</u></p> <p>(i) measure the impact of textbooks;</p> <p>(ii) measure the impact of teacher training on learning - using standardized learning tests as a medium of interpolation.</p> <p>(iii) School mapping project also to be established (2.23 p.18).</p>	<p>industry: ongoing for other sectors.</p> <p>"Etudes sectoriels: etude textile habillment; bilan technique et financier; etude artisanant" (1989) (doc. # H20393);</p> <p>(iii) and (iv) not yet initiated;</p> <p>(v) completed in construction, textile, administration. Other sectors under preparation.</p> <p>"Etude de l'adequation entre la formation professionnelle et l'emploi" (1985) (doc. # H21310)</p> <p>Loan became effective 11/89.</p>
EMENA	Oman LN 2419-OM	1984	<u>Second Education.</u> No research component.	Confirmed.
EMENA	Oman LN 2799-OM	1987	<u>Third Education Project.</u> No research component. Strengthen management information capacity; Evaluation report.	Evaluation report not found.
EMENA	Pakistan CR 1602-PAK	1985	<p><u>Second Primary Education.</u> (i) Pre-investment studies;</p> <p>(ii) review of pre-service teacher training;</p> <p>(iii) project preparation studies;</p> <p>(iv) completion study (para. 2.13 p.10).</p>	Partially completed. FCU/PNE Wing, MOE (1988) Research evaluation studies under PEP2 (doc. # H22574)

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
EMENA	Pakistan CR 1670-PAK	1986	<p><u>Second Vocational Training.</u> Studies to focus on: (i) cost recovery and financing of vocational education;</p> <p>(ii) women's training and employment opportunities;</p> <p>(iii) financial compensation schemes and training in private enterprise;</p> <p>(iv) rural apprenticeship programs;</p> <p>(v) survey of industrial sector needs (para. 2.17 p.16 Annex 8) (due Dec 1988).</p>	Studies not initiated.
EMENA	Pakistan CR 1821-PAK	1987	<p><u>Third Primary Education.</u> Study to review non-monetary incentives to rural teachers (para 3.24 p.24) (due 1989);</p> <p>(i) review possible methods of reorganizing teacher career system (para 3.25 p.24)(Dec 1988</p> <p>(ii) conduct surveys of Government Colleges for Elementary Teachers to establish physical repair system;</p> <p>(iv) study on teacher performance related to teacher training certification (Annex 6 p.7).</p>	Studies not initiated.
EMENA	Portugal LN 2456-PO	1984	<p><u>Manpower Training and Development.</u> Self evaluations by: professional engineering development center; National Institute of Administration; project Skill Training Centers; and project tourism centers.</p>	<p>(i) There have been considerable delays in the implementation of this project. Both the professional engineering development center and the skill training components have been cancelled as part of the loan. INA delayed. Tourism not yet ready for student intake</p> <p>(ii) not initiated</p>

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EMENA	Portugal LN 2867-PO	1988	(ii) Tracer study of first and second class graduates (para. 3.25 p.29). <u>Technology Education Credit</u> . Evaluation of project to introduce computers to 40 secondary and 10 primary schools, due March 1994 (para 2.27, p.20)	Not yet initiated.
EMENA	Tunisia LN 2230-TUN	1983	<u>Fifth Education</u> . Agricultural education studies: (i) analyze agricultural manpower stocks; (ii) determination of content and orientation of technical training of instructors; (iii) evaluation of agricultural education and training programs (para. 2.04 p.13). (iv) Studies of technician level training for industry: (a) assess infrastructure; (b) evaluate feasibility of intervention (para. 2.25 p.18).	General comment: There seems to be a reluctance to evaluate, especially when using control groups. Diagnostic part of studies completed by the end of 1988. Conclusions and recommendations unlikely to become available given the fact that the study is three years behind schedule; momentum seems to be lost. Studies of technician level training for industry completed. TORs and outlines of proposed projects available in docs # 350.016 (a) - (f). (iii) Ministere d'Agriculture (1988). "Adequation formation: emploi dans le domaine agricole." (doc. # H17138-44)
EMENA	Tunisia LN 3054-TUN	1989	<u>Education and Training Sector Loan</u> . No research component.	Studies not yet initiated.
EMENA	Turkey LN 2399-TU	1984	<u>Industrial Training Project</u> . Future project development component (para. 2.14(d) p.13).	Project proposal completed. Also available in files: "Research on the existing post-secondary school system and its implications for the YOK/MB technician training project." Tekesis (1985) (doc. # 352.838)
EMENA	Turkey LN 2536-TU	1985	<u>Industrial Schools Project</u> . (i) Tracer study of graduates from four industrial schools (due Dec	(i) Completion date postponed to 12/92

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
			1989) [para. 2.06 p.12). (ii) DiVE to monitor promotion and repetition rates in schools; (iii) performance of staff in inservice programs and turnover rates of staff in schools (iv) provide final evaluation report. (v) Cost recovery survey (2.15 15).	(ii) no monitoring or promotion of repetition rates since 1989/90 is first year of operation; (iii) no study of staff performances in inservice programs due to staff shortages/constraints; (iv) evaluation report due 1992; (v) cost recovery survey delayed, but under contract.
EMENA	Turkey LN 2776-TU	1987	<u>Non-formal Vocational Training Project.</u> Evaluation study to include follow up of graduate employment experience (due June 1990) [para. 2.12 p.14 Annex 15).	Project suffered 2-year delay. No graduates before 1991.
EMENA	Turkey LN 2922-TU	1988	<u>Second Industrial Training Project.</u> No research component.	Confirmed.
EMENA	Yemen AR CR 1773-YAR	1987	<u>Teacher Training Project.</u> Pre-investment study at the Sana University's Faculty of to assess effectiveness of current training program (due July 1989)(\$0.6m). (ii) Study of building maintenance procedures (\$0.06m). (iii) Strengthening of Directorate of Teacher Training including establishment of information system to aid teacher recruitment and deployment (\$0.12m). (iv) Conduct review to consider fading out teacher incentives (due Dec 1990)(\$0.06m). (v) Evaluation to be carried out by July 1991.	Studies not yet initiated.

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
EMENA	Yemen AR CR 1340-YAR	1983	<u>Fifth Education.</u> (i) Evaluation of District Training Centers (para. 2.18 p.15). (ii) Evaluation and pre-investment studies for follow up projects (2.21 16)	(i) In progress - undertaken by ERDC (ii) completed by EDUCONSULT (no document found) Also: Abdu Ali Muhammed Qasim (1983). " Initial study concerning the establishment of the General Teacher's Institute." (doc. # 253.929 (A))
EMENA	Yemen AR CR 1203-YAR	1982	<u>Fourth Education.</u> Educational Research and Development Center to undertake four studies: (i) Establish system to measure productivity and efficiency of primary schools; (ii) study supply and retention of Yemeni teachers; (iii) review curricula for teacher training; (iv) educational facilities inventory (para. 2.06 p.12).	(i) and (ii) completed; (iii) in progress- scope of study enlarged. (iv) in progress (95% complete) Muhammed Al-Haj Khali (1981). "Preliminary comprehensive study on the current situation and development of curricula, and proposed program for Second Five Year Plan." (doc. # 253.071 (A))
EMENA	Yemen AR CR 1470-YAR	1984	<u>Sixth Education.</u> (i) Review: role of National Institute for Public Administration; NIPA educational and training programs; personnel and physical resources of NIPA. (ii) Evaluate "Special study of Education Administration and Finance." (iii) Implement feasibility studies (para 2.21 p.17).	(i) Completed by NIPA; (ii) completed and currently under Bank/IDA review; (iii) completed by EDUCONSULT 06/86.
EMENA	Yemen AR CR 1645-YAR	1986	<u>Technical Training.</u> No research component.	Confirmed.
EMENA	Yemen PDR CR 1222-YDR	1982	<u>Third Education.</u> Two studies: (i) manpower planning;	(i) To be completed by the ILO; (ii) completed and recently expanded to include the remaining governorates

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
EMENA	Yemen PDR CR F019-YDR	1984	(ii) schools inventory survey (para.2.21 p.15). <u>Fourth Education</u> . Future project preparation to design suitable criteria for planning and implementation of manpower training activities (para. 2.21 p.15).	No information available.

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
LAC	Bahamas LN 3004-BM	1989	<u>Second Technical and Vocational Training Project.</u> Establishment of a graduate tracer system by Dec 1989, to evaluate National Training Council and Bahamas Hotel Training College training programs (para 3.7 p.1 5).	Project just initiated. No studies begun.
LAC	Barbados LN 2688-BAR	1986	<u>Second Education and Training.</u> Study the formulation of cost saving and efficient use of facilities to cover: (i) the selection procedures for public examinations; (ii) the marketing output of the technical/vocational system; (iii) maintenance costs; (iv) areas of post-secondary education where savings can be realized (para. 2.06.b p.11) (due Dec 1986).	Completed. Government of Barbados. "Status of studies assessment of cost and financing." (doc. # G12215)
LAC	Brazil LN 2412-BR	1984	<u>Urban Basic Education.</u> (i) School mapping study (para. 3.16 p.19); (ii) Funding of pre-investment studies (para. 3.20 p.20); (iii) Projects in: teaching literacy Grades 1 and 2; (iv) techniques for training untrained teachers (para. 3.21 p.20); (v) increasing item for student learning; (vi) improving school level administration; (vii) monitoring and evaluation;	(i) Mapping exercises have been conducted throughout project life. "Studies" are revised annually by the Bank supervision mission (architect) (ii)-(vi): not initiated (vii) Joao Pinheiro Foundation has undertaken formative evaluation (project monitoring). Final summative evaluation is in planning phase; (viii) studies of direct and indirect cost of schooling have been commissioned by unit inside SEB. Some reports have been completed and are in LAC files (not found). Others related to indirect costs are under preparation.

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Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
LAC	Brazil LN 2366-BR	1984	<p><u>Subsector Project for Technician Training.</u></p> <p>(i) Expand and strengthen graduate tracer system (paras. 4.25-6 p.23);</p> <p>(ii) assess value of current evaluations of technician training system;</p> <p>(iii) assess pedagogical and cost-benefit aspects of "school-production" system (para. 4.18 p.18);</p> <p>(iv) regional manpower studies (para. 4.28 p.26)</p>	<p>(i) and (iv): studies ongoing but not completed (expected 06/90). Will make interesting methodological contributions to operational tracer studies and labor market studies, but are not likely to yield substance of general interest;</p> <p>(ii) and (iii): studies completed, but quality of reports does not merit wider distribution;</p> <p>also: Ministerio de Educacao/EDUTEK (1987). "Analysis of Technician Training Project" (doc. # G14997);</p>
LAC	Brazil LN 2489-BR	1985	<p><u>Project for Science and Technology.</u> No research component. Mid-term review due 1986.</p>	Confirmed.
LAC	Brazil LN 2810-BR	1987	<p><u>Skills Formation.</u> Studies and Evaluation division of the Manpower Secretariat to undertake studies on:</p> <p>(i) the cost-effectiveness of training;</p> <p>(ii) systematic guidelines for evaluating training will be introduced. No specific research component (para 4.28 p.24)</p>	Prolific number of studies - far more than indicated in the SAR. All are in various stages of completion. Copies attached.
LAC	Colombia LN 2192-CO	1983	<p><u>Subsector Project for Rural Basic Education.</u> Impact evaluation of program to compare efficiency and learning achievement between districts incorporated in the program and unincorporated districts (para. 4.36 p.29).</p>	Original objectives changed. Project completion report due 01/90.
LAC	Colombia LN 3010-CO	1989	<p><u>Second Primary Education Project.</u> Introduction of systematic testing to monitor the gains in primary education. Analysis of this data to be</p>	Project recently initiated. No studies begun.

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LAC	Dominican Rep. LN 2558-DO	1985	available through SIED (Integrated Information System for Education) [para.2.15 p.13]. <u>Vocational Training</u> . Study impact of training on graduate's employment, income and performance (para. 2.12 p.6).	Project cancelled.
LAC	F. Caribbean CR 1785-CRG	1987	<u>Regional Vocational and Technical Project</u> . Project includes: (i) establishment of a Labor Market Information System (para. 3.7 p.11). (ii) Feasibility studies aimed at cost-saving include: cost recovery on textbooks; (iii) training program services; (iv) merging some technical and skill courses (due Dec 1988) [para. 3.10 p.13].	Referred to LAC files. No information available.
LAC	Ecuador LN 2171-EC	1982	<u>Second Vocational Training</u> . Strengthening of educational planning management. No research components.	No information supplied.
LAC	Guatemala LN 3003-GU	1989	<u>Second Basic Education Project</u> . (i) Studies in use of local technologies in school construction (due June 1993); (ii) evaluation of curriculum changes in in-service teacher training program (due Dec 1989); (iii) evaluate standardization of student evaluations (due Dec 1989); (iv) review alternative approaches to improve pre-service teacher training (due Dec 1990); (v) develop new roles and responsibilities for supervisors (Oct1990) [para 3.13 p.17 Annex VI]	Project not yet effective; studies not initiated.

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LAC	Guatemala LN 2328-GU	1983	<p><u>Basic Education</u>. Studies to:</p> <p>(i) continue school mapping project;</p> <p>(ii) language planning;</p> <p>(iii) curriculum development planning;</p> <p>(iv) improvements in information base to cover teachers, administrators, and school physical facilities;</p> <p>(v) data collection to improve monitoring and evaluation systems. (paras. 3.26-32 pp.21-2)</p>	<p>(i)-(iv): Reports with results have not been received by the Bank.</p> <p>(v): Government decided not to initiate this study.</p>
LAC	Haiti CR 1305-HA	1983	<p><u>Basic Education Project</u>. Evaluation study to focus on: (i) classroom conditions;</p> <p>(ii) effectiveness of curriculum;</p> <p>(iii) effectiveness of production and distribution of educational materials;</p> <p>(iv) effectiveness of training and supervision programs.</p> <p>(v) Monitor effects of introduction of Teacher Charter, and reaction of private sector to educational reform (para. 4.33 p.31).</p>	<p>Studies carried out by Institut Pedagogique National and MOE:</p> <p>(i) L'Institut Pedagogique National (1980). "La reforme de l'enseignement primaire en Haiti - problemes de l'experimentation" (doc. # G04597)</p> <p>(ii) Rapport au Secretaire d'Etat a l'Enseignement Primaire et Professionnelle (1983). "Rapport sur la situation des classes d'application fonctionnant dans la cadre de la reforme." (doc. # G04659)</p> <p>(iii) L'Institut Pedagogique National (1986). "Evaluation of classroom results 1984-5." (doc. # G04728)</p>
LAC	Haiti CR 1592-HA	1985	<p><u>Fourth Education and Training</u>. Studies on:</p> <p>(i) possibility of training entrepreneurs;</p> <p>(ii) training needs of women in labor market;</p> <p>(iii) audiovisual program to encourage women to participate invocational education.</p>	<p>See LAC files - supervision reports.</p> <p>Documents relating to supervision mission 09/88 (doc. # G21957-75)</p>

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LAC	Honduras LN 2804-HO	1987	(iv) Strengthen public sector management to enable studies of teacher motivation (para. 2.11 p.9) <u>Rural Primary Education Management Project.</u> Project revolves around micro-planning of rural primary education. Diagnostic survey of six Departments (para. 2.06 p.9).	Two micro plans completed; Eight others in draft form being prepared by the Government. Ministerio de Educacion (1989). "Microplanes educativos de primaria por los distritos de Choloma, departamento de Cortes y Olanchito, departamento de Yoro." (doc. # G34349) also J. Prawda y L. Figueroa (1989). "Terminacion del proyecto Administracion de la Educacion Primaria Rural." (doc. # G34819).
LAC	Jamaica ON 2070-JM	1982	<u>Third Educational (Technical and Vocational).</u> (i) Pre-investment study on Primary Education learning materials (para. 3.15 p.18). (ii) Evaluation of each project institution using graduate tracer studies (3.14 18).	See LAC files. (ii) MYCD (1986). "Development and utilization of the tracer system for placement and follow-up of vocational and technical program institutes: Evaluation plan and guidelines." (doc. # G00360) [No document found for final study].
LAC	Jamaica LN 2899-JM	1988	<u>Education Program Preparation and Student Loan Project.</u> Studies of: (i) administrative organization and school cooperation; (ii) financial evaluation of secondary school reforms (emphasize unified lower cycle); (iii) determination of family incomes and student expenditures at higher education to determine appropriateness of loans, determination of unit costs of public education. (para.2.7 p.10 Annex VII).	See LAC files. (i) MOE (1988). "School maintenance study." (doc. # G16014); (ii) MOE (1988) "Study of student loan scheme." (doc. # G16018); (iii) CVs for unit cost study (1989) (doc. # G33899-900); for school administration study (doc. # G33901); for Reform of Secondary Education study (doc. # G33902); for Educational Planning study (doc. # G33904).

Research Components of World Bank Education Projects,
since 1982.

Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
LAC	Mexico LN 2042-ME	1982	<p><u>Technical Training.</u> Study of: (i) manpower estimates;</p> <p>(ii) cost-reduction measures;</p> <p>(iii) strategic training alternatives (para. 4.16 p.21).</p>	<p>No studies of general interest emerged from this project. The project documentation does contain material of interest for technical/vocational education (e.g. graduate tracer instruments)</p> <p>PCR 7136: para 5.12-13; page 37): CONALEP (National Agency for Professional Technical Education) "is establishing systems for collecting and processing data for evaluation, however while some pilot studies have been carried out, there are as yet no conclusive evaluations available for the countrywide training program. such evaluations will be fully implemented in the follow-up project."</p>
LAC	Mexico LN 2559-ME	1985	<p><u>Second Technical Training.</u> No research component.</p>	<p>Some information received on technical/vocational training</p>
LAC	Mexico LN 2876-ME	1988	<p><u>Manpower Training Project.</u> Project component to increase the capabilities of the Ministry of Labor and Social welfare to guide national employment and training policies.</p> <p>Studies to: (i) assess management of training;</p> <p>(ii) evaluate costs and benefits of inservice programs (para.3.7 p.13 Annex 4d).</p>	<p>Large program of studies underway. A comprehensive list of studies is in preparation. Studies include:</p> <p>(i) The labor market in the tourism and hotel sector and its training needs;"</p> <p>(ii) "Labor market conditions and training needs in the "maquiladora" (in-bond manufacturing) sector;"</p> <p>(iii) "The informal sector in Mexico and its training needs;"</p> <p>(iv) "Student flows in the national training and education system."</p> <p>Following documents available:</p> <p>"Informe de evaluacion tecnica y comercial de las propuestas recibidas para et estudio .. el mercado de trabajo en las actividades maquiladoras." (doc. # G34299-34303)</p>

Research Components of World Bank Education Projects,
since 1982.

Area	Country and Loan/Credit Number	Approved	Research Components	Current Status of Studies, including Completed Documents/Data
LAC	Paraguay LN 2373-PA	1984	<p><u>Second Vocational Training.</u> Studies of: (i) organizational structure of National Vocational Training Center;</p> <p>(ii) analyze alternatives to current budget allocational procedures;</p> <p>(iii) identify long-term funding sources to finance rural training activities;</p> <p>(iv) 17 studies on rural occupations and training requirements;</p> <p>(v) course evaluation (paras. 3.28-30 p.18).</p>	<p>TOR for "análisis de los flujos del Sistema Educativo Nacional" (doc. # G34285) and "diagnostico sobre la situación del empleo en el sector turismo y necesidades de capacitación sectorial" (doc. #</p> <p>No information supplied.</p>
LAC	Peru LN 2208-PE	1983	<p><u>Higher Agricultural Education.</u> Support for research facilities but no specific studies.</p>	<p>No information supplied.</p>
LAC	Peru LN 2465-PE	1985	<p><u>Primary Education (II).</u> (i) Study to analyze current school administrative and supervision practices (para. 4.09 p.19).</p> <p>(ii) Study on implementation of budgeting and accounting system (\$300,000)(4.32 26).</p>	<p>No information supplied.</p>

ANNEX 2

Research components of World Bank Education Projects, 1972-1982, completed after 1982

Research Components of World Bank Education Projects,
before 1982.

AREA	Country/Year Approved	Reported Status in 1982 Survey	Current Status of Studies	Available Documents/Data
AFRICA	Benin I 5/23/75	Study on impact of "training tax" due end of 1982. Tracer study of graduates from Skill Upgrading Center (Cotonou) not initiated.	No information supplied	
AFRICA	Benin II 4/22/82	Evaluation of textbook use and impact study not started because project was new at time of evaluation.	Still outstanding	
AFRICA	Botswana III 10/1/81	Tracer studies in progress.	No information on tracer studies supplied	
AFRICA	Burundi I 1/21/77	Evaluation of redistribution effects of Multipurpose Learning Centers to be included in a report to be completed by the Government within three months of the project closing date (6/30/83).	Study completed - financed through BRIDGES project.	
AFRICA	Burundi II 1/7/80	No progress in developing a formal tracer and evaluation system to date. Instructions had been sent by MOE to technical schools to follow-up on students placement.	No information supplied	
AFRICA	Ethiopia IV 5/2/75	Bank staff scheduled to visit Ethiopia to assist the government in reviewing the evaluation.	No information supplied	
AFRICA	Gabon II 11/18/74	Tracer study on employment of graduates expected after first graduating class from Port Gentil Upper Secondary Technical School. Education reform ongoing study.	No information supplied	
AFRICA	Gambia I 5/5/78	Study on health planning and manpower	No information available.	

Research Components of World Bank Education Projects,
before 1982.

AREA	Country/Year Approved	Reported Status in 1982 Survey	Current Status of Studies	Available Documents/Data
		aspects due Fall 1982.		
AFRICA	Guinea I 8/15/78	Evaluation of instructor training programs for vocational education underway.	No information supplied	
AFRICA	Ivory Coast III 11/16/79	Tracer studies of graduates from vocational institutes underway.	PCR 7266: p.13 As of 02/87, data concerning the placement of students was not available. The first graduates entered the labor market 12/86, and many probably did not find jobs for the first few months after graduation. It was considered difficult to judge the labor market reaction to graduates until after they had worked for a while.	PCR 7266
AFRICA	Kenya III 10/3/75	Evaluation of effectiveness of new curricula and teaching methods partially underway.	PCR 6712: p.38 A new educational structure was recommended in 1979 necessitating new directives for curriculum development. Future projects were expected to address this problem.	PCR 6712
AFRICA	Kenya IV 4/17/78	Craft training centers selected for evaluation of improved facilities on effectiveness of teachers. Program was underway.	The same PCR refers to Kenya IV. Although providing no indication of the effect of new facilities within the Craft Training Centers, the PCR suggests that with the support of NGOs continued to expand, though without central control.	
AFRICA	Kenya V 2/12/81	Preinvestment study on Business Education - work program and budget approved, May 1982.	No information supplied for Kenya V.	
AFRICA	Liberia I 3/9/72	Tracer study of students from project institutions and traditional schools in place and ongoing - no results.	Not known. Not included in PCR.	PCR 6775
AFRICA	Liberia III 4/8/77	Evaluation of effectiveness of science	Not known.	

Research Components of World Bank Education Projects,
before 1982.

AREA	Country/Year Approved	Reported Status in 1982 Survey	Current Status of Studies	Available Documents/Data
AFRICA	Madagascar II 10/19/76	and technology instruction of pupils from small village secondary schools - Evaluation of changes in education administration and management etc. Partial reports had been received from Task Force (May 1982).	Nothing further received.	
AFRICA	Malawi III 5/1/79	Tracer studies of graduates from TTCs, Technical schools and general secondary. Study had not been initiated. Study on financing of primary education textbooks not initiated. School mapping studies completed but no analytical document prepared.	(i) almost complete (ii) and (iii): completed (iii) School mapping project completed late 1983. "Its impact on equality was almost nil because, in the provision of primary classrooms, considerations regarding self-help potential, accessibility of sites, and availability of building materials overrode the concern for equity." PCR 8195: p17	Documents with Ministry of Education and Culture, Lilongwe PCR 8196
AFRICA	Malawi IV 2/18/81	Tracer study of Chancellor College post-graduate occupations not initiated. Overall education plan for Malawi due June 1983. PCR 8195 indicates 10 other studies (i) costs and durability of textbooks (ii) Evaluation of Second Ed. Project (iii) Primary school attendance survey (iv) Impact of increase in school fees on school enrollment (v) Evaluate Primary School Self-Help Construction Program (vi) Secondary School Develop't Guideline (vii) Costs and Efficiency of University	(i) and (ii) completed PCR 8195 (i) Study identifies lack of storage facilities as reason for destruction. Offers no information on suitability of books for curriculum or perspective on maintaining books (ii) Evaluation completed (iii) Study based on 1979 attendance. Offers no reason for poor attendance (iv) study limited; requires further consideration of cost recovery (v) study completed (vi) study provides information on	PCR 8195; p.16-21 para 4.07-4.26

Research Components of World Bank Education Projects,
before 1982.

AREA	Country/Year Approved	Reported Status in 1982 Survey	Current Status of Studies	Available Documents/Data
		(viii) Teacher needs - secondary school (ix) Proposal to create Malawi Institute of Management (x) Issues of financing and recurrent expenditure in Malawi	minimum size of boarding school (vii) provides comprehensive information on organization and content of teacher training, and conditions of service of teachers. No information on other studies.	
AFRICA	Mali II 6/24/77	Study of training of managers for employer's needs (National Institute for Management) not completed.	No information supplied.	
AFRICA	Mauritania I 1/14/74	Evaluation of programs of Maradou Toure and Nouakchott Vocational Training centers not completed.	No information supplied for either project.	
AFRICA	Mauritania II 2/10/82	Tracer studies of graduates from project institutions not started.		
AFRICA	Rwanda II 5/24/82	Evaluation of project components and development of education sector due in IDA review 4/30/83.	No information supplied	
AFRICA	Senegal II 12/27/74	Tracer systems to monitor students entering employment after lower-secondary education and entering upper-secondary schools after vocational training programs, not started.	No information supplied for either project.	
AFRICA	Senegal III 5/1/79	Evaluation of impact on student achievement of science technology centers of Senegal II not completed. Study of employment records of graduates of Technical TTC not started.		
AFRICA	Sierra Leone II 6/24/75	Tracer system to track graduates of	Not known.	

Research Components of World Bank Education Projects,
before 1982.

AREA	Country/Year Approved	Reported Status in 1982 Survey	Current Status of Studies	Available Documents/Data
		<p>secondary schools and TTCs of first and second projects implemented for trade schools only.</p> <p>Studies on ways to extend elementary education not begun.</p>	<p>Still not begun.</p>	
AFRICA	Somalia IV 1/15/81	<p>Evaluation of Nomadic Training Centers, and Community Education Centers was at discussion stage.</p>	<p>No information supplied</p>	
AFRICA	Sudan II 3/26/75	<p>Evaluation of Integrated Rural Education Centers due on completion of project.</p>	<p>No information supplied.</p>	
AFRICA	Swaziland III 10/30/79	<p>Preinvestment studies of primary school fees and expansion of vocational training not initiated as of June 1982.</p>	<p>Not carried out</p>	
AFRICA	Tanzania VII 6/2/80	<p>Preinvestment studies' TORs not received for IDA review by June 1982 (Due 3/31/81).</p>	<p>No information available.</p>	

Research Components of World Bank Education Projects,
before 1982.

AREA	Country/Year Approved	Reported Status in 1982 Survey	Current Status of Studies	Available Documents/Data
ASIA	Bangladesh IV 5/27/80	<p>Project evaluation to determine: provision of female teachers on female enrollment;</p> <p>increased teacher training on student achievement;</p> <p>supervision on absenteeism;</p> <p>parent-teacher contact on drop-out rates;</p> <p>teacher assistants and their impact on costs all recently started.</p>	<p>A summative evaluation did not comment on.. the extent to which the provision of uniforms, the number of female teachers, and the increased contact between parents and teachers helped to boost student enrollment.</p> <p>(i) Supervision: unknown affect on absenteeism.</p> <p>(ii) Teacher training: teachers not applying better training</p>	<p>PCR dated Jan 23 1990; Paras. 2.06; 4.07; 4.12</p>
ASIA	China II 3/5/82	<p>Agricultural manpower planning survey not started.</p> <p>Agricultural research system study not started.</p>	<p>No information supplied.</p>	
ASIA	Indonesia IV 4/17/76	<p>Evaluations of: external efficiency graduate employment, internal efficiency, and course demand not completed.</p>	<p>No information supplied.</p>	
ASIA	Indonesia IX 8/4/80	<p>Management Information System (MIS) to be established to track University graduate employment.</p>	<p>No information supplied.</p>	
ASIA	Indonesia V 5/2/77	<p>Evaluation of teacher training methods on teacher skills not completed.</p>	<p>(i) a Tracer and Monitoring study was completed 12/82</p> <p>Three follow-up studies:</p> <p>(a) the master teacher as a functional status for competent teachers</p> <p>(b) incentives for teachers in remote</p>	<p>PCR 6315: para 3.18, p.22</p> <p>Tracer and Monitoring study: "The status and deployment of teachers"</p>

Research Components of World Bank Education Projects,
before 1982.

AREA	Country/Year Approved	Reported Status in 1982 Survey	Current Status of Studies	Available Documents/Data
ASIA	Indonesia VII 12/7/78	Polytechnic graduate tracer studies not started. Issues in higher education (financing, student flow etc) contract under negotiation. Accounting manpower requirements report due end 1982. Study of Government accounting and auditing system due end of 1984.	areas (c) the appointment and placement of teachers No information supplied for Indonesia VII, VII, X, XI	
ASIA	Indonesia VIII 4/9/79	Tracer studies of graduates from schools affected by project not started.		
ASIA	Indonesia X 2/11/82	Evaluation of existing curricula, use of textbooks not started.		
ASIA	Indonesia XI 2/22/82	Study of national special education strategy and evaluation of training on teacher's knowledge, skills and attitudes, and student achievement not started. Tracer study of graduates from preservice institutions not started. Evaluation of teacher supervision programs not started.		
ASIA	Nepal II 1981	Tracer study of graduates from Pokhara and Pulchowk campuses just started.	No information supplied	
ASIA	Papua New Guinea II 11/18/80	Evaluation of impact of textbooks and curricula on primary school learning	No information supplied	

Research Components of World Bank Education Projects,
before 1982.

AREA	Country/Year Approved	Reported Status in 1982 Survey	Current Status of Studies	Available Documents/Data
ASIA	Philippines III 2/27/76	<p>efficiency: data collection underway.</p> <p>Study of increase in student achievement resulting from textbook provision started.</p>	PCR summarizes findings of complete studies (para. 20; p.8)	<p>PCR 6279</p> <p>Textbook Board Secretariat (1982). "The effects of the National Textbook Project on Student Achievement in Communication, Arts, Science, Mathematics, and Social Studies Summary"</p> <p>Operations Evaluation Department (1985). "Evaluation of a Completed Research Project: Textbook Availability and Educational Quality RPO 671-60"</p> <p>S. Heyneman, D. Jamison and X. Montengro. "Textbooks in the Philippines: Evaluation of the Pedagogical Impact of a Nationwide Investment." World Bank Report Series No.335</p>
ASIA	Philippines VI 11/20/79	Draft for evaluation of training improvement and employability of graduates under preparation.		Archives
ASIA	Philippines VII 5/29/81	<p>Household survey contracted to study determinants of educational participation.</p> <p>Study of education finance underway.</p> <p>Experimental delivery system in elementary education not initiated.</p>	Completed	Documents with Department of Education, Philippines.
ASIA	Solomon Islands II 1/24/82	Evaluation of textbook effectiveness not started.		

Research Components of World Bank Education Projects,
before 1982.

AREA	Country/Year Approved	Reported Status in 1982 Survey	Current Status of Studies	Available Documents/Data
ASIA	Thailand II 4/17/72	Study of all levels of agricultural education and training underway.	Four volume report on Veterinary Science Agricultural Education and Research and Extension Studies.	PCR 4563 (para 3.20; p.36)
ASIA	Thailand V 5/4/79	Study of adult education and tracer study of graduates from vocational education centers not completed.	<p>Eleven studies were undertaken including the tracer study, excluding adult education.</p> <ul style="list-style-type: none"> (i) Reduced instructional time (ii) Primary Education problems (iii) Models of Technical-Vocational Education (iv) Manpower study (v) Second IEA science study-unfinished (vi) Agricultural education study (vii) Vocational and Technical training (viii) Needs for and organization of an Educational Information System for Educational Planning and Development (ix) Education and Employment-tracer (x) Evaluation of Upper Secondary school curriculum (xi) Area Vocational training centers tracer study 	7284 (10.1-10.16; pp.131-160)
ASIA	Thailand VI 5/18/82	<p>Studies on rural teacher incentives; vocational and technical education; and tracer studies of graduates of project and non-project schools, all expected 1984/5.</p>		

Research Components of World Bank Education Projects,
before 1982.

AREA	Country/Year Approved	Reported Status in 1982 Survey	Current Status of Studies	Available Documents/Data
EMENA	Afghanistan II 11/22/76	Tracer study of secondary school graduates and teacher quality halted by "country situation."	Status unknown - documentation retired	
EMENA	Algeria V 2/11/80	Tracer study of students from project institutions (vocational education) not available since institutions had not been constructed.	No change.	
EMENA	Greece III 5/2/75	Evaluation of the efficiency and achievements of multilateral schools due to begin after schools have been in operation for a longer time period.	Institutional memory has been lost for both projects.	
EMENA	Greece IV 2/21/78	Tracer studies of students from vocational schools delayed by slow construction of institutions.		
EMENA	Jordan III 11/15/79	Construction of Saahab Training Complex not finished delaying tracer study of system. No information on effectiveness of community colleges.	(i) Limited staff in Tracer unit and difficulties in tracing male graduates after the end of their two year military service which follows their graduation inhibited development of tracer system; (ii) an evaluation mechanism was superceded by the establishment of a nationwide system for all community colleges	
EMENA	Jordan IV 11/17/81	Institutions not constructed - no tracer study results.	Both MOE and MOHE are developing tracer systems for their respective programs. The VTC tracer network, comprising center-based units and central service has been established and the unit has started analyzing the first survey results.	
EMENA	Morocco III 2/25/76	Evaluation of primary school education (including effect of meal programs on pupils) to be completed after project	Only preliminary evaluation of primary school curriculum was carried out in 1981	

Research Components of World Bank Education Projects,
before 1982.

AREA	Country/Year Approved	Reported Status in 1982 Survey	Current Status of Studies	Available Documents/Data
EMENA	Morocco IV 3/19/79	schools have been established for longer. Tracer system studies for project institutions to be completed October 1985.	Tracer studies never carried out.	
EMENA	Pakistan IV 3/15/79	Studies of teacher incentives; teacher training and pupil achievement; teacher supervision and absenteeism; teacher-parent contact and drop-out rates: all due December 1982.	Consultant responsible for studies died Studies not completed.	
EMENA	Pakistan V 2/10/81	Evaluation of external efficiencies (effects of training on enterprise) and internal efficiency (delivery system costs) conducted by UNDP experts. Report due September 1982.	No information available on status of studies.	PCR 8212
EMENA	Portugal I 4/3/78	Tracer system for technical training institutions under development. Evaluation of Integrated Center for Teacher Training programs expected after 1987 (first graduates).	Some tracer studies have been carried out on a limited scale	PCR 6925 para 4.21, p.31
EMENA	Portugal II 12/7/79	Tracer study for Agricultural Technician Training Institute to begin in late 1984, with admission of first graduates.	There were delays in the implementation and the first graduates have not been traced.	
EMENA	Tunisia III 6/18/75	Study of relationship between education/training and the labor market half completed in Feb. 1981 - the second half has been delayed.	Study carried out by UNESCO. Scope was limited to an inventory of training specialties. Did not assess labor market needs.	
EMENA	Tunisia IV 2/25/81	Study of employment prospects of graduates of vocational training institutes dependent on completion of institution.	Never initiated.	

Research Components of World Bank Education Projects,
before 1982.

AREA	Country/Year Approved	Reported Status in 1982 Survey	Current Status of Studies	Available Documents/Data
EMENA	Yemen AR III 4/27/79	Tracer study of graduates of Agricultural secondary Schools and Livestock Secondary School delayed until first intake has graduated.	Not completed. Neither the MDE nor CPO had the expertise to do this	PCR 8257; Annex 7
EMENA	Yemen AR IV 12/28/81	Evaluation of teacher trainee salary supplement fund in attracting teacher trainees into primary education - studies to start late 1982.	Evaluation completed, and teacher trainee supplement discontinued at Government request. Funds reallocated.	
EMENA	Yemen PDR II 11/10/78	Evaluation of vocational training centers - just started.	Completed	Government has documents.
EMENA	Yemen PDR III 2/25/82	Evaluation of commercial schools to begin 1985. Schools inventory study and manpower planning study -- consultants being selected.	(i) completed (ii) completed; Dec. 1984 (iii) manpower planning study being conducted by the ILO	(i) and (ii): Government has documents. Also: R. Thomas and P. Temporal (1984) "Investing in the future; a report on an inventory of educational facilities in PDR Yemen." Crown Agents for Overseas Governments and Administrations; Surrey, U.K. (doc. # 255422 (c))

Research Components of World Bank Education Projects,
before 1982.

AREA	Country/Year Approved	Reported Status in 1982 Survey	Current Status of Studies	Available Documents/Data
LAC	Argentina I 9/10/80	Tracer study of CONET (National Council of Technical Education) graduates halted by budgetary constraints. In process of seeking outside consultants.	No information supplied.	
LAC	Bahamas I 3/2/81	Evaluation of cost-effectiveness and employment impact of industrial and crafts training programs started.	PCR completed 12/30/88	
LAC	Brazil III 5/26/77	Collection of manpower data, study of vocational and employment guidance partially finished; however, inflation had eroded the available funds for projects.	Studies completed, but of limited scope and interest	PCR 7750; para 3.28-29 p.36 Docs. # G25852-G25867
LAC	Brazil IV 4/28/80	Evaluation of basic education curriculum in Ceara and Pernambuco; effectiveness of teacher training programs; school mapping studies; - all preliminary work completed.	Prodigious output in Portuguese. Most of the 9 Northeast States produced statistical information on coverage and achievement data, generally comparing project and non-project "municipios." Three states participated in Bank research.	Best collection of Portuguese language reports is found at the Fundacao de Pesquisa e Cultura in Fortaleza. Some 100 volumes exist covering 7 years of project activity. English language reports summarized in a forthcoming book by Harbison and Harushak. See also: J. Therrien y S. Pereira (1987). "Relatorio referente aos estudos: caracteristicas do Acordo concepcao e desempenho dos componetesdo programa." (doc.# G118469) Ministerio do Educuacao (1988). "Relatorio final do Edurural-NE" (doc. # G19082) UNESCO (1989). Completion report on the Northeast Basic Education project "Edurural." (doc. # G31625)

Research Components of World Bank Education Projects,
before 1982.

AREA	Country/Year Approved	Reported Status in 1982 Survey	Current Status of Studies	Available Documents/Data
LAC	El Salvador IV 5/21/79	Tracer study of San Miguel Technological Institute and evaluation of impact of school resources on student achievement not initiated.	San Miguel Technical Institute was deleted from the project.	
LAC	Guatemala II 1/30/76	School resources and mapping survey 30% complete. Study of poor urban area needs for primary education underway.	Neither study mentioned in PCR 5985. Secondary student tracer system abandoned due to changes in Government priorities.	PCR 5985
LAC	Haiti II 2/8/78	Tracer study of secondary vocational and Agricultural Training graduates postponed until schools built. Evaluation of teacher training effectiveness to begin in 1983. Preinvestment school mapping project unfinished.	No studies were carried out for a number of reasons: (i) rural teacher training college not built; (ii) studies of teacher effectiveness and book distribution not undertaken since later proved unsustainable after project implementation; (iii) school mapping remained unfinished because of urgency to build schools; (iv) delays in installing equipment prevented study of Radio Nationale; (v) Government moved to using creole negating need for language study.	PCR 6529; para. 2.12 p.10 Planning Unit (1981). "Localization des Ecoles Primaires." (doc. #261514)
LAC	Jamaica III 11/24/81	Evaluation of effectiveness of training activities pending implementation of project. Preinvestment study on impact of primary education learning materials underway. Study of trainee technicians pending project implementation.	PCR completed 3/27/89	

Research Components of World Bank Education Projects,
before 1982.

AREA	Country/Year Approved	Reported Status in 1982 Survey	Current Status of Studies	Available Documents/Data
LAC	Paraguay IV 4/28/81	<p>Study of: education evaluation system for primary education;</p> <p>compensation levels to attract qualified primary teachers to rural areas;</p> <p>improvement of textbook availability in rural areas;</p> <p>quality of instruction and its impact on student performance contracted out to OAS - due November 1983.</p>	<p>PCR Jar 1990 lists following studies:</p> <p>(i) National education evaluation system for primary school students to improve curriculum for primary education (completed 1983: some impact)</p> <p>(ii) compensation levels and other incentives required for attracting qualified primary teachers to rural areas (completed 1989: no impact)</p> <p>(iii) improvement of availability of primary textbooks in rural areas (completed 1984: some impac*);</p> <p>(iv) alternative designs and use of non-traditional construction methods for primary schools (completed 1989: no impact)</p> <p>(v) studies on current educational needs: nuclearization (1985: widely used) multigrade teaching (1986: widely used) in-service teacher training (1985: widely used)</p> <p>(vi) Tracer system (1984: no impact)</p>	
LAC	Uruguay I 5/25/78	<p>Survey of training needs (vocational education) in planning stage.</p>	<p>Survey completed 1982/3.</p> <p>Manpower training needs study enabled changes to be made in original training programs</p>	<p>PCR 7272; para 1.8 (1) p.4</p> <p>also: Ministerio de Trabalho (1987). "Relatorio relativo as relacao anual de informacoes sociais (RAIS-82)" (doc. # G25882)</p>

ANNEX 3

- Table 1: Distribution of studies by type and by region, 1982-1989, as a percent of studies within region
- Table 2: Distribution of studies and completion rates by size of commitments to research components, 1982-1989
- Table 3: Distribution of projects by size of commitments to research components, by year, 1982-1989
- Table 4: Commitments to research components per project and per planned study, by year (US\$ millions)
- Table 5: Commitments to research components per project and per planned study, by region (US\$ millions)

Table 1:
Distribution of studies by type and by region, 1982-1989, as a percent of studies within region

	EDUCATIONAL INPUTS	EDUCATIONAL OUTPUTS	LABOR MARKET STUDIES	FEASIB- ILITY STUDIES	COST AND FINANCE STUDIES	MIS AND STATISTICAL STUDIES	OTHER
ALL REGIONS	24.8	5.6	21.2	8.8	15.1	13.6	12.3
AFRICA	29.2	5.0	13.3	8.3	17.5	14.2	12.5
AF1	24.1	6.9	17.2	10.3	17.2	17.2	6.9
AF2	30.0	10.0	10.0	10.0	10.0	0.0	30.0
AF3	35.0	15.0	0.0	10.0	5.0	25.0	10.0
AF4	66.7	9.0	16.7	0.0	0.0	0.0	16.7
AF5	24.3	0.0	10.8	8.1	29.7	13.5	13.5
AF6	27.6	0.0	22.2	5.6	16.7	11.1	11.1
ASIA	23.6	8.9	23.6	9.8	12.2	8.9	13.0
AS1	15.0	0.0	20.0	5.0	20.0	10.0	30.0
AS2	20.8	16.7	20.8	16.7	8.3	12.5	4.2
AS3	7.1	14.3	28.6	21.4	14.3	14.3	0.0
AS4	0.0	25.0	75.0	0.0	0.0	0.0	0.0
AS5	32.8	6.6	21.3	6.6	11.5	6.6	14.8
EMENA	19.5	3.5	27.6	13.8	11.5	12.6	11.5
EM1	35.0	5.0	25.0	20.0	0.0	15.0	0.0
EM2	16.7	6.7	36.7	10.0	6.7	6.7	16.7
EM3	11.8	0.0	20.6	14.7	14.7	26.5	11.8
EM4	33.3	0.0	33.3	0.0	0.0	0.0	33.3
LAC	25.9	3.7	22.7	2.5	19.7	13.6	12.3
LA1	33.3	0.0	13.3	6.7	26.7	6.7	13.3
LA2	32.0	4.0	20.0	0.0	8.0	24.0	12.0
LA3	21.9	6.3	28.1	3.1	25.0	6.3	9.4
LA4	12.5	0.0	25.0	0.0	25.0	25.0	12.5

Table 2:
*Distribution of studies and completion rates by size of commitments
to research components, 1982-1989*

	Number of Projects	Planned studies	As percent of all studies	Completed Studies	Completion rate
Less than \$0.5 million	64	205	47.0%	78	38.0%
More than \$0.5 million	42	198	45.4%	98	49.5%
Not known/ not stated	10	33	7.6%	8	24.2%
Total	116	436	100.0%	184	42.2%

Table 3:

Distribution of education projects by size of commitment to research components, by year, 1982-1989

Year	Less than \$0.5 million	\$0.5 million to \$2 million	More than \$2 million	Not known/ not stated
1982	6	5	3	2
1983	10	4	2	0
1984	7	6	1	1
1985	9	3	1	0
1986	7	3	0	3
1987	6	3	1	2
1988	8	5	1	2
1989	11	2	2	0
Total	64	31	11	10
Percent	55.2%	26.7%	9.5%	8.6%

Table 4:
Commitments to research components per project and per planned study,
by year (US\$ Millions)

YEAR	TOTAL COMMITMENT TO RESEARCH	COMMITMENT PER PROJECT	COMMITMENT PER PLANNED STUDY	STUDY COMPLETION RATE
ALL YEARS	98.50	0.87	0.23	42%
1982	17.70	1.11	0.35	54%
1983	14.37	0.90	0.29	57%
1984	11.6	0.77	0.24	42%
1985	13.45	1.03	0.29	49%
1986	7.35	0.61	0.14	49%
1987	13.78	1.06	0.19	59%
1988	9.57	0.60	0.15	27%
1989	10.65	0.71	0.19	2%

Table 5:
Commitments to research components per project and per planned study,
by region (US\$ Millions)

REGION	TOTAL COMMITMENT	COMMITMENT PER PROJECT	COMMITMENT PER PLANNED STUDY	COMMITMENT AS A PERCENT OF PROJECT LOAN
ALL REGIONS	98.50	0.87	0.23	2.21%
AFRICA	17.1	0.5	0.1	3.2
AF1	2.1	0.3	0.0	2.6
AF2	4.9	1.2	0.6	4.3
AF3	3.0	0.4	0.2	4.5
AF4	0.5	0.2	0.1	1.2
AF5	4.8	0.7	0.1	5.0
AF6	1.9	0.3	0.1	1.6
ASIA	44.0	1.3	0.4	2.6
AS1	2.8	0.5	0.1	3.7
AS2	5.9	1.0	0.3	3.5
AS3	18.0	3.0	1.2	2.8
AS4	0.4	0.4	0.1	0.1
AS5	16.9	1.2	0.3	2.9
EMENA	18.2	1.3	0.6	2.2
EM1	1.2	0.2	0.1	0.3
EM2	9.8	1.2	0.2	2.6
EM3	5.0	0.4	0.2	2.6
EM4	2.1	1.1	0.4	3.4
LAC	19.2	1.0	0.2	4.2
LA1	10.3	3.5	0.3	5.7
LA2	2.6	0.5	0.1	3.8
LA3	5.6	0.6	0.2	2.8
LA4	0.6	0.3	0.1	4.3

ANNEX 4

Memorandum sent to Division Chiefs requesting information on research components

List of Division Chiefs to whom memorandum was sent

OFFICE MEMORANDUM

DATE: November 8th, 1989

TO:

THROUGH: Adriaan Verspoor, Chief, PHREE

FROM: Marlaine Lockheed, Senior Sociologist, PHREE

EXTENSION: 33443

SUBJECT: Studies within Education Projects
in the

1. Many education projects have included research and studies components. These studies, though country specific, might be expected to generate generalized findings that would strengthen the Bank's ability to assist borrowers to build and strengthen the capacity to undertake and implement education research. In 1982, a study identified 272 previously funded research activities in education projects. At the time of the study, only 20% of these activities yielded obtainable documents. Given the continued inclusion of research and study components in education projects, and their considered value in promoting domestic research development and, consequently, improving the ability to direct future sectoral investments, it is important to determine the conditions under which research and study components have generated readily available information.

2. PHREE is currently undertaking a study to determine the extent to which outstanding projects before 1982 were completed, and the current situation of study components in projects after that date. As you and your staff have first-hand knowledge of these projects we request your help in compiling this information.

3. The following attachment is a list of education projects (country and SAR number) for the periods before and after 1982, when approved, their study components, and a blank column regarding the current status of the studies, and any available documents. Please request your staff to complete the final column for each project and study. Where no information is available it would be useful to write "n.a." in the corresponding space. Please confirm those projects that are listed as having no study component, and add any components not listed. If possible, please attach any data or materials that have been produced, or indicate where it is available. It would be convenient for further discussion to have the names of your staff according to the project/countries for which they will be supplying information. We hope that you can respond to our request by 12/01/89.

4. When the results of this project are available, we will send an inventory of the studies and resultant findings to you and to your staff. Thank you for your help.

Attachment

cc:

(ar disk 2 memo-af1)

The attached memorandum, with example attachment, was sent to the following division chiefs, 11/14/89:

Michael Palein	AF1PH
Dennis Mahar	AF2PH
Alain Colliou	AF3PH
Janet de Merode	AF4PH
Florent Agueh	AF5PH
David de Ferranti	AF6PH

Martin Karcher	AS1PH
Bradley Babson	AS2PH
Zafer Ecevit	AS3PH
Richard Skolnik	AS4PH
Clifford Gilpin	AS5PH

Roberto Cuca	EM1PH
Andrew Rogerson	EM2PH
Douglas Keare	EM3PH
Ralph Harbison	EMTPH

Nancy Birdsall	LA1PH
William McGreevy	LA2PH
Robert Drysdale	LA3PH
Jacob van Lutsenburg Maas	LA4PH

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