The Philippines
Education Sector Study

(In Two Parts) Part One: Overview and Summary

December 1988

Population and Human Resources
Operations Unit
Country Department II
Asia Regional Office

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CURRENCY EQUIVALENTS

$ 1 = ₱ 21.00
₱ 1 = $ 0.05

FISCAL YEAR

January 1 - December 31

SCHOOL YEAR

June - March

ACRONYMS

DBM - Department of Budget and Management
DECS - Department of Education, Culture and Sports
EDPITAF - Educational Development Projects
              Implementing Task Force
HSMS - Household and School Matching Surveys
NCEE - National College Entrance Examination
NCR - National Capital Region
NEDA - National Economic Development Authority
NFE - Nonformal Education
NGO - Nongovernmental Organization
NMYC - National Manpower and Youth Council
OPS - Office of Planning Service
PBET - Professional Board Examination for Teachers
SOUTELE - Survey of Outcomes of Elementary Education
SUCs - State Universities and Colleges
UP - University of the Philippines
PREFACE

This sector review was initiated by the Department of Education, Culture and Sports (DECS) as part of the government’s efforts to strengthen and expand learning opportunities. A keen appreciation of the importance of human resource development for self-reliance and national development is manifested in the Philippine Medium-Term Plan (1987-92) and in the commitment made in the 1987 Constitution toward increasing and improving educational opportunities including, for the first time, the provision of free public secondary schooling.

The World Bank was invited to collaborate with a panel of Philippine specialists organized by DECS to conduct a review of the education sector. Terms of Reference were prepared as a collaborative effort and working papers on selected topics of sector management and nonformal education were prepared by Filipino experts. A joint field mission of about three weeks was undertaken in April 1988. However, the views expressed in this report do not necessarily reflect those of DECS.

The main objectives of this review are to identify and explore key issues in education, and to suggest how these issues can be addressed operationally. In light of resource and time constraints, trade-offs had to be made between comprehensive coverage and in-depth analysis. It was agreed that the important area of vocational and technical education and employment be covered in a separate study, which is now under way. It was also felt that while the review should be as broad as possible the issues still had to be examined in as much depth as was possible without initiating new research, and that the report should stress linkages between issues.

The report is in two parts. Part One is an overview and summary intended for discussion and ultimately to be agreed upon as a core action program by senior policymakers and educational administrators. Appropriately, it is kept brief but covers key points and findings distilled from various working papers by Filipino experts and the World Bank team. Part Two of the report contains five technical chapters that provide more detailed discussion of the issues, a comprehensive list of recommendations, and supplementary notes, tables and references. These are addressed to technical professionals and managers concerned with specific aspects of the educational system, and will be used as a basis for developing a detailed action program for the subsectors covered.

1/ Victor M. Ordonez, DECS Undersecretary for Foreign-Assisted Projects, led the Philippine Government team consisting of six DECS officials assisted by eight external consultants. The World Bank team comprised Shigeko M. Asher (mission leader), Linda Dove (educator), Jee-Peng Tan (economist), consultants Estelle James (economist), Alain Mingat (economist), Charles Currin (educator) and Anita Nazareth (education planner). Roy Prosser (UNESCO/World Bank Cooperative Program) participated in the mission and provided advice on various aspects of the study. At Bank headquarters, Vicente Paqueo (economist) prepared a supporting paper, Maria C. Dalupan (research analyst) contributed to the preparation of the report, and Patricia Brereton edited the report. The report was discussed with the Government in November 1988.

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**EDUCATION SECTOR STUDY**

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A. Introduction and Overview

1. Educational development in the Philippines is at a crossroad. As a result of recent government decisions to make secondary schooling free, to assume funding responsibility for all local secondary schools, and to substantially increase teachers' salaries, the role of the national government in enrollment coverage and budgetary spending is increasing rapidly. By the same token, the traditionally large share of the private sector in secondary and tertiary education is in danger of being eroded. In an environment of severe financial constraints, the government must ensure the optimum use of scarce public resources and the continued involvement of the private sector if it is to achieve and sustain its key educational goals of universal elementary education, free secondary education, and the development of technical and professional manpower. The government is therefore rethinking its overall strategy for the sector by identifying areas that need changes and by developing an action plan to implement those changes.

2. Part One of the report begins with an introductory section which presents a brief account of the historical development of the Philippine education system and reviews its main features by noting achievements in the sector; it is argued, however, that reform is needed if the sector is to achieve and sustain its goals under continued financial constraints and rapid population growth, and the broad analytical framework is set out within which sectoral issues are identified and addressed in the report. The succeeding four sections then focus on the issues that have been identified as those with sector-wide application, and those that are limited to specific subsectors (basic, tertiary and nonformal education). Each of the discussions includes action-oriented recommendations to address the issues. The final section outlines proposals on an overall sector strategy and priority programs.

Historical Perspective

3. Two special features of the Philippine educational system represent basic structural strengths: the predominance of national government support at the elementary level, and the extensive involvement of the private sector at the higher levels of education (Figures 1 to 3). These features have their roots primarily in the American colonial period (1898-1941) when the establishment of a nation-wide system of public elementary schools was an explicit priority of the colonial administration, based on the belief that popular education was the means to prepare the Filipino people for democratic self-government.

4. The Philippine Department of Public Instruction (later the Department of Education) was established in 1901, and charged with the administration and supervision of the school system. Over 1,000 teachers were recruited from the United States both to teach the local children, and to train the first corps of Filipino teachers. Formal preparation of elementary school teachers
started in the state-run Philippine Normal School (now the Philippine Normal College) founded in Manila in 1901 and in selected provincial secondary schools. By 1941, schools were run and students taught almost entirely by Filipinos.

5. With the public administration concentrating heavily on elementary education, the private sector was allowed to meet the demand for secondary and tertiary education. Private schools were required to be incorporated under the Corporation Law of 1906, and under the Private School Law of 1917, a process of inspection and recognition became mandatory. The private sector particularly dominated tertiary education with a wide range of colleges and courses, and by the time of independence in 1946, the private sector share of enrollments was 46% in secondary schools and 98% at the tertiary level.

6. In the two decades following independence, the Philippines continued to aim at universal participation in elementary education. By 1955, enrollment in elementary schools numbered 3.5 million, equivalent to a gross enrollment ratio of 90%.\(^1\) This ratio rose to 107% ten years later (Figure 4). As graduates streamed out of elementary schools, demand for secondary education grew. This demand was first met by private schools, which saw their share of secondary school enrollments peak at close to 70% in the early 1960s. However, private schools were concentrated in well-populated urban areas. To provide secondary education opportunities for rural youth, the government authorized the establishment of barrio (i.e., village, later barangay) secondary schools in 1964. Barrio councils were authorized to open schools whenever the parents of at least 40 students petitioned for one. The barrio secondary schools were financed primarily by tuition fees and initially made use of existing elementary school facilities and staff. Secondary school gross enrollment ratios, which had remained at 27% between 1955 and 1965, rose to 46% by 1970. This overall increase in secondary school attendance was accompanied by a decline in the share of private school enrollments.

7. While tertiary education has remained predominantly private, the number of nationally-funded colleges and universities increased dramatically from 26 institutions in 1965 to 319 by 1985. This contrasts with secondary education where local governments have had to bear the financial responsibility for the expansion. Due to inadequate local government incomes, most secondary schools had to depend mainly on tuition fees for their operating expenses, supplemented by other funds including a Special Education Fund raised partially from an additional annual tax on real property, which local governments could allocate to their schools. Thus, while secondary education was being expanded through the support of tuition fees as well as local tax revenue and other private initiatives, tertiary education grew rapidly with increased subsidies from the national government. A moratorium on the establishment of new state universities and colleges was enforced in 1986.

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\(^1\) Gross enrollment ratios indicate the proportion of total school enrollments (including the under- and over-aged) at a particular level compared to the population in the age group specified for that level. In the Philippines, this means ages 7-12 and 13-16 for elementary and secondary education, respectively. A ratio exceeding 100% therefore indicates the presence of students outside the normal school-age group.
Present Educational Profile

8. About 9 million students are currently enrolled in 32,800 elementary schools, over 3 million in 5,400 secondary schools, and over 1.5 million in 1,200 tertiary education institutions. The teaching force includes 284,000 elementary, 99,000 secondary and 57,000 tertiary level teachers. Enrollment ratios greatly exceed international averages at all levels and underscore an exceptionally strong social demand for education. In 1980, for example, gross enrollment ratios for the Philippines were over 100% in elementary, 65% in secondary, and 26% in tertiary education, while the averages for developing countries were 75%, 23% and 7%, respectively. This achievement is particularly striking when levels of economic development are considered. Countries with a per capita GNP similar to that of the Philippines have enrollment ratios about half as high in both secondary and tertiary education (Figure 5). The coverage of the Philippine system is wider than even that of countries in East Asia\(^2\) and Latin America\(^3\) -- countries with relatively well-developed educational systems and which on average have higher levels of per capita GNP.

\(^2\) East Asian countries include Burma, China, Hong Kong, Indonesia, Korea, Malaysia, Philippines, Papua New Guinea, Singapore and Thailand.

\(^3\) Latin American countries include 20 countries including Argentina, Brazil, Chile, Colombia, and Mexico.
9. At the elementary level the share of private enrollments has remained relatively stable, ranging from 4% to 6% since 1955. The private sector continues to play an important role at the secondary and tertiary levels, despite the decreasing share of enrollments noted earlier. In 1986 private schools accounted for 40% of secondary and 85% of tertiary education enrollments. These are much larger proportions than in most other countries. For example, in Latin America, private institutions enroll about 35% and 23% of secondary and tertiary education students, respectively.

10. Another noteworthy achievement of the Philippine system is the exceptionally high representation of female students in all three levels of education. Enrollments at the elementary level are about equal for both boys and girls but female enrollments exceed those of males in secondary and tertiary education (Figure 6). In fact, other indicators suggest a problem with the performance of males in basic education. Rates of failure, dropout and repetition in the elementary grades are significantly higher for boys than for girls, and the same trend is apparent at the secondary level.
Need for Reform

11. The quantitative achievements in Philippine education are impressive, but conceal continuing problems. For example, one out of every three students starting grade one fails to complete the elementary cycle, and student achievement falls significantly below performance targets. Of concern as well are the financial implications of the national government’s recent policy decisions on free public secondary schooling, the nationalization of all local secondary schools, and the 50% increase in teachers’ salaries over the last two years. The central government’s recurrent budget for education as a percentage of the total recurrent budget is now 21%, compared to 17% in 1985. Although the government attaches high priority to the social sectors, it is difficult to predict the extent to which additional resources will be available for the education sector in view of the competing claims of other sectors and of the experience in most other countries where the budgetary share of education rarely exceeds 20%.

12. The problems of rising costs, less than satisfactory educational quality and a high dropout rate come at a time of continued government budgetary constraints and increasing demand for education. While the economy registered a 5% growth in 1987 after several years of economic stagnation, the Philippines will continue to face severe financial constraints with its large debt obligations. At the same time, the demand for education services is certain to rise as the population is still growing at about 2.5% annually, which will double the number of school-age children in about 30 years. Population growth alone implies a demand for more classrooms, teachers and
other operational support. In addition, increased resources are required to achieve government goals for the universalization of quality elementary education, free secondary education, increased literacy standards and livelihood skills for the adults and youths who have been unable to benefit fully from the formal school system, and the training of manpower required for increased productivity in agriculture and accelerated industrialization. Complicating this situation further is the declining proportion of private sector enrollments which fell from 68% in 1960 to 40% in 1986 at the secondary level, and from 90% to 85% at the tertiary level during the same period.

13. In view of the simultaneous challenges of budgetary constraints and societal pressures for increased educational services, the need arises to review the overall strategy for the sector and develop a revised strategy with an action plan to address the main issues confronting the sector. The analytical framework used to identify the issues in this report involves three broad areas: (a) efficiency and quality--how education resources are utilized and what are the outcomes; (b) equity--how resources are distributed; and (c) management--how resources are organized to maximize efficiency and equity outcomes. These questions will be addressed at two levels, as sector-wide issues and as subsector issues related to basic, tertiary and nonformal education. The main conclusions derived from the analysis are that the current level of investment in education and its distribution among elementary, secondary and tertiary education are reasonable as they bring about acceptable returns, and the patterns of public subsidization across the subsectors is one of the most equitable ones in the world thanks to the large private shares in secondary and tertiary education; however, there are a number of quality, efficiency and equity problems with respect to specific subsectors which would entail changes in the existing policy and institutional arrangements.

B. Sector-wide Issues

14. Public resources are relatively efficiently allocated to the sector as a whole and across the subsectors, and the structure of the system is reasonably equitable in terms of the distribution of enrollments and public subsidies among the three levels of education. However, there is a need to make substantial improvements in: (a) equity in terms of access to the education system of various socioeconomic groups; and (b) management capacity to plan and execute sector goals.

Evidence on Efficiency

15. The term efficiency is generally used to describe the relationship between inputs and outcomes. A distinction is made between external and internal efficiency according to whether the outcomes are defined as broad social goals or as goals internal to the school system. Because internal efficiency relates mostly to goals internal to each level of education, it will be discussed later in the context of subsectoral issues. This section focuses on the external efficiency of the sector.

16. Allocation of Resources to Education. With the change in government, the public allocation for education as a share of GDP has been rising for three successive years, reflecting the priorities of the new government, from
1.3% in 1965 to 2.3% in 1988. In terms of actual spending on education, the share is expected to rise from 1.8% of GNP in 1985 to 2.8% in 1988. If private spending is included, the proportion of GNP spent on education is estimated to increase to over 3% in 1988, closer to the level in many developing countries (3% to 4%). Countries such as Thailand, Turkey and Colombia, for example, devoted 3.3% to 3.4% of GNP to education in the early 1980s. The bulk of resources in the Philippines is invested in elementary education, 55%, compared to 21% and 24% in secondary and tertiary education, respectively. At each level of education the national government bears a significant proportion of the total operating costs: 92% in elementary schooling, 41% in secondary and 47% in tertiary education.

17. These investments in education have been profitable. Estimates on the returns for the latest available year, 1985, show that at 12% to 13% for all three levels of education, current social rates of return exceed the normal 10% yardstick used for investing in physical capital. These returns therefore indicate reasonable profitability to society and imply no major underinvestment in education at present. They also suggest modest sectoral expansion, perhaps at about the rate of growth of the school-age population.

18. It should be noted that important differences exist between returns to those who do and do not complete each cycle of education. The difference is particularly significant in elementary education, suggesting that social gains to investing in education improve considerably if elementary dropouts are reduced. The issue of elementary school dropouts will be discussed further in the sections on basic and nonformal education.

19. **Intrasectoral Allocation.** Rates of return are comparable among the three levels of education, suggesting that there are no serious distortions and inefficiencies in the current intrasectoral allocation of public resources to education--a situation greatly aided by the public-private division of responsibility. Unlike many other countries, the Philippines allocates its public resources largely to elementary education. The 1988 distribution of government spending on education across the three levels is estimated at 61%, 23% and 17% for elementary, secondary and tertiary education, respectively. Spending the largest proportion for elementary education is socially efficient, since it is this level that is considered to generate the highest externalities. As will be discussed below, these features of Philippine education of large government support to elementary education and the high share of private enrollments in the second and third levels of education, are important factors contributing to a high degree of structural equity in the system.

**Evidence on Equity**

20. The extent of equity is assessed in terms of structural equity which takes into account the enrollment structure and the pattern of public subsidization, and equity in social selectivity which provides all persons from different socioeconomic groups with equal opportunities for education. The analysis shows that the system is structurally equitable, but that there is adverse social selectivity.
21. **Structural Equity.** Three characteristics of the education system contribute to its high degree of structural equity: (a) the enrollment pyramid is flatter than that of most other systems, suggesting broad access at the base of the education ladder; (b) the share of enrollments in private secondary and tertiary education is substantial, indicating a significant proportion of students paying for their own education at the post-elementary level; and (c) the difference is small between government spending per student in the first and third levels. The relative extent of structural equity is summarized by a Lorenz curve and the associated Gini-coefficient (Figure 7). The Lorenz curve is much closer to the diagonal than the average curve for developing countries and the Gini-coefficient is one of the lowest in the world.

![Figure 7. DISTRIBUTION OF CUMULATIVE PUBLIC SPENDING ON EDUCATION, PHILIPPINES AND DEVELOPING COUNTRIES](image)

22. **Social Selectivity.** The fact that the educational system is structurally equitable does not mean that people of all social backgrounds have similar schooling careers. Social inequities in the system constitute a sector-wide issue because the inequities generated in one level of education are transmitted to subsequent levels.
23. Students drop out at all levels, but the dropout rate declines as the level of education rises. The overall rates of transition at the various points of selection in the system reveal that only 6% of entering students in year one complete their elementary schooling. About 90% of these graduates enter into secondary school and about 70% of them finish the fourth year. Most secondary school graduates obtain some postsecondary training, but the government limits the number of students entering four-year degree programs to those who score at the 50th percentile on the National College Entrance Examination (NCEE) in any given year. About 80% of the students who start college finish the degree.

24. Adverse social selectivity originates in elementary education, with dropouts concentrated among socioeconomically disadvantaged students. For example, 89% of students with an annual household income exceeding P 30,000 complete elementary education as compared to 57% with an annual household income of less than P 10,000. Using another indicator of socioeconomic status, students whose fathers received a college education rarely drop out, but nearly 50% of those whose fathers had only an elementary education leave school without completing the cycle (Figure 8). These findings suggest that to reduce social inequities in the system as a whole, public policies should be directed at the problem of dropouts in elementary education. This issue will be elaborated on in later sections.

Figure 8. COHORT SURVIVAL RATES IN ELEMENTARY EDUCATION BY FATHER'S EDUCATION, 1986
Management

25. The Department of Education, Culture and Sports (DECS) has undergone a series of organizational changes to improve its capacity to manage the system, primarily as a result of a government-wide reorganization and decentralization plan instituted in 1972. In an effort to make government more responsive to local needs, regional offices were created for all executive departments. Within DECS, decentralization was supported by the creation of the staff Bureaus of Elementary, Secondary and Higher Education, with line functions given over to the regions. The decentralization process has not been completed, however, and many difficulties stem from ongoing efforts to institutionalize decentralized management. The main problems of sector-wide management concern: policy and plan formulation; planning and budgeting; and project development and execution.

26. Policy and Plan Formulation. DECS is responsible for developing and implementing plans and programs in education in line with broad policies legislated by Congress. Coordination of plans and programs among the different government departments is a function of the National Economic Development Authority (NEDA). Within DECS, the Office of Planning Service (OPS) is responsible for the critical task of briefing DECS senior managers on alternative ways of achieving policy targets while ensuring the attainability of those targets. The present policy formulation and planning process could be strengthened by: (a) improving the sectoral data base; (b) initiating long-term planning; and (c) augmenting institutional capabilities in planning and coordination.

27. DECS collects a great deal of information from schools through its regional offices, but there is a need to simplify data requirements for management and planning purposes to help improve accuracy of the data and timeliness in collection. DECS has recently decided to strengthen the data collection and research capacities of OPS by sponsoring the Information Systems Improvement Activity to improve both sector monitoring and the educational management information system. Efforts such as these should be continued and supported by staff retraining and the recruitment of professional planners and statisticians. However, the current requirement that all DECS staff must have taken 18 units of education courses in college is detrimental to the recruitment of the planners and statisticians and should be eliminated as an entry requirement.

28. Data and plan targets relating to teacher training and to private education are currently inadequate because there are no focal points in the DECS structure to undertake systematic data gathering and analysis as inputs to decision-making. The main functions of a recently created Technical Panel for Teacher Education include making recommendations on the size and programs of teacher education. While the panel provides overall direction, DECS still needs organizational arrangements clearly devoted to the collection and analysis of teacher training data. Similar arrangements are necessary for data on the private sector.

29. Sectoral planning should be an activity designed to provide long-term direction and priorities for the education sector, rather than (as is presently the case) an annual extrapolation of past trends to fulfill the
minimum needs of a five-year development plan. Given the long gestation period of education developments, ten-year national plans for education development should be prepared. This work would need to be done jointly by NEDA and DECS working in close coordination.

30. It is also recommended that a Board or Council of Education be established to broaden DECS policy-making processes which are now largely carried out at DECS central and regional offices. The proposed body should bring together representatives of other administrative departments, local governments, schools, communities and the private sector. It could serve as an advisory body to DECS and Congress.

31. Planning and Budgeting. The DECS administrative cycle begins with annual planning calls issued by NEDA and budget calls issued by the Department of Budget and Management (DBM). Instructions for plan and budget preparation are passed from the central office down to the regions, divisions, districts and schools; proposals then flow back upwards to the regional offices, where regional plans and budgets are prepared for submission to the central DECS office. After review by DBM analysts, proposals are submitted to DBM management and to the President for submission to Congress. The current process of planning and budgeting suffers from three main weaknesses: the aggregation of performance indicators; unclear procedures; and the low status and compensation of regional planners and budget officers.

32. Planning and budgeting for the sector are based on regional-level indicators, primarily the participation, retention and survival rates. But regional-level indices conceal performance disparities at divisional and district levels within a region so that the resource needs of low-performing districts cannot be equitably addressed. Planning and budgeting should instead be based on performance at the subregional level. The key performance indicators are, in fact, already available at the division level.

33. Sectoral planning and budgeting procedures have frequently been changed in line with efforts to decentralize management and to introduce different budget management systems. The series of instructions announcing new and revised procedures has resulted in an outpouring of memoranda, circulars and notices that staff cannot assimilate. As a simple management tool, manuals on planning and budgetary procedures should be prepared, detailing the responsibilities and accountability of each administrative level. Workshops for school, district and divisional budgeting and planning offices should also be conducted.

34. Regional planning units and officers have a lower institutional status than those at the central level. Unlike the central office where the planning group is recognized as a division and its staff as teaching staff, the regional groups are categorized as units and their staff as non-teaching. This means that the compensation of regional planning personnel is lower than that of their counterparts at the center, and that they cannot benefit from increases in teacher salaries (such as the recent 50% pay raise). The low status and incentives of these offices cause comparatively high turnover and demoralization. It is therefore recommended that improving the qualifications and competencies of regional planning and budgeting officers be supported by enhancing their organizational status and incentives.
35. **Project Development and Execution.** There are apparent functional overlaps between the Educational Development Projects Implementing Task Force (EDPITAF) and OPS in research and project development, and between the DECS Bureaus and EDPITAF in project management and evaluation. OPS and EDPITAF were both established in 1972, with the former responsible for data collection, research, planning, and project development and evaluation, and the latter responsible for research and the design, execution and evaluation of externally-assisted projects. Although originally envisioned as a ten-year task force, EDPITAF has continued to play a key role while OPS has been only minimally involved in project development and evaluation. The overlap between the DECS Bureaus and EDPITAF has occurred because, in contrast to past projects in the sector that focused on building construction and equipment installation, recent projects have centered around policies to introduce reforms in curricula, textbooks and teacher training. The DECS Bureaus of Elementary and Secondary Education are therefore now heading the management units for the new projects, thus taking on line responsibilities that presumably belong to EDPITAF.

36. To streamline project development and execution, it is recommended that EDPITAF's functions be transferred to OPS, the Bureaus and to a new office of project services that would be responsible for external relations, project implementation (including procurement and disbursement) and project monitoring. The new office might consist of two divisions, one for domestically-financed projects and the other for externally-assisted projects. Each project would be managed by a coordinating committee comprising members of OPS and the relevant Bureaus, with the new office of project services acting as the committee's secretariat. Given the type of projects now being undertaken, it seems inevitable that the Bureaus would have to be responsible for certain line functions. OPS would focus its resources on improving sector data, undertaking sector-wide studies in such areas as finance and management, and preparing annual and long-term development plans and programs.

C. **Issues in Basic Education**

37. Basic education is considered internally efficient if it produces the desired output at minimum cost. The desired output is often measured in terms of high student achievement and high retention rates. A lack of cost data, however, does not permit comprehensive analysis of the relative importance of the school and home factors that enhance schooling outcomes. This review is therefore limited to separate assessments of achievement, dropouts and unit costs, along with a comparison of the relative performance and cost of public and private schools which suggests, though tentatively, some direction for priority efforts, the most important of which is perhaps to bring decision-making as close as possible to individual schools so as to increase the accountability of school principals and teachers for schooling outcomes.

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In the Philippines, basic education covers the elementary and secondary cycles, a total of ten years, comparable to nine years of elementary and lower secondary education in many other countries.
Student Achievement

38. Student achievement on standardized tests both at the elementary and secondary levels is low in all curricular areas. Compared to a designated learning target of 75%, students have averaged between 30% and 50% in DECS tests such as those administered by the Survey of Outcomes of Elementary Education (SOUTELE) in 1974 and again in 1986, the 1982/83 Household and School Matching Surveys (HSMS), and 1982-85 Bureau of Secondary Education achievement tests. Furthermore, in a recent international study of science achievement in 17 countries, Philippine fifth- and eighth-graders correctly answered 9.5 and 11.5 items out of a total 24 and 30 questions, respectively. In comparison, the fifth-grade in Singapore and Hong Kong both scored 11.2, and the eighth-graders of the same two countries and Thailand averaged 16.5.

39. Besides the overall low averages, there are significant variations in achievement within the country, depending on region, type of community, and type of school. In the HSMS study, private elementary students scored from 1.3 to 1.6 times higher than public school counterparts, and urban school scores were 15% to 22% higher than those of rural schools. Among the 13 regions, the National Capital Region (NCR) and Region III with higher per capita income performed best, while Regions II and VIII that fall in the lower end of the per capita income group scored the lowest. These achievement variations suggest the linkages with the socioeconomic status (SES) of the students and the type of communities where schools are located. Evidence also shows that the effects of schools are greater for poorer students who are less exposed to educational environments than students in more advantaged homes and communities. Unless better quality education is assured in all schools, schools are likely to reinforce rather than mitigate the effects of students' home background on achievement.

40. The quality of school outcomes is affected by a variety of factors, including the quality of teachers, the extent of decentralization and accountability in school management, the availability of instructional materials, and the language of instruction.

41. Teachers. Earlier efforts to improve school quality have often focussed on the material inputs such as textbooks and other instructional materials, furniture and facilities. While it is important to further improve the supply of these items, greater attention is needed to teacher competencies in subject knowledge and classroom management.

42. A four-year college degree has long been required of all teachers and there has been no shortage of trained teachers. There are, however, problems with the quality of teachers in both subject matter and pedagogical skills. The HSMS study showed that elementary school teachers given competency tests in English, Filipino and mathematics averaged 48%, 63% and 50%, respectively. Those teaching in rural, disadvantaged districts scored the lowest. Teachers in rural areas but not considered disadvantaged did as well on the math and Filipino tests as teachers from urban disadvantaged districts. However, English skill levels were significantly lower for teachers in all rural schools than for their urban counterparts.
43. With this low competency and a 1.5% annual turnover rate, upgrading of teacher quality in subject content is essential. In addition, the coverage of in-service training needs to focus on pedagogy, testing and evaluation. Pedagogical training is needed to promote instructional methods which provide opportunities for student participation, as these are known to increase student performance. Classroom testing and evaluation need to be improved as indispensable tools to monitor student as well as teacher performance. Diagnostic testing to identify students at risk of failure in conjunction with remedial measures to reduce such risk are of particular importance. In principle, these skills should have been developed in the teachers' pre-service training programs.

44. The poor quality of teacher training graduates is indicated by the fact that, between 1978 and 1985, only about 30% of all such graduates passed the Professional Board Examination for Teachers (PBET), a requirement for civil service eligibility and for a permanent appointment. Improving the quality of pre-service training means addressing the problems of entrants into teacher training, curriculum, the facilities and faculty of training institutions. DECS has tried to improve the qualifications of entering students by increasing the National College Entrance Examination (NCEE) cut-off score for admission to teacher training from the 25th percentile rank set in 1974 to the 60th percentile in 1988. However, there has been no concerted effort to improve teacher training. Only one-fifth of the more than 300 teacher training colleges are accredited. At present, there is no institutionalized mechanism to identify the weaknesses of the colleges and to formulate appropriate steps to correct them. Although the recently created Technical Panel for Teacher Education is beginning to address these issues, there is still a need for a focal point to be created in DECS for continuous monitoring, evaluation and feedback to policymakers on teacher training.

45. The government has recently shown its commitment to the welfare of teachers by substantially increasing their salaries. DECS should expand on this initiative by reducing bureaucratic burdens on teachers, thus allowing them to give priority to teaching rather than other activities. Reciprocally, teachers should assume greater responsibility and accountability for their performance. In this regard, consideration might be given to a workable structure of merit pay increases and to the use of renewable, fixed-term contracts.

46. Decentralization and Accountability. Analysis of HSMS data shows that even after controlling for selectivity in student characteristics, both elementary and secondary private schools outperformed public schools although the private schools had lower unit operating costs. This finding is consistent with a view that more decentralized management of schools with greater accountability leads to increased internal efficiency, i.e., desired educational outcomes at lower costs.

47. The performance of the different types of schools was assessed, based on a comparison of the results of a test administered to students in their first year of secondary school and their NCEE scores four years later (Figure 9). Schools below the diagonal are those that have declined in relative achievement on the NCEE compared to their ranking on the initial test. The sharpest contrast is noted between national schools, which initially scored
above the mean (+0.21) but whose NCEE scores fell below the mean (-0.01), and private schools, which showed improvement in scores over the period (-0.01 to +0.17 for nonsectarian and +0.36 to +0.67 for sectarian schools), even though their cost per student was about 60% less than the national schools.

Figure 9. RELATIVE ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS ON INITIAL TEST AND THE NCEE, 1987

48. These comparisons of public and private school performance show that the closer linkages of private schools with parents and local communities in determining school financial and academic operations, with resultant accountability by school management, are key factors to improved quality and efficiency. However, the question is how these private sector characteristics would be relevant and applicable to public education. Delegation of administrative responsibilities to districts and schools is already an ongoing government effort, which should be further supported by clear instructions on decision-making powers, workshops to disseminate the instructions, and management training for school principals and head teachers. However, without
a concomitant decentralization of fiscal decision-making, administrative decentralization alone will not be sufficient to make principals fully accountable for performance results. In this regard, some discretionary funds should be made available to principals to achieve agreed upon improvements, with monitoring of results. It is also important that local school boards and parent-teacher associations take an active interest in local school development through financial support to priority services and items, with close monitoring of the outcomes.

49. As an important management tool to monitor quality and provide feedback to schools and the public, current testing and evaluation capacities need to be strengthened. The DECS National Educational Testing and Research Center should develop a program for a national network of testing and research activities, and the Bureaus of Elementary and Secondary Education should develop programs to upgrade regional testing capacities to allow regional offices to eventually conduct their own evaluations.

50. Instructional Materials. The government has provided strong support for the development of textbooks and supplementary instructional materials since the late 1970s. The average student-textbook ratio has been reduced from 10:1 in 1979 to 2:1 for elementary schooling, which has helped raise student achievement, especially among the lower-income groups. Under DECS Secondary Education Development Program, textbooks are being produced for the two million public secondary school students to achieve a student-textbook ratio of 1:1. As a result of this achievement, the increased supply of other instructional items such as reference books, which are not available to the same degree as textbooks, provision would lead to more significant incremental gains in achievement. This does not mean, however, that no further investment is needed for elementary textbooks. An adequate supply and quality of textbooks must be maintained, and still existing distribution problems be resolved.

51. Language of Instruction. Under a bilingual education policy that has been in effect since 1974, English is used for teaching mathematics and science and Tagalog-based Filipino for all other subjects. The policy aims to create a nation of bilinguals able to communicate in either language, but about 75% of the population speak neither English nor Filipino as a first language. School is often the first, and in some cases the only, place in which both languages are tried. It is therefore important to ensure that language is a facilitator of learning rather than a constraint. There should be provision for transition from the home language to the languages of instruction in the school. Preschool programs organized by nongovernmental organizations (NGOs) and local communities could be expanded to include language training.

Dropouts in Elementary Education

52. As discussed earlier, the incidence of dropout is highest at the elementary level, with more than one-third of entering students failing to reach the sixth grade. The elimination of these dropouts will be crucial to maximizing the social equity and efficiency goals of the sector.
53. The dropout problem is related both to the incidence of poverty in the country and to school-related constraints. Correlations were earlier noted between dropout rates and fathers' education and income levels. Significant regional disparities in cohort survival rates are also observed, ranging from 87% in the National Capital Region (NCR) to 48% and 46% in Regions IX and XII, respectively. These percentages are generally higher in regions with lower average household income and lower average life expectancy. Available evidence also shows that children in schools with higher achievement levels have a higher probability of completion even when other factors are held constant. Conversely, children in rural, disadvantaged schools with low achievement levels are more likely to drop out.

54. Controlling for the household income variable, some regional differences remain, which may be related to the supply of schooling. A high correlation is also observed between regional dropout rates and the proportion of elementary schools in each region without facilities to accommodate the full six-year cycle, which suggests lack of access as another reason for noncompletion. However, the fact that the greatest percentage of dropouts occurs in grade one cannot be explained by inaccessibility to schools.

55. The linkages of high dropout rates with poverty and school-related factors are generally supported by mothers interviewed for HSMS. These mothers identified the following as significant reasons for their children dropping out: children's low motivation, family's inability to purchase school necessities like paper and pencils, and poor quality of schooling. Other reasons, though not so significant as these three, included ill-health which is most likely related to malnutrition and inaccessibility to schools.

56. These findings suggest the need for interventions in preschool programs, school quality, financial aid and a social marketing campaign. Preschool programs targeted at disadvantaged children should provide nutrition and basic health care services, as well as preliteracy and language programs designed to prepare children for formal schooling. These programs could be better organized and delivered with the assistance of NGOs. Efforts to improve school quality should pay special attention to increasing student and teacher interaction in classrooms to raise student attention and sustain interest in learning, diagnostic testing and evaluation to identify those who need remedial assistance, and language proficiency to help communication and learning. Principals and teachers who prove successful in retaining more students could be rewarded by incentives such as performance-based salary increases besides automatic increases. Financial support to students is also suggested in the form of scholarships or the supply of school amenities for children from depressed areas. Finally, launching of a social marketing campaign would be beneficial.

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5/ The cohort survival rate is the proportion of students enrolled in the first year of a cycle who persist to the end of that cycle. At the elementary level, the cohort survival rate is the ratio of Grade 6 enrollments in a particular year to Grade 1 enrollments five years prior. The cohort survival rate is used as the measure for dropouts in this report because the dropout rate reported by DECS is inconsistent with patterns of enrollment over the last two decades and is believed to understate the extent of the dropping out at the elementary level.
campaign is recommended by DECS, NGOs and local communities to increase the parents' and children's awareness of the importance of completing school for social mobility and economic gains over the long-term.

5. It is proposed that the above programs be introduced in a pilot project in selected, disadvantaged school districts, with close monitoring and evaluation in terms of relative effectiveness in lowering dropout rates before wider application.

Unit Costs

58. The annual recurrent cost to train a student can be reduced by improving the organization of both schools and classes. A review of existing organizational arrangements in the Philippines shows that there is little scope to exploit economies of scale from the consolidation of small classes but there is a significant scope for reducing unit costs by consolidating smaller schools into larger ones.

59. The average number of students per class is already large, about 50, both in public and private schools. Although the average may conceal some variations, the number of very small classes, especially among secondary schools, is likely to be few. However, teaching loads vary more significantly across schools. Private secondary schools, which face tighter budget constraints, generally require teachers to bear a heavier load, thereby lowering the largest proportion of recurrent expenditures--teacher salaries--and overall unit costs. The recent nationalization of formerly locally-funded secondary schools implies an immediate increase in public secondary education unit costs by almost 30%, from ₱690 to ₱890.

60. There is greater scope for reducing secondary school unit costs through the redistribution of students across schools. On average, 1,150 students are enrolled in a national school compared to 2,150 in a local school in NCR. Other local schools are much smaller, with an average of 370. These averages hide significant differences among schools: nearly two-thirds of the national schools have fewer than 1,000 students, and about 60% of the local schools outside the NCR enroll no more than 300. The reduction in unit costs that might result from consolidating the small schools into larger ones depends on the existence of economies of scale. Regression analysis on a sample of 497 national schools (representing about 80% of all national schools) suggests that unit costs decline with rising enrollments, although the decline begins to taper off beyond an enrollment of 1,200 students (Figure 10). If small national schools were consolidated to reach a minimum enrollment of 1,000 students, the potential savings would amount to about 23% of the current operating costs of the small national schools, equivalent to nearly 8% of total government spending on public secondary education in 1986.

61. The unit cost of schools attached to state universities and colleges (SUCs) is considerably higher than that of other national schools. The 1986 unit cost of elementary and secondary schools attached to SUCs was 1.7 times higher than that for other national schools. This difference was due largely to salary differentials, because schools attached to SUCs pay higher salaries owing to the fiscal autonomy granted to such chartered schools, a main cause of their proliferation.
In summary, to reduce unit costs, especially in view of the cost escalation brought on by the nationalization of local secondary schools, consideration should be given to increasing the size of schools. Given the geographical uniqueness of the country, an archipelago of over 7,000 small islands with still underdeveloped communication and transport networks, it would not be feasible, even putting political and administrative complications aside, to consolidate 11 small schools into an economically efficient size. Nevertheless, present financial constraints make it important to give high priority to the expansion of existing small schools to accommodate an increasing number of students and bring the schools close to an economical size. Where a new school is required, the school should be sufficiently large to take advantage of economies of scale. Second, SUC-attached elementary and secondary schools should be separated and become regular national schools with the standard teacher salary scale.

Figure 10. RELATIONSHIP BETWEEN UNIT COSTS AND ENROLLMENTS IN NATIONAL SECONDARY SCHOOLS, 1986
D. Issues in Tertiary Education

63. Public tertiary education includes nonchartered institutions which are directly supervised by and receive their budgets from DECS, and chartered SUCs which are created by acts of Congress and receive their budgets through Congressional appropriations. Private institutions are of two types: non-stock and proprietary. The former are mostly religious in origin, but also include a group of secular schools. The large proprietary institutions are stock companies while many small ones are family-owned businesses. About one out of three of the 17-20 age cohort are enrolled in the over 1,000 tertiary institutions. Both nondegree courses of one or two years and four-year bachelors' degree courses are available. Over 80% of all college and university students attend private institutions which run on virtually no subsidy from the government.

64. This section provides, first, an assessment of the issues in terms of quality (faculty, facilities), external and internal efficiency (curricula and programs, economies of scale), and equity (access to low-income students). An overall strategy is then proposed which would cut across these issues, and deals with two broad areas of government policy: the allocation of public resources, and the regulation of private institutions.

Quality Issues

65. The number of tertiary education institutions and the tertiary enrollment ratio are impressive, but quantity is often offered at the expense of quality. Despite a DECS requirement that all faculty members have a master's degree, more than 70% of the faculty have only a bachelor's degree. PhD holders are a low 4% and they are heavily concentrated at the University of the Philippines (UP) and a few other state institutions. The low number of graduate degree-holding faculty corresponds to the fact that graduate enrollments are exceptionally small in the Philippines.

66. People generally pursue PhDs, which are expensive, if their training costs are subsidized or if a sufficient wage premium is expected. In the highly privatized Philippine system, graduate students must largely cover the cost of their own training. Faculty salaries are low: most faculty members receive a wage which, if unaugmented by additional income, would put them below the household poverty line of P 2,100. In the public sector, monthly salaries range between P 2,000 and P 5,000. In private institutions, monthly salaries are estimated to range between P 1,400 and P 5,000, with most clustered below P 2,000.

67. Just as colleges and universities invest little in human capital (e.g., advanced staff training, rewards for trained faculty), neither do they invest in physical capital. This is seen, for example, in the paucity of laboratory equipment (even in engineering colleges) and the absence of books and periodicals. This is true for public and, especially, private institutions. In 1985, the average public institution had six books per student (half of them at UP) while the average proprietary institution had three. Meager investments in faculty and physical facilities can be attributed partly to the difficulty of obtaining financial assistance. Without collateral, most faculty are unable to get loans to upgrade their
qualifications. Private colleges have to pay over 20% interest on loans although they can get less than 10% on their savings. One remedy for these capital market problems is a lending program for faculty and colleges. A revolving loan fund could be set up by the government, with an interest rate high enough to cover public borrowing costs, but low enough to encourage investments in quality improvement and expansion. However, such a loan program must be tied to deregulation which permits colleges to charge higher fees as their human and physical capital improves. These arrangements are discussed later.

68. The quality of private institutions suffers from tight government regulations. DECS views its regulation of private institutions as necessary to maintain minimum quality standards but interprets this primarily in terms of imposing detailed regulations and specifications. Private institutions are required, for example, to obtain approval for each program and each campus, to follow curricula prescribed by the government, to keep a specified list of books in their libraries, to limit class size to 50 students, to have 60-minute class periods, and not to change textbooks more often than once every six years. Further, DECS must approve all fee increases, and 60% of any approved tuition increase is to be used for staff salaries. These regulations on pricing and wages have hampered attempts to improve quality. A low ceiling on tuition increases and the need to spend most of any increase on salaries leave little for investment in libraries, laboratories, equipment or staff development. Price and wage regulations thus lead to lower educational quality and hurt students. Other government-imposed standards such as class size limits result in heavier teaching loads and less time for further study and research by the faculty.

Efficiency Issues

69. Two sets of efficiency issues are important in tertiary education. The first relates to the external efficiency of social investments in tertiary education, and the second focuses on achieving internal efficiency through the exploitation of economies of scale.

70. External Efficiency. Although investments in tertiary education are, on average, externally efficient, more can be achieved by redirecting government spending toward postgraduate and research programs within the subsector. This is because people's decisions to invest are based on a calculation of private benefits and costs--a calculation which ignores the external benefits from these programs since such benefits are not readily recovered by students and institutions. Thus, individuals are willing to invest in undergraduate education which is perceived to yield a high private return, but not in graduate education and research which yield a lower private return. However, graduate education and research generate externalities for society at large--a justification for increased government funding. Currently, only 2% of tertiary education enrollments are in graduate programs. With the small number of postgraduate programs, spending on research is also understandably very low. The majority of SUCs spend less than 5% of their budgets on research, and the private sector spends even less.

71. Both the public and private sectors are dominated by undergraduate teaching institutions focusing on job-oriented fields. Over 90% of students
are in programs with a specific occupational goal such as business administration and engineering. Vocation-oriented programs give graduates access to domestic professions and to the international labor market which seeks particular skills. Most graduates find their training relevant to their jobs, but at least one-third of graduates work outside their fields. This fact can be seen as evidence of a well-functioning labor market in a situation where the future skill mix demanded by employers cannot be accurately predicted, but the situation creates an inconsistency between a flexible labor market and a relatively inflexible curriculum since programs of study prescribed by DECS are narrowly defined and contain few electives. Therefore, as part of the deregulation now under way, greater institutional flexibility as well as elective options for students should be allowed.

72. Economies of Scale. Economies of scale exist in tertiary education and should be exploited to minimize unit costs. In the public sector, economies of scale relate both to the size of enrollments and the number of campuses per institution. The average size per campus for 76 of the 78 SUCs is 760. Of these SUCs, 43% have more than one campus, averaging 230 to 800 students per campus. Average enrollment per campus drops sharply as the number of campuses rises. This proliferation of campuses with small enrollments is inefficient because it drives up operating costs per student. For example, unit costs at a one-campus institution with an enrollment of 1,000 are estimated at P 8,600, but this figure rises by 55% if the same number of students are spread over five campuses. Lower unit costs also result from movement toward larger institutions. For example, if enrollments were increased in the one-campus institutions from 1,000 to 5,000 students, unit costs would decline by 57%. The difference in unit costs between multiple- and single-campus institutions also narrows as total enrollments rise (Figure 11).

73. Smaller colleges often pay a price in terms of higher costs or lower quality. Many of these small colleges do not have faculty members with graduate degrees, well-equipped libraries, laboratories or other quality-related facilities. Given the potential for significant cost savings, institutions whose enrollments in postsecondary programs are less than 1,000 should be studied to scrutinize whether they are operating at acceptable cost and quality levels, and if not, whether merger and/or redefinition of mission is desirable. Small colleges might become two-year institutions focussing on postsecondary vocational training or providing general education credits that could eventually be transferred to college courses. This would help make their mission consistent with their size so that reasonable quality could be provided at reasonable cost. This will be discussed further later.

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6/ The high private sector share in engineering, a high-cost subject, is possible because it is taught more as a theoretical rather than a laboratory subject.

7/ UP and the Polytechnic University of the Philippines (PUP) are excluded from the analysis because their exceptionally large sizes would bias the average considerably. UP and PUP have nine and five campuses, respectively, with an average of 3,300 and 6,600 students per campus.
74. Smaller colleges often pay a price in terms of higher costs or lower quality. Many of these small colleges do not have faculty members with graduate degrees, well-equipped libraries, laboratories or other quality-related facilities. Given the potential for significant cost savings, institutions whose enrollments in postsecondary programs are less than 1,000 should be studied to scrutinize whether they are operating at acceptable cost and quality levels, and if not, whether merger and/or redefinition of mission is desirable. Small colleges might become two-year institutions focusing on postsecondary vocational training or providing general education credits that could eventually be transferred to college courses. This would help make their mission consistent with their size so that reasonable quality could be provided at reasonable cost. This will be discussed further later.

75. In the private sector, one would expect that institutions of suboptimal size would be driven out of business in a competitive environment. However, over 60% of all private colleges and universities have fewer than 500 bachelor's degree candidates, and another 10% have less than 1,000. Small
Equity Issues

75. Students in tertiary education come from families whose socioeconomic status is considerably above the national average, as is the case in most countries. A 1987 survey of a sample of public and private institutions in Manila showed that the average monthly salary of the students' fathers was ₱3,100 compared with the country's median monthly family income of ₱1,700. Differences by type of institution were evident, depending on tuition fees and academic selectivity. For example, the University of the Philippines (UP) draws from the wealthiest and most educated families in the population. The fathers of UP students had a mean income of ₱4,040 compared to ₱2,380 for the fathers of students in other public colleges and universities in Manila. Although UP charges two and a half times more tuition than other public institutions (₱1,080 against ₱430 per semester), unit costs at UP were ₱21,000 in 1986, compared to about ₱6,000 in the remaining chartered SUCs and about ₱2,900 in nonchartered institutions. Within the private sector, the Catholic schools, with average tuition fees of ₱2,040 per semester, are most selective and almost as skewed towards the wealthy as UP. The secular nonprofit colleges, which charge ₱900 per semester, draw from the least advantaged, and the Protestant and proprietary colleges are in between these two extremes. These tuition fees account for about 90% of unit costs. These findings are consistent with a nation-wide survey of college students conducted ten years ago.

76. While well intended, the government's current practice of subsidizing state colleges and universities often fails to promote social equity in tertiary education. Poor students get access to institutional subsidies only if they attend a public institution and lose their subsidy if they choose to attend a better quality private college. While some state colleges in rural areas cater to low-income families, most college students come from relatively high-income families. Moreover, the income bias increases at the best public institutions, which are also the most heavily subsidized, with UP being at the top of the apex in terms of both socioeconomic background and government subsidies. Most of the students attending these institutions would be able to pay for their own education, with little negative enrollment response.

77. Thus, if the equity objective is to use government funds to redistribute educational opportunities to the lower-income groups, a better way to do so is through a vastly enlarged scholarship program, which can be targeted directly to the poor, and used at any accredited public or private institution. This would be a kind of contracting scheme at the tertiary education level, available to meritorious students from lower income groups. Because private tuition rates are often less than expenditures per student at public colleges, this would actually save the government money, while giving the poor much greater access and choice than they currently have. At the same time, public funds spent on subsidizing wealthy students at state colleges and universities should be cut back, as these institutions are shifted to a fee-financed basis.

78. One economic problem with this scheme is the high administrative cost of testing economic means of a large number of scholarship applicants. Another political problem is the difficulty that would be faced by the small public colleges in rural areas and the low-income students they currently
enroll. To minimize these problems, a restructuring of public sector colleges and universities into a three-tier system is proposed, which would permit some institutions to retain their subsidies while others are shifted to fee-financing. The object would be to assign each tier a differentiated mission, with differentiated degrees of facilities and subsidies, such that the most heavily subsidized colleges also have characteristics that would attract the poorest students.

Restructuring of Public Institutions

79. Existing public institutions could be reorganized into a three-tier system.

(a) Tier One would consist of postsecondary institutions which offer one- or two-year terminal vocational programs and general education courses that could later be transferred to college. They would resemble upper-secondary schools or community and junior colleges in other countries. Most of the 180 nonchartered colleges upgraded from secondary schools would fall into this category since most of their faculty only have bachelor's degrees, facilities are meager and many of their students who come from lower income groups are already in nondegree programs. These institutions would continue to be heavily subsidized, based on the number of students times the expenditures per student needed with full utilization of facilities so that schools would have to attract full capacity enrollments to survive.

(b) Tier Two would consist of four-year colleges and universities offering bachelor's and possibly master's degree programs. Criteria for eligibility in this category would include a size sufficient to allow a variety of courses and a minimum core of faculty, a majority of faculty with master's degrees, and library and laboratory facilities. These institutions would be accredited or working towards accreditation. They would receive limited subsidies per student, relying mainly on income from fees, including those paid by holders of government scholarships. Most chartered state colleges would fall into this category, although the smaller campuses belong in Tier One.

(c) Tier Three would consist of a small number of universities which receive grants in support of postgraduate and research programs, but would not be subsidized for undergraduate teaching. An enlarged scholarship program would allow deserving students access to these universities.

80. The three-tier structure would facilitate the targeting of public resources to less advantaged students and to programs with relatively high social benefits and acceptable administrative costs. Together with the restructuring of the public institutions, public funds that are spent currently would be reallocated to:

(a) direct subsidies to public institutions in Tier One (80%-90% of unit costs) and in Tier Two (40%-50%);
(b) an enlarged program of scholarships to meritorious students, who could choose to attend a public or private institution;

(c) funding for research projects and graduate programs in selected fields awarded on a competitive basis to a small number of public and private universities; and

(d) small subsidies for accreditation and training in academic management.

81. It is also recommended that additional funds be mobilized to establish a revolving fund for loans to institutions and faculty to help finance facility improvement and staff development. The interest and amortization payments on these loans should ultimately cover the cost of the revolving fund.

82. The existing National Scholarship and Student Loan Center or a new quasi-autonomous body under the Board of Higher Education (similar to the U.S. National Science Foundation or the U.K. University Grants Commission) might take primary responsibility for the administration of the scholarship, loan, grants and research programs.

Deregulation of Private Institutions

83. The private sector has always played a major role in Philippine tertiary education, and the government should capitalize on the sector's potential for providing quality education efficiently. Government policy towards the private sector should encourage and sustain its contribution through the incentives created by deregulation together with accreditation.

84. Deregulation. As discussed earlier, many of the regulations intended to assure minimum standards in private institutions have become obstacles to quality improvement. Since the early 1980s, there has been a shift to deregulation of controls and to self-regulation through accreditation of institutions. A new manual of regulations to replace the previous 1970 edition will be introduced later in 1988. This will eliminate regulations on, for example, class size, length of a class period and library reading list specifications. The draft manual should be further revised to allow the private sector greater control over its curriculum design and fee structure so that market demands can be met faster and quality improvements can be financed.

85. Accreditation. There are at this time four accreditation associations in the country for Catholic, Protestant, nonsectarian and state universities and colleges. These are coordinated by an umbrella organization, the Federation of Accrediting Agencies of the Philippines. Institutions are currently accredited at four levels with increasing autonomy at each level. Level I indicates that the institution is still working toward accreditation but has limited administrative freedom (e.g., no need to submit teachers' programs and enrollment lists). Level II denotes accredited schools with full administrative and tuition deregulation. Level III schools are those that have been re-accredited and granted curriculum deregulation. Level IV schools
are considered to have met international standards and are eligible for public subsidies. As of January 1988, 52 institutions were at Level II, 33 at Level III, and none in Level IV.

86. In reality, the four levels of accreditation can be collapsed into two groups. Under the 1982 Education Act as implemented in 1988, all institutions are deregulated in relation to tuition fee increases, so there is no real incentive for Level II accreditation. Similarly, few subsidies are available to private institutions, thus Level IV has little meaning. It is therefore recommended that accreditation be simplified into two levels: those working for accreditation and those that are fully accredited. Accreditation should be subject to periodic review.

87. Recent deregulation and accreditation initiatives are steps in the right direction, but more can be done. The proposed reallocation of public resources would offer important incentives by allowing the private sector to compete for financial assistance. Since accredited status would likely be a requirement in this competition, the evaluation criteria of the different accrediting associations need to be made consistent, and should be reviewed periodically by an independent group. The technical panels recently appointed by DECS to review quality standards of tertiary institutions in various fields could play such a role.

E. Issues in Nonformal Education

88. There are indications of increasing poverty in urban ghettos and in rural communities where real wages and average income have been falling. The new government is tackling this problem through a package of initiatives including land reform and improvement in rural infrastructure, health measures, and education, particularly nonformal education (NFE). NFE covers all organized learning activities outside the formal school system and is addressed primarily to the disadvantaged, poorest segments of the population that have not attended school or have left prematurely. In 1985, only a third of the lowest income group had some schooling, and only 30% of these had completed the elementary cycle. Clearly, part of the solution to the low educational status of the poor is to improve the formal school system itself and reduce wastage, but a sizeable task remains for NFE as long as dropouts continue.

89. The government estimates that a little over 10% of the population (about 5 million) over 10 years of age are illiterate, and about half a million people are being added annually to this group as they do not attend school at all or drop out before attaining functional literacy. Literacy and livelihood skills training are particularly important for the large number of unemployed youth who, in 1985, comprised nearly half of the 3.4 million out-of-school youth aged 15 to 24. Recognizing NFE as an important vehicle to address the problem of the disadvantaged, the government is giving increased priority to NFE strengthening.

90. While there are some successful NFE programs to increase literacy such as the DECS/UNESCO sponsored Asia-Pacific Program of Education for All, in general, NFE has been deficient in linking its programs to beneficiary
needs, coordinating the efforts of multiple agencies, and finding additional resources for expansion and improvement of the programs.

Linkages to Needs

91. Most clientele of nonformal skills training are unemployed youth and marginal agricultural workers in rural areas. While both groups need training in basic livelihood skills and small-scale income-generating projects, with an emphasis on rural-based development, current NFE tends to be traditional, formalized, and industry- and urban-biased. This problem is compounded by unprepared trainers who conduct overly theoretical classes without practical hands-on training. Many of the trainers were formally trained as school teachers for children and youths, but are called upon to conduct NFE classes for adults. Further, there are few professional NFE planners and managers who can identify clientele needs and design programs.

92. To professionalize NFE personnel and improve the relevance of training, a Philippine Center for NFE is proposed to serve as the main training ground for both government and NGO personnel. The center would also conduct studies, organize conferences and exchange programs with other countries to share experiences.

Coordination

93. A number of government departments undertake nonformal education programs. DECS, through its Bureau of NFE, sponsors literacy classes, short-term skills training courses, and community education programs on such topics as nutrition, health and sanitation, cooperatives and citizenship. With other Bureaus, the Bureau of NFE is also involved in equivalency programs that provide alternative delivery systems for the school curricula. The National Manpower and Youth Council (NMYC) under the Department of Labor provides skills training to 90,000 youths annually at its regional training centers. The Department of Social Welfare provides classes in literacy, practical skills, job placement and self-employment to some 280,000 youths and adults annually. Other departments, including Health, Agriculture, and Trade and Industry, have their own training programs. However, most NFE is conducted through churches and other private, locally-based agencies, including business and voluntary organizations.

94. DECS has a mandate to provide support to NFE in general, but it has concentrated on the implementation of its own operational programs and placed less emphasis on general support services such as needs identification, program design, materials production, monitoring, and information gathering. NMYC is mandated to coordinate nonformal vocational training, but it has not successfully fulfilled this role. In the private sector, there are many bodies coordinating nonformal efforts such as the Association for Non-Traditional Education in the Philippines and the Catholic Educational Association of the Philippines. While coordination of NFE efforts could potentially lead to standardization and bureaucratization of initiatives, there seems to be a case for creating NFE Coordinating Councils at the local and national levels, to help maximize NFE resources by reducing duplication of activities.
95. The Councils would consist of representatives of all governmental, nongovernmental, and people's organizations involved in nonformal education as planners, implementors, or beneficiaries. The main functions of the Councils would be to assess the needs of various target groups, inventory NFE programs and resources, design and monitor cost-effective programs, and serve as clearinghouses of information for their respective areas. The DECS Bureau of NFE might be designated as the secretariat of the National Council. Its counterparts at the regional, provincial, city and municipal levels should serve as the secretariats to the councils at the different local levels.

Funding

96. Although the dearth of reliable and updated information on NFE is a major issue and the amount spent on NFE is unknown, it is apparent that NFE funding is inadequate when one compares the number of potential clientele (out-of-school youth and illiterates) with the number of people being trained. Many NGOs, particularly churches, can attract resources from international parent bodies, but most NFE projects experience a general shortage of resources as their clientele are often "inarticulate" to attract funding.

97. To address the need for additional funds with which to improve and expand NFE, it is suggested that a National NFE Loan Fund be established. The implementing agencies would be able to borrow from the Fund for capital investment if they could demonstrate their capacity to repay the loan.

F. Proposed Strategy and Operational Program

98. The main issues in Philippine education have been identified on a sector-wide basis and as specific subsector concerns. Recommendations have been made to address these issues in pursuit of the educational system's quality, equity, and efficiency goals. This final section proposes a strategy for the sector to define priorities and a plan of action within the economic reality of limited resources.

Financial Constraints and Choices

99. Recent government decisions on the public school system have led to an immediate and heavy financial burden on the national treasury: teacher salary increases by 50%; abolition of tuition fees; and transfer to the national government of financial responsibility for local secondary schools, formerly assisted by local government revenues and tuition fees to the extent of 40% of their recurrent costs. A combination of these decisions has led to an increase in total secondary operating costs by about 60%, contributing to the overall increase in the share of education in total government spending from 17% in 1985 to an estimated 21% in 1988.

100. Even with modest improvements in elementary and secondary cohort survival rates and in the elementary to secondary level transition rate, as well as with stable participation rates in tertiary education, the percentage share of the sector as high as 21% to 22% will have to be sustained over the medium term simply to maintain current real levels of unit operating
expenditure per student. This estimate still does not take into account any real increases in teacher salaries and the additional resources needed for quality improvements in the sector. These financial realities demand decisions on priorities for sector development and strategies to deliver educational services more efficiently.

There are, for example, trade-offs between quantity—in terms of accommodating enrollment expansion at the elementary and secondary levels—and quality. This is seldom debated since the government is committed to providing basic education for all its citizens, although it generally means that fewer resources can be devoted to each student than would be the case in a more selective system. In fact, a recurring issue in Philippine education is that the government has never been able to introduce a seventh grade at the elementary level as mandated by law. Recently, proposals to add one or more years either at the elementary or secondary level have been publicly discussed and supported by bills filed in Congress. These proposals are premised on the reasoning that the basic education cycle needs to be lengthened in order to improve quality. It is argued, however, that changing the structure of basic education would only absorb scarce resources from and delay quality improvement. Such a strategy would seem inappropriate when a large proportion of the population fails even to complete the ten-year cycle and the average quality of education currently being offered is still below an acceptable minimum. The immediate concern appears to be to get the present system functioning more efficiently.

Strategies and Action Plans

Three main strategies are proposed to increase sectoral quality, equity and efficiency: strengthening management capacities; containing budgetary expansion; and encouraging the private sector. These strategies and the actions needed to effect them are described below.

Strengthening Management Capacities. Sector issues can be effectively addressed when strong planning and management capacities are built up at the central, regional and subregional levels. Toward this end, DECS should:

(a) begin a program to strengthen educational planning, taking a 10-year planning time horizon; review data needs, simplify data collection

The specific assumptions for these projections are: (a) growth in first grade enrollments increase at the current rate of population growth; (b) cohort survival rates improve between now and 1993 from 67% to 71% at the elementary level, and from 79% to 84% at the secondary level; (c) the transition rate from elementary to secondary education remains stable at 92%, but increases from the backlog of previous elementary school graduates wishing to avail themselves of free secondary education are taken into account (estimated at 200,000 in 1988, decreasing to 100,000 by 1993); (d) the public share of secondary school enrollments increases from 63% to 68%; (e) the tertiary education enrollment ratio remains at about 35%; and (f) real GNP increases at 5.7% annually between 1988 and 1993 with the share of the government budget at 12%.
forms and integrate these into the planning process; build a research and evaluation capability into the planning process; review qualifications required for DECS staff to permit broader entry;

(b) establish a national board or council of education as a policy advisory group to DECS as well as to Congress;

(c) set up organizational arrangements for data collection and analysis to assist in planning of teacher training and private education;

(d) set up a unit for project execution within DECS and absorb relevant EDPITAF staff into this unit;

(e) develop manuals of inter- and intra-departmental responsibilities and accountability at each level of administration for various management tasks including planning, budgeting, and procurement and distribution of textbooks and other school materials;

(f) plan and execute training programs in management skills for regional and district education officials and for school principals;

(g) experiment in one or two regions on the limits and possibilities of decentralizing planning and budgetary responsibilities in conjunction with performance audits.

(h) develop institutional arrangements for harmonizing and expanding nonformal education (NFE Councils and a Center for Nonformal Education).

104. Containing Budgetary Expansion. Given the country's financial constraints, efforts to contain a rapid increase in education expenditure should be made through immediate as well as longer term measures. It should be noted that by mandating free secondary education and raising teacher salaries by 50%, much of the budgetary flexibility has been removed, so that the major priority for the sector is to improve quality while containing expenditures. This means that there is an urgent need for interventions and reforms to promote greater efficiency, such as:

(a) utilizing teachers more efficiently through higher student-teacher ratios and teaching loads at the elementary and secondary level;

(b) converting secondary schools attached to state universities and colleges into regular national schools; and

(c) taking advantage of economies of scale by consolidating small schools and campuses, where possible, and by instituting guidelines for the minimum size of new public educational institutions.

As a long-term measure with a far reaching impact on enrollments and expenditures, active participation in an effort to lower fertility through population and health education is essential.
105. **Encouraging the Private Sector.** Private education has played a vital role in providing educational services. The sustained participation of the private sector should be promoted by removing tight controls, moving towards self-regulation based on the accreditation system, and expanding opportunities for financial assistance. Specifically, the government should:

(a) accelerate the deregulation process by granting greater flexibility over tuition fees and curricular changes;

(b) help strengthen the accreditation process and develop the DECS technical panels to assist in developing and periodically updating accreditation criteria;

(c) allow private institutions to compete for public grants to fund research and graduate studies;

(d) establish a revolving loan fund to colleges and faculty for capital improvements and staff development; and

(e) expand the Educational Service Contracting program at the secondary level, in which the government pays private schools to enroll students who cannot be accommodated in the public schools.

106. Another avenue by which the private sector can be a strong partner in educational development is through increased participation of NGOs and support of programs that these organizations run more effectively and efficiently than the government. It is recommended that the government:

(a) involve NGOs in the delivery of the proposed preschool programs targeted to disadvantaged students, which would include health, nutrition and preliteracy language components; and

(b) support the already considerable involvement of NGOs in nonformal education by establishing national and local councils of nonformal education, a training center and a revolving NFE fund.

**Priority Programs**

107. Two specific programs seem to have the most immediate and pressing priority in the education sector: (a) reducing the elementary school dropout rate, and (b) rationalizing tertiary education.

108. **Reducing Elementary School Dropout.** The problem of elementary school dropout is of primary concern because it is at this level that social inequities in the education system originate, and are transmitted to subsequent levels. Similarly, to the extent that dropout is caused by factors related to school quality, the products of the elementary school system determine the quality of entrants in secondary and eventually in tertiary education. Reducing dropout in elementary schools will require measures that address specific school and poverty-related causes of dropout, and a general strategy to improve the overall quality of schooling.
109. As the analysis of the dropout problem is based on limited data, a pilot project is recommended in selected disadvantaged school districts where a set of measures would be introduced for close monitoring and determination of the relative effectiveness of each intervention for wider application. The project would include free provision of essential school-related items, nutrition and language programs targeted at pre-elementary school children, an information campaign to raise the interest of parents and children in completing schooling, various measures to improve teaching quality, and additional facilities to ensure access to the full six-year elementary school cycle based on school mapping.

110. Overall improvement in school quality, which is expected to encourage retention, would include intensified in-service training for teachers, long-term improvements in pre-service teacher education, provision of adequate levels and quality of instructional materials, decentralization of decision-making and increased accountability of school principals and teachers, and improved testing and evaluation.

111. Rationalizing Tertiary Education. Rationalization of tertiary education should be expedited to eliminate current inequities and inefficiencies in the system. The government has embarked on comprehensive development programs for both the elementary and secondary subsectors, and it is appropriate that attention also be given the third level of education. Unlike the large investment programs in basic education, however, the challenge in the tertiary education subsector is how quality and access can be improved without spending more public funds. Rationalizing the system means directing public funds to subsidize the education of qualified but less advantaged students and to programs with relatively high social benefits and acceptable administrative costs. This would be achieved both by restructuring the public universities and colleges into the three-tier system with each tier assigned a different mission and different degree of subsidy, and by reallocating currently spent public funds towards an enlarged scholarship program, funding for research projects, graduate programs in selected fields and training in academic management. Additional funding would however be proposed for the initial start-up capital for a revolving loan fund to finance improvements in physical facilities and staff development.