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TRINIDAD AND TOBAGO

STAFF APPRAISAL REPORT ON A

THIRD EDUCATION PROJECT

May 21, 1979

Projects Department
Latin America and Caribbean Regional Office

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CURRENCY EQUIVALENTS
(since June 1976)

Currency Unit	= Trinidad and Tobago Dollar (TT\$)
US\$1.00	= TT\$2.40
TT\$1.00	= US\$0.42

WEIGHTS AND MEASURES

1 hectare (ha)	= 2.47 acres
1 square meter (m ²)	= 10.76 square feet
1 square kilometer (km ²)	= 0.39 square miles

GLOSSARY OF ABBREVIATIONS

CARICOM	- Caribbean Common Market
ECIAF	- Eastern Caribbean Institute of Agriculture and Forestry
EEC	- European Economic Community
EPIU	- Education Unit Projects Implementation Unit
IDB	- Inter-American Development Bank
NCTDC	- National Curriculum and Teacher Development Center
OAS	- Organization of American States
TDC	- Teacher Development Center

GOVERNMENT OF TRINIDAD AND TOBAGO
FISCAL YEAR

January 1 - December 31

SCHOOL YEAR

September 1 - August 31

TRINIDAD AND TOBAGO
STAFF APPRAISAL REPORT ON A
THIRD EDUCATION PROJECT

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This report is based on the findings of an appraisal mission which visited Trinidad and Tobago in November, 1978. The mission comprised Messrs. N. Fisher (educator), A. Stocker (economist) and T. van Tienhoven (civil engineer, consultant).

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TRINIDAD AND TOBAGO
STAFF APPRAISAL REPORT ON A
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BASIC DATA

Area	5,128.0 km ²
<u>Population</u> (mid-1977)	1,114,800
Density	217 per km ²
Average Annual Population Growth (1970-76)	1.1%
Literacy	95%
<u>GNP Per Capita</u> (1977)	US\$2,380
Public Education Expenditure as % of Total Government Expenditures (1977)	
- Recurrent	19.7%
- Capital	7.1%
- Total	14.1%
Public Education Expenditures as % of GNP (1977)	4.5%
<u>Enrollments</u> (1976/77)	
<u>Level</u>	<u>Total</u> <u>% Age Group</u>
Primary	161,010 98
Secondary	108,972 79
Junior Secondary	79,387 93
Senior Secondary	29,585 54
Higher	7,669 -
<u>Student/Teacher Ratio</u> (1976/77)	
Primary	28:1
Secondary: Junior Secondary	29:1
Senior Secondary	21:1

GLOSSARY

Senior Primary Classes. A two-year extension course (Grades 8-9) in primary schools for students who, on completion of their primary school education (Grades 1-7) are unsuccessful in the Common Entrance Examination for admission to a junior secondary school.

Common Entrance Examination. A State-controlled selective examination taken at the end of the primary school cycle for admission to a junior secondary school.

14 + Examination. A State-controlled selective examination taken on completion of the junior secondary school cycle (Grade 10) for admission to a senior secondary school course (Grades 11-12).

Junior Secondary School. A coeducational lower cycle secondary school (Grades 8-10).

Senior Secondary School. A coeducational upper cycle secondary school offering academic courses (Grades 11-12) and pre-university (6th Form) courses (Grades 13-14).

Composite Secondary School. A coeducational secondary school comprising both lower and upper cycles (Grades 8-12) but not offering pre-university courses.

Senior Comprehensive School. A coeducational secondary school offering academic and pre-vocational courses at upper cycle and pre-university levels (Grades 11/12-14).

Double Shift System. Use of the same educational facility by two groups of students, one group in the morning, and a second in the afternoon. To de-shift a school: To convert a school from the double shift to a single shift system.

General Certificate of Education at Ordinary Level. Certificate awarded on completion of Grade 12, based on an examination set and graded by a British University.

General Certificate of Education at Advanced Level. Certificate awarded on completion of Grade 14, based on an examination set and graded by a British University. A pre-requisite for university admission.

Caribbean Examinations Council. A Regional Council, representative of the English speaking Caribbean countries, to organize and administer a Caribbean Certificate of Education examination to replace the British-based system.

Sandwich Course. A training system whereby workers are released by their employers for a given period of time in each year of the course to pursue full-time courses of study at technical institutions. Depending on the annual duration of these study periods, they are referred to as "thick" or "thin" sandwich courses.

TRINIDAD AND TOBAGO

I. SOCIO ECONOMIC FACTORS RELATED TO EDUCATION DEVELOPMENT

1.01 The discovery of additional oil and gas reserves, and the quadrupling of world oil prices at the end of 1973, led to a dramatic upturn in Trinidad and Tobago's economic situation. GNP grew by 7.8% in 1977; fiscal revenues and foreign exchange reserves have increased sharply. The government has responded to this improved economic situation by establishing a number of "special funds" from which to finance investments which it considers basic to its development strategy. That strategy is to diversify the structure of the economy by accelerating investments, mainly in industry and infrastructure, and to provide a wide range of public services in health, education, housing and community development. The increased investment resources afford an excellent opportunity to tackle basic social and economic problems, but success will depend on the extent to which the government is able to improve its administrative and managerial capacity for project planning, preparation and implementation, and resolve manpower constraints in key sectors.

1.02 The twin islands' population grew at an average 1.1% annually in the 1970-76 period, and reached 1,114,800 in mid-1977. However, the population will increase at a rate higher than that previously predicted due to such factors as the curtailed level of emigration, the lowering of the mortality rate, and a lower than anticipated decline in birth rates. If current trends continue, total population may be expected to grow at 2.3% p.a. compared with the 1% earlier anticipated to prevail through 1985. Although the primary school age group (5-11) is expected to decline, the secondary and higher age groups are likely to increase, reflecting the high birth rates in the 50's and early 60's. If a high proportion of young people were to continue to leave school without the training or orientation to prepare them for the requirements of the developing economy, the chronic unemployment (16.2% in 1977), or underemployment, would worsen.

1.03 The academically-biased education system, and the resultant inadequate preparation of labor force entrants, is demonstrably not helping to reduce unemployment. ^{1/} Success in schools is measured by achievements in predominantly academic subjects; the traditional secondary schools prepare students essentially for white collar jobs (administrative and clerical work) and artificial labor shortages are thus created for some types of skilled and manual jobs, particularly in agriculture and construction. Implementation of proposed reforms in curricula and the examination system is long overdue.

^{1/} There is some evidence, based on a 1975-76 Manpower survey, that supports the thesis of a mismatch between educational training and manpower requirements. For example (a) of the 305 graduates of secondary schools with the highest qualifications (6-10 "O" level passes), 296 were still unemployed 6 months after graduating; (b) contrariwise, of 122 graduates of Technical Schools in the same year, 98 had obtained jobs within the six-month period.

Source: Survey of Graduates of the Education and Training Systems, Ministry of Finance (Division of Planning and Development) Manpower Unit, Trinidad 1976.

1.04 Efforts to improve income distribution and the living standards of the poor must be linked to improved access to education and training opportunities for this same group. While almost 90% of the labor force has completed primary education, only 7% of workers have received a secondary education.

1.05 The government's development plan emphasizes the creation of a modern, capital-intensive energy-based industrial sector. At the same time efforts will continue to develop agriculture and small-to-medium-scale manufacturing to absorb the unemployed. The success of this strategy will depend substantially on the government's ability to redirect the education system so as to utilize fully the country's labor force. Specifically, a major effort is needed to provide training in the skills needed by industry. The government recognizes this fact and will continue to devote a major part of its budgetary expenditures to the education sector, and in this context has accorded a high priority to vocationally-oriented training. The government further proposes to give added impetus to craft learning and technical studies in the senior secondary schools which for some years have been diversifying their curricula in this direction.

II. THE EDUCATION AND TRAINING SECTOR

General

2.01 In 1967 the government of Trinidad and Tobago approved a 15-year Education Development Plan (1968-1983) which was expected to be implemented in three phases: 1968-72; 1973-77; and 1978-83. In 1975 the implementation of the Plan became the focus of considerable discussion, and in the light of the improved economic situation of the country and the aspirations and needs of the population it was reappraised. The main guidelines enunciated by the government are presently being vigorously pursued. The salient objectives are: to meet new qualitative and quantitative targets at the primary and secondary levels in consonance with sound educational practice and perceived manpower needs; to accept the denominational organizations as having a critical and important role to play in the education system, but to reject the old cost-sharing formula, with the public sector assuming full responsibility for all costs; to view the double-shift junior secondary school system as a temporary measure; to give technology in all its aspects high priority in any modified Education Plan; and to reject the concept of specialized craft training programs in separate government vocational schools in favor of an integrated, comprehensive school system embracing traditional academic, pre-technician, commercial, industrial and limited specialized craft programs.

Structure and Administration of the Education System

2.02 The structure of the public education and training system is given in Chart 4. Primary education spans the age range 5-13+ years, and includes the following three levels: infants (2 years); main primary (5 years); and senior primary (2 years). The last level is for students unsuccessful in the Common Entrance Examination for admission to secondary schools. Secondary

education extends over the age range 11-16 years and is divided into two cycles: junior secondary (3 years; Forms I-III, or grades 8-10); and senior secondary (2 years; Forms IV-V, or grades 11-12), leading to the General Certificate of Education at Ordinary Level. An additional Sixth Form (pre university) course of 2 years (Grades 13-14) is also offered leading to the General Certificate of Education at Advanced Level. (These examinations will, over time, be replaced by the Caribbean Certificate of Education examinations under the administration of the Caribbean Examinations Council.) Higher education consists of post-secondary institutions (technical institutes, teacher training colleges, agricultural institutes, etc.) and the University of the West Indies at St. Augustine. Save for the latter, an autonomous institution, and some post-secondary institutions (paramedical, agriculture) coming under other Ministries, the administration of the public education system is under the direct control of the Ministry of Education and Culture. The same Ministry is also responsible for the administration of a number of non-formal, adult and vocational training programs.

Enrollment Characteristics

2.03 While compulsory education terminates at the age of twelve, the clamor for ever more education is such that enrollments remain high at all levels, as will be evident from the following summary of Tables 2 and 3.

Enrollments 1976-77

<u>Level</u>	<u>Enrollment</u>	<u>% Age Group</u>	<u>% Female</u>	<u>Teachers</u>	<u>Students Teacher Ratio</u>
<u>Primary</u>	161,010	97.5	49	5,681 /c	28:1
<u>Secondary: Total</u>	<u>108,972 /a</u>	<u>79 /a</u>	<u>51</u>	<u>4,095 /d</u>	<u>27:1</u>
Junior Secondary	79,387 /a	93 /a	52	2,713	29:1
Senior Secondary	29,585	54	51	1,382	21:1
<u>Higher</u>	<u>7,669 /b</u>				

/a Including 23,986 accommodated in senior-primary classes in primary schools.

/b Including University of West Indies, Teacher Training Colleges and Technical Institutes.

/c Excluding 1,296 in teacher training colleges, and teachers for senior-primary classes in primary schools.

/d Including teachers for senior-primary classes in primary schools.

2.04 The above Table demonstrates (i) the near 100% participation rate of the age group 5-11 years; (ii) the dramatic rise in secondary school enrollments, which in the case of the junior cycle have risen from 41,103 in 1971-72 to 79,387 (+93%) in 1976-77, and at senior secondary level from 12,958 to 29,585 (+228%) over the same period. When one adds that automatic promotion and parental commitment to the education of their children have resulted in

negligible drop-out and repeater rates, except in the final year of primary education (para 2.05) together with a high incidence of school attendance, the measure of the government's achievements in expanding access to primary and secondary education in internally efficient schools becomes apparent. Nonetheless, the magnitude of the government's ambitious education reform targets has exceeded implementation capacity, and the present system is showing signs of strain.

2.05 Primary Education. With the introduction of the Education Reform of 1967, primary school curricula were reformulated. These, however, produced little significant impact on the quality of education, since the demands of the Common Entrance Examination, with its emphasis on conventional academic programs, to the exclusion of practical subjects and activity-based teaching, continued to dominate the school timetable. The senior primary classes operate, in overcrowded and ill equipped premises, an essentially primary school and quite inadequate curriculum. The present curriculum, revised in 1975 in expectation of the early abolition of the Common Entrance Examination, is soundly based on modern educational theory and practice and in the spirit of the government's new education policy. Its effective introduction into the schools will not, however, be possible without the initiation of programs to upgrade physical facilities, many of which are old and outmoded; to reorient primary school teachers in the new curriculum and methodologies; and to design, produce and distribute appropriate teaching/learning materials. Thus at primary level, urgent measures are called for to (a) reconstruct/remodel some 85 outmoded or dilapidated primary schools in which about 35,400 students (22% of total enrollments) are presently accommodated in conditions which negate the introduction of a modern curriculum and teaching methodology; (b) abolish the overcrowded and unsatisfactory senior primary classes in primary schools, in which some 23,986 students, denied access to junior secondary schools through lack of facilities, receive an education vastly inferior to that enjoyed by their peer group; and (c) eliminate the high and wasteful repetition which occurs in the final (i.e. the selective entrance examination) year of primary education. The urgency of this latter problem highlights at once the gap between the government's promotion policies and physical provision, and the public pressure for secondary education; despite a vigorous policy of school construction, the mismatch between supply and demand has scarcely changed over the past eleven years, as is evident from the following data:

- (i) between 1965/66 and 1976/77 enrollments in senior primary classes scarcely declined (from 25,367 to 23,986);
- (ii) the voluntary repeater rate for the final grade of primary education in 1965/66 was 30% (8,338 students); it had only declined to 28% (9,309 students out of an increased enrollment) in 1976-77;
- (iii) the percentage of 5th grade students, including repeaters, who failed to obtain a junior secondary place, 65% (18,414) in 1965/66, remained at a high 44% (14,586) in 1976/77.

Secondary Education

2.06 At junior secondary level, the proposed abolition by 1983 of the 11+ Common Entrance Examination (CEE) and the planned automatic promotion of all eligible primary graduates to junior secondary courses, will require an immediate phased program of expansion of the existing, and construction of new schools of this type. With the abolition of the selective examination, the government hopes to raise the quality of primary education by the removal of curriculum distortions commonly associated with selective examination procedures. The government is currently reassessing its order of priorities in this subsector, to accord first importance to the resolution of the access problem rather than to converting the double-shift use of existing junior secondary schools to a single-shift system.

2.07 At senior secondary level, the government's plan, targeted for 1985, for the automatic promotion of about 90% of junior secondary graduates, and the conversion of the present 14+ selective examination into a purely normative device to be administered at the end of the junior secondary cycle, calls for the expansion of existing, and the construction of new schools of this level, as well as for radical changes in the type of physical provision and in curriculum content, if meaningful education is to be offered to the broader ability spectrum for which these schools will be required to cater. It is within this context that the government decided to abolish separate vocational schools and to integrate the craft courses in the senior secondary program to offer an acceptable balanced course of general and technical education, that will meet legitimate aspirations of students and accelerate the flow of technically-oriented graduates to the labor market.

Teacher Education

2.08 The government recognizes that to reap the full returns from its school facilities expansion and improvement investment programs, excellence will derive no less from the quality of the teacher force, and from well conceived teaching support systems, than from physical provision. Thus at primary school level, with the imminent phasing out by 1979-80 of its basic in-service training program for unqualified primary teachers, (76% of whom have now been or are being certificated), the government plans to use resources, both physical and financial, that will become available to initiate pre-service courses, and to retrain qualified teachers to adapt to new curricula and teaching techniques.

2.09 With regard to the junior secondary schools, the majority of staff are primary teachers who have received short in-service courses to fit them for their teaching role. Furthermore, the dramatic expansion of senior secondary education has exposed these schools to a serious dearth of qualified and trained teachers, especially in technical/vocational, science and mathematics disciplines. This problem will be compounded by (a) the proposed inclusion of craft courses in all senior secondary schools and (b) a redistribution of enrollments in these schools, to attract more students into technical/vocational courses. Moreover, in this regard, a major expansion of guidance and counselling services will be required if students, and their parents, are

to profit wisely from the improved education offering, and the widening course choices soon to become available. A more intensive and sustained program is under preparation, using existing institutions as well as the newly proposed Teacher Development Centers, to produce a fully qualified teaching force for these schools.

2.10 The government is no less conscious that if equity in education, and qualitative improvement are to be achieved, the existing incipient services which cater for curriculum development and for the elaboration, testing and distribution of didactic material are insufficient to meet the needs of an expanding school system. Only a substantial expansion of these services will provide teachers and students, in particular those of limited socio-economic means, with the indispensable tools of sound learning.

B. Formal and Non-formal Technical and Vocational Education

2.11 The Ministry of Education provides technical and vocational education of 2-3 years duration in two Technical Institutes (San Fernando and John S. Donaldson) and one Vocational Center at Point Fortin, trade courses at five Youth Camps and six Trade Centers, two of which are located in Tobago. The Ministry of Agriculture offers training courses for farmers at the Farmers' Training Center, and through three mobile training units included in the Bank-financed second education project under Loan 862-TR. The same Ministry operates the Eastern Caribbean Institute of Agriculture and Forestry (ECIAF) which affords two year courses for rural extension officers, mainly but not exclusively from Trinidad and Tobago. Two/three-year paramedical courses are the responsibility of the Ministry of Health.

2.12 The San Fernando Technical Institute, provided under the Bank second education loan (862-TR), prepares technicians and craftsmen for direct entry to industry and commerce and also offers part-time/sandwich courses for up-grading of the existing work force. In 1976/77 there were 385 enrollments in technician courses (25 day and 360 evening students) and 1,155 enrollments in craft courses (808 day and 385 evening students). The John S. Donaldson Technical Institute, located in Port of Spain, also offers technician level and craft courses. Enrollments in 1976-77 totalled 2,139, 769 in technician courses (231 day and 538 evening students) and 1,370 in craft courses (534 day and 836 evening courses). This Institute also has a recently completed Technical Teacher Training wing, financed under an IDB project, which has not as yet become operative.

2.13 Point Fortin Vocational Center, located in the south west of the island of Trinidad, provides only craft level courses. Enrollments in 1976-77 totalled 406, 121 in day and 285 in evening courses. The Youth Camps and Trade Centers, initiated in 1966, provide nonformal vocational/practical training courses for unemployed youths in the 17 to 21 age range. Most courses are male oriented but the tailoring trades are provided at two Camps while one caters exclusively for girls. Enrollments have never been high; in 1976-77 they totalled 1,066, of which 188 were in the girls' Camp and about 233 were girls.

2.14 The future role of the technical institutions is under consideration by the government. Medium and longer term objectives include the gradual transfer of all basic craft level training to the secondary schools, the upgrading of the technical institutions to prepare higher level skilled manpower, and the phasing out of the Youth Camps and Trade Centers once the backlog of untrained unemployed youth is absorbed into industry. The expansion and redistribution of enrollments in the senior secondary schools are viewed as major strategies in the achievement of these goals.

2.15 The National Training Board (NTB), was established by the government in 1972 to advise on technical and vocational education and to coordinate and standardize craft training and certification in formal institutions and in industrial enterprises. Although the Board has only lately made any substantial impact, due to long delays in staff appointments, and although its future role, within the recently created National Institute of Higher Education, charged inter alia with responsibility for coordinating all aspects of technical, vocational and on-going education, remains unclear, it has successfully organized a number of courses for managers of in-plant training courses within the private sector.

2.16 Apprenticeship training in private industry has been relatively successful in the larger enterprises, either by direct in-plant training courses or in conjunction with formal government institutions. Smaller private enterprises have, however, proved incapable of devising similar apprenticeship training; the government is considering strategies by which (a) to reduce the normal 5-year apprenticeship scheme to 3 years in the case of graduates from the senior secondary technician and craft courses and (b) to develop a national apprenticeship scheme, coordinated and standardized by the NTB and/or the National Institute of Higher Education. The restructuring of senior secondary courses (para 2.07) should thus serve this policy of accelerated absorption into industry of prevocationally-trained secondary school graduates.

2.17 The Eastern Caribbean Institute of Agriculture and Forestry is the regional center for the training of rural extension officers. It offers two year residential courses to post secondary students sponsored by the Ministry of Agriculture, by other Caribbean governments, or by private industry. The Trinidadian Ministry of Education also sponsors a small number of trained teachers requiring technical upgrading to serve as teachers of agriculture. Recently girls have been admitted to the course. The yearly intake of about 72 students is typically distributed as follows: 35 sponsored by Ministry of Agriculture; 15 by the Forestry Division of the same Ministry; 6 by Ministry of Education; 16 by foreign governments or private enterprises. In 1978 there were 13 girls in residence.

2.18 Paramedical training courses are operated by the Ministry of Health. A newly constructed Nurses Training Center, conjointly with local hospitals, graduates 100 registered nurses annually in 3-year training programs, and about 35 auxiliary nurses annually in 2-year courses. The recently renovated Dental Nurses Training Center conducts 2-year training programs, with an annual output of 35. Graduates of these courses are attached to one or other

of the more than 100 Public Health Centers located in major centers of population across the two islands, and of which some 31 are presently being rehabilitated or constructed under an IDB assistance project. It is intended that graduates from these training programs will increasingly be attached to one or more schools remote from the Public Health Centers, each base school being provided with the essential yet modest medico-dental physical facilities.

2.19 The growing importance of the Guidance and Counselling services has not gone unnoticed by the government: Over the past four years a part-time day release program operated by the Ministry of Education in conjunction with the Ministry of Health and the University of the West Indies, has provided basic in-service training in counselling to some 200 teachers. An expanded Guidance Service, and a fully professionalized staff is now envisioned in two phases: the appointment, training, and assignment of 116 officers, 61 between 1979-81, and 55 during 1981-83. Steps so far taken include (a) Cabinet agreement to the creation of 61 Guidance/Counselling posts in schools; (b) a fellowship training program for three key Guidance staff presently in operation at Buffalo University; and (c) discussions with the Universities of Buffalo and the West Indies to initiate in September 1980 a recognized one year Diploma Course in Guidance and Counselling at UWI, to train 25 Guidance officers annually. Graduates of these programs will be attached in increasing numbers to secondary institutions, and ultimately to groups of primary schools.

2.20 The imminent full operation of the San Fernando Technical Institute and the gradual phasing out of lower level craft training courses at this and the John S. Donaldson Institute in favor of higher level courses, should provide appropriate conditions to service substantially the technical/vocational training needs of the country, both formal and nonformal. The redistribution of secondary school enrollments, existing pre-technician courses and the proposed introduction of craft courses in senior secondary schools should provide industry and the training institutions with substantial numbers of secondary school graduates attitudinally and pre-vocationally equipped for absorption into industry and/or further training. It is further intended to make extensive use of the facilities at secondary schools throughout the country for formal and nonformal adult education, for extension services, and for community participatory activities.

C. Education Finance and External Aid

2.21 In the past four years total public education expenditures ranged from 4.5% to 5.0% of GNP (Table 8). In 1977, expenditures for education amounted to 14.1% of the total government budget, comprising 19.7% of the recurrent budget and 7.1% of the capital budget. The relatively low capital expenditures are a result of constraints in the implementation mechanism, which prevent the Ministry of Education from fully realizing its ambitious development program. The amounts provided in the capital budget estimates are normally lower than the amounts requested, not because of overall budget constraints, but to take into account the implementation constraints. In real terms capital expenditures increased by an annual 6.4% in the 1976-78 period. The major investment has taken place at the secondary level (expansion of places and introduction of craft courses).

2.22 Recurrent expenditures per student were US\$230 ^{1/} in primary and US\$390 ^{1/} in secondary education in 1977. At the primary level, salaries account for 94% and at the secondary level for 80%. This leaves at the primary level relatively little for materials and maintenance. The average student-teacher ratios of 28:1 in primary, 29:1 in junior secondary, and 21:1 in senior secondary schools are reasonable (paras 2.03, 2.04). The planned elimination of senior primary classes in primary schools could produce some temporary overstaffing; however, the proposed retraining of surplus primary teachers for service in the secondary schools would enable the present ratios to be retained, or improved. Further economies will be achieved when the present costly teacher training system - in-service training on full pay for unqualified teachers after a minimum of two years teaching service - is replaced by pre-service training. The introduction of craft courses at the secondary level will eventually increase recurrent costs. The proposed expansion of the school feeding program (free school meals for all primary and secondary students) will have a major impact on recurrent costs (about TT\$162.0 million, or US\$67.5 million per year, which represents an increase of 65% over the 1977 recurrent budget).

2.23 The proposed project includes the required capital investment for a government-supportive program to replace dilapidated primary schools, improve access to junior secondary schools, expand the educational offering of a group of senior/composite secondary schools by the introduction of craft courses, and improve the quality of teacher education and teaching support services. Project costs will represent about 25% of planned public investments in the education sector in the period 1980-83. The Ministry of Finance and Planning is allocating the necessary counterpart funds for the proposed project in its investment plan.

2.24 External aid through bilateral and multilateral agencies has been a significant factor in the development in recent years of the education sector in Trinidad and Tobago. The major source of external assistance at present is the World Bank; a first Bank loan of US\$9.2 million (Loan No. 564-TR) was made in October 16, 1968, and a second Bank loan of US\$9.3 million (Loan No. 862-TR) in October 25, 1972 (para 2.35). IDB approved in 1972 a US\$9.4 million loan for the construction and equipping of 12 vocational schools and an expansion of the John S. Donaldson Technical Institute. Consequent upon a government policy decision against separate vocational schools, and the integration of these courses within the Comprehensive Schools, only the one school then under construction, redesigned as a comprehensive School, and the extension to the John S. Donaldson Institute, were built. The remaining part of the loan (US\$7.6 million) was cancelled in 1976. IDB is now providing non-reimbursable technical assistance (US\$350,000) to the Ministry of Education and Culture Planning Unit. About five experts would assist the unit mainly in education planning, curriculum development and teacher training. A European Economic Community technical assistance program is providing experts for

^{1/} Excluding school meal service.

^{2/} Excluding teachers in training 1,296 in primary and 46 in secondary.

technical teacher training and fellowships for technical teachers. The total grant for education amounts to about US\$1.0 million for 1979-80. The United Kingdom provides on a grant basis four experts for the San Fernando Technical Institute. OAS is affording limited support (equipment, books) in the field of in-service teaching training and in the establishment of an Institute of Languages. A regional OAS project for handicapped adults is expected to start next year. UNDP is providing one expert for the establishment of a national system of occupational classification and coding.

D. Government Education Development Strategy

National

2.25 Determinants in the planning of education development in Trinidad and Tobago include the following salient topographic, demographic, socio-economic and cultural features. Topographically, more than half the country's area is covered by forests and mountains leading to a habitation pattern of clusters of relatively densely populated conurbations, which contrast with small, isolated villages, access to, and intercommunication between which, are often precarious. In socio-economic terms, there remains a significant gap between the rich and the underprivileged, a substantial minority of the population living at near subsistence level, their children often effectively denied opportunities to benefit fully from the educational process. Culturally, the multiracial mix of the inhabitants has encouraged the growth of ethnically distributed population zones, each developing its own infrastructure, including the establishment of (sometimes makeshift) schools.

2.26 The above features complicate the planning process in a number of ways. Firstly, the location and capacity of new schools, especially at primary level, of necessity are planned primarily to serve local needs rather than in strict accord with large and more economic models; secondary schools, particularly the upper cycle, must limit course options, to provide cost-effective class sizes. Secondly, isolation, in combination with poverty factors, make imperative the provision of student welfare programs. Thirdly the sensitive ethnic issue requires increasing government support for the large number of denominational schools (75% of all primary schools) formerly constructed and maintained by significant financial contributions by the diverse Church authorities. The planned expansion of primary and secondary schools is in part designed to respond to the above features of Trinidadian society and will materially assist the equity issue.

2.27 The major government sector objectives are: (i) the equalization of educational opportunity at least between the ages 5-16 years; (ii) the reorientation of school curricula to respond to modern educational trends, the career aspirations of students of a wide range of ability, and the needs of the labor market; and (iii) the complementary training/retraining of teachers, and the expansion of support systems, to meet these changing criteria.

2.28 In pursuance of these objectives, basic strategies focus upon (a) a program of construction to rehabilitate both government and government-assisted (denominational) primary schools where physical conditions militate against the adoption of new curricula and teaching methodologies; to increase the number of junior secondary places to the point where universal and automatic promotion to this level of education would be assured (and thus to eliminate the unsatisfactory primary classes in primary schools, and with their elimination, the abolition of the Common Entrance Examination (11+); and to augment provision, and reorient the direction of senior secondary schools, to provide for automatic access to these institutions (and hence to abolish the 14+ selective examination procedures), and to emphasize the teaching of vocational skills; (b) a program of teacher education to provide certification courses for unqualified teachers, professional courses for untrained graduates and technical teachers, and regular upgrading courses for teachers unfamiliar with current curricula trends and teaching techniques; and (c) a curriculum development and support mechanism to expand and institutionalize curriculum research, development and testing techniques, disseminate findings to the profession and to support the teaching/learning process by the production and distribution of didactic material. The proposed project is designed to complement the government's efforts to achieve these policy objectives and its implementation strategy.

2.29 The priority accorded by the government to the elimination of inequality in, and the qualitative improvement of the primary school system, not least within the denominational schools, is demonstrated by the recently created "Primary School Construction and Equipment Fund" (TT\$300 million over 15 years), the joint management procedures presently being worked out between the government and the respective Church authorities, and the newly adopted school curriculum emphasizing the teaching of science, practical subjects and aesthetic education within the context of a child-centered approach. The proposed provision of medico-dental services, and a national school meals program, attest to the government's concern for the disadvantaged and impoverished. The proposed project would support the equity and qualitative improvements objectives.

2.30 A logical further stage in the solution of the equity objective is the elimination of the senior primary classes in primary schools through the expansion of the junior secondary schools system. In this regard the government faces the dilemma of a system which is atypical of its general school policy. The twenty existing junior secondary schools built by 1977 under the Bank financed first and second education projects (Loans 564-TR and 862-TR) are the only institutions operating a double shift. The double shift system is seen by the public as having significant and adverse educational and social effects; they are popularly viewed as second rate schools, to be chosen as a last extremity, a situation which has distorted enrollment patterns in these and the complementary prestigious secondary schools. Against the public outcry for early deshifting, a posture supported by the Prime Minister's Working Party on this issue, the government has decided (a) to extend the existing junior secondary schools from 720/960 to 1,440 student places and to construct all new schools of this type on the larger model; and (b) in the longer term to phase out the double shift system. Notwithstanding this strategy, the

government concedes that given the high capital costs of deshifting (estimated cost US\$200 million) and the priority status of access to these schools, it will be necessary to continue the double shift system at least until all access problems are resolved. In this sense the proposed project, in its modified form, provides support for the government's priority access objective at this level of education.

2.31 At senior secondary level, the government has discarded the divisive principle of separate vocational schools as originally proposed in an IDB financed project in favor of an integrated comprehensive school system which will be capable of meeting in cost effective institutions the educational needs and job aspirations of students of all ability levels within a single school unit. It has further determined that industry's crucial needs for skilled and semi-skilled manpower require a redistribution of enrollment patterns in the upper secondary schools to attract more students into pretechnician and craft courses. To this end it (a) has recently built nine comprehensive schools, each incorporating craft facilities as well as the now standard pre-technician course facilities; (b) proposes to extend existing senior secondary schools and to redistribute enrollment patterns so that some 75% of all students in Forms IV and V will be studying one or other of the practical options. It should be noted that curricula for the practical courses have been carefully constructed to include an acceptable balance between general and technical education; with respect to the craft courses, however, the practical content is perhaps excessively craft-specific. The government is aware that these courses, which it justifies in the short term by a drive to assist industry to meet its crucial need for skilled and semi-skilled manpower, may in the longer term require redefinition. To this end it proposes to initiate, with the possible collaboration of the National Training Board and/or the National Institute of Higher Education, an evaluation of the relevance, in educational and employment terms, of the craft courses presently taught in the existing nine senior comprehensive schools. This study should be coordinated with the research findings of the specialists to be provided to the National Training Board under the second education project (Loan No. 862-TR) in the fields of manpower research, job analysis, and skill training requirements, relevant curriculum research and evaluation. It is therefore of the first importance that the government determine the future role of the National Training Board, vis-a-vis the recently created National Institute of Higher Education, in the area of technical/vocational training, appoint to the former institution the staff necessary to complete its establishment, and recruit the specialists referred to above. The Government provided assurances that evaluation of the existing craft courses will be undertaken, and submitted to the Bank for comment, prior to January 1, 1981 and any final determination regarding the scope and content of these courses in the project schools. In this connection it is relevant to note (i) that recommended course modifications which may result from the above mentioned evaluation could readily be accommodated in the project schools, given the planned flexibility in school design and enrollment patterns; and (ii) the proposed redistribution of enrollments in the project school will limit capital and recurrent costs to the actual number of new student places required, and by the joint use of existing and new facilities, to craft teaching areas not heretofore provided. In this version of the government's request document, as modified during appraisal, the proposed project will support this strategy.

2.32 Central to the qualitative improvement of education is the availability of a well prepared teaching force. The adoption of new curricula, the sound and efficient use of new practical facilities and the methodological reorientation necessary to deal with an ever widening range of student abilities imply the need for new directions in teacher training, in particular for trained guidance/counsellors, and an ongoing program of refresher courses. With the finalization by 1979-80 of the certification programs for unqualified primary school teachers, and the imminent availability of a new Teacher Training College constructed under the Bank second education project (Loan 862-TR) these facilities will be increasingly used to train and retrain primary and secondary school teachers in the new curricula; the University of the West Indies School of Education will shortly increase admissions to its post graduate teacher training course from 100 to 150 annually and further, initiate a Diploma course in Guidance and Counselling. These arrangements should adequately meet the teacher needs for all areas other than the specialists in technical and vocational education, of which there is currently a serious dearth. This latter deficit will be met by (a) a program to train annually between 50-100 technically qualified teachers at the newly completed Technical Teacher Training Wing of the John S. Donaldson Technical Institute, constructed under an IDB financed project; and (b) a program to train about 20-30 teachers of agriculture annually at the Eastern Caribbean Institute of Agriculture and Forestry (ECIAF).

2.33 To provide centralized resource facilities for curriculum research and development, for continuous, short in-service training courses, seminars and teacher group meetings, and for the production and distribution on a national scale of teaching/learning aids, the government proposes the creation of a National Curriculum and Teacher Development Center (NCTDC), strategically housed in the capital close to the Valsayn Teacher Training College. The work of the Center, under its Director and specialist staff, would be closely associated with relevant activities of the University, the Teacher Training Colleges, the National Training Board and the Ministry of Education's School Supervisory staff. The government's long term plans also foreshadow the construction of satellite regional Teacher Development Centers (TDC) in nodal points in Trinidad and Tobago; the functions of the satellite Centers will be more circumscribed, concerning themselves solely with in-service teacher training programs, and drawing on the resources of the National Center for advisory and possibly training services. One such Regional Center, to be located in San Fernando adjacent to the Corinth Teacher Training College, is scheduled for early construction. The proposed project would support the programs for the training of guidance counsellors and technical teachers and the development of a national system of Teacher Development Centers.

Regional

2.34 While the field of education is not the most obvious for a Regional Development approach, the government of Trinidad and Tobago has long recognized in practical terms the advantages of such a strategy. Presently the Eastern Caribbean Institute of Agriculture and Forestry allots some 20% of its places to extra-national students and has modified its entrance requirements to accommodate them; the Dental Nurse Training Program provides for 10 places out of an annual enrollment of 35, for non Trinidadian students, while the University of the West Indies is a interregional multi-Campus complex, the Trinidad Campus

receiving between 400-450 students annually from other countries. The proposed project could provide a further impetus to this strategy: the training of teachers of agriculture at ECIAF, and of Guidance Counsellors at UWI, could well be broadened to include students from other countries, while the National Curriculum and Teacher Development Center could become a focal point for collaborative efforts in these activities and a host Center for regional conferences, seminars and the like. Joint ventures of this kind, and in the publication/distribution of teaching/learning material, will become even more practicable and significant as the new Caribbean Schools Examination Council, presently in its formative stages, becomes fully operational. Whatever body emerges as the organization responsible for controlling the new Caribbean Schools Council examinations, their regional character must perforce require multinational representation and participation in the affairs of the controlling authority.

Bank Lending Strategy

2.35 In March 1967, the Government of Trinidad and Tobago approved the guidelines of a 15-year Education Development Plan to restructure the education system, lessen its academic bias and dependence upon foreign standards, and improve the distribution of educational opportunities. This Plan was expected to be implemented in three phases: 1968-72, 1973-77 and 1978-83. The Bank's lending strategy has been to support priority investment programs included in each phase of this long term education development plan. A first Bank loan of US\$9.2 million (Loan No. 564-TR, of October 16, 1968) was made in support of the first phase (1968-72) of the Plan, which focussed on junior and comprehensive secondary education and on teacher training for primary and junior secondary schools. The project was completed in 1976. The relevant Project Performance Audit Report (No. 1627) to which was attached the Project Completion Report, was circulated on June 14, 1977, under Ref. SecM77-503. The first project was judged generally successful. A major part of the success was due to the realistic nature of its objectives, the careful preparation of the plan on which it was based, and the government's commitment to the type of development supported by the project. The school places provided were fully utilized, and the planned diversification of curricula took place. The few problems which arose in regard to procurement of furniture and equipment are fairly representative of the experience of first education projects in other countries and have received attention in the formulation of the subsequent projects. A second Bank loan of US\$9.3 million (Loan No. 862-TR, of October 25, 1972) was made in support of the second phase (1973-77) of the Plan which continued support of the expansion of education opportunities at the junior and senior secondary levels, implementation of the secondary school teacher training program, reform of technical education and extension of non-formal training of farmers. The project is virtually complete except for three secondary schools which have faced contractor and/or site problems which will delay completion by about one year to June 1980.

2.36 The recent, favorable economic situation has induced the Government of Trinidad and Tobago to expedite the implementation of its broader sector objectives as enunciated in the 1975 revisions to the Education Development Plan. It has also given the Bank the opportunity to reassess its sector lending policy towards Trinidad and Tobago. Further involvement by the Bank in this sector should emphasize, through an effective foreign assistance component,

institution building, equalization of educational opportunity, and relevant education of high quality. Thus, through the proposed project the Bank would assist the government's objective to develop an efficient institutional capacity for the supervision of all physical aspects of sector development, and for such qualitative aspects of education as teacher development, curriculum research and teaching/learning support systems. The physical components of the proposed project would assist the government to attain its goals to correct inequalities of educational opportunities at the primary level and improve access, quality and relevance at the secondary level.

III. THE PROJECT

Objectives and Content

3.01 The proposed project would assist the Government in achieving its objectives of equalizing educational opportunity within the context of improved and more relevant education, generally at all levels, but more specifically at the primary and secondary levels. The modifications introduced into the project during appraisal reflect the Government's serious regard for due economy within sector development, in line with foreseeable financial, administrative, and construction resources. Thus, the material reduction in overall content and the redesigning of some components, recognize the need for a project of more manageable proportions which will produce more cost effective education better oriented towards the priority needs of the sector.

3.02 More specifically, modifications in project content adopted in support of this strategy include (a) the provision of about 9,320 student places in up to 27 replacement denominational primary schools to be located in the most disadvantaged regions of Trinidad and Tobago, to help solve the critical equity problem at this level; (b) the elimination of the proposed extensions to and deshifting of 22 junior secondary schools on the grounds that this high cost component would, at least temporarily, exacerbate the crucial problem of access to these schools; (c) the substitution for item (b) of the construction of two new junior secondary schools each with a capacity of 1,440 student places, specifically to assist with the problem of access; (d) the reduction from four to two in the number of composite schools, and thus from 10 to 8 in the total number of senior/composite secondary schools to be provided with facilities for craft courses. The redesigning of the craft extensions, to reflect the Government's proposed redistribution of enrollments in these schools, and hence, the substantially lower net increase in total enrollments (as compared with the actual number of students following these courses), together with the use of both existing and new facilities on a joint-use basis, will result in savings of 1,436 new student places to be constructed (1,316 instead of 2,752); and (e) the substitution of day training courses at ECIAF for teachers of agriculture, in place of the proposed residential programs, and hence, the elimination of all capital costs for construction, and a significant reduction in the recurrent costs of training.

3.03 The proposed project thus comprises:

(a) construction, furnishing and equipping of:

Type/Grade	INSTITUTIONS			CAPACITY		
	New	Replacements	Extensions	Total	Existing	New
(i) Primary Schools (Grades 1-7) /a	-	27	-	9,320	9,320	-
(ii) Junior Secondary Schools (Grades 8-10)	2	-	-	2,880	-	2,880
(iii) Senior Secondary Schools (Grades 11/12-14) /b	-	-	6	7,812	6,880	932
(iv) Composite Secondary Schools (Grades 8-12)	-	-	2	1,600	1,216	384
(v) National Curriculum and Teacher Development Center Valsayn	1	-	-	n/a	n/a	n/a
(vi) Regional Teacher Development Center San Fernando	1	-	-	n/a	n/a	n/a

/a Including two years of infant education.

/b Including two-year pre-university courses (grades 13-14).

(b) related technical assistance in the form of 10 man/years of specialist services and 9.25 man/years of fellowships; and

(c) project management and administration (10 man/years).

Elements of the Project

General Education

(a) (i) Primary Schools

3.04 This project item will consist of the construction, furnishing and equipping of about 9,320 student places through the replacement of 27 primary schools selected from a list of 85 denominational schools identified as in urgent need of total replacement because of their precarious

physical condition and their unsuitability for adaptation/extension to permit the introduction of the new curriculum which has been developed. Other selection criteria include equity considerations in respect of (a) location; (b) assistance to the various denominational authorities; and (c) socio-economic conditions in the communities to be served. Thus, the 15 schools (4,720 student places) already identified are representative of all regions of Trinidad, but not Tobago; of these, seven are Catholic, two Presbyterian, two Hindu, one each Muslim, Muslim Baptist, Hindustan Baptist and Anglican. The remaining twelve schools to be identified (up to 4,600 student places) will be selected in accordance with the same criteria, special consideration being given to the inclusion of some schools in Tobago; assurances in this regard were obtained from the Government during negotiations.

3.05 The project primary schools would represent the first stage of a national program for the rehabilitation and equalization of the primary school system. This program would be initiated by the handing over to the Government of denominational schools which the respective church authorities are unable to rebuild and maintain to a standard necessary for relevant and modern education. These unsuitable and antiquated schools would, therefore, be replaced by new and modern facilities, and would become joint venture schools financed entirely from government resources. However, their day-to-day management would be conducted by Joint Management Boards representative of community, church and government interests; negotiations between the interested parties to produce a Model Agreement are now at an advanced stage; the Government has provided assurances that the Model Agreement in its final form will be forwarded to the Bank for comment.

3.06 The design of the primary schools will be functional and economic in that classrooms will accommodate 40 students per teacher, with multigrade teaching procedures in the smaller schools. Nonetheless, they will include facilities, consonant with the new primary curriculum, for practical courses in basic science and agriculture, handicrafts, health and nutrition education. Moreover, because of the wider role these schools are expected to play in each community where they are located, library areas for school project work and for community use will be provided, as will be a health unit and a school meals distribution point.

(a) (ii) Junior Secondary Schools

3.07 This project item would support the construction, furnishing and equipping of two new junior secondary schools with about 2,880 student places providing a three-year lower secondary course. The locations of these two schools have yet to be decided by agreement with the Bank, but they will be sited in areas presently lacking these facilities, and where senior primary classes in primary schools will be eliminated. Each school will provide 1,440 student places; curricula, basic designs, and equipment and furniture specifications will be modelled on the smaller existing junior secondary schools constructed under the two previous Bank financed education projects (564-TR and 862-TR). Junior secondary schools in Trinidad have always been operated with due regard for economy; class sizes are 40 for general education (85% of timetable loading), and 20 for prevocational courses.

3.08 First year enrollments in the two schools (960) will provide 8% of the estimated 12,000 student places required by 1983 to eliminate the senior primary classes in primary schools. The Government's development program to September 1983 includes the extension to 1,440 student places of the 20 existing junior secondary schools, an accelerated construction program of up to 10 new schools, and the extension/conversion of existing secondary schools to resolve the access issue at this level of education. Possible financial and, more particularly, construction constraints may delay the full implementation of this ambitious target; the Government has given assurances that in the context of its proposal to deshift existing junior secondary schools, it will take all necessary steps to assure, by June 1983, access to this level of education for all eligible primary school pupils.

(a) (iii & iv) Senior and Composite Secondary Schools

3.09 This project item would comprise the construction, furnishing and equipping of extensions to six senior secondary schools (grades 11/12-14), and two composite secondary schools (grades 8-12). As a result of these extensions, an additional 1,316 student places would be created at these eight schools (increasing the capacity from 8,096 to 9,412 student places) and facilities provided for craft courses to support (a) the redistribution of student enrollments to emphasize pretechnician and vocational work-oriented education and (b) the Government's objective of automatic access, and universal secondary education to 16 years of age. While enrollment patterns will vary in accordance with the location and type of school (senior or composite secondary school, with or without pre-university courses) and with regional labor market requirements, in general, academic programs will absorb between 25%-35% of student admissions; 30%-40% will follow craft courses, and the remaining 25%-45% will be enrolled in pretechnician classes (Table T-5).

3.10 While the total number of new places to be constructed in the eight project schools stands at a modest 1,316, the planned enrollment redistribution will effectively provide craft training for about 2,752 students in a wide variety of industrial, commercial, home economics and agricultural options, with an annual output of some 1,370 graduates. Cost-effective education will be assured by (a) joint-use timetabling of existing pretechnician and the new craft physical facilities; and (b) teaching groups of 32 students (16 for practical lessons).

3.11 The concept of the craft course in principle responds well to the needs and realistic job aspirations of the increasing number of less able students who, under the Government's policy of universal secondary education, will proceed automatically to these schools. They are distinguished from the established pretechnician courses, aimed at the more able student likely to pursue successfully a program leading to an external examination qualification (the General Certificate of Education, or the new developing Caribbean Certificate of Education), by their more practical bias, with appropriate emphasis (50% of timetable hours) on craft-oriented general education attuned to the needs of the course and the ability of the students.

3.12 Neither the pretechnician nor the craft course would be terminal, but each would provide immediate employable skills together with the basis for ongoing education/training, though through different training media and with distinctive objectives. The successful graduate of the pretechnician course would be suitably qualified for (a) admission to the Sixth Form pre-university course and subsequently to tertiary level courses in science/technology related programs or (b) for employment as trainee in his specialist field, with in-plant and/or sandwich type courses leading to the Government's National Diploma in Technology. Success in the craft courses would lead to employment as a trainee apprentice in a specific craft (welding, plumbing, electronics, clerical, etc.) with in-plant training and/or part-time evening/day release courses for craft certification. Craft graduates would not, however, be precluded from subsequently upgrading their status to that of technician level.

Teacher Education

(a) (v) National Curriculum and Teacher Development Center (NCTDC) at Valsayn

3.13 The most pressing needs for the qualitative improvement of education in Trinidad and Tobago lie in the areas of teacher education, curriculum development, and teacher/learning support systems. With respect to teacher education, the long backlog of unqualified primary teachers and the rapidity of expansion of the system at all levels since the beginning of the decade, have conspired to outstrip training or retraining provisions for primary school teachers unprepared for the new curriculum approach; junior secondary teachers, whose basic formation is unsuited to the work of these schools; the large and increasing number of technical/vocational teachers required in the senior grades of the secondary schools; and a well qualified corps of guidance counsellors able to service the system at all levels. In regard to curriculum development, the interconnectedness and interdependence of all levels of education -- from primary to university -- demand that continuity and coherence should characterize curricula within and between the various levels, and should be responsive to the changing needs of society and industry. Finally, teaching/learning materials and methodologies need to be constantly updated and made readily available to schools. In order to respond to these needs, a structured research and development institutional framework is required. The proposed project would help the Government to develop such an institutional capacity by the construction, furnishing and equipping of a National Curriculum and Teacher Development Center (NCTDC) to be located near the Valsayn Teacher Training College financed under the second education project (Loan 862-TR of October 1972).

3.14 The NCTDC would consolidate research and development activities at primary and secondary education levels, and side by side with the recently created National Institute for Higher Education, founded to integrate parallel activities at post-secondary and higher education levels, would thus assist the Government's plan for the rationalization of all educational research and development programs. It would be constructed, equipped and staffed to perform three essential functions: (i) curriculum research and development; (ii) teacher upgrading; and (iii) production and distribution of teaching/learning materials. Administratively, it would be linked to the Ministry of Education to whose Director of Supervision Services the Head of the Center

would report. Organizationally, it would consist of the following three Units:

(a) Curriculum Department. Central to the functions and impact of the NCTDC in relation to the future direction of primary and secondary education in Trinidad and Tobago, the Curriculum Department would be responsible for the continuous assessment of educational inputs and outcomes of the primary and secondary schools, and for research into, and development of curricula, teaching method and teaching/learning materials. Serviced by a permanent staff of about six research officers, each with an assistant, six technical officers and related office and ancillary staff, and working in close collaboration with the Ministry of Education's 23 school supervisors (who would be relocated to the NCTDC) as well as with other concerned agencies (para 2.33), the Department, as a result of its monitoring activities, would design and field test new curricula, teaching methodologies and prototype didactic and evaluation material, prior to their introduction into the school system. Although principally involved with the formal primary and secondary school sectors, it is hoped that over time other areas such as pre-primary, adult and non-formal education would also be serviced.

(b) Teacher Development Department. Designed to complement existing physical and human resources, and the conventional training courses available at the adjacent Teacher Training College, its main function would be to conduct or host in-service refresher courses for teachers, supervisors, principals and teacher educators in all aspects of curriculum, teaching methodology, school organization and administration, evaluation and the like. The Department would consist of a few subject specific rooms equipped for demonstration/display purposes, an information/materials resource area, and a small auditorium/conference hall. Seminars, conferences, teachers' meetings, as well as weekend and vacation refresher courses, often based on the findings of and utilizing materials produced by the Curriculum Development Department, would be organized or hosted by the Director of the Center and advance notice of forthcoming activities widely publicized through the Publications Unit and other media. Both educational agencies and industrial concerns would be encouraged to make the widest use of the facilities.

(c) Teaching Materials/Production Unit. The existing School Publications Unit of the Ministry of Education is presently understaffed and inadequately housed and equipped to meet the challenge of providing the support services necessary to a rapidly expanding and changing school system. Relocated within the National Curriculum and Teacher Development Center, it would be provided with basic equipment and facilities for printing and publication, storage, and a gradually expanding staff estimated to reach 12 Publications Officers and assistants, 12 Printing Supervisors and Operators, and about 10 ancillary/office staff. Among its principal functions would be the publication and distribution of curriculum material, teachers' guides, students' manuals, information sheets, etc., designed by the Curriculum Department to update existing school texts, and specifically to ensure an adequate supply of teaching material to the schools, and of learning materials to underprivileged students, in parallel with developments in curriculum development and teaching methodology.

3.15 Thus, conceived and launched with an appropriate input of technical assistance (para 3.17), the National Curriculum and Teacher Development Center would constitute the central government agency for the qualitative improvement of education at all levels, and in every sphere of activity.

(a) (vi) Regional Teacher Development Center at San Fernando

3.16 The proposed project would assist the Government's objective of equalizing opportunities for continuous teacher upgrading, and consequentially, for the qualitative improvement of education by the construction, furnishing and equipping, of the first of a limited number of Regional Teacher Development Centers, each of which would serve a specified geographic area. This Center would be located near the Corinth Teacher Training College at San Fernando, financed under the first education project (Loan 564-TR) and, like the NCTDC (para 3.14), would coordinate its activities with and complement the work of the latter institution. The Regional Center would fulfill only the function of teacher development described in para 3.14 above, drawing on the resources, and working in close collaboration with and under the direction of the NCTDC. It would thus prove the forerunner of a service designed to dispel inequalities in educational opportunities, both for teachers and students, as between the urban and more remote rural zones of the country.

3.17 The project would additionally assist the qualitative improvement of teacher education in general and specifically of technical/vocational and agricultural education by providing technical assistance for these areas.

(b) Technical Assistance

3.18 Specifically, the component provides for 10 man/years of specialist services (about US\$570,000) and 9.25 man/years of fellowships (about US\$162,000) distributed as follows:

- (i) Teacher Development Centers. About 2.5 man/years of specialist services for the planning and inauguration of the NCTDC and the related Regional Teacher Development Center (about US\$142,000); and about 2 man/years of fellowships for training/upgrading study tours for key personnel of the Publications Unit of the NCTDC (about US\$35,000);
- (ii) Technical Teacher Training. About 5.5 man/years of specialist services for the training of technical teachers not catered for under the EEC technical assistance program at the John Donaldson Technical Institute Teacher Training Wing (about US\$314,000); and about 5.75 man/years of fellowships for training and upgrading study/tours for technical teacher trainers from the same Institute not provided under the EEC assistance program (about US\$101,000);
- (iii) Agricultural Teacher Training. About one man/year of specialist services for the establishment of an Agricultural Teacher Training program at the Eastern Caribbean

Institute of Agriculture and Forestry (ECIAF) (about US\$57,000); and about 1.5 man/years of fellowships for the upgrading of agricultural teacher trainers (about US\$26,000); and

- (iv) Guidance and Counselling. About one man/year of specialist services for the development of a Guidance and Counselling Service within the Ministry of Education (about US\$57,000).

3.19 The cost of technical assistance has been calculated for specialists at US\$4,800 per man/month inclusive of all local costs and overheads, and for fellowships at US\$17,500 per man/year. Should any part of the technical assistance funds prove not to be required, the savings may be used in agreement with the Bank for other project-related purposes. The Government has provided assurances that all specialists would be selected in consultation with, and their terms of reference and conditions of service acceptable to the Bank. Specific proposals for the fellowship program should be submitted to the Bank for review by December 31, 1979; candidates for these fellowships would be selected in consultation with the Bank.

Project Management and Administration

3.20 In recognition of existing management, administrative and construction constraints, and the Government's determination to contract the expertise necessary for expeditious project implementation, about 10 man/years of professional project management services (about US\$1,220,000) and related project administration costs (about US\$30,000) are included in the proposed project. These services are designed to meet not only immediate project-related needs, but also a major concern of the Government to build into the client Ministry, through experience gained in the proposed project, an institution-building mechanism for the management of school construction programs which will remain as a permanent and beneficial outcome of the project. Furthermore, the provision of these services will assist the Government's broader concern to improve the efficiency of the Ministry of Education planning services and will in this sense complement an IDB technical assistance project designed to upgrade the expertise of the Education Planning Unit (para 2.24).

IV. COST ESTIMATE, FINANCING, AND IMPLEMENTATION OF THE PROJECT

Cost Estimate

4.01 The total cost of the project is estimated at US\$54.6 million as summarized below. A detailed breakdown of the total cost by project item and type of expenditure is provided in Table T-6.

	TT\$ ('000)/ ^a			US\$ ('000)		
	Local	Foreign	Total	Local	Foreign	Total
Primary Schools	16,908.1	10,599.7	27,507.8	7,045.0	4,416.5	11,461.5
Junior Secondary Schools	10,894.3	8,085.8	18,980.1	4,539.3	3,369.1	7,908.4
Senior Secondary Schools	13,643.9	13,918.1	27,562.0	5,685.0	5,799.2	11,484.2
Composite Secondary Schools	2,379.1	1,704.9	4,084.0	991.3	710.4	1,701.7
Teacher Development Centers	3,339.2	2,537.7	5,876.9	1,391.3	1,057.4	2,448.7
Technical Assistance	-	1,756.5	1,756.5	-	731.9	731.9
Project Management & Administration	14.8	3,066.5	3,081.3	6.2	1,277.7	1,283.9
BASE COST ^{/b}	47,179.4	41,669.2	88,848.6	19,658.1	17,362.2	37,020.3
Contingencies						
Physical (10%)	4,718.0	4,167.0	8,885.0	1,965.8	1,736.3	3,702.1
Price (34%)	24,910.7	8,454.0	33,364.7	10,379.5	3,522.5	13,902.0
TOTAL COST	76,808.1	54,290.2	131,098.3	32,003.4	22,620.9	54,624.3
ROUNDED TOTAL	-	-	-	32,000	22,600	54,600

^{/a} US\$1 = TT\$ 2.40.

^{/b} Base cost estimate expressed in prices as of July 1979.

4.02 Design criteria, as agreed with the Government, are essentially the same as those established under the First and Second Education Projects. They include specific considerations dealing with cost effective planning and building, siting for maximum climatic benefit, and the use of appropriate building systems and materials.

4.03 Base costs of civil works are derived from actual recent construction costs in Trinidad projected to July 1979. Primary school buildings are costed at US\$345 per square meter of gross floor area; secondary school buildings are costed at US\$395 per square meter of gross floor area. Site works are estimated at 15% of building costs except in some cases where visits to proposed sites indicated that higher site works costs should be expected. Construction areas for project components have been established

by means of schedules of accommodation developed and agreed to during appraisal. Furniture costs have been estimated at 12% of building costs; equipment costs have been estimated for each teaching and administrative area based on actual costs being experienced in the Second Education Project. Furniture and equipment imported for the project would be exempt from customs duties, and have been costed accordingly. Educational specialist services are estimated at US\$4,800 per man/month inclusive of all local costs and overheads, and fellowships at US\$17,500 per man-year. Project management services (about 10 man/years) are estimated at 5% of civil and site works costs and assuming that they will be contracted with a private firm.

4.04 Contingency allowances for unforeseen physical factors that might arise in the course of design and construction, and expected price escalation during the project implementation period have been added to the base cost. Physical contingencies average about 10% of the base cost estimate, and price contingencies which have been estimated separately for the local and foreign exchange components of the project average about 34% of base cost plus physical contingencies. Price contingencies for the local component have been estimated at an annual increase of 20% and for the foreign exchange components were estimated as follows: civil works (including buildings, site works, and related professional fees) at 9% annually; furniture and equipment at 9% the first year, and 8% annually thereafter; technical assistance at 9% the first year, 8% the second year, and 7% the third and fourth years. These rates take into account recent increases in the cost of imported items, which have been higher than average world-wide inflation rates. Total contingencies amount to approximately US\$17.6 million, equal to about 47.5% of the base cost estimate (Table T-7).

4.05 The total foreign exchange cost of the project has been estimated at US\$22.6 million and represents approximately 41% of total project cost. Individual foreign exchange components were calculated as follows: construction (including buildings, site works, and professional fees) 35%, furniture 50%, equipment 95%, and technical assistance 100% (Table T-6).

Financing Plan

4.06 The total capital cost of the project would be met by a Bank loan of US\$20.0 million, with the balance of US\$34.6 million to be met with yearly budgetary contributions by the central government, in accordance with the following estimated schedule of expenditures (in US\$'000):

	FY1980	FY1981	FY1982	FY1983	Total
Bank Loan	3,770	5,470	7,400	3,360	20,000
Government Contribution	4,950	7,670	12,810	9,170	34,600
Total	8,720	13,140	20,210	12,530	54,600

The Government has given assurances that it would make the necessary budgetary allocations on a timely basis in order to meet the project's annual requirement for counterpart funds.

4.07 Recurrent Costs. The recurrent costs generated by the project would amount to approximately US\$3.7 million annually (1980 prices). These recurrent costs represent approximately 1.8% of the recurrent expenditures of the Ministry of Education projected for 1980, and would, therefore, not impose undue burden on the Government's financial capability.

Project Implementation

4.08 For the implementation of the first and second education projects (Loans 564-TR and 862-TR), a Project Unit was established within the Ministry of Works. The performance of this Unit, particularly in recent years, has been inconsistent and has depended on the quality of staff appointed by the Ministry of Works. Moreover, because of its location, the Ministry of Education has had hardly any influence in exercising control on matters of direct concern and interest. Thus, it is within the context of the Ministry of Education's requiring more effective project management organization and the Government's expressed concern for implementing investment projects on a timely and cost-effective basis, that the proposed project will help establish an Educational Projects Implementation Unit (EPIU) within the Ministry of Education.

4.09 The EPIU would be responsible for implementing the proposed education project and it would initially comprise: a Director, Project Architect (or Engineer), Quantity Surveyor (or Cost Engineer), a Procurement Officer, and an Accountant, all on full-time appointments, plus the necessary support and clerical staff. During the project implementation period the EPIU would be coached, trained and supported by a project management team, the costs of which would be financed by the project, to ensure the timely and effective implementation of the project and to help develop the necessary expertise for the EPIU to become self-sufficient and capable of managing the Ministry of Education's educational facilities investment programs. The government has recently approved the establishment of the EPIU as a dependency of the Ministry of Education. A condition of effectiveness of the Loan should be the appointment of all key staff of the EPIU, and the selection and contracting of the project management group, acceptable to the Bank.

4.10 The EPIU would report directly to the Permanent Secretary of the Ministry of Education and have the authority to liaise directly with concerned departments within the Ministry of Education and other agencies of the Government on all matters related to project implementation. It would be responsible for, *inter alia*: arranging for the selection, appointment and supervision of consultants; preparation of architect's briefs; preparation of all procurement and contract documents; ensuring timely availability of school sites and assessing their suitability for construction; monitoring project implementation and costs; and liaison with the Bank. The project management team will assume the coaching, training and executive functions as may be necessary for the EPIU effectively to carry out its responsibilities during the project implementation period (Annex 3).

4.11 All design work and construction supervision would be performed by architectural and engineering consultants acceptable to the Bank and commissioned on terms and conditions satisfactory to the Bank. A sufficient supply of qualified consulting firms are available in Trinidad and Tobago. The EPIU would supervise the work of the consultants to assure that the prescribed standards, project cost parameters and objectives of the project are being met. With the assistance of consultants, EPIU would determine, inter alia: (a) educational specifications and space standards or preparing designs; (b) basic construction standards and building materials to be used; and (c) unit costs for the project institutions. Technical review committees will be established with representatives from the concerned departments of the Ministry of Education.

4.12 A Project Implementation Schedule (Chart C-5) has been prepared in order to assist the project unit with the overall planning, organization, and control of project implementation. The schedule was discussed during negotiations, and mutual agreement reached that it be updated regularly and used as a project implementation and monitoring tool.

4.13 Sites are required for 12 of the 15 identified replacement primary schools in the project. At appraisal, nine suitable sites had been selected. During negotiations, the Government gave assurances that within six months of the signing of the Loan Agreement (i) all 12 primary school sites acceptable to the Bank would be selected and acquired; and (ii) sites acceptable to the Bank for the additional twelve replacement primary schools in the project yet to be identified, as well as for the two new junior secondary schools would be selected. Extensions to the project senior/composite secondary schools can be carried out on the existing sites except in the case of Southeast Port of Spain, where additional space is required and for which an existing government owned vacant marketplace of adequate area could be used. Sites for both teacher development centers exist and are government owned.

4.14 Maintenance of schools is carried out with reasonable efficiency by the Ministry of Education (secondary schools) and the Ministry of Works (primary schools). With the ongoing transfer of responsibility for an increasing number of primary schools from the country's religious denominations to the Ministry of Education, the capacity of the school maintenance programs will require upgrading. During negotiations the Government stated that it was studying the most effective arrangements for school maintenance, including the possibility of contracting specialized private firms for this purpose. It also gave assurances that it would provide adequate annual budgetary allocations for the maintenance and operation of the project institutions and that a comprehensive maintenance handbook establishing procedures would be developed.

Procurement

4.15 Construction, furniture, and equipment contracts would be awarded on the basis of international competitive bidding in accordance with the Bank's Guidelines for Procurement. It is unlikely, however, that foreign contractors will submit tenders for civil works, particularly for the

primary schools which, in addition to being relatively small, are located in remote areas. Therefore, civil works contracts for the primary schools component will be awarded on the basis of local competitive bidding satisfactory to the Bank. Furniture and equipment items would be grouped to form sizable packages to permit bulk procurement; those that cannot be grouped into packages of at least US\$50,000 would be procured on the basis of local procedures acceptable to the Bank. The total cost of furniture and equipment procured in this manner would not in the aggregate exceed US\$450,000 (equivalent to about 5% of the estimated total cost of furniture and equipment). In the case of procurement under international competitive bidding procedures, domestic furniture and equipment manufacturers would be accorded preferential treatment in bid evaluation limited to 15% of the c.i.f. price of imported goods or the applicable import duty, whichever is lower. Regional preference for members of the Caribbean Common Market (CARICOM) would be limited to 15% of the c.i.f. price of nonregional goods or the difference in tariffs, whichever is lower.

Disbursements

4.16 Disbursements from the proposed Loan of US\$20 million (equivalent to approximately 37% of the estimated total project cost of US\$54.6 million) would finance about 88% of the estimated foreign exchange component as follows: (a) 31% of total expenditures for construction (including civil works, site works, and professional fees); (b) 100% of foreign expenditures for imported, or 75% of expenditures for locally procured furniture and equipment; (c) 100% of total expenditures for project management and administration, technical assistance and fellowships. The Loan would be disbursed over a period of 4.5 years through December 31, 1983 (Table T-10). In principle, all disbursements would be fully documented.

V. BENEFITS, RISKS AND EVALUATION

Benefits

5.01 The project is conceived as a two-pronged thrust towards (a) improving the quality of primary and secondary schooling, with particular emphasis on equity issues and employment-related education; and (b) institution-building, in the areas of school facilities planning and project management, and institutionalized capacities for teacher training and upgrading, curriculum development and teacher/student support systems.

5.02 With regard to the educational aspects of the project, the emphasis is largely on quality improvement. While the project will benefit the country in quantitative terms by the provision of some additional 2,880 junior secondary places and 1,316 senior secondary places, qualitatively it will (a) rehouse 9,320 primary students, many from the more disadvantaged regions, in modern buildings offering facilities for sound education and student welfare programs; (b) provide 2,880 (960 new entry places) in recognized junior secondary schools for some 8% of the students presently accommodated in overcrowded, unsatisfactory senior primary classes in primary

schools; (c) support the redistribution of (expanded) student enrollments by complementing existing school facilities in eight composite/senior secondary schools so as to provide craft courses for 2,752 students; (d) foster the introduction of professional training for 20-30 teachers of agriculture and 50-100 technical/vocational teachers annually; and (e) initiate new and complement existing institutionalized arrangements for the continuous development of teaching/administrative staff, curriculum research and development, and the production, publication and distribution of teaching/learning materials.

5.03 In the realm of institution-building, among the most important benefits deriving from the project is likely to be the development of a permanent capacity within the Ministry of Education for the planning, management, and supervision of the physical requirements of the education sector. Of like import will be the creation of a national system of teacher training/retraining and support systems referred to in the previous paragraph.

Risks

5.04 In respect of the expeditious implementation of the physical aspects of the project, there are two risks. (1) Crucial to the construction program is the early selection and appointment of the expatriate project management group, and of their national counterparts to form the Education Projects Implementation Unit. The Government has given assurances that the necessary measures will be taken without undue delay; its commitment to the project is such that it should be able to implement these measures prior to loan effectiveness. (2) The capacity of the construction industry, which is already subject to considerable strain, is an issue of importance in timely project execution. However, the Government has launched a program to expand local cement production, facilitate the availability of building materials, and encourage civil works bids from non-national contractors. These steps, if taken expeditiously, should minimize delays in project execution.

5.05 Two further risks refer to the qualitative aspects of project implementation. (1) The timely initiation of teacher education courses will predetermine the educational benefits likely to accrue from the project. In this respect (a) the implementation schedule calls for priority construction of the National Curriculum and Teacher Development Center; (b) the Valsayn Teacher Training College constructed under the Bank Second Education Project (Loan 862-TR), should become operational early in 1979 and will be available for in-service training courses for primary and secondary teachers; (c) the John Donaldson Technical Institute Teacher Training Wing is already constructed, requiring only the appointment of teaching staff and specialist services; (d) agreement in principle has already been reached between the Ministries of Education and Agriculture for the training of teachers of agriculture at the Eastern Caribbean Institute of Agriculture and Forestry; and (e) discussions are proceeding between the Ministry of Health, the University of the West Indies and Buffalo University for the validation and inauguration of a Diploma Course in Guidance and Counselling. If these objectives are vigorously pursued, an adequate supply of well qualified teachers should be assured. (2) The smooth functioning of the project primary (originally denominational) schools will call for early agreement

between the competent Church authorities and the Ministry of Education in respect of joint management mechanisms, curricula criteria and day-to-day supervision. Joint exploratory meetings have been held; the Catholic authorities and the Ministry of Education are currently discussing unresolved issues. There is need for a Model Agreement to be subscribed by the interested parties and for accord to be reached with the other sectarian authorities with a view to its adoption as a general instrument of policy. However, no undue delay in reaching accord on these matters is anticipated, the more so since most sites and all capital and recurrent costs of these schools will be met exclusively by the Government.

5.06 The Bank's experience with diversified education has been mixed. Of the 79 projects with diversification of secondary education components, 20 have been completed. The successful cases had in common the following characteristics: (a) acceptance of the new mode by administrators, teachers and parents; (b) strong administration; (c) an adequate supply of science and practical subject teachers. It is expected that in Trinidad and Tobago, these conditions will be present.

Evaluation

5.07 As part of the regular reporting procedures, the Government should undertake to keep the Bank informed of sector advances towards the realization of targeted goals, and to provide annually for Bank review a statement of any major policy reformulation. More specifically, through its competent agencies, the Ministry of Education should periodically review with the Bank the outcome of (a) its guidance and counselling training programs, and (b) curriculum development, teacher/student support systems, and publications unit activities. Finally, within six months of the closing date of the Loan Account, the Government should furnish the Bank with a detailed, preliminary evaluation of project outcomes, including experiences gained during implementation.

VI. AGREEMENTS REACHED

6.01 During negotiations, the Government provided assurances that:

- (a) the location of the twelve primary schools remaining to be identified would be determined in accordance with initially agreed criteria, special consideration to be given to the inclusion of some schools in Tobago (para 3.04);
- (b) the Model Agreements for the Joint Management Boards for the day-to-day management of the project primary schools would be forwarded to the Bank for comment (para 3.05);
- (c) all necessary actions would be taken to assure access to junior secondary level courses for all eligible primary school pupils, including the carrying out of a program satisfactory to the Bank assuring such access, and would provide, promptly as needed, the funds, facilities, services and other resources required for the purpose (para 3.08);

- (d) all specialists would be selected in consultation with, and on terms of reference and conditions of service acceptable to the Bank, and the fellowship program would be submitted for Bank review by December 31, 1979, and candidates for these fellowships selected in consultation with the Bank (para 3.19);
- (e) adequate and timely budgetary allocations would be made to meet the project's annual requirements for counterpart funds (para 4.06);
- (f) all architectural and engineering consultants would be acceptable to the Bank and commissioned on terms and conditions satisfactory to the Bank (para 4.11);
- (g) within six months of loan signing, action satisfactory to the Bank will be taken in regard to:
 - (i) the revision of curricula and the organization of in-service training courses for primary and secondary teachers at the Valsayn and Corinth Teacher Training Colleges (para 2.32);
 - (ii) agreements to be subscribed between the Ministry of Education and (a) the Ministry of Agriculture for the use of the Eastern Caribbean Institute of Agriculture and Forestry for the professional training of about 20 teachers of agriculture annually; (b) the divers Church authorities for the joint management of the project primary schools; and (c) the University of the West Indies for the establishment of Diploma courses in Guidance and Counselling (para 5.05);
 - (iii) the establishment of teaching/administrative posts, and the selection and appointment of staff to organize and conduct in-service training courses for 50-100 technical/vocational teachers annually at the John S. Donaldson Technical Institute Teacher Training Wing (para 5.05);
- (h) within six months of loan signing, the Ministry of Education would establish formal procedures between the Education Projects Implementation Unit and the relevant departments of the Ministry of Education for the continuous review of architectural designs, and furniture and equipment lists, to ensure they meet the educational objectives and criteria of the project (para 4.10);
- (i) a project implementation schedule would be prepared and used as a project implementation and monitoring tool (para 4.12);

- (j) within six months of the signing of the Loan Agreement: sites acceptable to the Bank for the 12 primary schools initially identified, and for the S.E. Port of Spain secondary school extension, would be selected and acquired; and sites acceptable to the Bank for the additional twelve primary schools, as well as for the two junior secondary schools, would be selected (para 4.13);
- (k) provision of adequate funds for the maintenance and operation of the project institutions would be made available (para 4.14);
- (l) prior to January 1, 1981, a study of the results of the craft courses presently being offered in senior secondary schools would be furnished to the Bank for review, together with any proposed modifications to these courses, as may be deemed necessary, in the project institutions (para 2.31);
- (m) the Bank would be kept informed of sector advances towards the realization of targeted goals, specifically in respect of: guidance counselling; teacher education; curriculum research; and student/teacher support systems components of the project, as well as of major sector policy developments (para 5.07); and
- (n) a preliminary project completion report would be furnished to the Bank by the Government within six months of the closing of the Loan Account (para 5.07).

6.02 As conditions for Loan Effectiveness, the Government will submit evidence that action satisfactory to the Bank has been taken in regard to:

- (a) the appointment of key local counterpart staff, acceptable to the Bank to constitute the nucleus of the Education Projects Implementation Unit (para 4.09);
- (b) the selection and appointment of a project management team, acceptable to the Bank, to provide specialist services to the Education Projects Implementation Unit (para 4.09).

6.03 Subject to the conditions described in paras 6.01 and 6.02 above, the project constitutes a suitable basis for a loan of US\$20.0 million to the Government of Trinidad and Tobago for a period of 15 years including 3 years of grace.

May 21, 1979

TRINIDAD AND TOBAGO

THIRD EDUCATION PROJECT

Comparative Education Indicators
(May 1, 1979)

ANNEX 1

Table T-1

Page 1 of 2

	POP. YR. MILLS.	GNP/ CAPITA AT MARKET PRICES (US\$)	% GNP DEVOTED TO EDU. (ONLY)	% TOTAL EXP. DEVOTED TO EDU.	% OF PUBLIC EDUCATION EXP. ALLOCATED TO: PRI. SEC. HI.	LITER- ACY RATE (% OF ADULTS)	PRI. ENROLL- MENT RATIO (%)	COMPLE- TION RATE FOR CYCLE(%)	PRI. STU- DENTS PER TEACH- ER	AV. PRI. SALARY IN RELATION TO GNP/ CAPITA	PROGRESS- ION RATE FROM PRI. (%)	SEC. ENROLL- MENT RATIO (%)	SEC. STU- DENTS PER TEACH- ER	HIGHER ENROLL- MENT RATIO GROSS (%)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)			
ADVANCED																	
AUSTRIA	74	7.5F	4.870F	5.3Y	8.5EY	24Y	51Y	15Y	99	98	93D	26D	2.0D	99D	51D	19D	16.85Y
CANADA	75	22.8	7.135	7.3	16.7	30	37	26	98	99	97	19	2.0	99	90	18	16.00
GERMANY F. REP.	75	61.8	6.670	5.0	10.2	31EY	64**	26EY	99	90	99	23EY	...	98Y	84Y	22C	20.26Y
JAPAN	75	111.6	4.450	4.3E	20.7E	40UY	37UY	11UY	99	99D	99C	25	2.0B	99C	95XY	20C	24.69Y
NETHERLANDS	75	13.7	5.425	9.4	22.4D	21	39	25	99	95	95	29	2.0	97	80	20	12.00
NEW ZEALAND	73	3.1F	4.280F	5.2	...	39	24	29	99	99	99	26	...	99	67	19	24.00
NORWAY	76	4.0	8.043	7.2	14.4	54	24	15	99	99	99	16	1.5	99E	62	11	11.00
SWEDEN	76	8.2	8.150	8.8	14.0	23	29	12	99	99	99	16	...	907	85C	13	30.00C
U.K.	75	56.0	3.780	7.1	13.9	26	41	18	99	99	...	24	2.0	...	68	17	21.00X
U.S.A.	76	214.6	7.950	5.4	15.8	...	72**	28	99E	99	99	22	...	99	93	19	24.00
EUROPE																	
GREECE	76	9.1	2.590	2.6	10.4	37	26	21	86B	99	82D	31	2.0	70E	80	27	15.00
IRELAND	74	3.1F	2.390F	5.1	13.9D	43Y	41Y	14Y	98	108XY	99A	35	...	95A	65XY	19	15.47Y
PORTUGAL	77	9.7	1.850	3.6	15.4	41	21	15	70G	82	60*	19	2.0	75*	35	12	5.00
ROMANIA	75	21.2	1.240	4.0	8.4	36	19	13	98	101X	...	21	...	98	49	22	10.00
SPAIN	74	35.3F	2.750F	2.4B	15.2A	49Y	22Y	15Y	94A	115XY	...	35A	...	...	78XY	30	17.68Y
AFRICA																	
ALGERIA	77	16.9	990G	7.5	14.3FY	42	...	21	35	78X	45	39	4.0	55	26X	13	6.00
BENIN	74	3.1F	130F	7.2N	36.0Y	47D	23D	10D	11D	44XY	70B	53Y	25.0B	43B	11XY	39B	0.74Y
BOTSWANA	76	0.7	410	4.0	19.2	53	20	14	3	72X	95	32	3.0	60	12	22	0.30
BURUNDI	74	3.7F	110F	2.5	19.9Q	47R	41R	12R	10	20X	307	38	10.0	14	2X	18	1.0
CAMEROON	76	7.7	314	3.7	21.5	33	43	20	...	80	45	52	4.0	2.0	90	24	0.90CY
C.A.R.	74	1.8F	220F	3.0D	17.0D	56B	19B	...	...	79XY	25	69Y	...	18	8XY	27BY	0.21Y
CHAD	75	4.0	120	3.0	10.0	78	22	...	15	29XYB	30	65BY	15.0	8	2XYB	30	0.018Y
CONGO(B)	74	1.3F	510F	6.0	19.3	40	32	21	507	133X	63	63	6.0	48	33X	22	3.40
EGYPT	76	38.2	310	5.9N	...	30	32	25	44	76	80	31	...	79	45	20	12.00
ETHIOPIA	77	29.0	100	2.4	12.5	44	31	14	10	26	...	50	...	63	8	38	...
GABON	74	0.5F	2.540F	5.0D	20.6D	25D	9D	11D	...	100Y	25C	46C	5.0	18A	31Y	21C	0.29Y
GAMBIA	76	0.5	170	3.3	11.5	46	25	6	10	27	90	33	...	92	13	25	...
GHANA	74	9.9F	590F	...	19.7Y	43Y	22Y	20Y	...	60XY	62B	30Y	...	14B	35XY	16CY	1.09Y
GUINEA	76	4.7	180F	4.3NQ	...	30	31	30	...	30X	64	45	12F	86	13X	26	4.00
IVORY COAST	76	7.0	610	6.8	23.1	33	46	13	9A	50	88	43	7.0	47	17XY	26	1.64Y
KENYA	76	13.8	240	5.9	26.0	67	23	10	40	807	607	34	6.0	30	16	27	1.0
LESOTHO	75	1.2	160	12.0P	23.0	49	18	20	40	85	50	52	7.0W	81	10	26	1.00
LIBERIA	75	1.5	410	2.4	13.2	27	15	20	73	58	...	35	2.0	...	12	26	1.10AY
MADAGASCAR	77	8.0	240	4.0	24.0	53	28	19	50	90	33	44	6.0	38	14	23	1.70
MALAWI	77	5.6	140	2.2	9.3	40	17	22	25	56X	21	61	5.0	9	5X	21	0.47
MALI	75	5.7F	90F	4.2M	33.0F	45F	37F	18F	10F	22XF	...	48F	9.5F	50F	6X	21	...
MAURITANIA	71	1.3F	320F	4.1Y	20.0Y	...	...	...	10A	17XY	...	22A	...	...	3XY	24A	...
MAURITIUS	76	0.9L	680	4.7	12.1	50	26	6	80C	94	99	24	4.5	90	45	32	1.50
MOROCCO	76	18.2	520	6.3	15.2	39R	48R	13R	28	65X	33	40	...	33	17X	22	4.00
NIGERIA	74	75.0F	340F	4.10Y	24.2DY	23Y	16Y	42Y	...	49XY	...	34DY	...	...	10XY	20CY	0.48Y
RWANDA	73	4.1F	100F	3.2C	28.00	...	...	...	23	52	...	51	...	...	2	13	0.23CY
SENEGAL	77	5.2	420	5.0	23.0	46	34	20	10	32	...	49	10.0	20	10	21	1.5
SIERRA LEONE	73	3.0F	200F	3.4	23.4	31	36	30	157	34X	45	32	4.0E	68	13X	21	0.53BY
SOMALIA	75	3.2	110	3.70	10.8Q	49Q	16Q	19Q	507	34X	86	35	10.0	60	3	15	0.10
SUDAN	76	15.9	290	4.5	19.9	48	36	16	20	34	74	33	3.8	33	14	24	1.24
SWAZILAND	75	0.5	470	3.8	...	38	31	19	50	73	71	38	3.8	51	24	22	1.00
TANZANIA	76	15.1	180	6.6	17.4	42	21	12	80	93X	81	49	6.6	6	4X	19	0.34
TUNISIA	73	5.6F	730F	6.3	23.4	37	43	18	55	72	81	41	6.0	31	14	21	3.00
UGANDA	75	11.6	230	3.40Y	15.7DY	34EY	40EY	22EY	25A	53XY	...	34EY	...	14A	6XY	21A	0.56Y
UPPER VOLTA	77	5.8	118	3.4	23.9	31	16	32	5C	13	23	51	24.0	19	2	25	1.0
ZAIRE	76	25.6	140	6.0	22.0	49	26	25	15	86X	44	42X	2.0	41	13X	27	1.00X
ZAMBIA	76	5.1	440	6.8	15.9	54	22	22	39	97X	80	49	7.0	21	16	23	1.50
CENTRAL AMERICA AND THE CARIBBEAN																	
BARBADOS	76	0.2	1.620	8.1	22.1	43	31	16	99	106X	99	21	3.0	99	94X	17	...
COSTA RICA	75	2.0	960	5.2B	22.7B	57B	25B	12B	89B	109XY	65B	29B	3.0B	58B	52XY	25B	17.15Y
CUBA	78	9.5	9.500	8.0	11.0	...	...	...	98	98	98	22	2.7	98	65	15	15.00
DOMINICAN REP.	72	4.7F	720F	3.0	13.9	42	24	22	51	80	17	54	3.00	63	13.5	24	7.00
EL SALVADOR	77	4.1	570	4.4	27.2	64	8	27	62	88X	32	39	2.2	41	23	21	7.00
GUATEMALA	73	6.3F	570F	1.9	16.0	55	23	14	47	64	26	35	3.0	69	8	25	4.09Y
HAITI	76	4.7	200	1.0	8.0	61	21	11	20B	25F	13	56U	3.0	62	4	...	0.7
HONDURAS	75	2.9	390G	4.2G	18.8G	62G	15G	19G	53	78	30	35	3.0	68	11	17	4.00
JAMAICA	76	2.1	1.070	9.9	16.2	37	33	22	86E	91	52	39	4.5	94	64	25	7.58
MEXICO	75	59.9	1.050	3.10Q	12.00Q	51Y	26Y	12Y	76	112XY	31	46	3.0	63	35XY	23A	8.97EY
NICARAGUA	74	2.3F	700F	2.5	14.2	61	13	13	57	65	21	37	2.0	93	17	24	7.00
TRINIDAD & T.	77	1.1	2.380	4.5	14.1	48	32	20	95	98	91	28	3.0	49	79	27	...
SOUTH AMERICA																	
BOLIVIA	76	5.8	315F	5.0	17.5F	...	...	...	38	17B	29D	24	5F	...	48	18D	...
BRAZIL	75	107.0	1.030	5.0	12.4	42E	20E	37E	54A	86G	...	27CY	...	...	26G	15CY	6.00B
CHILE	75	10.3	990	3.8RY	12.5RY	23Y	10Y	50Y	...	119XY	...	35Y	...	...	48XY	...	16.55Y
COLOMBIA	74	23.6F	580F	3.30Y	21.2DY	44DY	22DY	11Y	73	105XY	20	33Y	4.0	90	36XY	14A	6.67Y
ECUADOR	75	7.1	590	3.7D	27.7C	...	...	...	69	102XY	...	38C	...	...	38XY	14C	...
GUYANA	74	0.8F	510F	5.8N	14.70	47	35	14	83A	92X	39	33	6.0	19	62X	24	1.00
PARAGUAY	74	2.6F	580F	1.8	11.0	55	13	22	81	82	26	30	1.9	85	17	12	5.00
PERU	75	15.4	760	4.2DY	21.70Y	40Y	22Y	15Y	72	111XY	38	39DY	3.0	70	48XY	23DY	14.41Y
URUGUAY	75	2.8	1.300	2.5	15.3	46	34	20	94	93X	...	24	...	83	...	10	...
VENEZUELA	73	12.0F	2.280F	4.6	19.9	30Q	28Q	35Q	77A	81	...	33	2.4	...	33	...	12.63CY

TRINIDAD AND TOBAGO

ANNEX 1
Table T-1
Page 2 of 2

THIRD EDUCATION PROJECT

Comparative Education Indicators

(May 1, 1979)

		GNP/ CAPITA AT MARKET POP. YR:MILLS.	% GNP DEVOTED TO EDU. (PUBLIC EXP. ONLY)	% TOTAL EXP. EDU.	% OF PUBLIC EDUCATION EXP. ALLOCATED TO: PRI. SEC. HI.	LITER- ACY RATE (% OF ADULTS)	PRI. ENROLL- MENT RATIO (%)	COMPLE- TION RATE (%)	PRI. STU- DENTS PER TEACH- ER	AV. PRI. SALARY IN- TEACH- ER RELATION TO GNP/ CAPITA	PROGRESS- ION RATE FROM PRI. TO SEC. (%)	SEC. ENROLL- MENT RATIO (%)	SEC. STU- DENTS PER TEACH- ER	HIGHER ENROLL- MENT RATIO (%)	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
ASIA AND OCEANIA															
AFGHANISTAN	77M	14.3	160G	1.8	11.6	47	19	15	12	29X	69	37	3.0G	62	8X 17 1.00
BANGLADESH	73	78.6F	90F	1.2	20.2	44Y	22Y	21Y	23D	56X	...	48D	...	23XD	28 ...
CHINA(TAIWAN)	73	16.0F	930F	3.2	14.0	28	41	22	82	98C	94	40	14.0	84	61C 26 20.00C
INDIA	75	608.1	140	2.6VY	...	...	...	...	298	65XY	...	43A	...	29XY	20AY 2.34EY
INDONESIA	76	130.2	240	3.0	11.0	26	32	15	608	79EX	43E	30E	2.0	52E	19EX 14E 2.00
IRAN	73	33.4F	1,660F	3.3	12.6	508	188	128	50	77	74A	32	5.08	80A	24 32 4.32CY
IRAQ	75	11.1	1,250	6.7C	16.3DR	...	...	...	26C	93XY	...	22	...	35XY	26C 8.47Y
JORDAN	77	2.1	997	4.5	8.6	25R	50R	3R	69	87	81	32	2.0	91	68 22 79.10
KOREA	78	37.0	1,242	2.8	17.5	35	29	36	93	102X	94	49	2.9	91	60 45 18.00
LEBANON	72	3.2F	1,070F	3.5	18.0	39	40	10	68	86	65	19	2.0	63	26U 25 23.00
MALAYSIA	76	12.6	860	6.7	26.0	42	34	15	60C	95	93	32	3.7	78	48 28 3.00
NEPAL	76	12.6F	110F	1.1	10.0	29	20	41	19	59	28	31	2.3	64	14 24 0.8
OMAN	72	0.8F	2,300F	1.7N	3.8	96	-	-	20	24X	99	27F	7.0	...	0.4X 9 ...
PAKISTAN	75	69.2	160	1.6	16.2	45	25	18	21	47X	50	39	2.0	...	17X 18 6.00
PAPUA N.G.	75	2.8	470	5.6	16.1	38	16	24	32	577	73P	31	11.0	90	12X? 24 0.90?
PHILIPPINES	74	42.2F	380F	2.5	14.9	73	15	12	87	104X	...	34	15.0	...	46X ... 21.00
SINGAPORE	74	2.3F	2,450F	2.7Y	9.2Y	39Y	39Y	17Y	75A	109XY	72A	31Y	...	99A	44XY 24 7.68Y
SYRIA	75	7.4	720	3.6	6.9	39	25	26	53	89	70	35	2.0	92	45 21 12.00
THAILAND	77	44.1	410	4.0V	20.0	55	30	15	93	83	30	35	5.0U	70	28 25 3.00
TURKEY	73	40.2F	900F	5.6CY	20.6CY	...	...	...	...	85Y	...	34Y	...	...	24Y 27DY 5.83Y
YEMEN	73	5.9F	200F	0.5	4.0	45P	21P	23P	10	15X	18	36	5.0	75	2X 19 0.05BY
YEMEN P.O.R.	76	1.7	280	6.6	...	57	28	8	20	89X	48	30	5.0	94	21X 24 0.10

SUMMARY FOR DEVELOPING COUNTRIES:

NUMBER OF COUNTRIES:	94	90	88	88	85	87	95	74	95	68	77	94	91	84
RANGE:	(0.5- 12.0)	(3.8- 33.0)	(25- 96)	(5- 47)	(2- 41)	(3- 98)	(14- 133X)	(13- 99)	(19- 69)	(1.9- 25.0)	(7- 99)	(.4- 80)	(9- 39)	(.01- 23.0)
QUANTILES: UPPER :	5.1	21.2	54	32	22	73	94	76	46	7	83	36	25	7.0
MEDIAN:	3.9	16.3	45	23	18	50	78	55	36	4	63	17	23	2.3
LOWER :	3.0	12.4	38	18	12	20	53	30	32	3	43	9	20	.9

SYMBOLS: ...	DATUM UNAVAILABLE	A=1970 OR BEFORE	M=CURRENT PRICES	SOURCES:
-	MAGNITUDE NIL OR NEGLIGIBLE	B=1971	N=GDP	-----
?	QUESTIONABLE	C=1972	P=INCLUDING FOREIGN AID	COLUMNS: 1 AND 2 WORLD BANK ATLAS
*	INCLUDES PART-TIME STUDENTS	D=1973	Q=CENTRAL GOVT. ONLY	OR IBRD MISSIONS
**	COMBINED WITH PRIMARY	E=1974	R=MINISTRY OF EDUCATION (MOE) ONLY	3 TO 14 IBRD MISSIONS
***	UNDER REVIEW	F=1975	S=MOE AND STATE GOVT. ONLY	AND/OR UNESCO
		G=1976	T=EXCLUDING CENTRAL GOVT.	STATISTICAL
			U=PUBLIC ONLY	YEARBOOK
			V=INCLUDING PRIVATE EXPENDITURE	
			X=INCLUDING OVERAGED STUDENTS	
			Y=UNESCO SOURCES	

COMPARATIVE EDUCATION DATA ARE USEFUL IN THE EVALUATION OF VARIOUS EDUCATION SYSTEMS AND ANALYSIS OF RELATIVE STAGES OF EDUCATIONAL DEVELOPMENT BETWEEN VARIOUS COUNTRIES. HOWEVER, ON THE BASIS OF THE PRESENT DATA, CROSS-NATIONAL COMPARISON SHOULD BE APPROACHED WITH GREAT CAUTION. DATA PRESENTED IN THE ABOVE TABLE HAVE BEEN COLLECTED LARGELY BY THE BANK MISSIONS FROM GOVERNMENT SOURCES; THE REMAINDER ARE STAFF ESTIMATES OR DATA FROM UNESCO. EFFORTS HAVE BEEN MADE TO STANDARDIZE DEFINITIONS AND WITHIN LIMITS, TO CHECK THE ACCURACY OF THE DATA. NEVERTHELESS, SUCH DATA ARE STILL IMPERFECT IN SEVERAL RESPECTS AND THE BANK IS WORKING TO IMPROVE THEM PROGRESSIVELY ON THE OCCASION OF ITS OPERATIONAL WORK. IN THE USE OF THESE DATA, THE FOLLOWING QUALIFICATIONS SHOULD BE BORNE IN MIND:

- (1) "EDUCATION" AS DEFINED IN THE TABLE INCLUDES ALL EDUCATION AND TRAINING, FORMAL AND NON-FORMAL;
- (2) "PRIMARY EDUCATION" REFERS TO EDUCATION AT THE FIRST LEVEL AND "SECONDARY" EDUCATION REFERS TO ALL EDUCATION AT THE SECONDARY LEVEL REGARDLESS OF TYPE (E.G. GENERAL, TECHNICAL, AGRICULTURAL);
- (3) "LITERACY RATES" (COL. 6) ARE OFTEN OBTAINED FROM COUNTRY CENSUSES. IN MANY COUNTRIES THEY ARE ONLY APPROXIMATIONS AND IT IS DOUBTFUL THAT ANY UNIFORM DEFINITION OF "LITERATE" HAS BEEN FOLLOWED CONSISTENTLY;
- (4) "PUBLIC EXPENDITURE IN EDUCATION" (COLS. 3, 4 AND 5) REFER TO ALL CAPITAL AND RECURRENT EXPENDITURES DEVOTED TO EDUCATION BY PUBLIC AND QUASI-PUBLIC AGENCIES;
- (5) "ENROLLMENT RATIOS" (COLS. 7, 12 AND 14) REFER TO SCHOOL YEAR AND MEAN THE PERCENTAGE OF ELIGIBLE CHILDREN ENROLLED FULL-TIME IN THE APPROPRIATE SCHOOL, PUBLIC AND PRIVATE BY LEVEL. THEY ARE OFTEN SUBJECT TO A WIDE MARGIN OF ERROR IN THE DEVELOPING COUNTRIES OWING TO VARIATION IN THE ACCURACY OF BASIC DATA (I.E. AGE-SPECIFIC POPULATION AND ENROLLMENTS). ENROLLMENT FIGURES FREQUENTLY ARE HIGHER THAN THE NUMBER OF STUDENTS ACTUALLY IN SCHOOL. OVERAGED STUDENTS WHOSE INCLUSION IS INDICATED BY FOOTNOTES ALSO CAN INFLATE THE RATIOS.

TRINIDAD AND TOBAGO
THIRD EDUCATION PROJECT

ANNEX 1
Table T-2

Public Primary Education

Enrollments by Grade and Sex 1965/66-1971/72-1975/76 and 1976/77

	Inf. 1	Inf. 2	Std. I	Std. II	Std. III	Std. IV	Std. V	Total Inf. 1 - Std. V	Std. VI	Std. VII	Std. VI-VII	Grand Total Inf. 1 - Std. VII
1965/66	34,918	26,224	26,494	24,004	23,670	23,181	28,300	186,791	15,915	9,442	25,367	212,148
Male	18,051	13,255	13,697	12,208	11,945	11,753	13,586	94,495	8,365	5,070	13,395	107,890
Female	16,867	12,969	12,797	11,795	11,725	11,428	14,714	92,296	7,590	4,372	11,962	104,258
1966/67	33,470	26,625	26,845	24,072	22,528	21,431	31,519	186,490	18,414	11,261	29,675	216,165
Male	17,150	13,515	13,641	12,117	11,574	10,765	15,332	94,094	9,540	6,097	15,637	109,731
Female	16,320	13,110	13,204	11,955	10,954	10,666	16,187	92,396	8,874	5,164	14,038	106,423
1967/68	32,700	27,416	27,913	24,829	24,369	21,952	30,996	190,175	18,328	11,643	29,971	220,146
Male	17,191	13,795	14,134	12,516	12,271	11,184	15,294	96,385	9,511	6,187	15,698	112,038
Female	15,509	13,621	13,779	12,313	12,098	10,768	15,702	93,790	8,817	5,456	14,273	108,063
1968/69	32,695	27,136	27,719	26,828	24,200	22,278	31,184	192,040	18,085	12,202	30,287	222,327
Male	16,906	13,980	14,141	13,604	12,136	11,208	15,129	97,104	9,531	6,570	16,101	113,205
Female	15,789	13,156	13,578	13,224	12,064	11,070	16,055	94,936	8,554	5,632	14,186	109,122
1969/70	33,110	27,360	27,501	26,251	25,145	22,346	32,272	193,985	18,292	12,622	30,914	224,899
Male	17,147	14,047	14,053	13,341	12,680	11,215	15,626	98,109	9,523	6,790	16,313	114,422
Female	15,963	13,313	13,448	12,910	12,465	11,131	16,646	95,876	8,769	5,832	14,601	110,477
1970/71	32,850	27,285	27,733	26,006	25,524	22,955	33,535	195,888	18,819	11,968	30,787	226,675
Male	16,980	13,647	14,228	13,365	12,972	11,587	15,968	98,747	10,005	6,261	16,266	115,013
Female	15,870	13,638	13,505	12,641	12,552	11,368	17,567	97,141	8,814	5,707	14,521	111,662
1971/72	32,263	26,753	27,968	26,882	25,776	24,480	34,938	199,060	16,102	9,972	26,074	225,134
Male	16,600	13,539	14,261	13,727	13,181	12,581	16,580	100,329	8,674	5,462	14,136	114,465
Female	15,663	13,214	13,707	13,155	12,595	12,099	18,358	98,731	7,428	4,510	11,938	110,669
1975/76	25,252	21,367	23,310	21,367	23,310	23,310	33,022	170,938	15,540	7,770	23,310	194,248 ^{/1}
1976/77	25,140	19,589	21,654	21,166	20,409	20,433	32,619	161,010	14,586	9,400	23,986	184,996

/1 About 35% in Government schools.
About 65% in Government Assisted schools.
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TRINIDAD AND TOBAGO

THIRD EDUCATION PROJECT

ANNEX 1
Table T-3

Enrollments in Public Secondary Schools (Government and Assisted)

Enrollments by Form and Sex 1965/66 - 1971/72 and 1975/76

	FORM I	FORM II	FORM III	FORM IV	FORM V	FORM VI	GRAND TOTAL
<u>1965/66</u>	<u>4,135</u>	<u>3,785</u>	<u>3,814</u>	<u>3,763</u>	<u>4,147</u>	<u>1,133</u>	<u>20,777</u>
Male	1,881	1,706	1,912	1,859	2,273	683	10,314
Female	2,254	2,079	1,902	1,904	1,874	450	10,463
<u>1966/67</u>	<u>5,788</u>	<u>4,984</u>	<u>4,397</u>	<u>4,393</u>	<u>5,024</u>	<u>1,194</u>	<u>25,780</u>
Male	2,801	2,407	2,103	2,332	2,707	711	13,061
Female	2,987	2,577	2,294	2,061	2,317	483	12,719
<u>1967/68</u>	<u>5,218</u>	<u>5,871</u>	<u>4,881</u>	<u>4,515</u>	<u>4,994</u>	<u>1,385</u>	<u>26,864</u>
Male	2,704	2,836	2,356	2,187	2,652	760	13,495
Female	2,514	3,035	2,525	2,328	2,342	625	13,369
<u>1968/69</u>	<u>4,908</u>	<u>5,153</u>	<u>5,653</u>	<u>5,047</u>	<u>5,061</u>	<u>1,616</u>	<u>27,438</u>
Male	2,416	2,706	2,778	2,424	2,601	858	13,783
Female	2,492	2,447	2,875	2,623	2,460	758	13,655
<u>1969/70</u>	<u>4,886</u>	<u>4,851</u>	<u>5,096</u>	<u>5,547</u>	<u>5,439</u>	<u>1,808</u>	<u>27,627</u>
Male	2,364	2,517	2,629	2,650	2,757	950	13,867
Female	2,522	2,334	2,467	2,897	2,682	858	13,760
<u>1970/71</u>	<u>4,886</u>	<u>4,851</u>	<u>5,096</u>	<u>5,547</u>	<u>5,439</u>	<u>1,808</u>	<u>27,627</u>
Male	2,364	2,517	2,629	2,650	2,757	950	13,867
Female	2,522	2,334	2,467	2,897	2,682	858	13,760
<u>1971/72</u>	<u>4,950</u>	<u>4,915</u>	<u>5,164</u>	<u>5,620</u>	<u>5,510</u>	<u>1,828</u>	<u>27,987</u>
Male	2,398	2,377	2,498	2,718	2,666	884	13,541
Female	2,552	2,538	2,666	2,902	2,844	944	14,446
<u>1975/76</u>	<u>12,929</u>	<u>11,366</u>	<u>11,942</u>	<u>19,873</u>	<u>12,744</u>	<u>4,233</u>	<u>73,087</u>
Male	6,255	5,499	5,778	9,725	6,166	2,186	35,609
Female	6,674	5,867	6,164	10,148	6,578	2,047	37,478

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TRINIDAD AND TOBAGO

ANNEX 1
Table T-4

THIRD EDUCATION PROJECT

Proposed Distribution of Enrollments in Project Senior/Composite Secondary Schools: Present Capacity and Additional Places Required

A. Primary Schools:

No. of Schools	Trained	Untrained	In Training	Total
462	4,477	1,804	1,296	7,577

B. Secondary Schools:

Type of School	No.	Graduates				Non Graduates						Sub-Total	Total
		Principal	Vice Principal	Teacher II	Sub-Total	Sp. T III	Sp. T II	Sp. T I	T I	A.T II	A.T I		
All-age Govt.	21	21	20	409	450	88	64	37	54	47	-	290	740
All-age Assisted	27	27	27	518	572	61	43	18	91	93	-	306	878
Junior Secondary	20	20	40	145	205	31	49	16	846	74	1	1017	1222*
Senior Secondary	3	3	3	103	109	7	9	11	8	4	-	39	148
Senior Comprehensive	9	9	9	388	406	10	18	9	16	21	-	74	480
Composite	1	1	1	15	17	3	4	-	2	1	-	10	27*
TOTALS	81	81	101	1,578	1,759	204	187	91	1,017	240	1	1,736	3,495

* Incomplete data.

NOTES: Explanation of symbols:

Teacher II Graduate (trained or untrained)

Sp. T III (Special Teacher III) Incomplete or unacceptable degree

Sp. T II Basic primary teacher training plus additional specialist courses

Sp. T I Technical Certificate

T I Primary teacher training

A. T III (Assistant Teacher III) Advanced level secondary certificate, no teacher training

A. T II Ordinary level secondary certificate, no teacher training

A. T I Limited ordinary level secondary certificate, no teacher training

T II Technical certificate plus primary teacher training

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TRINIDAD AND TOBAGO
THIRD EDUCATION PROJECT

ANNEX 1
Table T-5

Proposed Distribution of Enrollments in Project Senior/Composite Secondary Schools: Present Capacity and Additional Places Required

SCHOOL	JSS			LEVELS AND TYPE OF COURSE										TOTALS				GRAND TOTAL	PRESENT CAPACITY
				ACAD		TECH		CRAFT		ARTS		SCIENCE							
	I	II	III	IV	V	IV	V	IV	V	VI	VI	VI	VI	JSS	ACAD	TECH	CRAFT		
St. Augustine	-	-	-	160	160	288	288	224	224	50	50	60	60	-	540 ^{1/}	576	448	1564	1400
Sangre Grande	-	-	-	160	160	288	288	224	224	50	50	60	60	-	540 ^{1/}	576	448	1564	1240
Point Fortin	-	-	-	160	160	288	288	224	224	50	50	60	60	-	540 ^{1/}	576	448	1564	1260
S.E. Port of Spain 2/	-	-	-	128	128	192	192	224	224	50	50	60	60	-	476 ^{1/}	384	448	1308	1260
Signal Hill	-	-	-	96	96	128	128	192	192	25	25	60	60	-	362 ^{1/}	256	384	1002	960
Rio Claro	-	-	-	64	64	96	96	160	160	25	25	60	60	-	298 ^{1/}	192	320	810	760
Toco	160	160	160	32	32	64	64	64	64	-	-	-	-	480	64	128	128	800	608
Tabaquite	160	160	160	32	32	64	64	64	64	-	-	-	-	480	64	128	128	800	608
TOTALS:	320	320	320	832	832	1408	1408	1376	1376	250	250	360	360	960	2884	2816	2752	9412	8096 3/

1/ Includes 6th Form (Grades 13-14) enrollments. Distribution of enrollments in Forms IV and V (Grades 11-12) are as follows:

Academic courses	1784 (24%)
Technical courses	2816 (38%)
Craft courses	2752 (38%)
Totals:	7352 100%

2/ Present enrollment includes 610 junior secondary students (to be phased out).

3/ Additional student places required: 1316

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TRINIDAD AND TOBAGO
THIRD EDUCATION PROJECT

ANNEX I
Table T-6

Summary of Project Costs ^{/a}
(TTS '000)

	Total Schools	Total Student Places	Construction		Professional Fees	Furniture	Equipment	Technical Assistance	Fellowships	TTS (000)	US\$ (000)
			Civil Works	Site Works							
1. <u>Primary Schools</u>											
Replacement Schools (identified)	15	4,720	9,477.9	1,692.9	1,228.8	948.0	583.4	-	-	13,931.0	5,904.6
(unidentified)	12	4,600	9,236.9	1,649.9	1,197.5	923.9	568.6	-	-	13,576.8	5,657.0
2. <u>Junior Secondary Schools</u>											
New Schools	2	2,880	11,782.7	1,767.4	2,032.5	1,321.9	2,073.6	-	-	18,980.1	7,904.3
3. <u>Composite Secondary Schools</u>											
Extensions to Existing Schools	2	384	2,675.2	401.3	307.7	321.0	378.8	-	-	4,084.0	1,701.7
4. <u>Senior Secondary Schools</u>											
Extensions to Existing Schools	6	932	15,176.7	2,174.0	1,695.5	1,862.3	6,653.5	-	-	27,562.0	11,484.2
5. <u>Teacher Development Centers</u>											
National Center - Valayn	-	-	2,666.4	400.0	460.0	299.6	473.3	-	-	4,299.3	1,791.4
Regional Center - San Fernando	-	-	961.6	141.2	162.4	105.8	228.6	-	-	1,577.6	657.3
SUBTOTAL FACILITIES			51,957.4	8,226.7	7,084.4	5,784.5	10,957.8	-	-	84,010.8	35,004.5
6. <u>Teacher Education</u>											
Teacher Development Centers			-	-	-	-	-	342.0	84.0	426.0	-
Technical			-	-	-	-	-	752.4	241.5	993.9	-
Agricultural			-	-	-	-	-	136.8	63.0	199.8	-
Guidance/Counseling			-	-	-	-	-	136.8	-	136.8	-
7. <u>Project Management and Administration</u>											
Project Unit			-	-	-	24.7	47.4	-	-	72.1	-
Project Management Services			-	-	-	-	-	3,009.2	-	3,009.2	1,283.9
TOTAL BASE COST ^{/b}			51,957.4	8,226.7	7,084.4	5,809.2	11,005.2	4,377.2	384.5	88,848.6	37,020.3
Physical Contingencies				6,726.9		581.0	1,100.5	476.6		8,885.0	3,702.0
Percentage				10%		10%	10%	10%		10%	10%
SUBTOTAL				73,995.4		6,390.2	12,105.7	5,242.3		97,733.6	40,722.3
Price Contingencies				28,266.3		2,108.7	2,360.6	629.1		31,364.7	13,902.0
Percentage				38.2%		33%	19.5%	12%		34.1%	33.8%
TOTAL PROJECT COST				102,261.7		8,498.9	14,466.3	5,871.4		131,098.3	54,624.3
Foreign Exchange Component				31,078.1		3,770.2	13,570.5	5,171.4		54,290.2	-
Percentage				30.4%		44.4%	93.8%	160%		41.4%	-
US\$ (000)				12,949.2		1,570.9	5,654.4	2,446.4		-	22,620.9

^{/a} US\$ = TT\$2.40

^{/b} Expressed in prices as of July 1979
May 1979

TRINIDAD AND TOBAGO
THIRD EDUCATION PROJECT
Contingency Allowances /^a
(TT\$ '000)

ANNEX 1
Table T-7

	<u>Construction</u>		<u>Furniture</u>		<u>Equipment</u>		<u>Tech. Assistance and Fellowships</u>		<u>Total</u>		<u>Grand Total</u>
	<u>Local (65%)</u>	<u>Foreign (35%)</u>	<u>Local (50%)</u>	<u>Foreign (50%)</u>	<u>Local (5%)</u>	<u>Foreign (95%)</u>	<u>Local (0)</u>	<u>Foreign (100%)</u>	<u>Local (53%)</u>	<u>Foreign (47%)</u>	
Total Project Base Cost / ^b	43,724.5	23,544.0	2,904.6	2,904.6	550.3	10,454.9	0	4,765.7	47,179.4	41,669.2	88,848.6
<u>Physical Contingencies</u>	4,372.5	2,354.4	290.5	290.5	55.0	1,045.5	0	476.6	4,718.0	4,167.0	8,885.0
(%)	(10)	(10)	(10)	(10)	(10)	(10)	0	(10)	(10)	(10)	(10)
Sub-Total	48,097.0	25,898.4	3,195.1	3,195.1	605.3	11,500.4	0	5,242.3	51,897.4	45,836.2	97,733.6
<u>Price Contingencies</u>	23,086.6	5,179.7	1,533.6	575.1	290.5	2,070.1	0	629.1	24,910.7	8,454.0	33,364.7
(%)	(48)	(20)	(48)	(18)	(48)	(18)	0	(12)	(48)	(18.4)	(34.1)
<u>TOTAL PROJECT COST</u>	<u>71,183.6</u>	<u>31,078.1</u>	<u>4,728.7</u>	<u>3,770.2</u>	<u>895.8</u>	<u>13,570.5</u>	<u>0</u>	<u>5,871.4</u>	<u>76,808.1</u>	<u>54,290.2</u>	<u>131,098.3</u>
US\$ ('000)	-	-	-	-	-	-	-	-	32,003.4	22,620.9	54,624.3

/^a US\$1 = TT\$2.40

/^b Expressed in prices as of July 1979.

May 1979.

TRINIDAD AND TOBAGO

ANNEX 1
Table T-8

THIRD EDUCATION PROJECT

Public Expenditures in Education
(in TT\$ Millions)

	1976 ^{1/}			1977 ^{1/}			1978 ^{2/}			1979 ^{2/}		
	Recurrent	Capital	Total	Recurrent	Capital	Total	Recurrent	Capital	Total	Recurrent	Capital	Total
A. Ministry of Education	185.3	83.5 ^{3/}	268.8	251.0	72.3	323.3	434.8	119.5	554.3	460.4	139.4	599.8
B. Others	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C. TOTAL	185.3	83.5	268.8	251.0	72.3	323.3	434.8	119.5	554.3	460.4	139.4	599.8
A as % of Public Sector Expenditures	19.1	7.7	13.1	19.7	7.1 ^{4/}	14.1	24.6	8.5	17.5	21.1	5.5 ^{5/}	12.8
	(968.6)	(1 089.8)	(2,058.4)	(1,277.1)	(1,019.9)	(2,297.0)	(1,765.4)	(1,401.5)	(3,166.9)	(2,184.0)	(2,516.9)	(4,700.9)
A as % of GNP (at market prices)			4.5 (5,973.6)			4.5 (7,046.5)			6.8 (8,200.0)			

^{1/} Actual

^{2/} Estimates

^{3/} Includes Development Program and Education Funds

^{4/} Only includes actually spent out of the earmarked funds

^{5/} Includes Development Funds (about TT\$1,200 million) which do not have to be spent completely in this budget year

Sources: Estimates of Expenditure 1976-1979

May 1979

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TRINIDAD AND TOBAGO

THIRD EDUCATION PROJECT

Technical Assistance and Fellowships

Specialists

	<u>Total</u>	<u>FY</u>		
		<u>1980</u>	<u>1981</u>	<u>1982</u>
		(in man/months)		
1. Project Management Consultants	120	48	48	24
2. Technical Teacher Trainers (J. S. Donaldson T.I.)	66	12	36	18
3. Teacher Development Centers	30	24	3	3
4. Agricultural Teacher Trainer	12	12	-	-
5. Specialist in Guidance/Counsel.	12	12	-	-
	<u> </u>	<u> </u>	<u> </u>	<u> </u>
TOTAL:	240	108	87	45

Fellowships

Technical Teacher Trainers	69	27	42	
Teacher Development Centers	24	12	12	
Agricultural Teacher Trainers	18	9	9	-
	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	111	48	63	-

May 1979.

TRINIDAD AND TOBAGO
THIRD EDUCATION PROJECT
Schedule of Disbursements
(US\$'000)

<u>Fiscal Year</u>	<u>Quarter</u>	<u>Disbursement</u>	<u>Accumulated Disbursement</u>	<u>Undisbursed Balance</u>
1980	1	-	-	20,000
	2	350	350	19,650
	3	350	700	19,300
	4	570	1,270	18,730
1981	1	570	1,840	18,160
	2	1,050	2,890	17,110
	3	1,500	4,390	15,610
	4	2,080	6,470	13,530
1982	1	1,800	8,270	11,730
	2	2,000	10,270	9,730
	3	1,370	11,640	8,360
	4	1,300	12,940	7,060
1983	1	1,500	14,440	5,560
	2	1,500	15,940	4,060
	3	1,500	17,440	2,560
	4	1,100	18,540	1,460
1984	1	800	19,340	660
	2	660	20,000	-

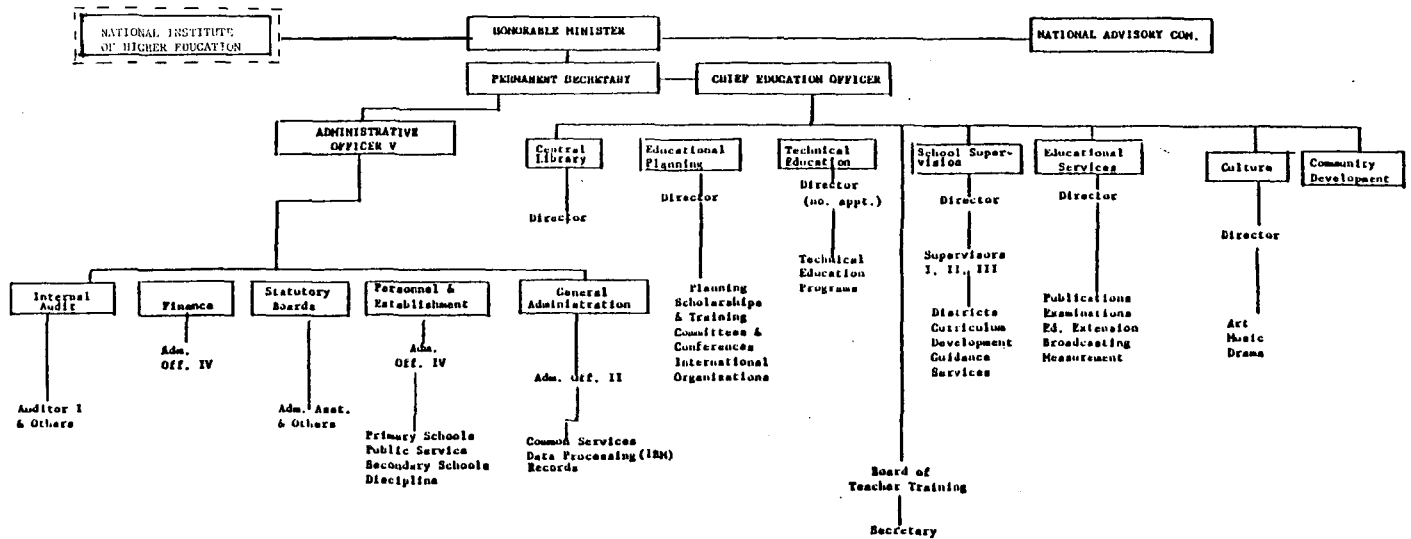
May 1979.

TRINIDAD AND TOBAGO

THIRD EDUCATION PROJECT

ANNEX 1
Chart C-1

Ministry of Education and Culture; Administrative Structure



Created 1978

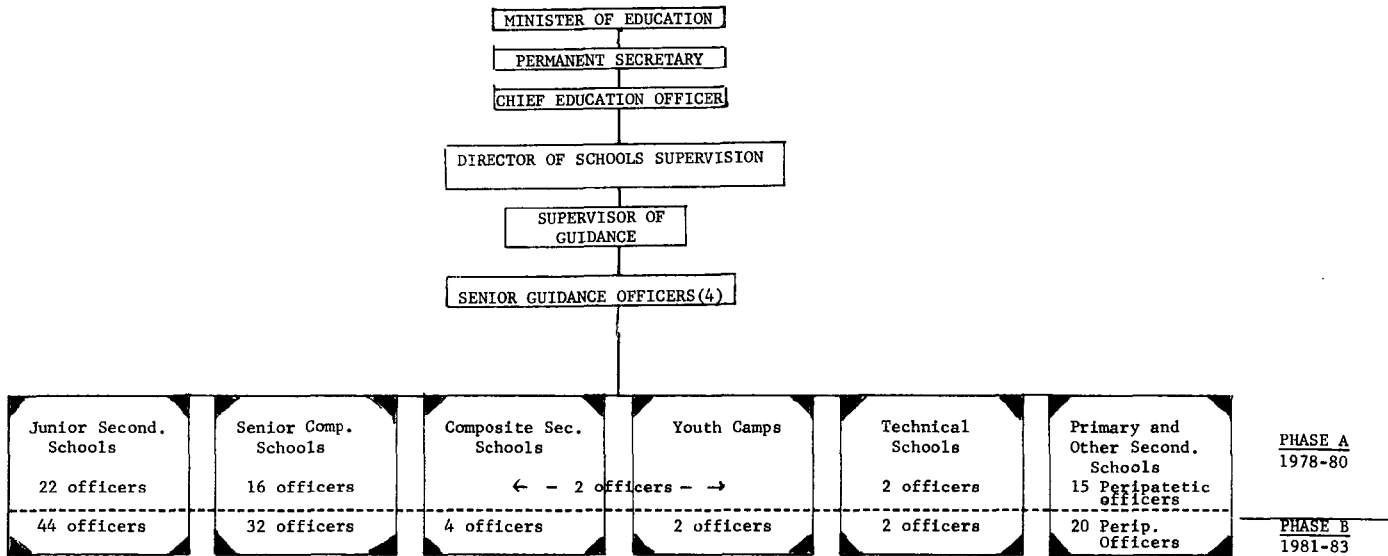
NOTE: School Supervision: proposals for the expansion and reorganization of these services are shown in Charts C-2 and C-3. May 1979.

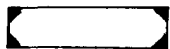
TRINIDAD AND TOBAGO

ANNEX 1
Chart C-2

THIRD EDUCATION PROJECT

Proposed Organization Chart: Guidance Unit (MOEC)



 Additional services planned.
May 1979.

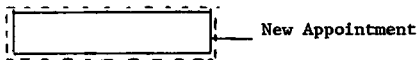
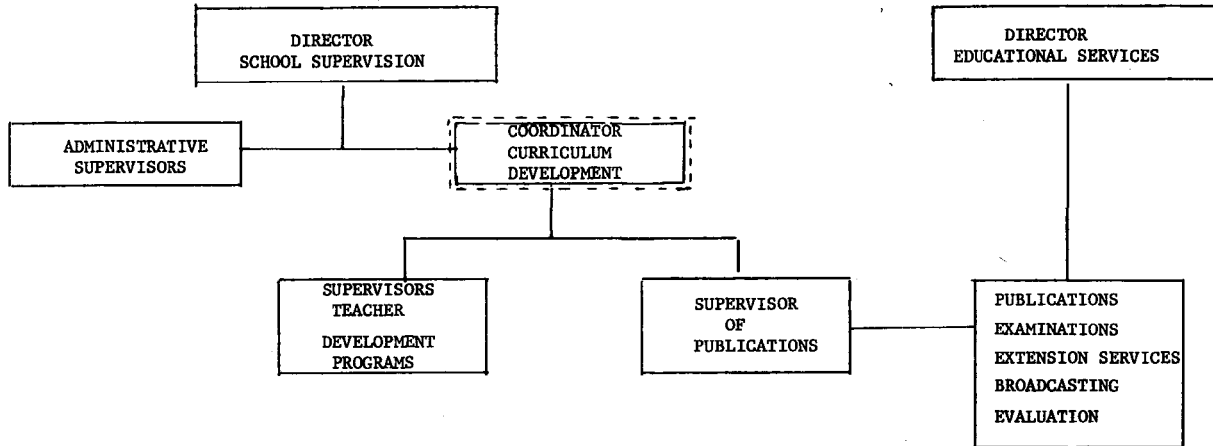
TRINIDAD AND TOBAGO

THIRD EDUCATION PROJECT

ANNEX 1
Chart C-3

Proposed Reorganization Chart: Incorporation of NCTDC Services

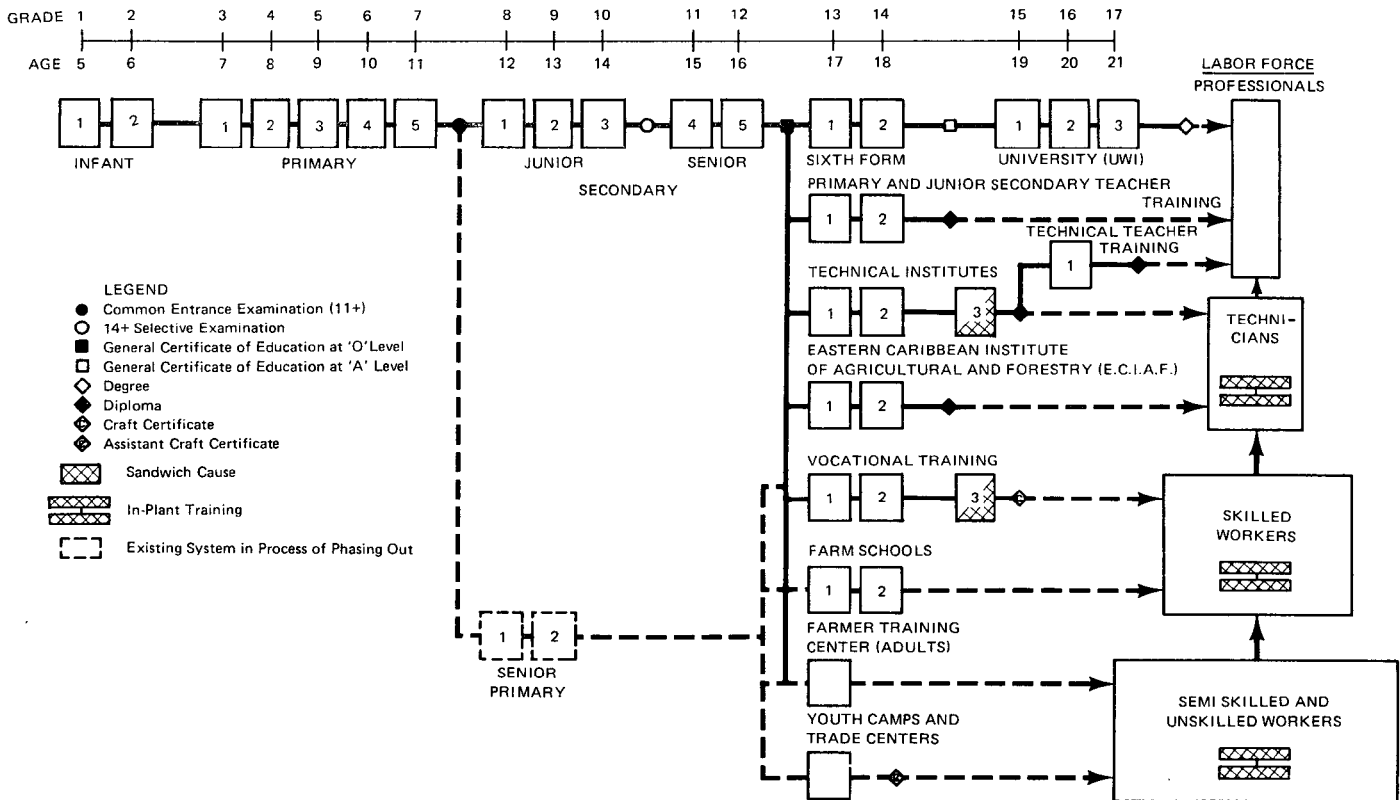
Within Directorate of School Supervision (MOEC)



May 1979.

TRINIDAD AND TOBAGO
THIRD EDUCATION PROJECT
Proposed Structure of the Educational and Training System

ANNEX 1
Chart C-4



NOTE: Under the Government's Education Development Plan the Common Entrance (11+) and 14+ Examinations will not function as selective techniques after 1983 and 1985 respectively.

MAY 1979

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TRINIDAD AND TOBAGO
THIRD EDUCATION PROJECT
IMPLEMENTATION SCHEDULE

Calendar Year Semester	1979		1980		1981		1982		1983	
	1	2	1	2	1	2	1	2	1	2
I. EXTENSION SECONDARY SCHOOLS										
A. Civil Works										
1. Preliminary Studies										
2. Preliminary Designs										
3. Final Designs and Tendering										
4. Construction										
B. Furniture and Equipment										
5. Bid Documents and Bidding										
6. Manufacture and Delivery										
7. Installation										
II. REPLACEMENT PRIMARY SCHOOLS										
A. Civil Works										
1. Preliminary Studies										
Phase One										
2. Preliminary Designs										
3. Final Designs and Tendering										
4. Construction										
Phase Two										
5. Preliminary Designs										
6. Final Designs and Tendering										
7. Construction										
Phase Three										
8. Preliminary Designs										
9. Final Designs and Tendering										
10. Construction										
B. Furniture and Equipment										
11. Bid Documents and Bidding										
12. Manufacture and Delivery										
13. Installation										
III. NEW JUNIOR SECONDARY SCHOOLS										
A. Civil Works										
1. Preliminary Studies										
2. Preliminary Designs										
3. Final Designs and Tendering										
4. Construction										
B. Furniture and Equipment										
5. Bid Documents and Bidding										
6. Manufacture and Delivery										
7. Installation										
IV. TEACHER DEVELOPMENT CENTERS.										
A. Civil Works										
1. Preliminary Studies										
2. Preliminary Designs										
3. Final Designs and Tendering										
4. Construction										
B. Furniture and Equipment										
5. Bid Documents and Bidding										
6. Manufacture and Delivery										
7. Installation										
V. TECHNICAL ASSISTANCE										
Development Centers										
Technical Teachers										
Agricultural Teachers										
Guidance/Counselling										
VI. PROJECT ADMINISTRATION										
Furniture and Equipment										
Project Management Services										

TRINIDAD AND TOBAGO

THIRD EDUCATION PROJECT

Revised Curriculum for Primary Schools

<u>Subject</u>	<u>Periods/Weeks</u>
Language Arts	22
Mathematics	10
Social Studies	5
General/Agricultural Science	4
Physical Education	2
Nutrition Education	1
Religious Education	5
Creative Arts:	6
Literacy Arts	
Art/Crafts	
Music/Drama/Dance	—
Total	55

Notes:

1. Teaching periods are of 30 minutes duration.
2. The school day runs from 8:00 am to 3:15 pm; it includes a registration period (15 minutes); lunch break (1 hour) and morning/afternoon recreation breaks of 10 minutes each.
3. Primary schools operate a 5 day/week program (11 teaching periods per day).
4. Class sizes: 40 students per teacher.

TRINIDAD AND TOBAGO

THIRD EDUCATION PROJECT

Curriculum for Junior Secondary Schools

<u>Subject</u>	<u>Periods/Weeks</u>
English	5
Mathematics	5
General Science	4
Social Science	4
Spanish	3
Agriculture	2
Industrial Arts or Home Economics	3
Art and Craft	2
Music	2
Physical Education	2
Religious Education	1
Electives	<u>2</u>
Total	<u>35</u>

Notes:

1. Teaching periods are of 45 minutes duration.
2. The schools operate a five day/week program with about 5-1/2 hours schools per day.
3. Class sizes: 40 students per teacher (20 for practical subjects).

TRINIDAD AND TOBAGO

THIRD EDUCATION PROJECT

Curricula for Upper Cycle Secondary Courses

A. ACADEMIC STREAMS

<u>Subject</u>	<u>Periods/Weeks</u>			
	<u>Core</u>	<u>Electives</u>		
		<u>Langs.</u>	<u>M/Sc.</u>	<u>Soc. Sc.</u>
English Lang/Lit	4	4		
Mathematics	4		1	
Social Studies	4			
Spanish	4	1		
General Science	5			
Technology (elective)	2			
Private Study	<u>1</u>			
	25			
 French		<u>5</u>		
		10		
 Chemistry			3	
Physics			3	
Biology			<u>3</u>	
			10	
 History/Geography				6
Economics				<u>4</u>
				10

Notes: 35-period week; 45 minutes per period; five-day week.

B. PRETECHNICAL STREAMS

<u>Subject</u>	<u>Periods/Weeks</u>	
	<u>Core</u>	<u>Electives ^{1/}</u>
English	5	
Mathematics	4	
Social Studies	4	
Spanish	4	
Science	5	
Private Study	<u>1</u>	
	23	

ONE of the following:

Business Studies
Home Economics
Creative Arts
Electronics
Construction, Technology
Drafting
Agriculture
Economics

12

Notes:

1. Number and type of pretechnical courses vary according to size and location of school.
2. 35-period week; 45 minutes per period; five-day week.
3. Class sizes: 32 (16 for practical courses).

C. CRAFT COURSES

<u>Subject</u>	<u>Periods/Weeks</u>			
	<u>Indust.</u>	<u>Business</u>	<u>Home Ec.</u>	<u>Agric.</u>
English	3	4	3	3
Mathematics	4	4 <u>1/</u>	4	4
Social Studies	3	3	3	3
Spanish	3	3	3	3
Integrated Science	3	-	3	6 <u>2/</u>
Private Study	1	1	1	1
Specialized Craft: <u>3/</u>				
Practical	12)	20	12	12
Related Theory	3)		3	3
Related Drawing/ Drafting	<u>3</u> 18	<u>-</u> 20	<u>3</u> 18	<u>-</u> 15

Notes:

- 1/ Accounts.
- 2/ Agricultural Science.
- 3/ (a) Industrial Crafts: Carpentry, Masonry, Electrical Installations, Welding, Auto Mechanics, Air Conditioning, Machine Shop, Plumbing.
 (b) Business Studies: Office Practice, Commerce, Typing, Accounts.
 (c) Home Economics: Food/Nutrition, Garment Construction, Housekeeping and Management, Beauty Culture.
- 4/ Number and type of specialized crafts will vary according to location and size of school. They may be taken in isolation, or in appropriate combinations.
- 5/ 35-period week; 45 minutes per period; five-day week.
- 6/ Class sizes: 32 (16 for practical courses).

TRINIDAD AND TOBAGO

THIRD EDUCATION PROJECT

Principal Functions of the Project Management Services Team

1. Design. Direct architectural and engineering consultants in developing economical facilities consistent with an approved design program. Make recommendations related to the building structure, construction methods, and materials selection.
2. Information System and Reports. Prepare for approval and implementation, communications procedures, forms and report formats so as to provide timely and coordinated information to all project participants.
3. Estimating, Forecasting and Cost Control. Prepare cost estimates ranging from a preliminary estimate to a definitive estimate, including estimates of the cost of change orders and extra services. Prepare periodic reports for cash flow, costs and commitments and trend forecasts of cost variations based on periodic design reviews. Determine probability factors for achieving the estimated costs and provide means for establishing necessary contingency funds.
4. Planning and Scheduling. Prepare in cooperation with consultants and contractors, a project execution plan and schedule integrating all of the services and construction activities. Review and update the project plan on a regular basis, incorporating completion date forecasts.
5. Procurement, Expediting, and Inspection. Prepare, if applicable, a procurement procedure for approval and implementation. Prepare lists of qualified bidders, solicit and evaluate bids, and inspect materials and equipment at the point of manufacture and during shipping and delivery to site. When requested, assist the client or other project participant in purchasing construction materials and equipment.
6. Contract Administration. Administer all contracts under its purview, including the coordination of all construction contracts. Arrange for inspection of the work for conformance with approved documents, process variation orders and progress payments, resolve conflicts, and verify materials and quantities. Make recommendations for contracting procedures and the form and content of contracts.
7. Liaison with Public Agencies. Where applicable, establish and maintain liaison with appropriate government agencies having jurisdiction over the project, and work to develop procedures to expedite approval processes.

TRINIDAD AND TOBAGO

THIRD EDUCATION PROJECT

Selected Documents and Data Available in the Project File

A. Selected Background Reports

1. Economic Position and Prospects of Trinidad and Tobago (2 Vols), World Bank, December 19, 1978.
2. Review of the Economy 1977, Republic of Trinidad and Tobago, Central Statistical Office, 1977.
3. Estimates of Expenditures for the Year 1978 (3 Vols), Government Printery, Trinidad, 1978.
4. Labour Force by Sex (Publication No. 37), Central Statistical Office, Trinidad and Tobago, 1978.

B. Selected Sector Reports

1. Draft Plan for Educational Development in Trinidad and Tobago, 1968-83, Government Printery, Trinidad, 1974.
2. Prime Minister's Proposals to Cabinet on Education, Government Printery, Trinidad, September 18, 1975.
3. Prime Minister's Further Proposals to Cabinet on Education. Government Printery, Trinidad, October 2, 1975.
4. Cabinet Recommendations on the Findings of the Three Working Parties Set Up to Review (a) The Education Plan (1968-83); (b) Craft Training and Apprenticeship Schemes; and (c) The Working of the Shift System, May 1976.
5. Trinidad and Tobago Education Sector Memorandum, the World Bank, LCPED, July 12, 1977.
6. White Paper on National Institute of Higher Education (Research, Science and Technology), Government Printery, Trinidad, 1977.

C. Selected Project-Related Reports and Studies

1. Third Education Development Project: Loan Request, October 1978.
2. Eastern Caribbean Institute of Agriculture and Forestry, Prospectus, September 1977.

D. Selected Working and Implementation Papers

(Prepared by the World Bank Appraisal Mission)

1. Demographic Projections 1980 and 1985, Selected School Age Groups.
2. Educational and Architectural Working Papers - Primary, Junior Secondary, and Senior Secondary Schools.
3. Brief Terms of Reference for Specialists and Consultants to be Contracted from Loan Proceeds (Annex 3).

