

MINISTRY OF EDUCATION

BRITISH GUIANA

**UNESCO PLANNING
RECOMMENDATIONS
1966 - 71**

The Government Printery, Georgetown.

(C.G.P. & S. 2089/66)

MINISTRY OF EDUCATION - BRITISH GUIANA

UNESCO PLANNING RECOMMENDATIONS

1966 - 71

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MINISTRY OF EDUCATION

DEVELOPMENT PROGRAMME: 1966-71

1. INTRODUCTION

In leaving these recommendations with the Planning Unit I must emphasize that they are the result of continuous discussion with its members who are therefore familiar with the lines of thought from which they have been derived. Where appropriate there has been consultation with other members of the UNESCO Mission, officers of other Ministries and representatives of the agencies of foreign Governments concerned with financial aid to developing countries. In a field remarkable for its diversity of opinion it would be idle to pretend that the recommendations represent unanimous agreement or that they are not coloured by my personal views as UNESCO Planning Consultant, but where differences exist they are largely a matter of detail rather than principle. In some respects the programme is contingent upon policy decisions which will have to be taken before it is drafted in its final form.

It will have to be based on four fundamental ministerial responsibilities. These are to:-

- (i) discharge the statutory commitments of compulsory education;
- (ii) achieve as far as possible the objectives of approved policy;
- (iii) ensure that expanding educational services are integrated into a national development programme and designed to encourage the advancement of the country's economy and to meet the social needs of its people; and,
- (iv) allocate priorities to educational projects in the light of:-
 - a) funds available for capital and recurrent expenditure; and
 - b) the most effective economic and social return in relation to the outlay of material and human effort.

The first of these must be given absolute priority. In terms of buildings, equipment and staff it should not be difficult to estimate its capital and recurrent cost, but unfortunately reliable statistics are not readily available while the 1960 Census Report, on which a population projection could be calculated, has not yet been published. Table I, however, gives a crude and simplified projection, which, although statistically vulnerable, will serve as a reasonable approximation to the dimensions of the problem. The figures are higher than those given in the Germanacos Report, but there may be criticism that they are not high enough. Even should this eventually prove to be valid, it must be remembered that education cannot be subjected to an inviolate or inflexible programme. It is the responsibility of the Planning Unit to keep it under constant review and adjustment to meet changing needs; one of the factors to be periodically examined is the pattern of population growth.

The recommendations that follow will make it apparent that the next priority should be in the field of secondary education. Recently the emphasis has been on numerical expansion at this level with a consequent neglect of the content quality of the course. With the exception of a few privileged high schools, facilities for teaching science are negligible while those for practical subjects including woodwork, metalwork and home economics are sorely inadequate. The rapid expansion has also meant the employment of many untrained teachers, some of poor academic attainment; the result has been a restriction of the curriculum to a narrow, literacy content, which is contributing little to the country's future. It is from the resources of the secondary schools that must be drawn the supply of students for higher education, teaching and technician training. Every aspect of economic and social advancement, medicine, veterinary science, agriculture, engineering, geology and many other professional activities, including teaching, depend basically on science education and the proper attitude to practical skills. It is essential that facilities and staff for these should be provided in the secondary schools and it is towards this objective the major effort should be concentrated.

No attempt has been made to support any of the recommendations with even a superficial man-power survey, because with the uncertainty over the future of the economy, it would offer no useful guidance. In fact the information that any such survey generally provides to the educational planner can be derived equally well from the application of a little commonsense and intelligent foresight; if statistics are unreliable it may give a dangerously misleading impression of accuracy. Moreover the present shortage of professional and technical staff is such that nothing in the proposed programme can cause concern about the possibility of unemployment at this level. The Ministry, however, must keep in constant touch with the Central Planning Unit to ensure that a rising demand for skills, or a need for new skills, in both the public and private sectors can be met and, if possible, anticipated.

There is a tendency for all Ministries to work in isolation. All development schemes have the common factor of education and training and this Ministry should take the initiative in seeking the closest possible association with other Ministries. As a practical step towards this it would help if members of the Central Planning Unit visited development projects with planning officers from other Ministries and not only those directly concerned with the projects. This would encourage an appreciation of the wider implications of planning and an understanding that its problems extend beyond the narrow confines of ministerial authority.

The development programme should be subject to annual review and adjusted in the light of changing needs and of the progress achieved. At the same time it should be extended in outline so that the target is always five years ahead. Education is a living organism and its growth does not come to an abrupt stop at the end of a development programme. Its growth is also continuous and it should be purposeful; while there is no reason why its direction should not be changed, frequent and sudden changes of policy will only produce a twisted abnormality.

The Germanacos Report recommends the appointment of County Education Officers. The Consultants are unanimously agreed that this is premature and that the insertion at this stage of an intermediary level of administration between the Districts and the Ministry may lead to unnecessary duplication and complication. The first priority should be given to raising the district administration to a high level of efficiency and later, consideration to the necessity for County Education Officers.

3) Supervision of Schools

The Consultants for Administration and Finance have broken new ground in recommending the establishment of an Inspectorate independent of administrative duties. In view of the urgent necessity for improving the content of the curriculum and the standard of teaching and school management these proposals should be given priority in connection with the 1965 Estimates, particularly as their cost will be largely off-set by economies arising from re-organisation elsewhere.

The quality of English language teaching in some parts of the country must give cause for grave concern. It is possible that it could be improved by the use of some of the techniques of teaching English as a foreign language. Research should be undertaken into this problem and it is recommended that consideration should be given to study courses overseas for the Inspector of English language and the Head of that Department in the Training College. Departments of Education in several British universities give specialist courses in this subject.

4) Capital and Recurrent Expenditure

All the foregoing recommendations have been put to the Ministry for inclusion in the 1965 Estimates. If any of them are not approved, they will have to be incorporated in the development programme together with an estimate of their costs, including capital provision for housing and offices where they are not already available.

III. PRIMARY EDUCATION

Schooling is compulsory for all children between the ages of six and fourteen. These eight years are normally covered by the full primary course and a further two years of secondary education. Two recent administrative directives, however, have committed the Ministry to expenditure beyond its statutory responsibility. The first authorizes the admission of children at the age of five; the second allows pupils to continue for a third year of secondary education with the possibility of completing the full five-year course when it is justified by scholastic attainment. The following is an attempt to forecast the expenditure involved in meeting these commitments.

Present policy is aimed at the separation of primary and secondary education and in view of its importance all future planning should be directed towards this end. In the meantime, however, it is not possible to draw a precise distinction between them because of the overlap in the all-age schools. The present definition of primary education in these estimates also includes those secondary classes attached to the all-age schools.

It is difficult to make an accurate forecast of future school enrolment. The primary and secondary enrolment for 1959-64 is given in Tables II and III but its pattern lacks uniformity from causes arising from political and social disturbances. The tables also give a population projection of the relative age-groups, but there is no obvious correlation between those figures and the enrolment. For the purpose of these estimates a forecast of the total school enrolment has been arbitrarily calculated to include:-

- (i) one half of the 5-6 age group;
- (ii) the 6-12 age group with a 10% reduction for children attending private schools or not at school for reasons of physical or mental handicap; and
- (iii) two-thirds of the 12-17 age group.

From this has been deducted the present secondary-high school enrolment (estimated at 12,500) with the increase estimated in Section IV (Para. 16):-

	Enrolment		
	Total	Secondary/High	All-Age
1966-67	178,000	14,000	164,000
1967-68	183,000	18,000	165,000
1968-69	187,000	21,000	166,000
1969-70	192,000	25,000	167,000
1970-71	198,000	29,000	169,000
1975-76	226,000	46,000	180,000

The next problem is to assess the supply of trained teachers. There are

at present some 1,400 trained or certificated teachers employed in all-age schools and by 1965 this is likely to rise to 1,800 when the results of the in-service and upgrading courses are known. The future output of trained teachers is uncertain and an approximation of the position up to 1975 is based on the assumptions that:-

- (i) in-service training will come to an end in 1970:
- (ii) after 1970 pre-service training will reach and maintain an annual output of 300 teachers; and
- (iii) wastage through such causes as retirement will be 2½% annually. (This may prove to be too low).

	Teachers in Employment	Pre-Service Output	In-Service Output	Total
1965-66	1,800			1,800
1966-67	1,750	120	700	2,570
1967-68	2,510	180		2,690
1968-69	2,620	180	500	3,300
1969-70	3,270	240		3,510
1970-71	3,420	240	300	3,960
1975-76	4,620	300		4,920

From this supply will have to be deducted the teachers required for the new secondary schools (Section IV Para. 16). The balance will be available for the all-age schools.

	Total	Secondary Schools	All-Age Schools
1966-67	2,570	60	2,510
1967-68	2,690	240	2,450
1968-69	3,300	380	2,920
1969-70	3,510	520	2,990
1970-71	3,960	660	3,300
1975-76	4,920	1,360	3,560

Staffing requirements have been calculated on a teacher-pupil ratio of 1:40. In 1966 it is estimated that there will be 370 non-teaching heads and that this number will increase by five annually. The position will therefore be:-

	Enrolment	Teaching Staff	Head Teachers	Trained Teachers	Untrained Teachers
1966-67	164,000	4,100	370	2,140	1,960
1967-68	165,000	4,125	375	2,075	2,050
1968-69	166,000	4,150	380	2,540	1,610
1969-70	167,000	4,175	385	2,605	1,570
1970-71	169,000	4,225	390	2,910	1,315
1975-76	180,000	4,500	415	3,145	1,355

TABLE II

PRIMARY SCHOOL ENROLMENT

1959-64

	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65
PREPARATORY A	27,350	26,671	26,172	23,123	29,708	22,061
B	16,335	17,336	18,413	18,044	18,497	20,549
STANDARD I	17,948	17,964	17,993	19,591	19,203	19,470
II	16,876	16,348	17,142	18,457	18,812	19,350
III	15,958	16,594	16,356	17,042	17,922	18,666
IV	11,046	13,635	14,666	15,512	16,526	19,175
TOTAL: PRIMARY ENROLMENT	105,513	108,548	111,742	111,769	120,668	119,271
PUPILS: UNDER 6	4,787	5,017	4,854	3,652	6,500	9,985
6-12 AGE GROUP	87,533	89,285	91,571	93,694	100,328	96,351
OVER 12	13,193	14,246	15,317	14,423	13,840	12,935
POPULATION PROJECTION 5-6	18,500	19,000	19,500	20,000	20,500	21,000
6-12	102,000	105,000	107,000	110,000	112,000	115,000
12-14	30,500	31,000	31,500	32,500	33,500	34,500

		1959-60	1960-61	1961-62	1962-63	1963-64	1964-65
ALL-AGE SCHOOLS	FORM 1	10,214	10,655	11,321	11,422	12,258	14,788
	2	9,621	10,134	9,986	9,098	8,384	10,724
	3	-	-	-	2,687	5,397	7,560
	4	-	-	-	614	1,789	4,657
	5	-	-	-	-	-	291
ALL-AGE SCHOOLS	TOTAL	19,835	20,789	21,307	23,841	27,828	38,020
SECONDARY AND HIGH SCHOOLS	FORM 1	1,684	1,822	2,374	1,869	2,608	2,702
	2	1,295	1,523	1,872	1,734	2,450	2,368
	3	1,385	1,412	1,672	1,607	2,119	2,529
	4	1,267	1,396	1,377	1,562	1,824	2,064
	5	1,026	936	1,029	1,254	1,277	2,073
SECONDARY AND HIGH SCHOOLS	TOTAL	6,657	7,089	8,324	8,026	10,278	11,736
TOTAL ENROLMENT	FORMS 1-2	22,814	24,134	25,553	24,143	25,700	30,582
	3	1,385	1,412	1,672	4,294	7,516	10,089
	4-5	2,293	2,332	2,406	3,430	4,890	9,085
TOTAL SECONDARY SCHOOL ENROLMENT		26,492	27,878	29,631	31,867	38,106	49,756
POPULATION PROJECTION	12-17 AGE GROUP	71,000	73,000	75,000	77,000	80,000	82,000

Recurrent Expenditure

In calculating these estimates the following costs have been used:-

Head Teacher	\$ 4,000
Trained Teacher	2,000
Untrained Teacher	1,000

* Other Charges - per capita

Standards A - VI	4
Forms 1 - 5	20

* (Including non-teaching staff).

(\$1,000)	Teachers Salaries	Other Charges	Total
1966-67	7,720	1,310	9,030
1967-68	7,700	1,320	9,020
1968-69	8,210	1,330	9,540
1969-70	8,310	1,340	9,650
1970-71	8,700	1,360	10,060
1975-76	9,300	1,470	10,770

Capital Expenditure

In estimating the cost of new buildings it has been assumed that most of the work will be carried out through 'self-help' projects and that a place in an all-age school can be provided and furnished at a cost of \$70 M. to the Government. The work to be carried out falls under three heads:-

(i) New Places

Between 1966 and 1971 it will be necessary to provide 5,000 new places at a cost of \$350,000.

(ii) Rebuilding

Some of the buildings now in use are so dilapidated that they are in danger of collapse. It is estimated there are 6,000 places in schools that should be condemned forthwith and replaced at a cost of \$420,000.

(iii) Overcrowding

Almost every school is over-crowded. In some the conditions are so appalling that the classes merge one into another and it is difficult to see how any worthwhile teaching is possible. A survey of the floor space available shows that on the standard basis of 10 sq.ft. a pupil another 40,000 places are required to provide adequate accommodation in the primary schools. These will cost \$2,800,000.

If primary education is to become effective it will be necessary to build or rebuild some 50,000 places during the 1966-71 planning period at a cost of \$3 - 4 million - and this is based on the assumption that the secondary school programme will relieve the all-age schools of

3,500 pupils annually. Even with the government expenditure only a very urgent sense of co-operative effort can make any impact on the situation.

Textbooks and Stationery

At present pupils provide their own books and stationery which means that, unless an examination is impending very few pupils have the necessary materials to meet the teaching requirements of the curriculum. It is not unusual to see four or five children crowding over a book, that is not always prescribed by the syllabus. A free issue of textbooks would ensure that the children had at least some permanent contact with the written word, but its cost would be prohibitive. It is, however, recommended that consideration should be given to the issue of textbooks on loan to the pupils. On the assumption that a book would normally have a life of four years it is estimated that the 'per capita' cost of this proposal would be:-

	Stationery	Textbooks	Total
	\$	\$	\$
Standards A - VI	3	6	9
Forms 1 - 5	4	8	12

The total annual cost would be (\$1,000)

1966-67	1,500
1967-68	1,510
1968-69	1,520
1969-70	1,530
1970-71	1,550
1975-76	1,660

IV. SECONDARY EDUCATION

The importance of priority being given to secondary education has already been stressed in Section I (Para. 4). It must be repeated here with the warning that the efforts now being directed towards numerical expansion should be diverted to the improvement and widening of the curriculum - and providing schools with the facilities to put it into effective practice. The primary objective should be to build up a single integrated system of secondary education in co-operation, where necessary, with such private managements as can adequately meet the requirements of that system. There are at present four types of secondary schools.

Government High Schools

These three schools, with a fourth planned for Berbice, have been described with some justification as privileged. Thus children tend to seek admission to those schools as their first choice. There are arguments to support this - usually from the staff of the privileged schools but many against it; it should be the aim to raise the standard of all secondary education to the level now offered by those schools. Sixth form work must, of course, continue as long as G.C.E. 'A' levels or their equivalent are a condition of entry to university and professional courses overseas, but selective entry should be at this level rather than at the beginning of the secondary course when it is difficult to measure academic potential.

Secondly there is a vexed question of the salary differentials applied to teachers in those schools. The historical background to this anomaly of higher pay is no longer an argument for allowing it to continue when similar work is being done in the other schools. Sixth-form work needs recognition, but this could be covered by a system of responsibility allowances which is a common practice elsewhere. (See Section VI on the Teaching Service).

Aided High Schools

There are fourteen such schools of greatly varying quality. Some are excellent; others certainly do not justify government aid. Discussions have been taking place on what has been loosely described in some quarters as a 'take-over' bid from the Government. Some managements will not relinquish control over their schools and this attitude is understandable on religious and historical grounds. It would be a mistake to fight it provided that the schools meet the Ministry's requirements over accommodation, equipment and teaching standards. They must be prepared to co-operate in an integrated system of secondary education, particularly over the curriculum and such matters as fees and admission, the last of which should be a subject of consultation rather than direction. If such agreement can be reached the grant-in-aid rules should be revised to allow complete financial equality with government schools over staff salaries, maintenance costs and capital expenditure. Consideration should be given to the payment of grants on a 'budget' system to meet the varying needs of different schools. Future development should, however, be through Government and not aided schools.

Other managements will welcome the opportunity to hand over their schools to the Government, but this is likely to require compensation from capital resources which could be more profitably used on other projects. Accommodation is frequently inadequate and unsuitable for either conversion or extension. The only capital asset is the site value which educationally is often negligible because the schools are in places not best suited to meet the needs of the community. Unless the Ministry is satisfied that an aided school can be fully absorbed into its development programme, particularly over its facilities for teaching science and practical subjects, it should be allowed to die a natural death through the provision of alternative accommodation elsewhere.

Government Secondary Schools

These ten schools were originally built as primary schools but were changed into secondary schools as a first step towards implementing the new policy of separating primary and secondary education. Not all of them are suitably sited as secondary schools and district surveys may show that some of them should revert to primary work as soon as alternative secondary facilities have been provided in new schools. The criteria for continued use as secondary schools should be (i) the possibility of expansion to take a three-form entry (except to meet the needs of a scattered population) and (ii) sufficient space for laboratories, workshops and homecraft rooms. Four schools have already been selected for such provision and it is hoped that the cost will be met by a C.D. & W. grant in 1965.

All-Age Schools

In these schools Forms 1 and 2 may be regarded as a commitment of compulsory education. Present policy allows pupils to stay on for a third year of the secondary course to take the College of Preceptors Examination. Those who reach a sufficiently high level of attainment in this may stay on for a further two years to take the 'O' level of G.C.E. The result of this new policy directive has not been entirely satisfactory. Too rapid expansion has brought heavy pressure to bear on accommodation already over crowded; frequently teachers have not been qualified for this level of work; without laboratories and practical rooms the course has been restricted to a narrow literary content. The result has been the expenditure of much misdirected effort with little profit to anyone. It is strongly urged that in future the addition of Forms 4 and 5 to an all-age school should be subject to special approval of the Ministry which must be satisfied that the curriculum, including science and practical subjects, can be adequately taught by suitably qualified staff.

The position will gradually improve as new secondary schools are built, but the problem of selection will remain until there is sufficient accommodation for everyone. Admission to secondary classes outside the all-age schools must obviously remain selective for the time being and at present there seems no suitable alternative to the Common Entrance Examination. When schools cannot fill their admission on this basis, other applicants should be selected by a special test given by the head teacher with a relaxation of the present age limit. Discretion over this should be allowed, because some children develop late and others do not start school at the prescribed age through no fault of

their own. Lastly, and this is important, there should be provision for pupils to transfer from an all-age school to Form 4 of a secondary school on the result of the C P E.

Curriculum

In some ways the curriculum is outside the province of the Planning Unit, particularly as far as its technical and professional details are concerned, but it has a responsibility to ensure that expenditure is directed to an adequate social and economic return. Mention has already been made of the narrow literary content of much of the teaching, but there are other inadequacies. It often lacks purpose because the present curriculum guide offers too little assistance to teachers. It needs to be revised in more detail and supported by syllabuses or schemes of work in each subject. No one would advocate a detailed week-by-week, term-by-term work programme with no freedom of interpretation or approach being allowed to the teachers, but closer direction is needed especially when school staffs carry a high proportion of untrained teachers and when trained teachers are often without experience and usually without supervision.

A directive is also needed to head teachers on the organization of their classes. A few enter candidates for some papers in the C P E. from Form 2, some from Form 3 and others from Form 4. Some head teachers retain their C P E. candidates in Form 4 until they hear the examination results, by which time a good deal of the academic year is lost. Pupils not up to the C P E. standard in Form 3 should be retained in that class for another year in order to allow suitable candidates two clear years of study for the 'O' level. Such suitability should be left to the head teacher's judgement rather than to C P E. results.

The position is worse in the aided schools some of which admit pupils from Standard VI into Form 2: others take them into Form 1 for a term, then Form 2 for 2 terms, promoting them into Form 3 at the end of their first year. In effect they are trying to do in four years what other schools with pupils of better quality, better staff and better facilities spend five years in doing. With a few notable exceptions it is not surprising that their results are very poor. A private school is free to do as it likes, even to the extent of deluding fee-paying parents, but this practice should not be allowed to continue in schools being aided from public funds. There should be closer control and constant inspection of these schools.

The Future

In the programme for secondary education no changes are proposed for the existing government and aided high schools except that the definition of 'high' should be restricted to those with sixth-form work. Unless some of the aided schools are transferred to government management on compensation no capital expenditure is involved apart from a programme of minor improvements and extensions which the Planning Unit should prepare. Both such transfer of management and the suggested revision of the grant-in-aid rules will entail increased recurrent expenditure. This also needs examination by the Planning Unit.

Present policy aims at providing five years of free education for all. In

Table I it is estimated that by 1976 the 12 - 17 age group will have risen to 110,000 needing 160 four-form entry schools. To achieve such an objective over the next ten years is outside reasonable possibility both as regards to capital expenditure on buildings and recurrent expenditure on staff salaries - even if sufficient teachers (4,400) were available. It is suggested that a reasonable programme would be to build five four-form entry schools annually during the 1966-71 programme with the possibility of the economic position allowing this number to be increased during the following five years. The target of twenty five new schools by 1971 will depend on extensive foreign aid towards capital expenditure. Although five four-form entry schools have been suggested each year, this pattern need not be rigidly adhered to. To meet the needs of some areas it may be necessary to build more smaller schools within the grounds of the financial provision, but small schools are usually less efficient and always more expensive than schools large enough to make full use of specialist staff and accommodation.

Priority over the new schools should be given to the suggested expansion of some of the six existing secondary schools not included in the 1965 C.D. & W. scheme. In the estimates that follow it has been assumed that four schools will need expansion by an additional total of 32 classrooms with extensions for science and practical work in each school.

Capital Expenditure

In the following estimates the cost of a "practical unit" to include sufficient space for the teaching of science, handicrafts and home economics in a four-form entry school has been calculated:-

	Area sq. ft.	Buildings \$	Equipment & Furniture \$
Laboratories	3,000	54,000	6,000
Handicrafts	2,500	45,000	11,000
Home Economics	2,500	45,000	7,000
		144,000	24,000

(i) Extensions to four existing schools (Para. 14)

(a) Buildings

	\$	
32 Classrooms	288,000	
4 Practical Units	<u>576,000</u>	
		864,000

(b) Equipment & Furniture

Classrooms	32,000	
Practical Units	<u>96,000</u>	
		<u>128,000</u>
		\$ 1,000,000 (SAY)

(ii) **New Schools (Para. 13)**(a) **Buildings**

	\$	\$
24 Classrooms & Offices	226,000	
Practical Units	<u>144,000</u>	
		370,000

(b) **Equipment & furniture**

Classrooms & Officer	26,000	
Practical Units	<u>24,000</u>	
		50,000
		\$ 420,000

Total cost of 25 schools: \$10,000,000 (SAY)

Recurrent Expenditure

If the two new schools and other extensions proposed for 1965 are built there will be approximately 1,500 additional places in 1966-67. The extensions proposed for four existing schools in 1966-67 will accommodate 1,000 pupils the following year, while the new schools will provide 3,500 additional places each year. Staffing requirements have been calculated on a teacher pupil ratio of 1:25 to allow for specialists and head teachers. The additional enrolment and staffing requirements are estimated to be:-

	Enrolment	Teachers
1966-67	1,500	60
1967-68	6,000	240
1968-69	9,500	380
1969-70	13,000	520
1970-71	16,500	660
1975-76	34,000	1,360

In calculating the cost these figures have been used:-

	\$
Teachers' Salaries	3,000
*Other Charges - per capita	
Forms 1 - 3	25
Forms 4 - 5	40

*(Including non-teaching staff).

The estimated annual cost is therefore (\$1,000):-

	Teachers' Salaries	Other Charges	Total
1966-67	180	46	226
1967-68	720	186	906
1968-69	1,140	294	1,434
1969-70	1,560	403	1,963
1970-71	1,980	511	5,134
1975-76	4,080	1,054	5,436

If the same basis of calculation is used for existing secondary and high schools with their estimated enrolment of 12,500 the cost will be \$1,500,000 for teachers' salaries and \$387,000 for other charges. The total cost of secondary education will therefore be:-

(\$1,000)	Teachers' Salaries	Other Charges	Total
1966-67	1,680	433	2,113
1967-68	2,220	573	2,793
1968-69	2,640	681	3,321
1969-70	3,060	790	3,850
1970-71	3,480	898	4,378
1975-76	5,580	1,441	7,021

For the purpose of these estimates it has been assumed that the schools will be staffed with trained teachers and that the balance of those available will be employed in the primary schools. This, of course, will not happen in practice as untrained teachers with G.C.E. 'A' level qualifications can sometimes be more usefully employed in secondary than in primary schools. This will, however, not affect the overall cost of primary and secondary education, the joint estimates for which provides for the full output of trained teachers.

Graduate Staff

The shortage of graduates for the higher classes is a very grave handicap to the secondary schools. Serious consideration should be given to the employment on short-term contract of expatriate trained graduates under the Overseas Service Aid Scheme (Ministry of Overseas Development). A few local graduates will be available and their number is likely to increase when the University of Guyana is in full operation. The average salary figure of \$3,000 is sufficiently high to cover the employment of some graduate staff in the new schools.

Textbooks and Stationery

If textbooks were issued on loan to pupils and if they were allowed free stationery, it is estimated that the 'per capita' annual cost would be:-

	Stationery	Textbooks	Total
	\$	\$	\$
Forms 1 - 3	4	8	12
Forms 4 - 5	5	10	15

The annual cost of this proposal for secondary schools is estimated to be (\$1,000):

1966-67	185
1967-68	238
1968-69	277
1969-70	330
1970-71	382
1975-76	607

V. TECHNICAL EDUCATION

Apart from the two 'private' *trade* schools run by Bookers Sugar Estates at Port Mourant and the Demerara Bauxite Company at Mackenzie for their own staff, the only craft and technician training available in British Guiana is at the Government Technical Institute in Georgetown. Its future depends on policy decisions which must be taken soon if provision for changes in its organization is to be made in the 1966-71 development programme. The following is an analysis of the present situation with recommendations for the future.

Craft Training

This is essentially part-time training. The first stage is a three-year course leading to the Craft Certificate of the City and Guilds of London Institute; the second is a further two years leading to the Advanced Craft Certificate. A condition of admission is the successful completion of a "preliminary craft training" course, covering English, mathematics, science and mechanical drawing and designed to ensure that candidates have reached the required academic standard. Subject to satisfactory practical experience, which may be teaching, holders of the Advanced Craft Certificate are eligible for the Full Technological Certificate of the City and Guilds. This is the workshop equivalent of the Higher Certificate in technician training.

Technician Training

At this level there is a full-time, two-year course for the Ordinary Certificate (Ordinary Technical Diploma) of the City and Guilds. Qualification for admission is an 'O' level in both English and mathematics; it can also be obtained through the craft courses. There is at present no course for the Higher Certificate which offers partial exemption from the examination for graduate membership of the appropriate professional institute.

The most urgent requirement, in the interests of both the Institute and the economic future of the country, is the introduction of the Higher Certificate course for technicians. This needs more space which can be made only by putting up more buildings or the removal of some of the lower level courses. The former is impracticable and the latter will result in raising the general standard of the Institute's work towards the ultimate objective of technological education.

The first step is the removal of the preliminary craft course. This is largely academic in content and should and could be provided in the all-age and other suitable schools with the use, where necessary, of the handicraft training centres for mechanical drawing. It is certainly no function of the Institute to provide such a course; in fact once the scope of the secondary school syllabus has been widened to make it educationally adequate, the need for the course should disappear with pupils from Form 3 qualified for direct entry to craft training.

The second is more fundamental. It is the removal of the craft courses from the Institute the first two years initially and eventually the final

year. Other facilities for this training will be needed and it is recommended that a trade school or Junior Technical College should be established in each of the three counties. Such colleges must be sited close to industrial centres for the necessary association between training and employment; Georgetown is an inevitable choice and it is recommended that the others should be at New Amsterdam and Anna Regina.

The Georgetown college must be larger than the others, first to meet the numerically greater needs of Demerara and secondly to cover the full scope of the variety of courses now available at the Institute. The others should start with only four courses, for motor mechanics, electricians, fitter-machinists and carpenter-joiners; local students wishing other courses will have to continue to train in Georgetown. It is recognised that woodworking is not popular but it has been included in the interest of the national economy. In this connection the Government should consider making contractually obligatory the employment of an agreed proportion of trained and apprentice craftsmen in all public building schemes. If this were done and the example followed in private building a much-needed improvement in the standard of building craftsmanship would result. Alternatively legislation could make this obligation mandatory, but such legislation is difficult to apply and voluntary acceptance of the principle is preferable.

In deciding priorities it must be recognised that the colleges at New Amsterdam and Anna Regina will save students from those areas the expense of travelling to and living in Georgetown and also avoid the possible difficulty of their finding part-time employment in the city. On the other hand the Georgetown college would relieve pressure on the Institute and allow it to accelerate its programme for advanced technician training. If it is practicable, it would be advisable to make a start on all these colleges simultaneously.

They should be sited and designed for expansion. Eventually they will have to absorb the third year of the craft course which will be continued for the time being at the Institute. Industrial development may demand a greater output of craftsmen and the introduction of new courses. In the first phase of the programme, however, it is recommended that the Georgetown college should provide for a total enrolment of 120 and those at New Amsterdam and Anna Regina of 60 students each. This would mean a total annual intake of 240 students.

These proposals are being put forward without any precise knowledge of the plans of the University of Guyana for the teaching of engineering and its allied subjects. If it is the intention to offer technological training in association with professional studies the future of the Technical Institute will have to be reconsidered in the light of the following decisions:-

- (a) Will the University offer courses at the technician level?
- (b) If it is the intention to offer such courses, will it make use of the present Institute or will it build on its own site?

The first is important because technician training is of fundamental importance to British Guiana's economy. If the University is not to undertake this, then the Ministry of Education must retain the Institute for this purpose and the

recommendations contained in this memorandum must stand.

If the University intends to undertake technician training and to continue using the present Institute, then the recommendations for the Junior Technical Colleges should be implemented. If on the other hand the University intends to offer technician training in its own buildings, the Institute can be converted for use as the Georgetown Technical College.

Whatever the outcome of these decisions the need for the Junior Technical Colleges at Anna Regina and New Amsterdam will remain. It is therefore recommended that an approach should be made to the Canadian Government on the possibility of its providing assistance for these two Colleges as a first step towards the re-organization of technical education.

In the initial stages of this programme there will be savings in recurrent expenditure at the Institute, but this must be disregarded in a long-term project as it will be absorbed by the extension of training at the Higher Certificate level. It is unlikely, however, that there will be any increase of expenditure at the Institute during the 1966-71 programme.

Staff

Neither money nor good intentions will make this scheme succeed - it will stand or fall by the quality of its staff. Before any start is made on its implementation it is of paramount importance that this problem is solved. Teachers of practical and technical subjects are needed in the secondary schools, the proposed Junior Technical Colleges and the Institute; for ease of definition these are classified as handicraft teachers, instructors and lecturers.

Handicraft Teachers

These are basically teachers and should be so qualified by the full teacher-training courses, in which they take handicrafts as the principal methods subject. This will have to be given in association with the Institute which will be responsible for the practical skills in wood and metal work required of such teachers. As a temporary measure to meet the immediate need it might be possible to organize short craft courses for trained teachers prepared to undertake this work. It is essential that these handicraft teachers are regarded as an integral part of the teaching staff and eligible for promotion; tangible evidence of the acceptance of this principle would be an encouragement to those concerned.

This source of supply may not meet immediate needs. A short-term alternative is a special teacher-training course for craftsmen with a Craft Certificate in wood or metal working. The shortage of handicraft teachers is desperate and aggravated by the essential need to widen the content of the secondary-school curriculum. In spite of the obvious complications of paying special allowances to a particular group of teachers the Government must give urgent consideration to this possibility as a means of meeting its obligations to the advancement of the economy.

Instructors .

In the Junior Technical College a high level of technical skill is more important than a wide knowledge of teaching methods as workshop instruction needs a different approach from classroom teaching. The minimum qualification should be an Advanced Craft Certificate with a short course in teaching methods possibly concurrently with the second year of the Advanced Craft course. It may be necessary to consider a special scale for these instructors to bring their earnings in line with those possible in industry.

Lecturers

Here foreign aid is essential both by way of expatriate staff and the training of local staff overseas. The latter will eventually eliminate the present dependence on expatriates. Here again technical skills are important and more value can be obtained from the Higher National Certificate in the United Kingdom than the Ministry of Education course for technical teachers, although the latter would be of help to those with full technical qualifications. It would be helpful to offer overseas courses for those members of staff recommended as suitable for the Higher National Certificate or the graduate examination of the various professional institutes.

Estimates**(a) Capital**

(i) Georgetown			
		\$	
Workshops		108,000	
Classrooms		54,000	
Stores, Offices, etc. (3,000 sq.ft.)		54,000	
Contingencies		<u>14,000</u>	
		230,000	
Permanent & Initial Equipment		70,000	
Furniture		<u>50,000</u>	
	Total		\$350,000
(ii) New Amsterdam			
Workshop (4,000 sq. ft.)		72,000	
Classrooms (2,000 sq.ft.)		36,000	
Stores, Offices, etc. (2,000 sq.ft.)		36,000	
Contingencies		<u>6,000</u>	
		150,000	
Permanent & Initial Equipment		30,000	
Furniture		<u>20,000</u>	
	Total		\$200,000
(iii) Anna Regina			
As for New Amsterdam			<u>\$200,000</u>
			<u>\$ 750,000</u>

(b) Recurrent

(i) Georgetown

		\$	
Salaries:-	Headmaster	8,000	
	Senior Master	7,000	
	Instructors		
	(12 @ \$5,000)	60,000	
	Non-teaching staff	<u>25,000</u>	
		100,000	
	Other Charges	<u>10,000</u>	
	Total		\$110,000

(ii) New Amsterdam

Salaries:-	Headmaster	8,000	
	Senior Master	7,000	
	Instructors		
	(6 @ \$5,000)	30,000	
	Non-teaching staff	<u>15,000</u>	
		60,000	
	Other Charges	<u>5,000</u>	
	Total		\$ 65,000

(iii) Anna Regina

As for New Amsterdam			\$ 65,000
			<u>\$240,000</u>

The scheme as a whole will have a strong appeal for foreign aid which will fall into various categories:-

- (i) grants for buildings;
- (ii) supply of equipment;
- (iii) expatriate teaching staff; and
- (iv) scholarships for the overseas training of local staff.

VI. THE TRAINING AND EMPLOYMENT OF TEACHERS

Training

As a result of the Germanacos Report a special scheme for the in-service training of teachers was started in 1963. By 1970 some 2,000 teachers will have qualified in this way and by then the proportion of untrained teachers employed in the schools will have fallen from the present figure of 70% to something like 20%. Statistically this is an impressive achievement but whether or not there has been an equivalent improvement in teaching standards is at least open to question. Both in-service and pupil teacher training have their attractions, particularly to students who are being paid salaries while training. They frequently involve, however, the teaching of young children by untrained and inexperienced staff at a stage when they most need the attention of professional skills and understanding. They also impose on students a heavy mental and physical strain under which their work in school must suffer. While both systems can be accepted in an emergency, as long-term policy they should be discarded as soon as possible. They should not continue after the 1966-71 planning period, by which time the training colleges should be able to meet in full the supply of trained teachers.

A UNESCO Consultant is advising the Ministry on the future of teacher training and the Planning Unit will have to incorporate his recommendations into the development programme. Although training is fundamental to the whole future of education, it must be allocated a priority in relation to other urgent needs. There is a demand for new buildings for the Georgetown college and this will be actively supported by the UNESCO Consultant. The college can, however, continue for the time being in its present buildings, but its success depends largely on its intake of suitable students from the secondary schools. Their first priority should therefore remain. On the other hand if the College becomes the University Institute of Education, funds for its new buildings will come from a different source and it will not compete with the secondary schools.

Secondly the objective should be to achieve and maintain an output of 300 trained teachers annually - by 1971 at the latest. There is a view that such a target is unrealistic because it will be impossible to recruit a sufficient intake of students of the necessary qualifications and proper calibre. This is unnecessarily pessimistic because the field of recruitment is widening rapidly as these enrolment figures demonstrate:-

	Form 4	Form 5
1962-63	2,176	1,254
1963-64	3,613	1,277
1964-65	6,721	2,364

If the plans for the expansion of secondary education are carried out, these figures will continue to rise and recruitment should present no problem.

One large centre would be more economic in the use of specialist staff and facilities than a number of smaller centres in different parts of the country. It would also be able to offer a wider variety of courses for small groups of

students to cover subjects usually outside the scope of a small centre. It is a pity, therefore, that all training cannot be concentrated in Georgetown, but residence is a problem and in an attempt to solve this the Ministry is already committed to a new centre in Berbice. In the circumstances, it is strongly recommended that a third should be started in Essequibo. In order to achieve the annual output of 300 teachers it is further recommended that the colleges should be designed to accommodate the following enrolment:-

Georgetown	300
Berbice	150
Essequibo	150

All three colleges should be sited and designed for expansion, first to meet the needs of a possible increase in enrolment and secondly to allow for the possibility of the extension of the course to three years. The question of residential accommodation in Georgetown should be deferred until the relation of the College with the University has been finally determined; it is unlikely that the University would welcome the students of a single faculty being in residence apart from those of other faculties.

Capital Expenditure

The following estimates are provisional and have been inserted to complete the financial picture of the 1966-71 development programme. They include furniture and equipment.

	\$
Georgetown	350,000
Essequibo	250,000
Berbice (Extension)	<u>100,000</u>
	<u>700,000</u>

Recurrent Expenditure

These estimates are based on a staff-student ratio of 1:12 with an average salary of \$4,000 for each lecturer. Other charges have been calculated on a 'per capita' cost of \$100 for each student:-

(\$1,000)	Enrolment	Salaries	Other Charges	Total
1966-67	360	120	36	156
1967-68	420	140	42	182
1968-69	480	160	48	208
1969-70	540	180	54	234
1970-71	600	200	60	260

The Ministry must also consider the payment of maintenance allowances to students - or possibly offering salaried employment during training. (This is already being done in some countries). Teacher training has to compete with other types of employment which carry the attraction of an immediate salary

upon engagement. Many potentially good teachers are lost in this way, especially when economic conditions and responsibilities to other members of the family make a cash income a matter of urgency. A system of loans might be an alternative, but these are never very satisfactory and offer little inducement in competition with the salaries offered elsewhere.

The Teaching Service

A very great need is for a unified service to which all teachers belong under conditions which govern their employment either by the Government or private managers. This is particularly important over the uniformity of salary scales. The service should also have its own pension schemes. A contributory pension scheme has its attractions but its management is complicated and expensive and it can be established only on the basis of an extensive actuarial survey. As many teachers are already in government employment it should not cost a great deal to extend free pension privileges to all teachers as has happened recently in other developing countries. The proposed Teaching Service Commission should be established immediately with authority to enquire into the conditions under which teachers are now employed and to make recommendations on their revision and co-ordination, particularly with reference to pensionable service. The operation of teaching services in other countries should be studied.

Lastly a word should be said about teachers employed in the interior particularly in the river areas, where the conditions under which some of them live are appalling and usually aggravated by complete isolation. It is recommended that the Ministry should set aside a sum of \$5,000 each year to improve the conditions in which the teachers are housed and to provide them with amenities which would relieve them in some measure of the isolated tedium in which they live.

VII. AGRICULTURAL EDUCATION

It is fashionable, particularly in political manifestos, to urge the importance of an agriculture bias to education. This ignores the bitter failures of such attempts in the way of vocational training and usually deteriorates into scratched patches of dried earth or impenetrable tangles of weeds - serving as a warning to the unwary rather than an inspiration to the enthusiast. The catalogue of reasons for the failure is long. Holidays interfere with the routine of seasonal tasks such as planting and harvesting. Pupils regard gardening as unwelcome and unnecessary drudgery interfering with more important lessons. Some parents are resistant to it because they regard education as a means of moving their children off the land rather than preparing them to return to it. Teachers have been known to use school gardens as a subsidiary source of income derived from the free labour of their pupils. There are many other reasons that contribute to the almost inevitable results.

There is nothing to be said against a school garden where the site is suitable and when it can improve the surroundings of the school. In a secondary school a small, well-kept garden can serve as a useful background to the teaching of botany and biology. Failure creeps in when vocational training is attempted. Like other craft and technician training this is the function of a special school following upon the ordinary processes of education.

Agricultural training is important in British Guiana, particularly in connection with the new land settlement schemes, and this can best be given through a Farm Institute course, such as that now being offered at Mon Repos with the very encouraging response it has stimulated. Similar Institutes are urgently needed in Berbice and Essequibo; small Institutes in the Rupununi and the North West District would offer a valuable return. The establishment of these Institutes is the responsibility of the Ministry of Agriculture but it is recommended that the Ministry of Education should initiate discussions on this subject in connection with the 1966-71 development programme and in particular on the relationship between the Institute course and those given in the secondary schools.

VIII. HOME ECONOMICS

Home Economics is an essential part of all levels of a comprehensive system of education. It is important to say this because in some quarters there is a tendency to dismiss it as a subject fit only for a secondary 'modern' course. Adequate accommodation for home economics has been recommended for all the new secondary schools. Wherever possible it should be included in the curriculum for the secondary classes of the all-age schools either in the special centres or in accommodation borrowed from other schools. With the present policy of separating primary and secondary education no further capital expenditure should be committed to home economics rooms at the all-age schools.

There is also the possibility of using a course in home economics as vocational training. The three-year course in this subject has been discontinued at the Carnegie School, which is now restricted to the training of teachers and evening classes. This is a pity, because it was making a valuable contribution to the social and economic life of the country, especially when many girls were leaving school at the age of fourteen. It can still serve a very useful purpose, not necessarily confined to expertise in home economics, but as a general preparation of young women for employment by the sugar estates and in the shops and offices in Georgetown and other urban areas. Its value would spread beyond employment into improving the standards of home-life and the upbringing of the next generation. It is therefore strongly recommended that the course should be started again, possibly reduced to two years following the P.C.E. examination, although there is no reason why students of higher academic qualifications should not be admitted to it.

IX. AMERINDIAN EDUCATION

In spite of Amerindian resistance to change and the enthusiastic support given to this attitude by dedicated romantics, commercial pressures from Georgetown and more particularly over the border from Venezuela and Brazil are already penetrating the secluded isolation in which until recently these people have been living. The inevitable change to their present pattern of life will offer a challenge which education must help to meet. It can help in two ways. It can encourage a higher standard of living for the people in their own environment by attacking the twin problem of nutrition and health through wider and better facilities for primary education; secondly, it can encourage the absorption of Amerindians into Guianese society by opening the way to professional and technical training through the secondary schools.

Of the predominantly Amerindian areas the North West District is already being integrated into the country's economic and social life and its needs, apart from the provision of boarding accommodation at two secondary schools, can be adequately met by the provisions of the over-all development programme for education. There are also small settlements, such as those on the Corentyne River, for which extraordinary provisions outside the existing primary-school system cannot be justified; the needs of education at a higher level will have to continue to be met by the present scholarship system, which should be extended by a less rigid insistence on a high level of academic attainment. The following recommendations are therefore confined to the Rupununi, Mazaruni, the Pomeroun-Tapacooma areas and the North West District.

Primary Education

Enrolment figures are not reliable enough to calculate precisely the percentage of children of school age actually attending school, but local observation suggests that it is much less than the national average. Parents are sometimes reluctant to send their children to school and circumstances make it impracticable to enforce the legal obligations of compulsory education. Even when children have enrolled at school they are frequently absent for long periods while they accompany their parents on seasonal expeditions for tending remote areas of cultivation in the mountains, fishing, diamond mining, balata tapping - or even merely visiting relatives. Persuasion from the administration and the Christian missions is having some influence, but only a spread of education itself into the next generation will effect any appreciable change in this parental attitude.

This irregular attendance is largely responsible for the comparatively low level of attainment in the Amerindian schools, which some experienced teachers judge to be two years lower than that of the rest of the country. Another contributing factor is the language difficulty, because the children are taught to read and write in English, which imposes upon them the necessity to learn a foreign language at the same time. The children's difficulty is further complicated by the insistence of some church authorities on giving religious instruction and bible readings in the vernacular. Some educationists hold the view that it could be easier for children to learn to read and write in their mother tongue and then be taught English as a second language. This is possible but debatable

and the work of the Unevangelised Field Mission in this method amongst the Wai-Wai should be studied. There are, however, practical difficulties in the way of teaching the vernacular, shortage of suitable written material and a lack of teachers who can speak the various languages. It seems inevitable, therefore, that the present practice, which has much to be said for it on social grounds, must continue, but its methods need to be greatly improved. Other countries such as Hong-Kong and Malaya are concerned with the same problem and a language specialist should be sent overseas to study modern techniques in teaching, reading and writing in a foreign language.

Other factors contributing to educational backwardness are malnutrition and ill-health. Most children eat little but cassava, a cooked handful of which is expected to carry them through a long day at school and frequently a long journey to and from their homes. An issue of milk and vitamin biscuit through the World Food Programme is improving their health, but it is only providing a temporary alleviation of a problem which can be finally solved only by fundamental changes in the present agricultural system. Similarly, although malaria has been largely eradicated, children are still debilitated by other tropical complaints, particularly by intestinal worms, many of which could be avoided by the practice of a few simple rules of personal hygiene. Education must be directed towards the elimination of these two evils.

Finally there is the inaccessibility of schools from some homes, which are frequently small family units in remote isolation, this is particularly true of the Rupununi, which has a widely scattered population and lacks the ease of river transport. Some children attend school by staying with relatives while others care for themselves, living in shelters and returning home at the weekends for food; in such circumstances the lure of home is very strong and irregular attendance is not surprising. Each small family unit cannot have its own school and at this stage of educational development some children must be left outside the primary school orbit, but a system of boarding hostels would provide a partial solution to the problem. As a pilot scheme it is suggested that four hostels are started in the Rupununi at Yupukari in the South Savannahs and at or in the neighbourhood of Karasabai, Kopinang and Kurukabaru in the Pakaraima Mountains (North Rupununi). In some areas it might be possible to widen the scope of the hostels by organising them in conjunction with small single-teacher, two-class schools (Preparatory A and B) with pupils moving into central hostels at the Std. 1 level; this would avoid the necessity of children leaving home at too early an age.

It is suggested that each hostel should be designed to accommodate 40 pupils, either in a single unit or in a group of four smaller and separate units. It should be possible to build them inexpensively in Amerindian style of local materials as a self-help project. A government grant of \$5,000 towards each hostel should be sufficient to build and equip adequate and suitable accommodation.

For recurrent expenditure it is estimated that it will cost \$60 a term to provide food for each pupil or an annual expenditure of \$7,200 for a fully occupied hostel. To this must be added a further \$800 for the wages of a

caretaker-matron to take charge of the hostel, making a total of \$8,000. (There is no reason why the children should not be responsible for the domestic duties connected with the hostel). It is clear that if fees are charged the hostels will remain empty. Education at this level is compulsory and if there is no alternative to providing it other than by hostels, it is the responsibility of the Government to meet its cost. It is suggested, however, that Oxfam should be asked to consider making an annual grant towards this project, because it concerns not only education but nutrition and health. It will also be necessary to ask Oxfam to conduct research into a suitable diet for the children in association with the possibility of a variation to the locally grown crops with the ultimate objective of maintaining the hostels without the added cost of imported food.

The management of the hostels should be associated with the local community and the management of the schools to which they are attached. It would be a useful exercise in local government practice for the Village Councils in consultation with the local church authority. If Oxfam decide to help the scheme, the grant should be paid direct to the Village Councils. If in future a hostel is attached to a Government School its management should be undertaken by the Village Council in consultation with the District Commissioner.

Secondary Education

The current enrolment by districts for secondary classes in all-age schools is:-

DISTRICT	FORMS			TOTAL
	1	2	3-4	
RUPUNUNI	174	90	87	351
MAZARUNI	11	6	4	21
ESSEQUIBO/ MORUCA RIVER	151	101	123	375
MABARUMA	128	89	53	270
TOTAL	464	286	267	1,017

Special provision for secondary schools should be made in the Amerindian areas for two reasons. First the low level of attainment in the primary schools restricts the number of pupils winning scholarships to secondary schools; secondly parents are reluctant to allow their children to move away from the influence of their own environment. The table above shows that already some schools have secondary classes, but they offer little more than a narrow literary course which is of doubtful value to the pupils and none to the general welfare of the community. There is an imperative need for secondary schools, equipped to give a fully comprehensive course, with small classes to allow the shortcomings of the primary schools to be offset by efficient teaching at the secondary level. Scholarships should continue for those who qualify and are

willing to accept them, because contacts with the outside world are important for these children. Those children who are under the age limit of compulsory education and for any reason are not admitted to a secondary school should remain in a special class in the primary schools, in which, if possible, the course should have a practical bias related to local needs.

The following recommendations are made:-

Rupununi

A two-form entry secondary school at Lethem for which the existing hostel would provide accommodation for 80 pupils. This is likely to be sufficient for the time being, because of the number of day-pupils likely to attend the school, but the need for expansion will be likely as primary education develops in the out-lying areas. The costs are provisionally estimated to be:

(a) Capital	
	\$
12 Classrooms	100,000
2 Laboratories	40,000
2 Workshops	30,000
2 Home Economics Rooms	30,000
10 Staff houses	120,000
Furniture & Equipment	20,000
	<hr/>
	340,000
Contingencies	10,000
	<hr/>
	350,000
	<hr/>
(b) Recurrent	
14* teachers @ \$3,000	42,000
non-teaching staff	5,000
Other Charges -	
tuition	12,000
boarding	18,000
	<hr/>
	77,000
	<hr/>

* It is likely that four teachers, e.g. married women, will be available locally.

Mazaruni

This is a small area not normally regarded as sufficiently large to carry a secondary school, but its needs are not likely to be met except by a small

school with a single-form entry at Kamarang. With this it will be necessary to build a hostel for 60 pupils, designed to allow for future expansion. The costs are provisionally estimated to be:-

(a) Capital		\$
6 Classrooms		50,000
1 Laboratory		20,000
1 Workshop		15,000
1 Home Economics Room		15,000
5 Staff houses		60,000
Hostel (60 pupils)		60,000
Furniture & Equipment -		
	tuition	10,000
	boarding	5,000
		235,000
Contingencies		5,000
		240,000

(b) Recurrent		
7* teachers at \$3,000		21,000
Non-teaching staff		3,000
Other charges - tuition		6,000
	boarding	14,000
		44,000

* See estimates for Lethem.

Essequibo - Moruca River

There will shortly be need for a secondary school at Charity and it is recommended that this should be given priority in the development programme. With this should be built a hostel for 80 pupils to provide for Amerindian children living along the Pomeroon River, the Moruca River and in the Tapacooma area. The costs are provisionally estimated to be:-

(a) Capital		\$
Hostel (80 pupils)		80,000
Furniture & Equipment		6,000
		86,000

(b) Recurrent		
Other Charges - boarding		18,000

Mabaruma

There is also a need for a secondary school in this area and it is recommended that this should be provided in the 1966-71 development programme. A hostel similar to that at Charity will also be necessary. The costs are provisionally estimated to be:-

(a) Capital	
	\$
Hostel (80 pupils)	80,000
Furniture & Equipment	6,000
	86,000
(b) Recurrent	
Other Charges - boarding	18,000

The site for the school will have to be chosen carefully. One essential requirement is that it should serve as many day pupils as possible. There should also be sufficient ground to allow for expansion and to provide adequate playing fields. It would be an advantage to have it as close as possible to Mabaruma, partly because hospital facilities are available there and partly because the children should be associated as closely as possible with the various activities that take place in the district headquarters.

There is also the question of the management of the school. Under present policy it will have to be a Government school. The children, however, are predominantly Catholic and the influence of the Church is powerful; without its co-operation the school's success is likely to be limited. It is suggested that discussions with representatives of the Church should seek a way of achieving such co-operation, particularly in respect of consultation over the appointment of staff.

In connection with the secondary school hostels two matters of policy have to be settled. The first is that of fees. If an economic fee based on costs is charged, very few Amerindian children will attend school; on the other hand it is reasonable that parents should make some contribution towards boarding costs of education above the primary school level. If it is decided that fees are to be charged for Amerindian children, it is recommended that initially the fee should be low, say \$10 a term, with the warning that they will be raised once the schools have become firmly established and accepted by the parents as an essential part of the process of education.

Secondly, there is the question of hostel management. At Lethem the hostel is managed by a local committee appointed for that purpose. This has much to commend it, but it is difficult to see how responsibility for discipline, for example, can be divorced from the teaching staff. If it is the intention to continue with such committees, it is recommended that its membership should include the head teacher with powers to advise on such matters as discipline. The same principle should also apply to the management of the hostels attached to primary schools.

Practical Training

For sometime to come education for the majority of Amerindian children will end at the primary school. One of the great needs of these areas is to raise the standard of living and a positive contribution to this could be made by improving the manual skills required in such rural industries as carpentry and building. Higher standards are also required in home management, particularly over infant welfare, diet and health. It is clearly impracticable to consider providing each school with accommodation and staff for teaching handicrafts and home economics. Therefore as a pilot scheme for the Rupununi it is recommended that consideration should be given to the setting up of two mobile units, one for handicrafts and the other for home economics, each staying at a school for a prescribed period to be determined in the light of experience. Schemes of this kind are being tried in some of the Indian reserves of the United States and would repay study. The costs of each of these units are estimated to be:

(a) Capital	\$
Land Rover	6,000
Trailer Workshop	12,000
Equipment	2,000
	<hr/>
	20,000
 (b) Recurrent	
Instructor	3,000
Assistant	2,000
Driver	2,000
Travelling & Maintenance	2,000
Materials	1,000
	<hr/>
	10,000

Technical training at a higher level cannot be provided locally except through the present system of the employment of learners by the Ministry of Works and Hydraulics. This is adequate for local employment, but has little value elsewhere. If Amerindians are to be absorbed into the general pool of craftsmen and technicians, they will have to be trained at the Technical Institute. As the secondary schools develop pupils will become qualified for admission and the present scholarship scheme should be extended to cover craft and technician training at the Institute.

Visual Education

Perhaps the biggest single contribution to Amerindian advancement could be made by the use of the modern techniques of visual education. In the schools the dead hand of isolation throws a shadow over all the teaching which struggles for life in a self contained vacuum dissociated from the outside world. Visual aids, suitably adapted to local needs and skillfully handled, could fill it with the

fresh air of reality and vitality. They could also be a powerful factor in adult education, but more will be said of that later. It is recommended that a mobile visual aid unit should be set up in charge of an officer who should be given a course of instruction overseas directed towards the special needs of such areas as the Rupununi and Mazaruni. The equipment should be so designed that it can be transported by river craft as well as by trailer. Its estimated cost would be approximately that of the other mobile units.

Agricultural Training

It has been recommended elsewhere (Section VII) that agriculture as vocational training should be undertaken by the Ministry of Agriculture in Farm Institutes and this is a policy that should be followed in Amerindian areas. It has been suggested that an Institute in both the Rupununi and the North West Districts would make a valuable contribution to Amerindian advancement.

Adult Education

This is another field of educational activity in which it is necessary to tread warily. Does it mean adult literacy - in the vernacular or in English? If the object is literacy in the vernacular much linguistic research will have to be carried out into a variety of languages and a careful study of the necessary techniques and material will have to be made. If it is in English research will have to be carried out into the methods of teaching adults to read in a foreign tongue. In either case there must be an adequate supply of follow-up reading material, without which literacy quickly disappears. An adult literacy campaign is rarely successful unless it can be linked with a community development scheme in which an ability to read offers a promise of material reward; its success would be even more problematic in an area where periodic family migration already seriously interferes with regular school attendance. In short the return from an adult literacy campaign amongst the Amerindians would not be commensurate with the heavy outlay in finance and human effort required in its organization.

Much, however, can be done by the use of the visual aid unit in co-operation with other Ministries and international organizations associated with them. It could help in instruction with farming methods, in home management, in hygiene and nutrition. A similar use could also be made of the mobile units for handicrafts and home economics. The Ministry of Education should give a lead in the co-operative use of its mobile units.

Text Book Supply

A handicap from which all schools suffer is a shortage of textbooks. This arises partly over the difficulty of supply, but mostly from the inability of parents to pay for the books their children need. It is recommended that the Ministry should supply recommended textbooks direct to the school, where they should be on sale to the pupils at a subsidized price. It is suggested that a sum of \$5,000 should be included in the Estimates for this subsidy, the rate of which will depend on the demand for books and the capacity of the parents to pay. An alternative would be to provide textbooks on loan from the schools, but very

often the only reading material in Amerindian homes is a textbook and it might be a mistake to withdraw this source of supply.

Summary

The following is a summary of the financial recommendations:-

<u>Scheme</u>	<u>Capital</u>	<u>Recurrent</u>
	\$	\$
PRIMARY SCHOOL HOSTELS	20,000	32,000
SECONDARY SCHOOLS	525,000	89,000
SECONDARY SCHOOL HOSTELS	237,000	68,000
MOBILE UNITS 1) HANDICRAFTS	20,000	10,000
2) HOME ECONOMICS	20,000	10,000
3) VISUAL AIDS	20,000	10,000
TEXTBOOK SUPPLY		5,000
TOTAL	842,000	224,000

The following courses of overseas training have been recommended:-

- (i) teaching to read and write in English as a foreign language;
- (ii) management of mobile units for:-
 - (a) handicrafts;
 - and (b) home economics; and
- (iii) techniques of visual education.

X. PRODUCTION AND SUPPLY OF TEXTBOOKS

PRODUCTION

The general quality of textbooks now in use needs urgent improvement and without this there is little possibility of raising educational standards in the schools. The Germanacos Report recommends the setting up of a Textbooks Research Bureau within the Planning Unit (Appendix L, Part IV, Paras.14-30), and an application to the U.N. for funds to meet the cost of -

- (a) machinery and equipment for the Ministry to set up its own printing unit; and
- (b) an expert in textbook production.

This application has, however, been deferred for a more urgent priority in Teacher-training.

Even as an ultimate objective this proposal is subject to question but at this stage it is unrealistic. The publication of textbooks is a highly skilled process needing expensive machinery and expert staff involving heavy capital and recurrent costs. With the comparatively small population of British Guiana it is doubtful if such a unit could be kept working at its full economic capacity and consequently its cost would cover a considerable hidden subsidy. In the present economic situation and because of other urgent demands on limited funds, expenditure on the scale involved cannot be justified. The alternative is to work in partnership with private publishing firms, a practice widely followed in countries bigger and richer than British Guiana.

The procedure is dependent on local initiative which must be responsible for the preliminary preparation of a needed textbook with up-to-date professional expertise in the subject and its presentation being provided by a selected firm of publishers. (It is the practice for one country to work with more than one firm to avoid any suggestion of monopoly). In its final form the book is published as a commercial enterprise subject to the condition that it is approved by the Ministry of Education for use in its schools; sometimes a second condition is imposed - an undertaking to buy a specific number of copies of the book on first publication. The result derives from a co-operative effort between the authors, publishers and the Ministry, the last being the final authority for approval, without which the publishers will not proceed.

When the preliminary work cannot be carried out locally it may be necessary to meet an urgent need by the direct commission of a textbook from a publisher by competitive tender. Sometimes this can be best achieved by the adaptation of a book already proved successful by its use in other countries. This approach is strongly recommended in order to meet the most immediate demands. These will be best known to those concerned with the training of teachers and the supervision of schools, with whom close and constant consultation is essential.

Most Ministries of Education delegate such authority to a Textbook Committee which is responsible for initiating the preparation of textbooks, selecting the

authors and finally for their approval for publication. The textbook position in a country depends on the quality of this committee and in British Guiana the first step is to examine the constitution and terms of reference of the present committee and to consider their need for revision in the light of its responsibilities. That it will meet these adequately, however, depends not on its constitution and terms of reference, but on the personality and efficiency of its secretary.

This post should be held by a full-time Textbook Officer. His duties would be to -

- (i) act as Secretary to the Textbooks Committee;
- (ii) control the funds allocated to it for the encouragement of textbook production;
- (iii) keep in touch with teachers, school supervisors and training-college staff on textbook needs;
- (iv) advise the Committee on these needs and on the choice of authors and publishers;
- (v) initiate and advise on negotiations between authors and publishers;
- (vi) undertake negotiations on the direct commission of textbooks from publishers and the adaptation of books in use elsewhere;
- (vii) arrange for the submission of the final draft of manuscripts to the Committee for approval and for discussing with the authors and publishers any changes which the Committee may feel necessary; and
- (viii) negotiate with the publishers the conditions of publication.

Other responsibilities will become apparent as the scope of the Committee's activities widens.

There is, however, one further aspect of the work of the Textbooks Officer which must be considered. The wider the circulation of a textbook the cheaper is its production and the lower its cost to the purchaser. Some textbooks designed for general use in the caribbean will be suitable for British Guiana. It is therefore essential that the Textbook Committee and its Officer should work in close collaboration with the Publications Unit of the University of the West Indies both in regard to books for the Caribbean and to those specifically for use in British Guiana.

Some of the processes required in text-book production, particularly over colour printing and the reproduction of diagrams and illustrations, may not be available locally, because of the lack of machinery and trained staff. Even if they are available, the comparatively small numbers of books required in a single edition may make their cost prohibitive. On the other hand there may be some needs, such as for supplementary readers with local colour, which could

well be met by cheap local production. This possibility should be examined by the Textbooks Officer, particularly over the purchase of machinery to be operated by the Government Printery.

Supply

It is the practice for pupils to buy their own textbooks and stationery. This imposes on parents expenditure which they are often reluctant to meet, particularly over the expensive books used in the upper classes of the secondary schools - although this reluctance is apt to disappear during an examination year. As a result it is not uncommon to see three or four pupils sharing a book; sometimes different books are used in the same class. This is an important factor in the low level of attainment in many schools, particularly those in the poorer areas. The Ministry should examine the possibility of providing schools with the books prescribed by the curriculum for use by the pupils on loan. There are objections to this, especially the imposition of government store-keeping procedure on the teaching staff. This could be avoided by a free issue of books to the pupils, but on the assumption that the life of a book is an average of four years, the annual cost would be four times higher than that of the loan system. It would, however, ensure that the children would treat the books with greater care and provide a source of reading material in their homes. In either method the Textbooks Committee would be able to estimate its requirements accurately.

Finance

There is already financial provision for the Textbooks Committee in the estimates, but additional funds will be required for its staff. It will need a typist and when its work expands to carry its full commitments it will need an executive assistant. The cost is estimated to be:-

	\$
Textbooks Officer*	6,000
Executive Assistant	3,500
Clerical Assistant	1,500
	\$ 11,000

* Of Education Officer status.

There are three people in the country who have had training courses in textbook production, but none is employed in this work. One of these should be given the appointment as Textbooks Officer. At the same time the application for the services of a UNESCO Consultant should be renewed for 1966. This would be much more effective than selecting yet another local officer for overseas training, as the Consultant would be able to work with the Committee and all those concerned in the production of textbooks.

The annual cost of supplying pupils with textbooks is estimated in the chapters dealing with primary and secondary education.

XI. BUILDING UNIT

It is doubtful if the building operations required by the Ministry are either extensive or varied enough to warrant the setting up of its own Building Unit, with a full-time architect and the professional staff required for the preparation and supervision of contracts. It might also lead to professional rivalry with the Ministry of Works and Hydraulics instead of the close co-operation required in fields wider than that of building.

Building problems are not difficult. The heaviest concentration of schools is in the coastal belt where the sites are uniformly level and present the same constructional difficulties. Building material is universally local timber and imported roofing. There is need, however, for enquiry into the possibility of economy in building costs and improvement in functional design. This could best be carried out by the visit of an expert in school architecture with experience in timber construction who would work in conjunction with the Planning Unit and the Ministry of Works and Hydraulics.

On the other hand the 'self-help' projects are essentially a matter of co-operation between the schools and the local communities and it is difficult to see how this could be encouraged and guided by any authority other than the Ministry of Education. Technical advice is, however, needed on the type of accommodation to be provided and how it can best be planned. Also there is need for competent supervision of the building operations. It is recommended that a suitably qualified officer should be appointed to the Ministry to undertake these duties.

XII. SPECIAL SCHEMES

1) **Adult Education**

As compulsory education has been in operation since 1876 there is no need for the heavy drain on financial resources imposed in many other countries by the organization of mass literacy campaigns. There are, however, many other fields, such as health, and agriculture in which adult education schemes can contribute to the economic advancement and social welfare of the community. The time so far available to the Planning Unit has not been sufficient to carry out a survey of the need for such schemes or how far it is being met by existing facilities. The advice of an expert in this field would be very helpful.

2) **Handicapped Children**

Little progress has been made on the combined institution which has been planned for the education of handicapped children. Through the good offices of the Red Cross and the Royal Institute for the Deaf progress has been made over the education of deaf children; money is available for extending this work in new buildings as soon as the Government is able to make its promised contribution to their cost. Much more requires to be done for the education of blind children, the physically deformed and the educationally sub-normal. Once again the Planning Unit has had no opportunity of examining this problem, but at the earliest opportunity it should instigate a survey of its extent in the various categories of handicapped children, using wherever possible the services of expert staff already in local employment.

XIII. FINANCIAL SUMMARY

Staff

There is a grave shortage of trained and experienced staff, particularly at the graduate level, and it will be some time before the country can fill the need from its own resources. If expansion takes place more reliance must be placed on expatriate staff employed on short-term contracts unless the present standards are to deteriorate even further. There are two schemes under which help from overseas might be obtained.

United Kingdom

Graduate teachers for 'designated' posts can be recruited under the Overseas Service Aid Scheme. Enquiries about this should be made from the Department of Overseas Development. (IV. Para 20).

Canada

Help is already being received from the Canadian Technical Assistance Programme. It may be possible to enlarge this particularly in the field of technical education. (V. Para. 19).

Help can also be obtained from voluntary organizations such as Voluntary Service Overseas. The great majority of V.S.O. workers are straight from university without training and experience which are the great need. The volunteers can give useful service, particularly as science teachers in the secondary schools, but the process of dilution must not be allowed to go too far. The same applies to the Peace Corps which now seems to be the only source of teacher-supply in the United States.

Training Courses Overseas

Some specialist posts can be filled by local officers after training or study courses overseas. Funds for these can be obtained from several sources and advice on this should be sought from the Ministry of Overseas Development and UNESCO. The following suggestions have been made:-

- | | |
|---|---------|
| (i) Teaching English as a Foreign Language' | (II.3) |
| (a) Specialist Supervision; and | |
| (b) Teacher-Training Specialist. | |
| (ii) Lecturers in Higher Technician Training | (V.19) |
| (iii) Unified Teaching Service | (VI.6) |
| (iv) Instructors for Mobile Handicraft and
Homecraft Units | (IX.15) |
| (v) Instructor for Visual Aid Unit | (IX.17) |

- (vi) Teaching reading and writing in English as a foreign language. (IX.4)

UNESCO Technical Advice

The following recommendations have been made for UNESCO assistance:-

- | | |
|-------------------------|---------|
| (i) Textbook Production | (X.11) |
| (ii) School Buildings | (XI.2) |
| (iii) Adult Education | (XII.2) |

CAPITAL EXPENDITURE

The major items of capital expenditure are:-

- | | |
|-------------------------------|-----------|
| (i) Primary Education | (\$1,000) |
| (a) New Places and Rebuilding | 770 |
| (b) Overcrowding | 2,800 |
| (ii) Secondary Education | 11,000 |
| (iii) Technical Education | 750 |
| (iv) Teacher Training | 700 |

It seems reasonable that under 'self-help' schemes the Government should assume responsibility for primary education, particularly if help from the World Food Programme continues. Although over-crowding is serious, the scheme for its elimination could be spread over ten years. This would reduce the annual capital expenditure to something of the order of \$400,000 during the 1966-71 programme.

The heaviest expenditure is for secondary education. The Planning Unit with the help of a UNESCO consultant should examine these costs very rigorously; economies may be possible but they should not be made through a reduction of facilities for a fully comprehensive curriculum. This is a scheme that should qualify for C.D. & W. assistance, but other countries may be prepared to participate.

Expenditure on technical education and teacher training is not relatively very high. Both schemes are likely to have a strong appeal for overseas aid and the Canadian Government is likely to be interested in the recommendations or the setting up of a Junior Technical College in each of the three counties.

Amerindian education (\$842,000) is in a different category. Educationally it cannot be given a very high priority, but it has a social appeal in which several countries may be interested. It has the advantage that it can be broken down into a series of projects which are not entirely inter-related. For

example, the mobile units can be treated in isolation and help from an organization such as Oxfam might be available.

In the planning recommendations no mention has been made of the need for teachers' houses. This is very important in areas where suitable accommodation is scarce. The Planning Unit should consider provision for a housing programme in its 1966-71 development plan.

RECURRENT EXPENDITURE

Here is the crux of the problem. Capital investment in education carries with it a very high level of recurrent expenditure and generally speaking this falls on the local government irrespective of the source of assistance towards capital expenditure. For example, if the planning recommendations on Primary and Secondary Education and Teacher Training are carried out the cost on these services alone in 1970-71 will rise to:-

	\$ (1,000)
Primary Education	10,060
Secondary Education	4,378
Teacher Training	260
	14,698

In effect the development programme must stand or fall by the capacity of the local government to meet the recurrent cost. In preparing the programme the Planning Unit must evaluate the total measure of the expansion of educational services with their relative priorities within the limits of the funds available for recurrent expenditure. Here the guidance of the Central Planning Unit is essential. It will be necessary to prepare a detailed forecast of the annual estimates over the planning period, but at this stage there is no point in undertaking such a task because the future depends on policy decisions yet to be made